Quazi Mahtab Zaman
Greg G. Hall · *Editors*

Border Urbanism

Transdisciplinary Perspectives

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Editors

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During the course of finalizing this publication, numerous global, regional, and local events demonstrated the damage that borders of all types can inflict. However, these events also served to highlight positive responses to the negative impact of divisions and boundaries and the potential to achieve good.

The authors and editors offer their observations, insights, and research with the hope that all present and future borders serve only positive purposes and benefit humanity.

Praise for *Border Urbanism*

"Unique, nuanced insights from a diverse range of regions and views that explore how borders can be beneficial by providing security and identity yet detrimental by creating imbalance and displacement."

—Dr. Emily Talen, *Professor of Urbanism, The Urbanism Lab, University of Chicago, Chicago, Illinois, USA*

"Vital and timely research addressing border issues in a dynamic world order. Its analysis of fragile habitats in volatile socio-political times outlines means to support those disadvantaged by border conflicts."

—Dr. Igea Troiani, *Head of Division for Architecture, London South Bank University, London, UK*

"These thoughtful investigations search for interpretations, understandings, and truths that define the essence of society and territoriality. The book is an important, critical work articulating both the present and future."

—Dr. Simon Atkinson, *Mike Hogg Centennial Professor, School of Architecture, The University of Texas at Austin, Austin, Texas, USA*

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Editors and Contributors

About the Editors

Quazi Mahtab Zaman is an architect and urban designer with an extensive international background in teaching, research, and practice.

He teaches the theory and the practice of architecture and urban design at the Scott Sutherland School of Architecture and Built Environment at Robert Gordon University, Aberdeen, Scotland. He has also researched and taught at Cornell University, BRAC University, Bangladesh, and the University of Hong Kong. In addition, his research includes a Fulbright Fellowship at Cornell University's College of Architecture, Art and Planning; postgraduate research at Lund University, Sweden; and doctoral and master's research at the University of Hong Kong.

Zaman founded the Borders Urbanism research initiative. As the chair, editor, and convenor of the Borders Urbanism research initiative and founder of the Border Urbanism Research Centre, he focuses on borders as a multidisciplinary research topic. He has expanded his urban design research interests to children in urban areas. In this work, he engages youth with a new participatory pedagogy tool, Stitching Urban Vision (SUV), that he developed to leverage 'communities as an extended class-rooms'. His research also addresses design to increase health conditions and considers the implications of congestion in developing countries. He serves on the editorial board of *MDP—Sustainable Journal* and the *Global Built Environment Review*. He is currently the International Director in Scotland for e-DAU (Team Designers Architects Urbanists Network based in Brazil).

In addition to numerous research papers and journal articles, he is the co-author of *Berlin: A City Awaits—The Interplay Between Political Ideology, Architecture and Identity* (Springer, 2020) and *Potsdamer Platz—The Reshaping of Berlin* (Springer, 2014), and he is the co-editor of *Transdisciplinary Urbanism and Culture—From Pedagogy to Praxis* (Springer, 2018).

He received a Master of Urban Design and a Ph.D. in Urban Design and Mass Housing from the Faculty of Architecture at the University of Hong Kong and Bachelor of Architecture from Bangladesh University of Engineering and Technology,

Bangladesh. He is a Fellow of the Institute of Architects Bangladesh (IAB) and a Professional Member of the Hong Kong Institute of Urban Design. He is also the International Director in Scotland for e-DAU (Design, Architecture & Urbanism).

Greg G. Hall is a Paris Prize- and NCARB Award-winning architect, educator, and administrator and a Fulbright alumnus with experience in education, research, practice, and regulation at local, regional, and international levels.

His academic experience includes administrative leadership positions in architecture and building construction management programs at the American University of Bahrain, Mississippi State University, and the Savannah College of Art and Design. In addition to these institutions, he has taught at the University of Hong Kong, the University of Texas at Austin, and Universidad del Istmo, Guatemala. His administrative experience includes serving as director, education at the National Council of Architectural Registration Boards (NCARB) in Washington, DC.

During his academic career, he has designed and developed innovative programs. Examples include an interactive game of professional architecture practice, recognized by the National Council of Architectural Registration Boards (NCARB) with an NCARB Award for the Integration of Practice and Education and collaborative design programs that prepare students for the realities of practice in dynamic global settings. He has also designed travel/study programs for Asia, Central America, and Europe. Throughout his career, creating programs and opportunities for students from underserved and marginalized communities has been an ongoing focus.

He has extensive international architecture design and project management experience; he has lived in Africa (Burkina Faso), Asia (Hong Kong, China, and Japan), and Europe (France, Italy, and the UK), where he worked on building design projects with many notable architects and firms including two Pritzker Prize-laureate architects, Jean Nouvel and Renzo Piano; one of the major Japanese general contractors, Takenaka Corporation; and the US Department of State. He has also practised independently in the Southeast US.

He is a registered architect (Mississippi, North Carolina, and South Carolina), and he holds an NCARB Certificate, which facilitates licensure in all US jurisdictions and overseas. He received a Ph.D. from the University of Hong Kong, where he was a Fulbright Fellow. In his doctoral research, he examined design management and the interface between the architecture profession and the construction industry. He identified means to allocate resources more effectively through the design process to increase building output quality and quantity. He holds a Bachelor of Architecture from the University of Texas at Austin and a certificate in the Japanese language from Kansai University of Foreign Studies, Osaka, Japan. He is an active member of many professional and civic organizations, including the National Organization of Minority Architects (NOMA) and the American Institute of Architects (AIA).

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Part I
Background to the Book

Chapter 1
Border Urbanism—A Critical Discourse

Quazi Mahtab Zaman

Abstract This opening chapter overviews the purpose of the book. It introduced a global initiative on border urbanism research and interdisciplinary collaboration in 2016, bringing over 28 researchers representing 28 countries to discuss various border-related issues in an international conference "Urbanism at Borders" held in Aberdeen, Scotland, in 2018. The book is undoubtedly not the first attempt to discuss border issues. However, it is instead the new interest that one might view this book as an opportunity for a "less-explored" subject of border discourse from architecture, urbanism, and other allied disciplines. The chapters in this book collated and demonstrated a renewed interest in the border issue within the built environment discourse. The overview sets the ambition of examining this critical discourse that has already been examined traditionally in various sociopolitical and related disciplines, which are much more advanced and critical. Nevertheless, the claim that architecture and urbanism do not necessarily intermingle with the border issue originated from the notion that the border subject belongs to a distinct, well-defined political science and allied discipline. Indeed, today we are positioned in a globalised world with more physically and digitally interconnected. However, we are in more unstable conditions than many centuries ago. We are subject to the fragility of conflicting ideologies, religion, economy, and the power–politics didactic relationship manifested in the fragility of our habitat and new challenges in restoring social and environmental sustainability. This book is a snapshot of the vast border issues yet to be researched from architecture and urbanism discourses.

Keywords Border-built environment nexus · Political boundaries · Spatial separation · Polarised border cities · Praxis of border urbanism · Border typologies

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1.1   Background to the Emergence of Border Urbanism Research Centre (BURC)

Urbanism at borders is a global research project conceptualised and initiated in 2016 in Aberdeen, Scotland, at the Scott Sutherland School of Architecture and Built Environment, Robert Gordon University. The initiative began with a global alliance of scholars from architecture and urbanism and a vast continuum of allied subject areas attracted under the Border Urbanism Research Centre (BURC). These scholars represent the fields of human geography, urban design, and architecture, trying to look at the issues of spatial justice and migration and urban form, informal and temporal settlement, and urbanism, among many others.

The research and the discussions these scholars are engaged in have underpinned the centre's objective of engaging in specific vanguard research themes on global border urbanism under three discrete and interrelated theoretical frameworks. These are the ethnography of transient and dispersed communities, the phenomenology of temporal and spatial experiences, and displacement dynamics. These were addressed under selected working themes: border urbanism—the spatial characteristics of temporal communities; ethnography—the vulnerability of marginalised societies; phenomenology—the cultural role of non-places, communal areas, and peripheries; and displacement—forced migration due to natural, economic, political, or migration factors.

Several questions were central to this discussion:

- Are borders sociopolitically manufactured conditions?
- Are borders and fragile habitats capable of reflecting the volatility of social, political, or geographical instability?
- Are borders a default social disorder?
- Can border issues be analysed in architecture and urbanism discourses?

Above are some of the ambitions of the BURC. This ambitious discussion gained momentum, and within a year, global scholars assembled and acknowledged that research of border issues is a critical companion issue of transformative global urbanism and architecture. It is global in latitude and commences from the pervasiveness that every country is confronted with borders.

The subject of borders is manifested in various measurable physical entities and non-discernible social, political, and human-centred crises. Although the built environment and urbanism disciplines lack political leverage similar to other relevant disciplines, the 28 researchers brought unique perspectives to the subject of borders based on their experiences and observations from broader and distinct arrays of geographic locations.

Borders have always been the subject of interest as seemingly unexplored research areas from built environment discourse. Nevertheless, there are many apathetic connotations of borders and the cruel ways they have portrayed socio-economic fragility due to the historical and contemporary migration at the inter-border tensions; the most common reaction to borders is adverse or apprehension. This response is

mainly due to the tension, conflict, war, discrimination, social, and spatial injustices that are often not a comfortable discussion choice within the built environment discourse.

Conversely, it is undeniable that borders have many positive traits, both factual and metaphorical, that provide a basis for contest, which many believe helps progress. There is no exchange of goods and services, mobility, economic advancement and competition, and progress without borders.

Borders often induce fallacies; they refer to disorder and displacement, resulting in political tussles, social displacement, and resource inequity. The world is geographically more fragmented than thousands of years ago. Revolutions through conflicts and evolution due to new-found lands evolved from the inconsistency in resource distribution and efficiencies to harness it. Predecessors sequestered by the geographical expanse and absence of mass communication are geographical border-makers. Nevertheless, it was not known to be fragmented, and the geopolitical separation was inevitably a social construct. Most of the debates on border issues appeared in post-modernism, cultural studies, postcolonialism, and ethnic studies framed within space theories.

Today's world is closely intertwined through technology and information systems; however, actions and interactions with individuals and how their characteristics are addressed are often prudent and discreet.

Humankind has always been nomadic, crossing borders globally! Three books pose critical questions about the immateriality of borders (Fig. 1.1) and the influence behind the formation of BURC.

Today, the world order, in many ways, integrated having networks of societies once divided by socially constructed norms and differences and focused on the singular premise that borders are a social construct in the conflict of *they and us*. Social conflicts and divisions are inherent in our genetic codes and influence border-making

Fig. 1.1 Nomadic beginnings—books that capture ways in which civilisations instinctively developed

and seek to believe that individuals are not born with a blank slate (tabula rasa) (Pinker 2002). Displacement due to climate change (Moving with Seasons by Lisa Carter); traditional nomadic life patterns and the transient settlement (Nomads and the Outside world by Anatoly Khazanov); the global ambition for connectivity through the formation of the silk road, breaking the barriers (Lands of Lost Borders by Kate Harris) are some of the works of literature. These books present the position of borders that adds some references to the collective notion of divided cultures and territoriality.

The border is an evaded condition with which we are mentally processed and fostered like "nature and nurture" of the blank slate ideology mentioned by Pinker (2002). The notion that conflict and social segregation are socially manufactured has roots in human instinct and originated in genetically coded behaviour. Rasmus Kerrn-Jespersen, in his article 'Genes, shape our social, ideological attitude'. Kerrn-Jespersen (2016) refers to a statement of a Ph.D. student Camilla Nexøe, from the Department of Political Science and Public Management at the University of Southern Denmark, *"My research shows that genes are an important part of individual opinion formation. In particular, the results show that genes influence individual differences in social, ideological orientation"*. However, "*Most of the variation in political opinion formation is not due to genetics, but some are*" (Kerrn-Jespersen 2016). "*Human personality is affected by both genetic and environmental components, …,*" (Kerrn-Jespersen 2016), as in the book Blank Slate by Pinker (2002).

Throughout history, borders have existed in various forms at local and regional levels that created inquisition for explorations and tendencies to connect or enact barriers, among the many undesirable results of world exploration and colonisation rooted in the distinct set of lands separated culturally, economically, and politically. These areas' variable socio-economic and political strength evolved from the differential scarce resources that brought about their early discovery and, subsequently, other countries' interest in invading. Countries have sustained growth or decline due to their resources and environmental advantages, availability, or depletion. Countries like Singapore, which lacked physical resources, took a creative path to innovation and leveraged intellect to maintain economic advantages. However, much of the development is through cooperation with Malaysia.

The border is a strongly extant element in society. It has been exploited as a political and economical tool; it represents the anxiety of past inhabitants and their descendant's response to complex and problematic border conditions. Future generations are destined to know the social and economic fatalities of a divided and contested world as manifested in the physical differences unknown to many growing children, such as Ciudad Juárez, Mexico (Fig. 1.2).

Several research questions guided the discussion of borders in BURC. Some are known, and some are critical for further exploration. These are

(a)   What political economies and social marginalisation with which continents, countries, regions, communities, and locales mediate, evolve into conflicts, and segregate races and cultures?

Fig. 1.2 Children at the border fence in January, Ciudad Juárez, Mexico. *Photo* Herika Martinez/Agence France-Presse/Getty images, https://www.wsj.com/articles/u-s-stops-separating-immigrant-children-at-border-under-coronavirus-emergency-powers-11585701887. Last accessed on 22 May 2021

(b) How do fragmented societies end up in fragile settlements, the subject of interest in architecture and urbanism ideologically?

(c) Are socio-economic and resource inconsistencies connected to marginalisation in knowledge-sharing methods, leading to social supremacy and superpower?

(d) Are these a subject of interest within urbanism, architecture, planning, and urban design?

The discipline of urbanism and built environment appears distant from the subject of borders. However, the border may not fall within the discourse of urbanism to analyse urban phenomena—but urbanism can be a new methodology to define and analyse the physical aspect of border-induced displacement instead of looking at the politics behind these displacements. It is no doubt that politics is the core driver of displacement. However, there is an opportunity to address other socio-economic and environmental phenomena, such as border or borderland's companion issues and consider broader issues such as climate change, ethnicity, economics, and micro-social issues as drivers of displacement and estrangement. These influence movement across borders and within the same geographical region, resulting in gentrification and migration at inter-urban, peri-urban, and urban–rural modes.

Urbanism at borders and its research collaboration focuses on how the border's physical characterisation may be analysed in the urbanism and architecture discourse. This is a longer-term initiative that the Border Urbanism Research Centre (BURC) will manage various agendas and explore partnerships with a creative and emerging way of networking.[1]

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[1] Home | Urbanism at Borders: Global Research Group (urbanismatbordersglobalresearchgroup. com).

1.2   Border-Built Environment Nexus

The association between a border and its neighbouring environment is impacted by the power of mediation of each party linked and affected. Although the environment often influences their rapport, numerous other factors are critical. The chapters in this section examine a variety of border–environment relationships. A wide range of environments, from natural to human-made, are considered against historical events such as cultural and political changeover, natural disasters, and economic development. Many ways borders may instantaneously divide and inexplicably unify; how the relationship may influence future sociopolitical events serves as an enlightening way to consider connections between borders and environments. Tim Marshall accrued figurative narratives of ten typologies of borders exemplified through maps that justify political beliefs worldwide. In a different discussion: how future politics will be dominated and the appearances of various class divisions and religions will aggravate the fragmentation of civilisation is now felt throughout the world. 11 September 2002 symbolises the condescension based on ideological conflict—all are down to the core sociopolitical differences displayed in the religious aphorisms. Samuel Huntingting was right in 1996! Huntington's thesis that anticipated conflicts arise from cultural and religious individualities is defined as the post-Cold War world (Huntington 1996). Nevertheless, what interests urban researchers is the fragility inflicted on those territoriality and how the architecture of fragmentation appears to be the true reflection of the "clash of civilisations".

Political judgements or misjudgements often manipulate or control the shape of borders. Nevertheless, the political definition of a border is different from how borders are defined in social, human, and even economic terms. Thus, politics is a vital tool to understand the formation of borders, a function of differential resource-sharing associations in a default geo-morphological setting; it is the difference that empowers one country over others, as Marshall (2015) introduces in *Prisoners of Geography*. Furthermore, he elaborated (Marshall 2015, p. 6) that world geography has always shaped individuals and societies, how individuals confront one another, and how power and politics continually shape social development (Fig. 1.3).

In "**Territory and Water Landscape**," **Carme Carcaño Zapata, Isabel Castiñeira Palou, and Alona Martínez Perez** (pp. 29) discuss a range of natural boundaries and ways in which nature has created default border attributes over time. Through studies, Zapata et al. (2018) subsequently recognised the causal effects of the border on urban development, delineation, separation, and distinction, through destruction to rebuild with renewed socio-spatial characteristics. She points to natural disasters in the Catalan cities of Sabadell and Terrassa, where over 400 residents died in the 1962 floods. They describe in this chapter the strength of human endeavour to act against the destruction and the interest in rebuilding the city that "*may be transformed to unite disparate areas*". The regional survey methodology of Patrick Geddes (Geddes 1915) is introduced and considers layers of historical heritage, topography and meteorology, the morphology of the territory, and economic processes. The
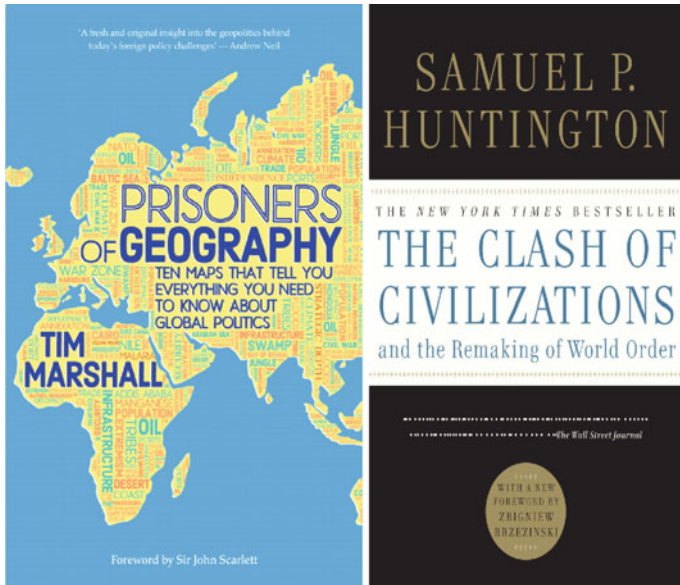
Fig. 1.3 Two vital books: Prisoners of Geography and The Clash of Civilisations

regional survey is an integral part of *geography as a social practice* and the particular geographical imagination suggested by regional surveys. Besides, she pointed to Enric Batlle's construction of the territory, embracing three points of view: (i) ecology, (ii) landscape, and (iii) town planning, as Enric's practice explains.

Natural disasters likely exacerbate natural boundaries, seen throughout history and contemporary geographical cases. It is also true that natural disasters can unite urban areas that were previously separated. According to the National Geography (2021), "With sea level rising and ice caps melting, it is easy to believe that more of Earth's land is covered by water every year. While this is undoubtedly real in some places, a new study found marginally more land surface uncovered than 30 years ago."

Boundaries and the power of boundaries as catalysts for the transformation of paired border cities are considered in **Rüya Erkan's chapter**, "**Typology of Boundaries and Their Effects on Paired Border Cities**" (pp. 55). Erkan uses the general definition of two classifications, *human-made* and *natural*, which provides a broader platform to generate the essential treatise to further argue on the division and reunification as a function of boundaries, emphasising the dominating *paired borders*. How borders affect the different paired border cities worldwide is explained, along with how they are depicted in various analyses based on divisive or unifying, partitioning or duplicating, alienation, coexistence, and integration. Finally, Erkan discusses the impact of boundaries on border cities, taking historical, cultural, social, political, and economic stances to comprehend border conditions influential in forming paired cities.

This study adds to previous studies of Németh et al. (2013), which focused on the various methodologies of identifying border typologies, described as (a) *Ulysses*: a research project (ULYSSES Project 2010–2012) that studied the development of European cross-border areas (CBA); (b) EU Border Regions[2]; (c) *The Unfamiliarity project*[3] is focused on the opinions and motivations of people both as influencing factors and as outcomes of cross-border interactions (CBC, flows and international or bilateral relations); (d) *Terco*, similar to Ulysses,[4] targeting "international territorial cooperation" interpretation "border-crossing" from greater distances; (e) *EU Border Regions*, studied different sections of the European Union's external borders through eleven case studies. EU Border Region's main objectives are to advise the "neighbourhood policy (or policies)" of the European Union (Németh et al. 2013).

In "**The Boundaries of Heritage: The Paradoxes of Ouro Preto** (pp. 83)", **Ricardo Ali Abdalla** discusses the significance of cultural heritage—its values and meanings eroded amid the industrial revolution and due to the crux that society faced in between new technology and vanishing traditional methods.

Modernism touched every facet of life, and the adoption of modernity and the new revolution of building techniques are at the border between traditionalism and post-modernism. Taking Ouro Preto as a world heritage site, Ricardo expresses the utter concern of losing the historical footprint amid innovation and shifting paradox in building technologies that choose not to support heritage but rather the uptake of standardised contemporary detached from traditionalism.

"**Regional Architecture in the Persian Gulf: Conflicting Architectural Narratives of Global–Local Border Convergence**," by **Ben Tosland** (pp. 97), considers regionalism within the Persian Gulf during the twentieth century. It informs the architecture of the Persian Gulf rather than each nation-state, contrary to current historiographical thought (Golzari 2013). International borders are explored to describe architectural development within the region. Moreover, geopolitical events influence the geographic shift of expansion and intensification of a regional aesthetic. The borderless information age has contributed to shaping twenty-first-century architecture in the Gulf Region. The Persian Gulf has quickly embraced architecture's globalised language through international star architects. Further, global capitalism is triggering a significant transformation in architectural design that questions the implication of this rapid change to climate change, ecological sustainability, and cultural identity. Regionalism is somewhat decomposed in the global style and trends, demanding a hybrid and instant city with eclectic architectural language.

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[2] In EU Border Regions, the eleven case studies are located along different sections of the European Union's external border. One of its main objectives is to advise the "neighbourhood policy (or policies)" of the European Union.

[3] As found in the reference of Németh et al. (2013) UNFAMILIARITY project (2010–2013), unfamiliarity as signs of European times: scrutinising historical representations of *otherness* and contemporary daily practices in border regions, funded by: Academy of Finland, Finland; The Danish Council for Independent Research—Humanities, Denmark; Research Foundation Flanders, Belgium; Netherlands Organisation for Scientific Research, The Netherlands; the European Science Foundation, http://www.unfamiliarity.eu/.

[4] *Terco* focused on the relationship between cross-border cooperation and regions' development.

Fraser and Golzari (2016) researched the comprehensive language of architecture and urbanism in the Persian Gulf, drawing very eloquently on the human settlement profile concerning environmental factors and the particularity of place that has been transforming. Ben Tosland has shown in his chapter that globalisation is also given the primary catalyst.

In "**Experiencing Authenticity Through Cultural Borders and Experimental Ethnography**" (pp. 115), **Mehwish Abed** discusses ethnographic research. She explains that borders are a geographical statement and bear the meaning of a socio-spatial entity. Moreover, borders reflect the subcultures in a multicultural condition that transcends geographic boundaries. Individual interpretation of the symbols of borders often results in segregation and marginalisation. As Haselsberger (2014) stated, borders affect the inner city and people and can be narrated by "overlapping geopolitical, socio-cultural, economic and biophysical layers, a bordering process." Is the process definable? Abed touched on the non-measurable border and explained that ethnographic geography might help unpack the sociocultural meaning of borders. This research highlights that people can experience cultural borders that indicate the city's authenticity through experimental ethnography.

Christos Kakalis investigates several sacred rituals associated with the commemoration of Saint George on the Island of Prinkipos (Büyükada), the largest of the so-called Princes' Islands in "**Urban Liminality: Negotiating Borders and the Pilgrimage to the Monastery of St. George Koudounas**" (pp. 133). Kakalis closely examines the pilgrimage to the monastery of St. George Koudounas on the day of Saint George's commemoration (23 April). Kakalis addresses the importance of a liminal place to describe the topography of our understanding of religious rituals that transcends through ephemeral phases beyond one's beliefs on sacred physicality.

The word "liminal" emanates from the Latin root "limen", which means "threshold"—the "crossing over" space. The liminal space is where one has left something behind in a physical term yet not wholly entered into something else. It is transient or temporal compared to the transition space in one's life and the mental sphere. The work of Casey (1993) highlights a shift from an ambiguous space to a meaningful place; in organisational life, this means a sense of space/materiality/work nexus. In border discourse, Liminality is an idyllic lexicon that portrays the transitory depiction and movement of exodus and coerced transposition, leaving behind a transient spatial experience.

1.3 Political Boundaries and Spatial Separation

Political boundaries demarcate physical areas. These may have recognisable boundaries defined by natural forms such as bodies of water or topographical features. On the other hand, these areas may be defined by abstract and non-physical boundaries that require measurement and interpretation to quantify and qualify their location. Regardless of their form and origin, political borders exert control over resources

by defining the limits of political power and ideologies. Examining political boundaries and how they leverage policies, economies, societies, cultures, religions, and histories examined in this section expands an understanding of political borders and their historical and contemporary impact on spatial separation for a wide range of objectives.

In "**Borders for Peace: Controls Within a Kenyan Informal Settlement—During Political Conflict**" (pp. 151), **Stephen Vertigans, Neil Gibson, and Natascha Mueller-Hirth** define various barriers to peace. Political boundaries that separate conflicting groups in informal settlements are often ineffective in preventing violence during contentious political events. Community-based initiatives can contribute to deeper understanding between groups, increase social control, and restrict the potential for political tension. Political tension is prevalent during the election in the informal settlement as a bordered community within a larger community.

Vertigans, Gibson, and Mueller-Hirth use the case of Kibera in Nairobi in 2017, drawing from the incident of 2008 when many people were killed in the post-election conflict. An election is a tool for luring informal settlers in many developing nations to obtain votes, resulting in conflict from the underlying tension between various lobbying groups. Differences between this urban area, neighbouring golf courses, and middle-class residential gated enclaves are immediately apparent (Fig. 1.4). The urban land share is not harmonious and reflects the lack of planning control. A qualitative fieldwork method was employed: photovoice, semi-structured interviews and focus groups to enable participants to share insights into their experiences

Fig. 1.4 Turmoil, uproar, and compactness of the slum are precisely set against the methodical tranquil Royal Nairobi Golf Club, which opened in 1906. *Source* Miller (2016), https://unequalscenes.com/nairobi

through photographs and words. The outcome suggests that the younger generation can mediate and neutralise conflict.

The younger generation is more resilient than the rest of the informal settlers. They are the instrument for negotiation, better understanding Kibera's barriers to peace and exercising peace between opposing political and ethnic groups. This highlights a similar pattern in developing nations—where the younger generation is powerful in transforming tough decisions through demonstration yet has the method to negotiate.

Chiew Hui Tan and Simone Chung show how infrastructure impacts geographic borders in "**Malaysia-Singapore Geopolitics Spatialised: The Causeway as a Palimpsest**" (pp. 165). Infrastructure in Malaysia and Singapore is critical to economic and historical development on both sides, as goods and services and the migrant workforce manage the services of Singapore daily. Border, in this case, filters a controlled movement for the benefit of Singapore's economic growth, using the infrastructure as a conduit of economic transaction and development momentum on both sides. Taking mobility as an essential part of MalaysiaSingapore development, Singapore gains more than Malaysia due to the well-established baseline of good governance and being a global player in trades and services. In this scenario, the border in these South Asian neighbouring countries facilitates trade relations, but not a conflict.

In "**Borders of Precincts: Unpacking the Politics of White Neighbourhood Identities in the Post-Apartheid Black City**" (pp. 185), **Denver Hendricks and Alona Martínez Perez** debate the racial relationships and fear and how these two dynamics impact land distribution and influence the interpretation of government policies. There are ways in which borders can be politically leveraged and undermine public participation in community planning. Post-Apartheid Black City is the crux of clustering settlement collaged in a white neighbourhood, where contradiction of political thought process and contrasting development point to the question of community consensus in any development initiative.

Hendricks and Perez introduced a city-funded *bottom-up* approach. The Johannesburg Development Agency (JDA) funded a Community Participatory Design (CPD) project, the Melville Precinct Plan. They discuss the Melville Residents Association (MRA) initiative helped voice a different opinion about how the urban area is envisioned concerning the Strategic Area Framework (SAF) set out by the City of Johannesburg. Analysis of the MRA stems from the enquiry on what kind of development is essential on the city's borders, what fears are synonymous with that, and what unfair and exclusionary practices. The research on Melville Precinct Plan focuses on its framing policies and the general outcomes to unpack how the borders, peripherals, and edges are used politically to undermine generous public participation processes in planning a new community vision.

Various factors influenced India's shift from hard power to soft power diplomacy in Nepal. **Suraj Paneru** considers these issues in "**India's Shift to Soft Power in Nepal: A Case Study of the Borderland City of Birgunj**" (pp. 197) and points to the key factors that influence the development of Nepal through the Indian "Soft Power" includes the political use of a border to enforce the policy. However, there are historical ties in terms of cultural and religious similarities.

The context of Birgunj, where the 2015 Indian economic blockade on Nepal, is examined. Five key factors influenced India's shift from hard power to a soft power policy: the internationalisation of the Nepal conflict, the opening of border transit and construction of roads to China, the trade agreement and the One Belt One Road (OBOR) initiative, and interpretation of Indian governmental activities and India's political situation.

These conditions are the function of a landlocked country and are similar to those addressed in "**Regional Features of Agglomeration and the Antidote to Almaty's Landlocked Condition**" (pp. 213). In this chapter, **Gulnara Nyussupova, Aisulu Kalimurzina, Roza Kelinbayeva, Shnar Kairova, and Laura Kenespayeva** assess the landlocked city of Almaty its development anomalies due to Kazakhstan's land-locked condition. The authors discuss the need to establish a parameter to guide inno-vative use of infrastructure to achieve regional ambitions of transportation corridors and investment to achieve potential on developing science, quality of life, and urban development to compensate for the disadvantages of being a landlocked country. Landlock Kazakhstan depends on regional interactions, and the infrastructure is an integral part of the economic development that contradicts many neighbouring countries.

Almaty, the former capital of Kazakhstan, advances as a prosperous city due to the ongoing influx of the working-age population, highly qualified personnel with a traditionally well-developed educational base enriched by national ambition, and some degree, national target to maintain an intellectual environment. Kazakhstan breaks the boundary of landlocked conditions by reaching out to various developed countries to partner with its development. Almaty has a long history as the epicentre of science and innovation. This relates to the previous chapter on Nepal—and the lessons to be learnt—where education becomes a strategic focus and the critical resource that potentially brings other prosperities.

In "**People Places and Relationships**" (pp. 225), **Vaidehi Raipat** points to the need for human-centric urban design, without which sociocultural fragmentation is inevitable. Underpinning five basic urban design dimensions—people, places, networks, activities, and territoriality—Vaidehi analysed the character of Ranchi in India. The city's urbanisation and radical plan for expansion affected the ecosystem, while the city's fabric could not take the growing demand of new technology-based societal needs. The polarities in Ranchi originated from traditionalism, and another craving for the contemporary socio-economic demand left fractured urban condi-tions. The chapter addresses the strategic ways of embracing conventional user partic-ipation to register the views, and observation can be the antidote to urban fracture conditions.

1.4 Polarised Border Cities

The linear boundary between different areas is often transected by a line of transit that conveys people, resources, goods, and information. A concentration of activity,

a permanent or temporal border city often develops at this intersection. These chapters examine this phenomenon in the specific context of historical borders and artificial borders, and borders of inequity and urgency. Each analysis outlines valuable insights applicable to cases and environments beyond each environment's scope and leads to new ways to identify and consider borders that separate and divide otherwise unified areas and groups.

In "**Border[s]lines Between Isolation and Connection**", **Cecilia Zecca and Richard Laing** (pp. 247) explore the connection between the disused railway and society using abandoned railways as a contradictory function of border and connection. Case studies examine how urban linear connections define linear inert space and become a socio-spatial statement—differing two sides of the line as distinguishable.

Urban infrastructures are dynamic and result in relocated railway lines, leaving a void in urban areas that can be leveraged as a connecting area rather than a divisive one. Disused space, being *non-spaces* (reference), can become creatively helpful for any society should be a collaborative professional, and social engagement should be exercised. Views and experiences with creative intervention into empty, non-space, and social intervention is presented.

Sam Vardy and Paula McCloskey present ways in which borders can resist sovereign historical territories and territoriality in "**Fragile Cartographies of Border Fictioning**" (pp. 269). The issue of displaced social vulnerability and survival tactics is examined through research and their viewpoints. Transient minorities in hyper-vulnerability face variable and contoured anxiety and risks of living in unsafe and unhealthy places. Relocating from hazardous environments and ensuring housing, providing stability, preventing a humanitarian crisis, protecting from natural disasters, and helping to avoid expulsion are challenging strategies every country faces. However, in temporal life, the adaptation to unforeseeable challenges is immense.

In "**Dissonant Living and Building in the No-Man's Land on the Korean Peninsula**" (pp. 281), **Hyun-Tae Jung** illustrated the underlying conflicts, primarily historical and known worldwide, as the source of regional intensely political volatility since the end of the Korean War during the years 1950–53. "The Korean Armistice Agreement" of 1953 formed the Korean Demilitarized Zone (DMZ) to lessen immediate conflicts between the two sides, flanked 250 km long and approximately 4 km wide. It served as a buffer between the two countries.

In "Displaced: Vulnerability and Survival Within Segregated Undercaste Micro-cultures" (pp. 293), Moriah Snowden focuses on humanitarian programmes that connect to transient minorities as a marginal segment of society who are in a state of hyper-vulnerability. The crisis on this migrant DiConstant relocation of these groups from unsafe environments resulting from humanitarian crises or housing instability leaves a disproportionate segment of this population with inadequate housing or temporary shelter.

Despite the best efforts of relief organisations, some disenfranchised and displaced groups view humanitarian outreach as a last resort and opt to meet their needs independently. Too often, these minorities are cast in an unfortunate light and regarded as

separate from the macro-societies they are apart. In this way, the border that defines these groups is a state of being rather than a drawn boundary.

Snowden explores the adaptation of the compromise. It addresses how marginalised minority populations that reject the larger society can sustain themselves outside conventional economic sectors. It draws upon volunteer experience with Habitat for Humanity between 2005 and 2009 and first-hand accounts and statistical data of outreach to groups seeking asylum. These efforts are part of an ongoing examination of undercaste micro-communities in Lebanon, and the USA (Puerto Rico and Georgia) shunned within the greater macro-societies.

In "Trailblazing of European Ideal" (pp. 315), Chiara Toscani considers the political history and its economic and political relationships. According to Toscani, the border represents the division between an economy of wealth and one without prosperity. The border represents an opening towards a new economic exchange that can be extended to social and political benefits.

Toscani uses Frankfurt (Oder) and Slubice—the twin cities separated by the Iron Curtain[5] that symbolise the urban and social context in the European Union. These twin cities are a testament to two adverse situations of the Iron Curtain, despite the disadvantage on the Eastern part, the same border signifying the gateway towards a new economic trade among Berlin, Frankfurt, and other Polish. The gateway allows a one-way journey to prosperous countries, Germany and the UK. However, it does not reverse the process. Toscani brings in governance and infrastructure development to prevent the one-way flow of immigrants.

The city of Ceuta, a much-discussed Spanish border settlement located on the north coast of Africa, provides means for **Guido Cimadomo** to address an unfolding migrant border crisis in "**Spatial Transformations in Ceuta, Spain: Effects of a Low-Density Hinterland on a Border Enclave**" (pp. 323). The issue has its roots in a long-running conflict about 2000 km (1242 miles) away. Ceuta falls in the versatility of culture and socio-politics shaped by the European Union and Africa together with another Spanish-controlled city Melilla over the last 400 years (Fig. 1.5). Although Ceuta has no physical land connection to the EU, the border is a unique context with which Ceuta has of Spain been transforming throughout its possession from Morocco.

Morocco's decision not to recognise Ceuta impacts the development and demographic density along the Moroccan side of the border. However, any movement of goods and people is controlled by written and unwritten laws that make it a permeable membrane in one aspect and a strong barrier that limits the undesired flows originating from south–north migrations. The central issue is the potential for development on the Moroccan side, which denotes social and spatial justice

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[5] According to Britannica, the term Iron Curtain originated for occasional and varied purposes, mainly as a metaphor since the nineteenth century. This term became prominent after it was used by former British Prime Minister Winston Churchill in a speech at Fulton, Missouri, USA, on 5 March 1946, when he said of the communist states, "From Stettin in the Baltic to Trieste in the Adriatic, an iron curtain has descended across the Continent." (Britannica, The Editors of Encyclopedia. "Iron Curtain". Encyclopedia Britannica, Invalid Date, https://www.britannica.com/event/Iron-Curtain. Accessed 24 June 2021).
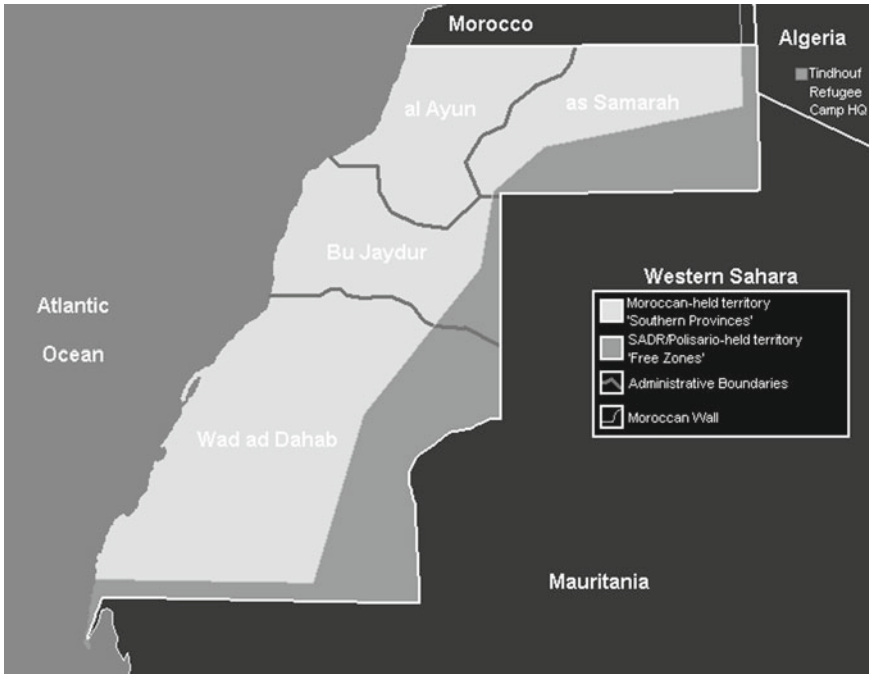
Fig. 1.5 Polisario-held territory east of the Moroccan Wall. *Source* Polisario front—Wikipedia, accessed on 10 October 2021

having less access to resources and a lack of development opportunities. Cimadomo took all these factors into his research and postulated "centripetal strategies/aiming to densify and upgrade the built environment addressing various social and political conflicts". Spanish-Moroccan disputed Polisario Front (Popular Front for the Liberation of Saguia el-Hamra and Río de Oro) is the inflicted global narratives—some from Germany and other critical questions from the former Trump regime USA—which are based on other global interests on the EU's approach to Ceuta.

1.5 Praxis of Border Urbanism

In reality, borders are often elements that unify rather than separate. In cases where the boundary limits unification that may be desired, there are ways to leverage the border as a coalescing element or, at a minimum, reduce its ability to divide. As presented by the chapters in this section, the potential to connect rather than isolate requires understanding the context, its history, and the issues that led to its creation. The disparate qualities of the border areas can be used to change their function. In addition, the physical characteristics of the border itself are often more critical than

the areas, populations, and resources it separates. Considered in these ways, borders can be leveraged to overcome and even modify future trajectories accepted as static or unchangeable.

Borders may be transient. Considered against the timeline of history, borders may be a decisive factor in determining how individuals define their population and identify themselves. Multiple borders may define different aspects of a physical area in many cases. Instead of being contradictory or competing, these boundaries may reinforce the legitimacy of other borders as they adapt to and respond to historical change.

Chapters in this section take an array of borders and boundaries and examine them concerning their unique political, cultural, and symbolic histories.

Rima Abousleiman, in "**Programmed Spaces: Redefining the Border Condition**" (pp. 341), presents the ideology that for some countries, a border is an opportunity for *junctures of unification* rather than *barriers of separation*. The inter-political powers portray borders as an imaginary lines as it forms on the geographical map. However, its meaning often embraces the opportunity of meeting places of languages, cultures, and cuisines, the possibilities for positive vision, which Rima postulates. This is a position ascertained and a utopian in some sense that is a desire for many. Nevertheless, Abousleiman goes beyond the pragmatic definition of borders by portraying the desolate expanses of landscape maintained as a political instrument. Abousleiman proposed a potential programme to draw people in, engage with them, and, consequently, activate a once undesirable space, perhaps a cultural hub combining language, art, music, and food, providing the opportunity to offer a spatial and placemaking value.

This is regarded as an emergent tertiary space as a non-existential space, given by the "Blue Neutralized Zone" as an example by the designer Soyoun Kim. Abousleiman also discusses the US-Mexico and West Bank borders in helping the theoretical debate. The Blue Neutralized Zone is a collective desire from both sides of Korea, and Abousleiman proposed a similar but more shared public realm that would unite rather than separate two cultures.

Abousleiman discusses a vision of designer Soyoun Kim naming "Blue Neutralized Zone" using the demilitarised zone (DMZ). Creating a sense of community in this neutral zone helps places foster a tertiary space that is neither here nor there but perfectly balanced interactions. One of the examples from 25 visions of Soyoun Kim is the Swimming Pool at the DMZ—highlighted in the Blue Neutralized Zone. The underlying objective of generating these visions rests on the belief in reintroducing the association between South and North Korea as an agreeable reality, probably even leading to the ambition for unanimity.

In "**Interrogating 'Post-conflict' Regeneration: A New Border in Northern Ireland**" (pp. 349), **Orla McKeever** begins with the question of whether repressive constraints, relating to the legacy of conflict, exist within the design of civic regeneration projects and if so, how do they manifest within the public realm? McKeever explores whether repressive constraints relating to the legacy of conflict exist within the design of civic regeneration projects and how they manifest within the public realm? Similarly, as the Nolli maps of Rome (1736–48) chart civic buildings' publicly

accessible interior space as an extension of the public realm, this question will be explored by investigating a civic case study project.

Finally, the threshold condition will be investigated as a critical moment in facilitating or obstructing of an extension of the public realm while exploring the *choreography of daily life* (Farrell and McNamara 2018).[6] Documented site visits reveal the immaterial repressive methods and material elements—signals within the built environment that control, contain, and corral the use of regeneration projects and facilitate new borders within the *post-conflict* environment of Northern Ireland.

Richard Murray addresses US-Mexico border issues in a new context in "**Cartographic Errors**" (pp. 361). Issues of socio-economic and cultural conflicts in the USA resulting from divided communities from this age-old border dispute are considered. In addition, Murray provides an alternate view of the potential to evaluate the border issue away from the traditional context and consider ways to bridge cultural divisions with individual recognition of other cultures.

Murray uses The Developmental Model of Intercultural Sensitivity, bringing a new interpretation of Milton Bennett (Bennett 2004), arguing a shift of mono-culture to an intercultural mindset to mediate differences and segregation. Murray sees the mediation technique as an architectural project with a sense of multiculturalism that could be sowed into children's minds through creative education settings.

According to Murray, "*Architecture cannot directly address cultural polarisation. Instead, the success of bridging cultural divisions begins with individual recognition of other cultures and is achieved by a collective movement towards awareness and appreciation*". This is perhaps the root cause of socially induced views on cultural polarities—negative connotations of differing cultural dynamism.

Yehya M. Serag, in "**Towards an Appropriate Development Approach for the Halayeb-Shalateen Border Region of Egypt**" (pp. 373), discusses the triangular region Halayeb-Shalateen in southeast Egypt that borders Sudan. The political struggle between Egypt and Sudan on the issue of administration and sovereignty echoes similar struggles in many parts of the world. A critical transition in British Colonisation needed compression due to the dispute between Egypt and Sudan during the last quarter of the nineteenth century and the first half of the twentieth century.

The regime in Egypt has controlled the demography in Egypt as control over their population moving to Sudan has lasted since the July 1952 revolution. For this, the Aswan High Dam during the 1960s acted as a physical control tool reducing cross-border interaction and trade that had previously helped strengthen border relations.

Recently, the Four Freedoms Agreement of 2004 suggested these two nations implement the bilateral movement of people and goods. The lessons are drawn as political acts implied through various physical and institutional regulatory systems (Mohyeldeen 2020).

In "**Contested Border Urbanism: Learning from the Cyprus Dispute**" (pp. 389), **Melehat Nil Gülari and Cecilia Zecca** address the ideas of *space*, *place*,

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[6] Farrell, Y., McNamara, S.: "La Biennale Di Venezia 16th International Architecture Exhibition Curated", http://files.cargocollective.com/159426/1.-Press-Release-16.-International-Architecture-Exhibition---La-Biennale-di-Venezia.pdf, last accessed 2018/06/27.

and *identity* in the context of the meaning of borders for Cypriots living in the north part of Cyprus, which is part of the Turkish Republic, and in the south, which is under Greek control. In considering the conflicting ethnic relationship, they trace the meaning of walls and borders by examining the urban fabric in Nicosia, Europe's last divided capital, and the narratives of crossing borders when closed borders were reopened after three decades.

1.6 Geopolitics and Social Polarities

The most critical impact of borders is upon people who inhabit the demarcated areas, identified, or separated. In many cases, the people who live and work in these areas were not responsible for the border's creation and enforcement. These people may have been attracted to the area by the qualities of the border created. On the other hand, the border may have been created to isolate them, their activities, and the characteristics that define them as a group—cultural, religious, political, and most often economic. In the latter case, people are disadvantaged by the reality of the border and the basis for its enforcement. This final section presents a range of issues in which the contradiction between borders and the reality of their contexts is examined for ways that the border can be a path to resolve disparity and differences rather than reinforce it.

Luke Murray and Lilly Kudic explore approaches to landscape using the Yorkshire Dales in Swaledale as a case study in "**Walk the Line: Stone Walls, Lead Mines and Future Farming**" (pp. 405). The Yorkshire Dales is well known for its prehistoric dry stone wall and mining history: currently, it has no significance in today's society, except for tourism. However, the traces of the path traversed by the miners from Gunnerside to The Old Gang Mine generate research interest for Murray and Kudic, and they question whether the landscape can offer insight into past acts, present attitudes, and future ambitions.

The research intends to reveal the historical significance moments, mainly "The Inclosure Act" passed throughout the 1600–the 1700s. Parliamentary Inclosure and Industrialists' land holdings represented the times' political, social, and economic authority, central to land and regional divisions have seen throughout Great Britain. This is relevant to historical landscapes today, except for tourism. However, the landscape can offer insight into past acts, present attitudes, and future agriculture ambitions in the UK (Matless 1992).

In "**Borders of Convenience: European Legal Measures and the Migration Crisis**" (pp. 423), **Paul Arnell and Carole Lyons** discuss the migration crisis concerning the European institutions, debating on whether the reality of European Union (EU) human rights matches its rhetoric. The EU's reaction to the crisis has adopted new external borders and responded to the jurisdictional extension of human rights protection by the European Court of Human Rights (ECtHR). Arnell and Lyons analysed underlying differences within the EU's response to the crisis and the ECtHR to re-impose responsibility on European states.

In many instances, the migrant crisis rests on the label of refugee status only, without taking the vulnerability likely to face when deported, which goes against the international human rights framework. The refugee status has been managed and controlled by the jurisdiction's international borders. However, it is widely agreed by the European Court of Human Rights (ECtHR) and other similar human rights organisations, such as Freedom for Torture (UK), and Amnesty International UK— aiming to assist in uniting displaced families and safeguard human rights against the UK government policies at large. Unfortunately, these recommendations from individual counties and the unions are often eliminated and ignore the human rights obligations proposed and advocated by the United Nations' NGO committee for migration in the document: a call for a human-rights-based approach to migration and development in the 2008 Global Forum on Migration and Development (GFMD) (McAuliffe and Khadria 2020).

Samira Albia and Rosa Cervera consider transient settlements in "**Indian Slums: The Boundary of Socially Constructed Temporal Borderlands. The Case of Nagar, Wazirpur, Jijamata Nagar Micro-cities**" (pp. 435). Albia and Cervera establish the contemporary notion of the temporal and transient form of settlements which are the product of the socially and economically constructed form of settlement, through the case of India. This formation is associated with industrialisation and the policy changes emphasising the economic growth that concentrates on a few social groups leaving behind the marginalised group of settlers who migrated from rural to urban areas. However, the conventional policy of the government is to stabilise the formation of slums. However, it becomes a far-cry objective for an overpopulated country with an imbalanced distribution of jobs. The authors analysed three specific slums to examine the different scales, the internal structures, and the morphologies of the settlements: the slum of Anna Nagar, located next to the airport of Secunderabad; the slum of Wazirpur, situated in a large industrial area of Delhi; and the slum of Jijamata Nagar in Mumbai, with the help of graphical methods. The research findings demonstrate how the inhabitants of each slum congregate daily in a self-regulated socio-economic and physical formation.

In "**A Neighbourhood of Fragmentation and Isolation**" (pp. 463), **Iris Altenberg** uses Scotland to illustrate regeneration and the measures against gentrification. A case study of the Raploch Council housing estate in Stirling, Scotland, once isolated as a bordered neighbourhood, is achieved with the gentrification outcome and policy in mind, encouraging increased owner occupation in an area previously dominated by social housing. In addition, new customary design values are reflected in the semiotics of architecture by creating a new language of building for new residents replacing the social housing tenants.

An *auto-driven photo-elicitation method* (PEI) was used by the area's new residents, giving them single-use cameras to take photos of the places and spaces that illustrate the changing nature of Raploch. Shaw (2013) suggests that differential opinions could be generated by enabling personal control and empowerment with a subsequent one-to-one interview. The marginalised societies might bring content into interviews that are not apparent from the observation or secondary data research (Clark-Ibáñez 2004; Guillermin and Drew 2010).

The interviews focused on the participants' photos. It became clear that there were social boundaries between the established and new residents and the new residents, resulting in an "us" and "them" discourse. These social discrepancies were expressed in the physical barrier of a road stretching between these two groups' areas, further amplified by the architectural character. Each group considered the other as either "out of place" in the established residents or as "old" with an underlying discourse of needing redevelopment by the new residents.

Austin Williams narrates the reflective documentary of social changes on the fringes of Suzhou, Jiangsu Province, China, in "**Edge Town/Che Fang**" (pp. 479). The rapid development in China has its roots in globalisation. The social social transformation has been at its highest rate over the last decades, and these changes made borders of differential growth patterns within the province. Williams uses a case study of a town close to Suzhou's industrialised area that was in the process of being transformed until the work was interrupted, resulting in a division in the community into three distinct areas. Wu indicates that new redevelopment in Chinese cities has dire consequences on societies due to the state's intervention in informal areas that turn into new production spaces for revenue maximisation.

Edge Town/Che Fang features interviews with a range of people living on the edge of the city's urban development that illustrates their memories and thoughts for the future. This state-run redevelopment has a long track record of the deterioration of the neighbourhood, including gentrification. As a result, marginalised communities become at the threshold of urban borders generated by the force of real estate investment. On the other hand, the enduring transformation in mainland China is linked to extreme socio-economic and political adjustments, shifting the way of living for many urban and rural dwellers living in poverty. The transformation of old and dilapidated neighbourhoods into modern, commoditised space forcibly produces marginalised societies. Since 1980s, various reform measures have been centred on leading homeownership through the commodification of urban housing (Wang and Murie 1999; Zhou and Logan 2002).

1.7   Border Typologies Investigated

The subject of the border is not so widespread or does not fascinate researchers in architecture or urbanism. Nevertheless, the discourses of architecture and urbanism generally trace the nature of borders or boundaries in exploring architectural development options or placemaking. Professionals mediate boundaries in architecture or urban design as borders or borderlands directly connecting to influencing factors. This practice emerges as a critical instrument with which land development decisions dictate histories and contemporary societies.

A collection of research by RIBA Part 2 students at the Scott Sutherland School of Architecture and Built Environment outlines analysis and research of typologies of boundaries in social, economic, and cultural domains.

In "**Border Typologies Investigated**" (pp. 497), **Andrew Pacitti** gathers a range of border conditions graphically inland and air, territorial and neighbouring countries. These are pictorial but self-narrative. Finally, **Patric Sim** presents the explorative research on the globalisation of transactions of goods and services in "**Chinese Trade Boundary: Immersion into the World Economy**" (pp. 498). Sim focuses on the Chinese global market economy, shaping worldwide consumption trends. The strength of production capacity drives this global phenomenon as China became the sole producer. At the same time, Europe and North America were the largest consumers, creating a more extensive global network of borderless enterprises (Fig. 1.6).
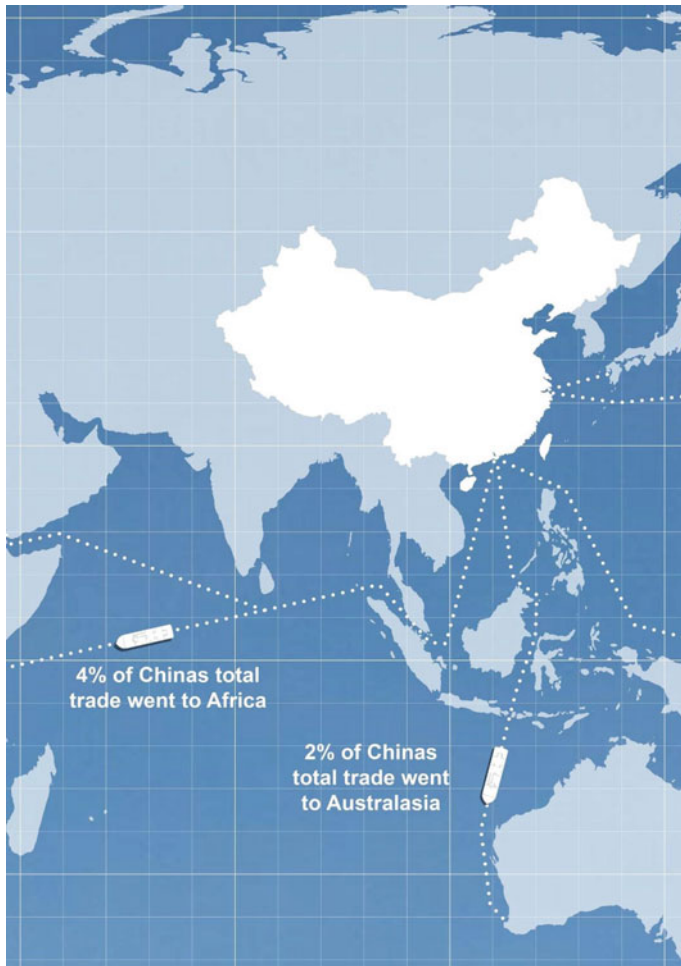
Fig. 1.6 Comparative scenario of China's trade in and out of the country in 2016 (Patrick Sim 2018)

Fig. 1.7 Typologies of social isolation

Mathew Holmes reframes the popular cultural precincts of Chinatowns in "**The Rhetoric of Ethnicity and Borderlands**" (pp. 507). Holmes describes an evolutionary process that gradually dissolves into a foreign cultural enclave. Chinatown makes a distinct feature in the alien landscape through its exotic food and services as a landmark, district, and edges (boundary), taking Kevin Lynch's urban semiotics and the 1967 Bob Chan Pictorial Map of San Francisco's Chinatown.

In "**Social Segregation and Boundaries of Restrictions**" (pp. 507), **Julie Nelson** selects from the micro-social landscape, where social segregation due to gender, disability, and age can be recognised as boundaries of socially constructed beliefs and norms that existed and are still a social concern. These are qualitatively described in images but have their foundations in the theoretical realm and interpretation that various authors researched in social science, politics, and ethnography (Fig. 1.7).

Andrew Kirwan considers how data and technology shape our world in "**Borderless Society and the Liminal Border**" (pp. 514). Kirwan describes how data gathering connects the world and creates a borderless society. The conceptualisation of networks in Manuel Castells' theory of network society predominantly addressed the social dependency on trades, social networking, economy, and politics. As a result, in the latter half of the 1990s, the information age trilogy became a critical notion of social change and social theory (Fig. 1.8).

1.8 Summary Statement of the Explorative Research

This last chapter is a graphical excursion. Although less methodical, these are being nurtured in the architectural educational realm. However, these illustrations can, to some extent, to communicate the fundamental nature of how some critical border typologies known to the world may be the basis for interest in reconnoitring more unfamiliar typologies.

The crux of these explorations is a flinch of the attempt or surprising trip to research border issues from the discipline of architecture. However, more collaboration with social, political, and ethnographic researchers would likely set a culture of probing

Fig. 1.8 Liminality at the tip of a finger (Kirwan 2018)

the border issues using architecture, urban design, and urban planning. As stated earlier, the border was less researched in the built environment disciplines in a similar polemical fashion as in political science and other allied disciplines.

Thus, there is a chance for embracing these two distant disciplines, architecture and political or anthropological sciences, to help define the various unknown phenomena of the formation of borders, their history of displaced settlements, fragile architecture, and transient social construction. Some of these are less explored and known sparsely in architecture and urbanism. The book will join other significant published books and articles to remind us of the need for a transdisciplinary approach to border research.

References

Bennett MJ (2004) Becoming interculturally competent. In Wurzel JS (ed) Toward multiculturalism: a reader in multicultural education. Intercultural Resource Corporation, Newton, MA

Casey ES (1993) Getting back into place: toward a renewed understanding of the place-world. Indiana University Press, Bloomington

Clark-Ibáñez M (2004) Framing the social world with photo-elicitation interviews. Am Behav Sci 47:1507–1528

Fraser M, Golzari N (2016) Architecture and globalisation in the Persian gulf region, 1st edition. Routledge, New York

Farrell Y, McNamara S (2018). La Biennale Di Venezia 16th International Architecture Exhibition Curated. http://files.cargocollective.com/159426/1. Press-Release-16. International-Architecture-Exhibition—La-Biennale-di-Venezia.pdf. Accessed 27 Jun 2018

Geddes P (1915) Cities in evolution. Williams and Norgate, London

Golzari N (2013) Architecture and globalisation in the Persian Gulf Region. Murray Fraser

Guillemin M, Drew S (2010) Questions of process in participant-generated visual methodologies. Vis Stud 25:175–188

Haselsberger B (2014) Decoding borders. Appreciating border impacts on space and people. Plann Theor Pract 15(4):505–526. https://doi.org/10.1080/14649357.2014.963652

Huntington SP (1996) The clash of civilizations and the remaking of world order. Simon and Schuster, New York

Kirwan A (2018) Borderless society and the liminal border. In: Elective contemporary issues in urban design and development module coursework. Scott Sutherland School of Architecture, Robert Gordon University

Marshall T (2015) Prisoners of geography: ten maps that tell you everything you need to know about global politics, (Politics of Place #1). Elliott & Thompson, London

Mason B (2021) New map shows where earth has gained and lost land. National Geography. https://www.nationalgeographic.com/culture/article/water-land-sea-levels-shift-map

Matless D (1992) Regional surveys and local knowledges: the geographical imagination in Britain, 1918–39. Trans Inst Br Geogr New Ser 17(4):464–480

McAuliffe M, Khadria B (eds) (2020) Un world migration report. Switzerland International Organization for Migration

Miller J (2016) Unequal scenes—Nairobi. https://doi.org/10.1007/s11482-019-09739-8

Mohyeldeen S (2020) The Egypt-Sudan border: a story of unfulfilled promise, X-border local research network. Malcolm H. Kerr Carnegie Middle East Center. https://carnegie-mec.org/2020/06/11/egypt-sudan-border-story-of-unfulfilled-promise-pub-81995. Accessed on 16 Oct 2021

Németh S et al (2013) Research design for studying development in border areas: case studies towards the big picture?, Belgeo [En ligne], 1|2013, mis en ligne le 31 octobre 2013, consulté le 06 juin 2022. http://journals.openedition.org/belgeo/10582; https://doi.org/10.4000/belgeo.10582

Pinker S (2002) The blank slate: the modern denial of human nature. Penguin Books, New York

Rasmus Kerrn-Jespersen (2016) Genes shape our social ideological attitudes. In: ScienceNordic. https://sciencenordic.com/denmark-genetics-politics/genes-shape-our-social-ideological-attitudes/1436320. Accessed on 6 June 2022

Shaw D (2013) A new look at an old research method: photo-elicitation. TESOL J 4:785–799

Sim P (2018) Border typology investigated. In: Elective contemporary issues in urban design and development module coursework. Scott Sutherland School of Architecture, Robert Gordon University

Ulysses Project (2010–2012) Using applied research results from ESPON as a Yardstick for cross-border spatial development planning. Funded by the European Commission under the ESPON 2013 Programme. http://www.espon.eu/main/Menu_Projects/Menu_TargetedAnalyses/ulysses.html

Wang YP, Murie A (1999) Housing policy and practice in China. Macmillan, London

Zapata et al (2018) Territory and water landscape. In: Zaman QMM, Hall GH (2022) Border urbanism - a discourse analysis. Springer

Zhou M, Logan JR (2002) Market transition and the commodification of housing in urban China. In: Logan JR (ed) The New Chinese city: globalisation and market reform. Blackwell Publishers, Oxford, pp 152–173

Part II
Border-Built Environment Nexus

Chapter 2
Territory and Water Landscapes: The Conurbations of Sabadell and Terrassa

Carme Carcaño Zapata, Isabel Castiñeira Palou, and Alona Martínez Perez

Abstract The Ripoll and the Arenes rivers in Catalonia, Spain, have a complex relationship with the towns of Sabadell and Terrassa. Towns such as these, about 25 km from Barcelona, have historically relied on the rivers as a power source for textile mills. In contrast with their value to the region's economy, the rivers have also brought devastation. On September 25, 1962, the rivers flooded both towns, and 441 people died. Despite this tragedy, the two water systems have maintained their importance to the towns and become the structural axes of Sabadell and Terrassa. Examination of these rivers and three other rivers in the area: the Riereta river, the Vallparadís river and the Palau river document their relationship to specific cities over time. It studies the rivers that, at one point, formed physical boundaries that separated towns and regions and continually posed risks to lives and livelihoods. This provides a basis for considering how these rivers and the larger water systems can serve as unifying elements that connect disparate urban areas with a population of about 574.700 inhabitants and a growth tax of 9.23 per 1000 inhabitants. Considering all scales and focussing on the territorial scale uses established methodology from three perspectives: ecology, landscape and town planning. Research findings identify river systems as structuring axes of the territory, the two urban conurbations of Sabadell and Terrassa. Furthermore, these findings reveal the river systems as spaces of opportunity in the territory's future planning.

Keywords Rivers · Streams · Mediterranean cities · Water landscapes · Resilient water landscape

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2.1 Introduction: The Flood of 1962 and Spatial Segregation

The towns of Sabadell and Terrassa are located 25 km from Barcelona. Although these Catalonian towns are only four kilometres apart, they have always been distinct urban areas; they have never constituted an urban conurbation. Both cities share similar pasts. In the Industrial Revolution, they were pioneering textile cities and played an essential role in Catalonia's historical and economic development. As their industrial sector has transformed into a service economy, it has also developed and expanded the urban fabric, turning both cities into the economic engine of the second crown of the Metropolitan Region of Barcelona.

In the collective memory of Vallesan society, the night of September 25, 1962, is profound. The cities, which have a population of 100,311 in Terrassa and 112,416 in Sabadell, were impacted by massive floods that killed 441 people, and besides, 374 people were reported missing. The financial cost was severe—over €16,000,000, a value of over €600,000,000 today. In contrast to the severity of the flood and the devastation that it left, today, the river's fluvial areas are the urban spaces that its citizens most frequent. The contrast between the condition after the flood and current conditions is shown in Figs. 2.1 and 2.2.

Analysing how the rivers and the land were developed helps explain their current characteristics and relationships with urban areas. First, the territory's stormwater systems provided accessible areas for development despite the risk of periodic flooding. This explains that the cities sprawl along the Ripoll and Arenas rivers rather than in the land between them. Second, the rivers that once separated territories and posed a risk became structural axes. Finally, urban growth and development brought the towns of the urban subsystems together. As a result, the Ripoll river has become a cultural park; the Arenes river has become a fast and desolate road; the Palau river and the Riereta river are streets, and the Vallparadís river is a city park.

Fig. 2.1 Historical photos from the 1962 flood show the extent of the devastation

Fig. 2.2 Current pictures of the study area show how areas devastated by floods have become parks and avenues

This methodology considers the regional survey methods of Patrick Geddes and Enric Batlle's statement about territory construction and emphasises three points of view: ecology, landscape and town planning. To adopt this methodology, different layers of the territory are examined. The research was done on historical heritage, topography and meteorology, geology and the territory's morphology. Further, the research focuses on its productivity, mobility, ecology, land coverings, aesthetics, symbolism and identity, social, urban fabric, accessible spaces and road and rail infrastructure layers, which collectively help understand the landscape, urban and ecology territory. These layers are described in Sects. 2.2 and 2.3. A MicroStation and Geographic Information System have been used in combination with the following urban documentation: the Metropolitan Territorial Plan of Barcelona, the Landscape Catalogue of the Metropolitan Region of Barcelona written by CCRS, architects, the Metropolitan Transport Authority (ATM) for 1996 and 2001, The Mobility Director Plan of the Metropolitan Region of Barcelona, the Urban Mobility Plan of Sabadell of 2009 and the Terrassa Mobility Study that analyses changes that have occurred between 1986 and 2001. Besides, the 2013 Statistical Institute of Catalonia has been considered.

2.2 A Territory Built by Rivers and Streams

The research underpins an understanding of Geddes's historical, topographical and meteorological layers. This is necessary for assessing the morphology of the territory and economic processes interconnected with mobility. The 1962 flood was a significant factor in the region's history. As shown in Fig. 2.9, architectural and urban elements are evidence of the historical heritage. The immediate areas of the town

of Terrassa and Sabadell are subject to entirely different meteorological patterns, as shown in Figs. 2.3 and 2.4. These patterns can be described as structuring elements of the territory. These are significant because they have determined the growth of the urban conurbations of Sabadell and Terrassa.

Sabadell and Terrassa comprise two different urban subsystems with unique relationships with the rivers. The Arenas river crosses the towns of Matadepera, Terrassa and Rubí, whereas the Ripoll river runs through the towns of Castellar del Vallès,
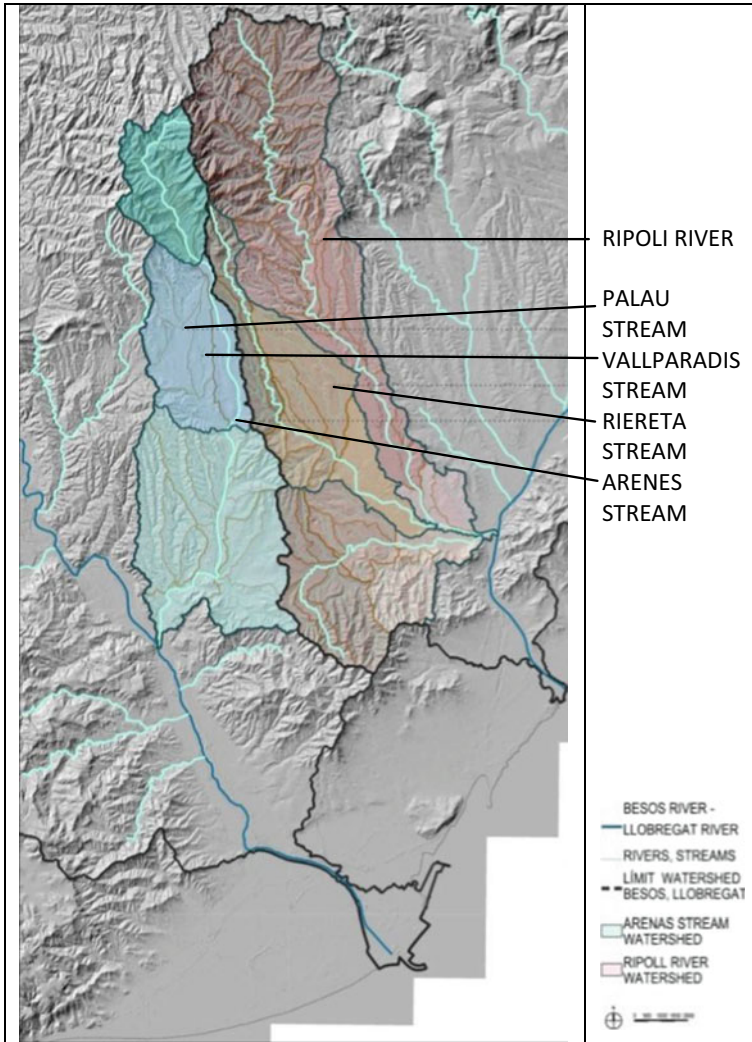
Fig. 2.3 Watersheds of the towns of Sabadell and Terrassa, which show two different areas
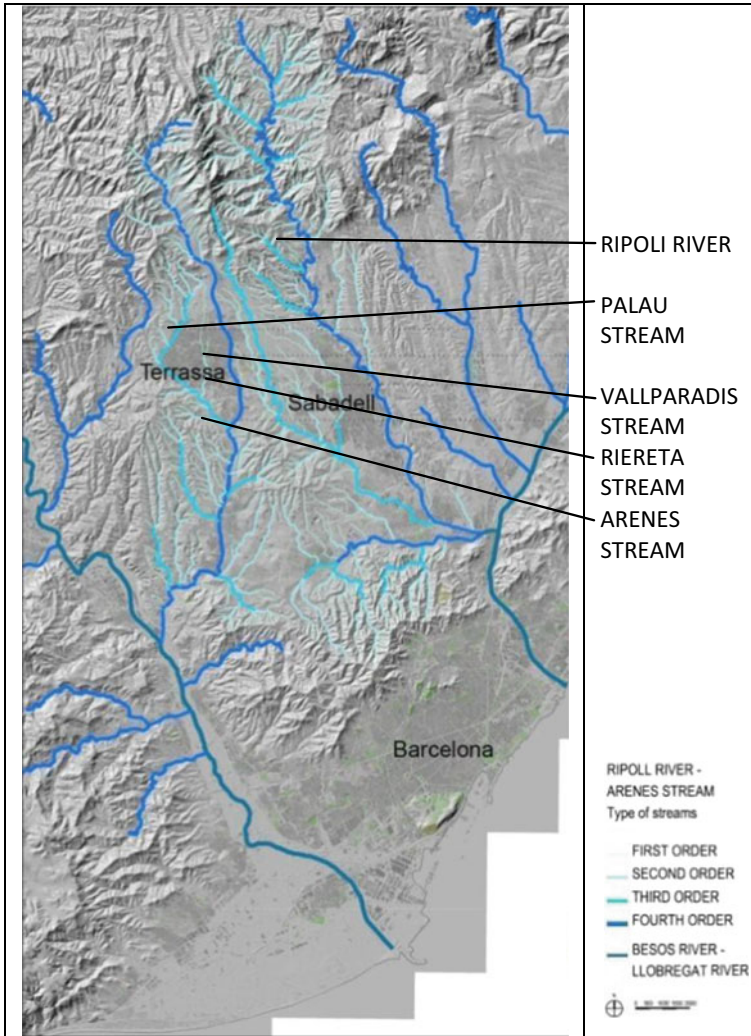
Fig. 2.4 Rivers that drain the area where the Ripoll river and the Arenas river have a territorial character, and the Vallparadís river, the Riereta river and the Palau river have an urban character

Sabadell and Barbarà del Vallès. The physical relationship between the cities and rivers is shown in Figs. 2.4 and 2.5.

In the western area (Terrassa), the rivers flow towards the Llobregat. In the eastern area (Sabadell), they flow towards the Besòs. This lack of a contiguous watershed unit is of enormous significance. Each watershed basin has specific orthographic and geological characteristics. For example, the Ripoll basin has a rugged topography that runs through gravel, sand and lucite soils. In contrast, the Arenas river basin has a flatter topography that runs through foothills.
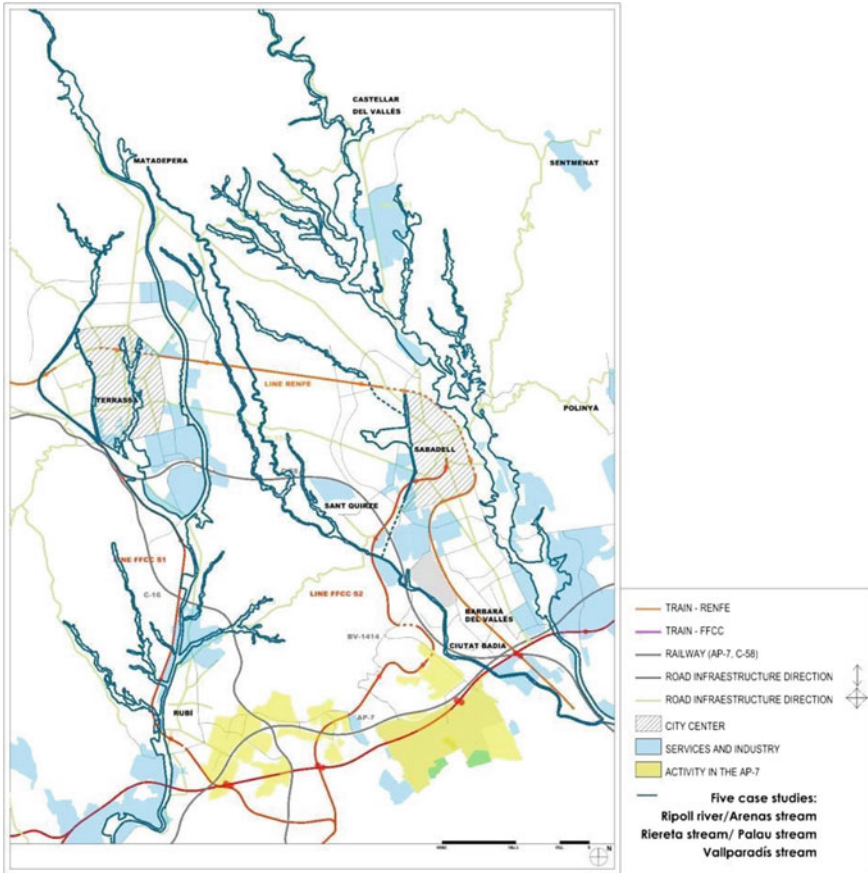
Fig. 2.5 The economic activity of Sabadell and Terrassa, which shows how economic activity is located on the axes of the Ripoll river and the Arenas river at the entrance of the C-58 and the B-30

The Ripoll river, Arenas river and its tributaries that drain the valleys have similar characteristics that restrict the ability to control water flow. The small surface area of the watersheds and the steep slopes at the head of the basin results in a very rapid concentration of surface water exacerbated by scarce surface vegetation in areas such as Sant Llorenç del Munt. In addition, the geology of the many regions of the valleys contributes to erosion. The sedimentary soil, the tender plain valley materials and naked vegetation plots expose the landscape to erosion. These factors contribute to a rapid increase in water levels in the river network. As water levels rise in the rivers, their erosive power significantly increases.

2.2.1 Morphology of the Territory

The Territorial Metropolitan Plan of Barcelona, approved on April 20, 2010, addresses the Terrassa and Sabadell urban subsystems and morphologies. This plan defines two areas to be developed through an urban Master Plan in the Ripoll river's fluvial environments and the Las Arenas stream, thus recognising the fluvial elements' structuring capacity.

2.2.1.1 Areas of Economic Activity

Economic activity within the study area is dispersed among several streets and zones. As shown in Fig. 2.5, it is concentrated on the axes of the Ripoll river and the Arenas river at the entrance of the C-58 and the B-30. According to Table 2.1, 2013 data on economic activity in the Valles area published by the Statistical Institute of Catalonia indicates that services are the study area's priority.

2.2.2 Mobility Within the Territory

Mobility within the territory has changed significantly since the last century. People's movement and the transportation of materials and goods have increased, and infrastructure networks' quality has expanded. Transportation routes between residential and work areas demonstrate the territory's existing mobility networks. Changes in three key areas are crucial to examining mobility: productivity, consumption and leisure. Thus, other mobility valuation systems must be considered to understand the territory's situation and interaction between the different municipalities. To examine the interrelationship between the municipalities, which delimits Sabadell and Terrassa's urban systems, the mobility survey prepared by the Metropolitan Transport Authority (ATM) in 1996 and 2001 has been used.

Based on the mobility patterns observed in this survey, it is possible to adopt a new approach to analyse the regional articulation of the Vallès Occidental (region of Sabadell and Terrassa) in the entire Metropolitan area of Barcelona. This approach relies upon optical analysis of networks whose main objective is the structures and relationship between different territorial centres' actors. The model is based on structural equivalence, in which groups of municipalities define cohesive areas with close interrelationships.

Once this model is applied in the Vallès region, the complexity of the area's urban structure is evident. This is unlike the mono-centric tendency of other regions of cohesion. As shown in Fig. 2.5, the two main historic centres of Sabadell and Terrassa appear to compete. An emerging network of new centres to the south accompanies both towns. This new centre network has a linear nature consisting of transportation infrastructures located transversally in the territory (AP-7 and its B-30 sides). It is

Table 2.1 Economic activities within the study area

Town	Type of economic activity				Areas of economic activities
	Services (%)	Manufacturing industry (%)	Construction (%)	Agriculture (%)	
Sabadell	82.34	11.29	6.28	0.08	Eix Marcià Street and main areas of neighbourhoods such as Matadepera Ave., Sol i Padris St., Concordia Ave., Europe Ave., Zamenhof St., 11th September Ave., La Rambla, Barbarà Ave., Almogàvers St. and Terrasa St.
Castellar del Vallès	57.62	33.10	8.93	0.02	Mirador Square and surrounding streets
Barbarà del Vallès	53.39	42.82	3.76	0.02	Dr. Moragas Street and the city centre
Terrasa	73.64	18.36	7.89	0.11	City centre, main streets of the Sant Pere and Ca n'Anglada neighbourhoods, the following streets: Josep Taradelles Ave., Rellinars St., Abat Marcet Ave., Jacquard Ave., Angel Sallent Ave., Passig 22nd Juliol St., Montcada St., Barcelona Ave., Jaume I Ave., Rambla d'Egara St. and Castellar St., the south part of Valles Ave. and the Montserrat, Can Parellada and Parc Valles commercial areas
Matadepera	82.91	7.75	8.84	0.49	Pedestrian streets of the city centre
Rubi	53.09	3.39	7.67	0.06	Prat de la Riba St., Pau Claris St., Ca n'Oriol St. and Estatut Ave.

This information is shown in Fig. 2.5

very well connected to Barcelona through the C-16 and the Metro del Vallès (FFCC), in which the municipalities of Bellaterra, Cerdanyola, Sant Cugat del Vallès, Rubí and Ripollet are located.

Two urban systems are recognised: Sabadell and Terrassa. On the one hand, there is the Sabadell system with the towns of Sant Llorenç de Savall, Castellar del Vallés, Sentmenat, Palau de Plegamans, Polinyà, Sant Quirze del Vallés, Barberà del Vallés and Badia. On the other hand, there is the Terrassa system with the towns of Matadepera, Vacarisses, Viladecavalls, Ullastrell and Rubí.

An analysis of the territory and the layers that have been identified show that the Ripoll river and the Arenas river are in different watersheds. Because the Arenas river and the Ripoll river are distinct natural elements in different hydrologic zones, they exist as natural elements that structure the territory. Figure 2.6 shows that, despite their proximity, these two towns never developed into one contiguous urban area.
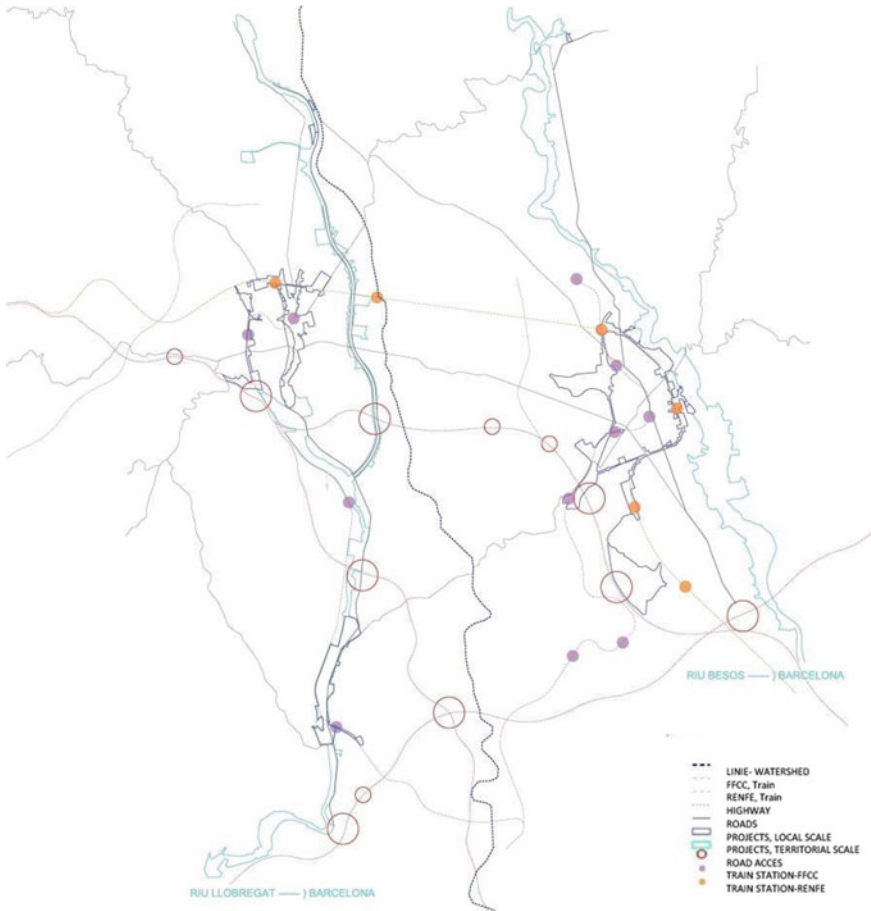
Fig. 2.6 Summary plan of the layers of topography, morphology, economic activity and mobility of the territory of Sabadell and Terrassa

2.3 Three Points of View: Ecology, Landscape and Town Planning

Before studying the territory concerning ecology, landscape and town planning, background information provides a broad context.

As cities in Europe developed, they expanded beyond a compact city centre of streets, avenues, squares and parks. Urban sprawl resulted from growing population, activities and services in cities' areas. Eventually, people's mentality changed with the link between the city and nature. A holistic ecological vision has emerged in response, which sees human beings and the environment as a single system.

Urban planners have been forced to rethink strategies to design cities because the compact city with its streets, avenues and parks has given way to the contemporary city characterised by its dispersion in the territory. Authors such as Enric Batlle and Carles Llop have demonstrated a commitment to building an ecological matrix to structure this new city. This matrix includes all free spaces, such as forests, hydraulic systems, fields and open spaces surrounding territorial infrastructures. Besides, it includes open spaces in cities such as walkways, parks and streets. These spaces are not considered reserve spaces or land for food production; instead, they are identified as spaces dedicated to environmental issues for the community's benefit.

In the Metropolitan Region of Barcelona, Batlle (2002) hypothesised that free space allows cohesion and makes the city understandable. This can become a new strategy to define the shape of the metropolis and help give rise to a new stratum that will embrace many construction layers and meanings that constitute the metropolitan fact. The strategy proposed the construction of a metropolitan ecological matrix that infiltrates all corners of the city. Rivers and streams are integral to this "Garden of the Metropolis."

This concept provides a basis to demonstrate that the five cases in question represent the "Garden of the Metropolis." They allow cohesion and structure of the territory. Furthermore, they are new streets of the new expansion area built in the Barcelona region. As Batlle (2014) writes, "The Garden of the Metropolis" is built on the three disciplines' values: ecology, landscape and urbanism. This leads to an analysis of these disciplines of the study's five cases, the Ripoll river, the Arenas river, the Vallparadís river, the Palau river and the Riereta river.

2.3.1 Ecology

The rivers and streams of these regions are essential elements that have influenced the natural and urban environment. According to R. Forman,[1] rivers and streams are best considered and understood as corridors with specific characteristics:

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[1] Richard Forman (1996), known as the father of ecological urban development, says that the structural pattern of the landscape or region is composed of three types of elements, patches, corridors and mosaics.

1. They are dense natural vegetation corridors that dissolve substances such as nitrogen, phosphorus and toxins.
2. Their width is sufficient to control dissolved-substance inputs from border areas to provide a conduit for upland interior species and offer suitable habitats for the floodplain.
3. They have a "ladder pattern" of large patches crossing the floodplain to provide a hydrologic sponge that traps sediment during floods and provides soil organic matter for the aquatic food chain.
4. Finally, a stream or river corridor's connectivity should be protected to maintain aquatic conditions such as cold water temperature and high oxygen content.

In light of this, the five cases are presented in Table 2.2, which has synthesised the information collected in Figs. 2.3, 2.7 and 2.8.

Analysis of the case studies from the water point of view identifies five aspects of the rivers for investigation:

1. Ability to collect water: Water collection depends on the land's filtering characteristics related to the slope, soil type and vegetation.
2. Water pollution: For rivers to serve as filters and minimise water pollution, there must be a sufficient level and quality of aquatic plants.
3. Flood control: Stormwater collectors must be designed to correspond to natural models that allow water to be retained and absorbed by the soil.
4. Erosion: To avoid erosion, soil type, land slope, rainfall frequency, and intensity must be considered; vegetation must be dormant in winter.
5. Water quality: Water quality depends upon the channel slope; the water depth and the roughness of the channel must be considered, and the floodplain must be maintained.

Table 2.3 presents critical aspects of the rivers under consideration.

Based on this analysis, the Ripoll river is the only case that meets the criteria of a corridor. However, the Palau river's transformation into forest paths and the Vallparadís river's transformation as an urban park contributes to a massive mosaic. Although the Riereta river (EixMacià) is a second-order stream similar to the Palau river and the Vallparadís river, it has been channelled. Because its modification is part of an urban project that prioritises vehicles over pedestrians, it cannot be considered an axis contributing to mosaic formation. The same consideration applies to the Arenas river.

2.3.2 Landscape

Nature is one of the many elements that shape the landscape. Many other determining elements are linked to human life. They include cultural aspects, visual elements and perceptive and symbolic characters. Analysing the landscape requires considering the features and layers that impact the natural form. These layers are interconnected with

Table 2.2 Ecological study of the five river areas of Sabadell and Terrassa

River	Watershed/Sub-watershed	Order[a]	Ladder pattern	Vegetation	Length and width	Protected connectivity
Ripoll river	Besos/Ripoll watershed	Fourth-order	Meandering with an isle of vegetation	Yes	$L = 18.5$ km $W = 500/600$ m Channel $=$ 50–60 m wide	Yes
Arenas river	Llobregat/Arenas watershed	Fourth-order	Straight, and central and south stream area stream channelised with open halfpipe	Yes, in the north No, in the central and south	$L = 16.2$ km $W = 68/120$ m Channel $= 50$ m wide	Yes, in the north No, in the central and south
Palau river (Ramla de Terrassa)	Llobregat/Palau watershed that dies in the Arenas watershed	Third-order	Stream channelised and diverted	No	$L = 0.600$ km $W = 24/80$ m	No
Riereta river (Eix Macià street)	Besós/Sec river watershed that dies in the Ripoll watershed	Second-order	Stream channelised	No	$L = 0.900$ km $W = 40$ m	No
Vallparadis river (Vallparadis park)	Llobregat/Sub-watershed that dies in the Palau watershed	Second-order	Stream channelised with open halfpipe	Yes	$L = 3$ km $W = 48/300$ m Channel $= 0.5$ m wide	Yes, vegetation on the slopes

[a] See Fig. 2.3
[b] See Figs. 2.7 and 2.8
The importance of notes [a] and [b] is to point out the ecological values of the territory as well as the reference to river basins

topography and geology, land use, vegetation patterns (e.g. forest, agriculture, urban), heritage, aesthetic qualities (e.g. texture, colours, forms, visibility) and relationships established between residents and the landscape (e.g. symbolic, identity, social).

The territory layers in which the five case studies are located are outlined in The *Landscape Catalogue of Barcelona's Metropolitan Region* (LCMB 2014). This 2014 study conducted by the Landscape Observatory identifies essential information.

2.3.2.1 Topography and Geology

See Table 2.4.
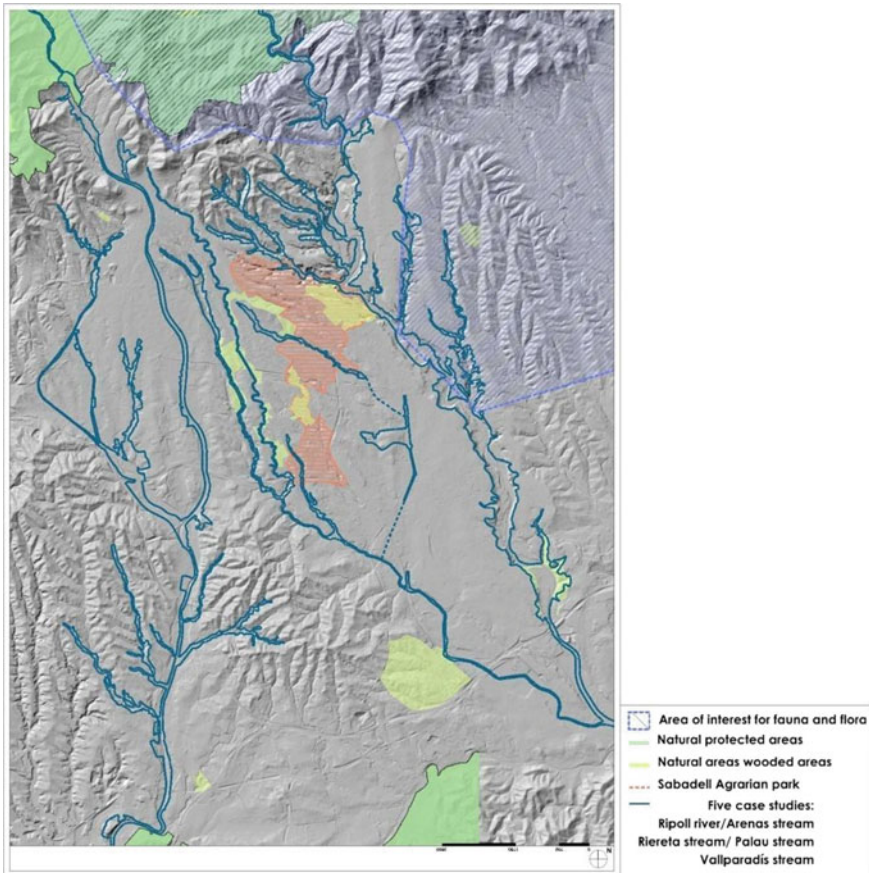
Fig. 2.7 Image of natural values of the five river areas of Sabadell and Terrassa
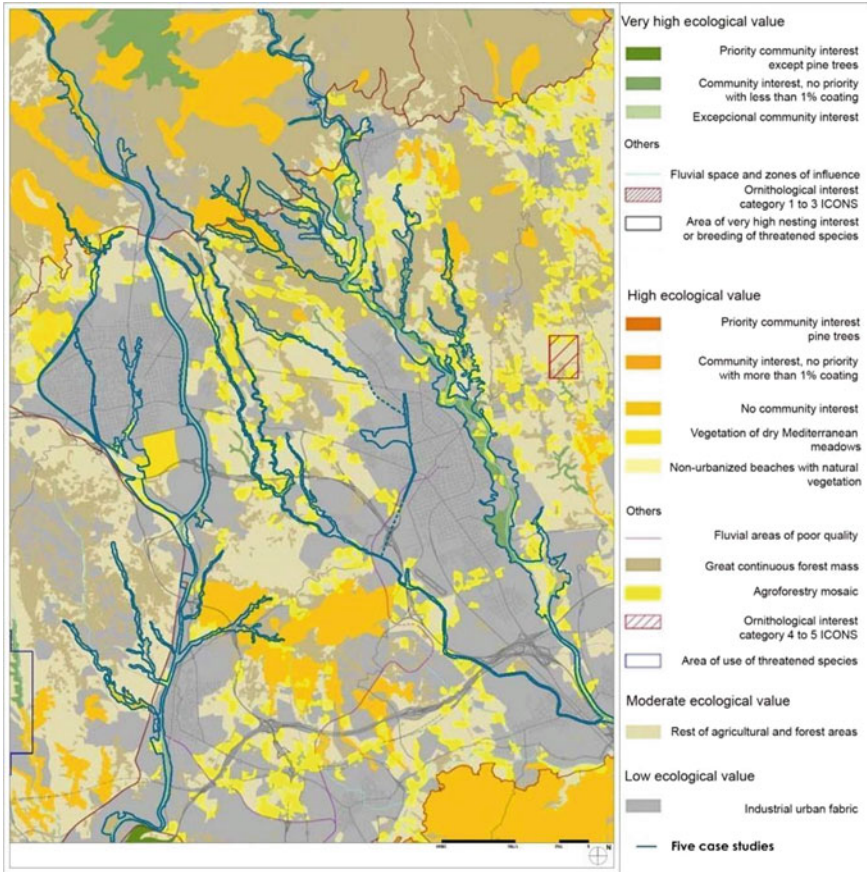
Fig. 2.8 Image of ecological values of the five river areas of Sabadell and Terrassa

2.3.2.2 Productive Layer

Analysis of the study area reveals an economic zone near the Ripoll river and the Arenes river. Also, there are shops in Rambla, and an enterprise area in Eix Macià. In addition, there are services in Vallparadis park (i.e. Mutua de Terrassa Hospital, Polytechnic University of Catalonia). However, there are no tourist areas in Sabadell, Terrassa or the towns near these cities.

2.3.2.3 Land Coverings: Natural Values

Figure 2.7 shows that riverside vegetation and natural interest areas exist only in the Ripoll area and at the head of the Arenas river. As for protected areas and agricultural
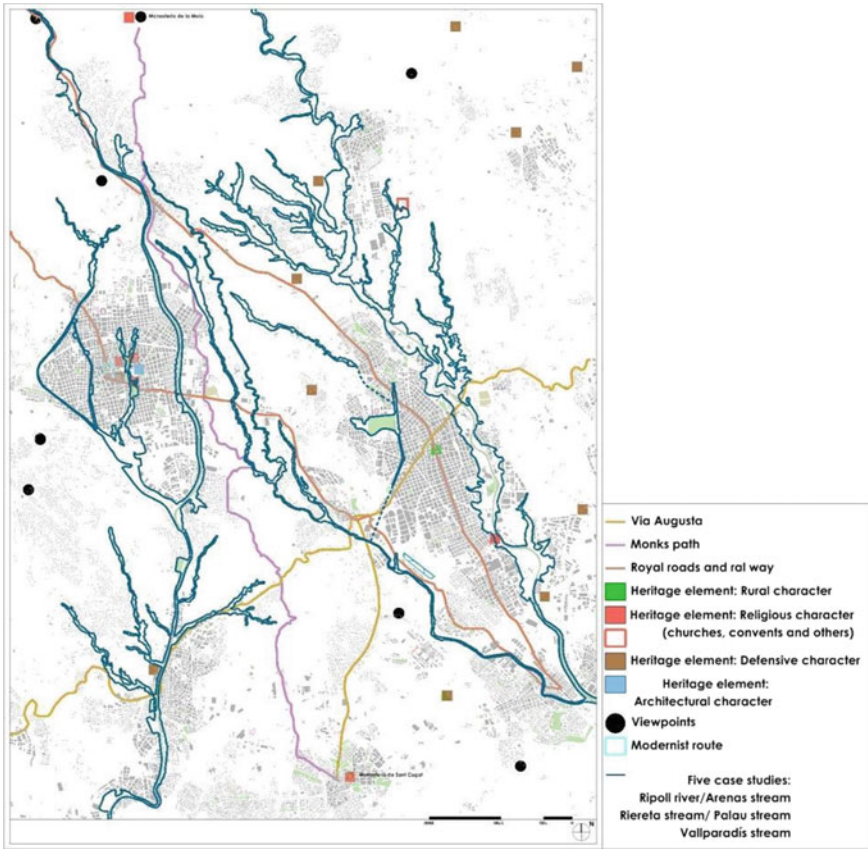
Fig. 2.9 Image of the heritage layer of the five rivers areas of Sabadell and Terrassa

areas of interest, only live in the Ripoll river's surroundings. Table 2.5 synthesises information collected in Fig. 2.7.

2.3.2.4   Land Coverings: Ecological Values

Figure 2.8 shows that areas with ecological value are found only in the Ripoll river and the Arenas river's surroundings. Table 2.6 has the information collected in Fig. 2.8.

2.3.2.5   Heritage Layer

According to the graph in Fig. 2.9, the Ripoll and the Vallparadís rivers are the fluvial axes with the most outstanding patrimonial elements in their environment. Likewise, the Arenas river has heritage elements when it crosses the city of Rubí; in the axis

Table 2.3 An ecological study of the five river areas of Sabadell and Terrassa

	Soil	Slope	Aquatic plants	Water retention	Depth of the channel	Roughness of the channel
Ripoll river	Granular materials, sands and gravels	Between 1 and 3%	Yes	Yes	0.5/1 m	High roughness
Arenas stream	First: conglomerates of gravel, bolos with clay cement and very broken limestone Second: very permeable bed	First 12.6 km: 3.6–3.2% Second 5.7 km: 3.2–2.0%	No	No	0.5 m	First: high roughness Second: less roughness
Palau stream (Ramla de Terrassa)	Stream channelized	Stream channelized	No	No	0 m	Stream channelized
Riereta stream (Eix Macià street)	Stream channelized	Stream channelized	No	No	0 m	Stream channelized
Vallparadis stream (Vallparadis park)	Stream channelized	Stream channelized	No	No	0.2 m	Stream channelized with concrete pipe

Note The intensity of the rainfall is high in some seasons of the year

of the Palau river, there is a heritage element, and the Riereta river crosses a historic neighbourhood, the Cruz Alta. Table 2.7 has the information collected in Fig. 2.9.

2.3.2.6 Aesthetic Layer

As shown in Fig. 2.10, the fluvial axes of the Ripoll, Palau and Vallparadís rivers cross areas with a marked scenic character. In the case of the Arenas river, this event only occurs at its headwaters and crosses the city of Rubí. Table 2.8 synthesises information collected in Fig. 2.10.

2.3.2.7 Symbolic and Identity Layer

The elements that have a symbolic character in the territory of the Vallés are three historical roads: The Camí Ral, the Via Augusta and the Camí dels Monjos, and a cattle road, the Mola, has become a landmark in the territory and the modernist route.

Table 2.4 Topography and geology of the five river areas of Sabadell and Terrassa

	Length	Width	Depth	Natural or artificial stream	Spaces geological interest
Ripoll river	18.50 km	Influential area: 500–600 m River area: 50–60 m	Influential area: 50.60 m River area: 0.5–1 m	Natural	North area, between Sant Lloerenç Savall and Castellar del vallès
Arenas stream	16.2 km	Natural area: 68–126 m Channelized area: 50 m	Natural area: 0.5–1 m Channelized area: 0.5 m	North: natural Central-south: artificial	North area, north of Matadepera
Palau stream (Ramla de Terrassa)	600 m	25–80 m	0 m	Artificial	No
Riereta stream (Eix Macià street)	900 m	40 m	0 m	Artificial	No
Vallparadis stream (Vallparadis park)	3 km	48–200 m	15 m	Artificial and some areas with vegetation	Yes

Table 2.5 Natural values of the five river areas of Sabadell and Terrassa

	Special plan for natural interest	Agrarian park	Protect areas	Riverside vegetation
Ripoll river	North area, between Sant Lloerenç Savall and Castellar del vallès	In the high part of the West Cliff, between Castellar del Vallès and Sabadell	Pla de Sant Julia, between Sabadell and Castellar	Yes
Arenas stream	North area, north of Matadepera	No	No	North area and Les Fonts area
Palau stream (Ramla de Terrassa)	No	No	No	No
Riereta stream (Eix Macià street)	No	No	No	No
Vallparadis stream (Vallparadis park)	No	No	No	No

Table 2.6 Ecological values of the five river areas of Sabadell and Terrassa

	Non-priority community interest with less than 1% coating—very high value	Non-priority community interest with less than 1% coating—high value	Great forest mass	Forest with crops areas
Ripoll river	Yes, Sant Llorenç and along the river	Yes, between Sant Llorenç Savall and Castellar del Vallès	Yes, between Sant Llorenç Savall and North Sabadell	Yes, between Castellar and Barbarà
Arenas stream	Yes, a small area in South Rubí	Yes, North Matadepera	Yes, North Matadepera	Yes, a small area in North Terrassa and in Rubí
Palau stream (Ramla de Terrassa)	No	No	No	No
Riereta stream (Eix Macià street)	No	No	No	No
Vallparadis stream (Vallparadis park)	No	No	No	No, but there are in area between Vallparadis and Arenes

The analysis of Figs. 2.9 and 2.10 shows that the Vallparadís river and the Arenas river are the fluvial axes they contact with more symbolic nature elements. Table 2.9 synthesises information collected in Figs. 2.9 and 2.10.

2.3.2.8   Social Layer

From the analysis of Fig. 2.11 and Table 2.10, the authors observe that the Vallparadís river is the area with the highest social activity, followed by the Ripoll river and the two urban axes of the Palau river and the Riereta river. The river axis with the minor social movement is the Arenas river. Table 2.10 synthesises information collected in Fig. 2.11.

This analysis demonstrates that the Ripoll river is the central rainwater system with particular interest because it is an ecological corridor. There are historic buildings and a new path along the Ripoll river, which citizens use.

However, looking at all layers, the other stormwater systems are also essential. For example, historic buildings and a vibrant neighbourhood in Vallparadís Park are expressed in the heritage layer. Furthermore, considering the aesthetic, symbolic and identity layers, all the cases have different elements that appeal to residents. These are outlined in Fig. 2.2. Also, productive activities such as industry, enterprises and services are located in these areas.

Table 2.7 Heritage layer of the five rivers areas of Sabadell and Terrassa

	Architectural character	Religious character	Industrial character	Defensive character	Agricultural character
Ripoll river	No	Parròquia Sant Salvador Santa Maria	Molí d'en Galí Molí d'en Mornau Molí d'en Font Molí de l'Amat Molí d'en Torella Ca la Daniela Molí Xic Nois Boixons Molí de les 3 creus Can Quadres Molí de Sant Oleguer Molí d'en Gall	Castellar Castle Barbarà Castle Santiga Castle Sant Pere Castle	Sèquia de Monar de Romau and Can Garriga-Can Pages Masia de Can Deu Can Català Sant Vicenç de Jonqueres
Arenas stream	No	No	No	Rubí Castle	No
Palau stream (Ramla de Terrassa)	No	No	Moncunill building	No	No
Riereta stream (Eix Macià street)	Creu Alta area	No	No	No	No
Vallparadis stream (Vallparadis park)	Vallparadís area	Sant Miquel Sant Pere Santa Maria	No	Palau de Terrassa Castle Cartoxa de Vallparadís	No

Finally, it should be noted that when the social use layer of the five cases of fluvial axes is analysed, it is verified by two things. First, in all cases, except for the Arenas river, there are spaces for people to enjoy leisure time. The public space of the Arenas river is not intended for residents. It is dedicated to vehicular use. Moreover, in the Riereta river transformed into Eix Macià, public spaces such as Cataluña Park can enjoy by citizens, but car prioritises pedestrian.

2.4   Urbanism

This study considers the methodology used at the Polytechnic University of Barcelona to analyse the city's urban fabric, accessible spaces and road and rail infrastructures. The study of road and rail infrastructures is presented in Figs. 2.5
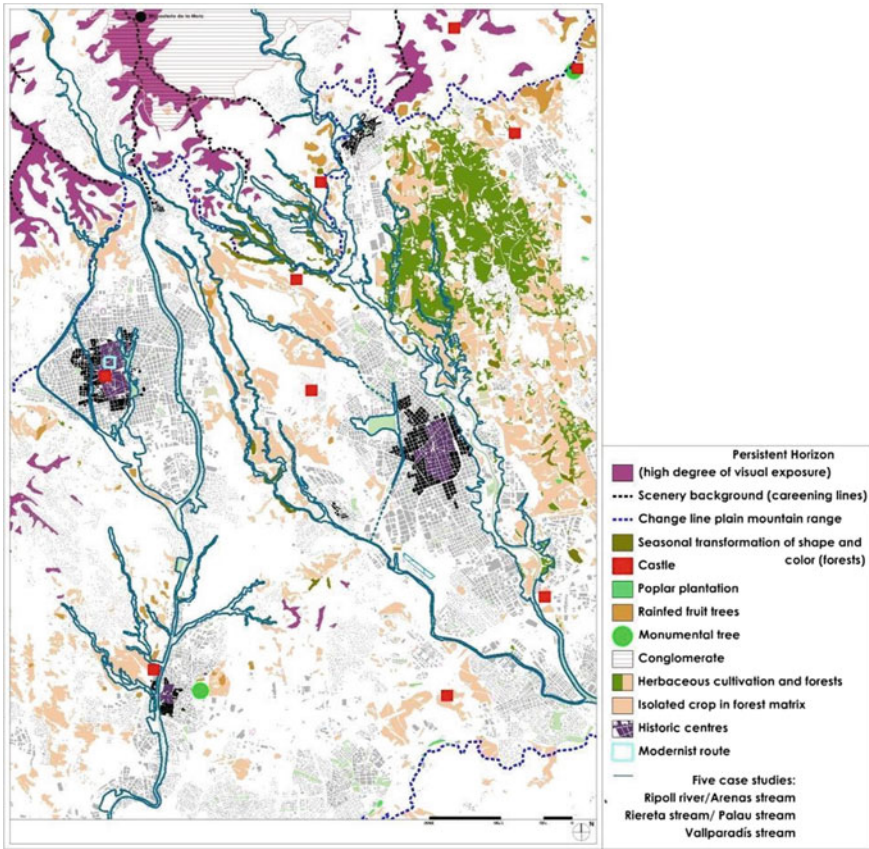
Fig. 2.10 Image of the aesthetic layer of the five rivers areas of Sabadell and Terrassa

and 2.6. The study of the urban fabric carried out by the Metropolitan Territorial Plan of Barcelona is shown in Fig. 2.12, and the layer of free spaces is shown in Fig. 2.13.

In light of these studies and considering the methodology of Patrick Geddes, the Ripoll river and the Arenes river are understood as the axes ordering the territory on a regional scale.

Notes: All sources are from C. Carcao except Fig. 2.1, which is from Bertran (2012).

Table 2.8   Aesthetic layer of the five rivers areas of Sabadell and Terrassa

	Compact city	Old town	Conglomerate	Forest: colour change shape	Flat change	Scenic background
Ripoll river	It is a border of Castellar, Sabadell, Barbarà	It is a border of Castellar old town	No	Castellar del Valles North Sabadell	North, Castellar del Vallès	North Castellar del Vallès
Arenas stream	It cross Terrassa-Rubí	It is a border of Matadepera and cross Les Fonts	North, Sant Llorenç Savall	No	North, Matadepera	North, Matadepera
Palau stream (Ramla de Terrassa)	Terrassa	Old town of Terrassa	No	No	No	No
Riereta stream (Eix Macià street)	Sabadell	No	No	No	No	No
Vallparadis stream (Vallparadis park)	Terrassa	Poble de Sant Pere	No	No	No	No

Table 2.9   Symbolic and identity layer of the five rivers areas of Sabadell and Terrassa

	See a milestone	Cross via Augusta	Modernist routes	Camí Ral (way)	Camí dels monjos (way)	Cattle path
Ripoll river	La Mola	Yes	No	No	No	No
Arenas stream	La Mola	Yes	No	Cross and along the stream	Yes, Matadepera	Yes, Rubí
Palau stream (Ramla de Terrassa)	No	No	Yes	No	No	No
Riereta stream (Eix Macià street)	La Mola	No	No	Yes, cross the street	No	No
Vallparadis stream (Vallparadis park)	La Mola, Montserrat	No	Yes	Yes, cross the park	No	No
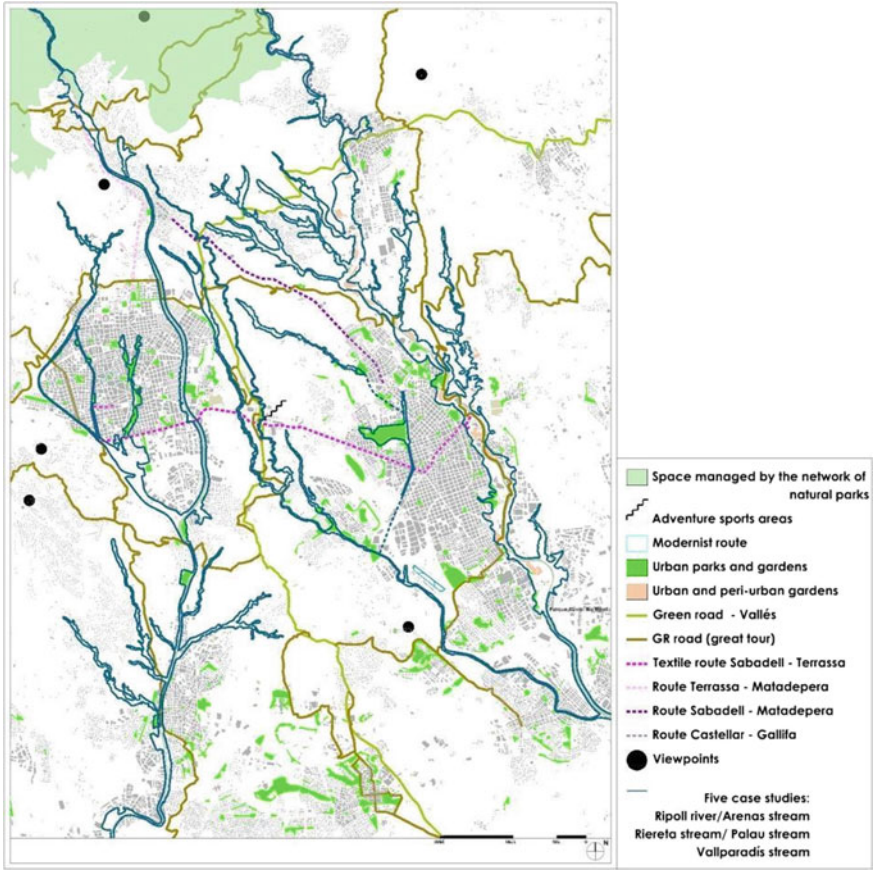
Fig. 2.11 Image of social layer of the five river areas of Sabadell and Terrassa

Table 2.10 Social layer of the five river areas of Sabadell and Terrassa

	Park	Orchards	GR (walks for hiking)	Wooded walk	Commercial area	Sport area
Ripoll river	No	Yes	Yes	Yes, in Sabadell	No	Yes
Arenas stream	No	No	No	No	Yes, but only by car	Yes, but only by car
Palau stream (Ramla de Terrassa)	No	No	No	Yes	Yes	No
Riereta stream (Eix Macià street)	No	No	No	Yes	Yes	No
Vallparadis stream (Vallparadis park)	Yes	No	No	Yes	Yes	Yes

Fig. 2.12 Urban fabric of the study area
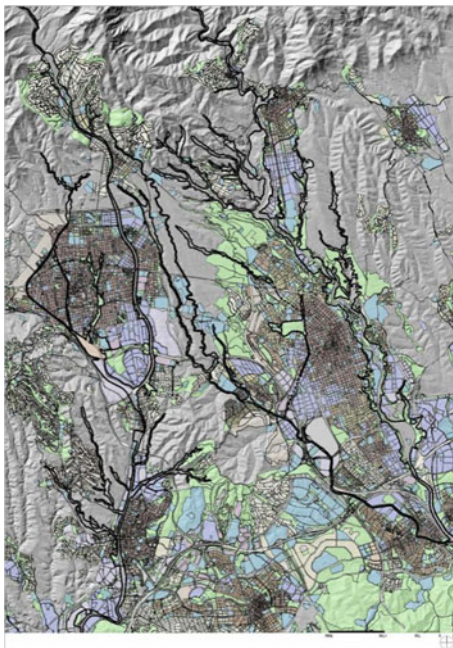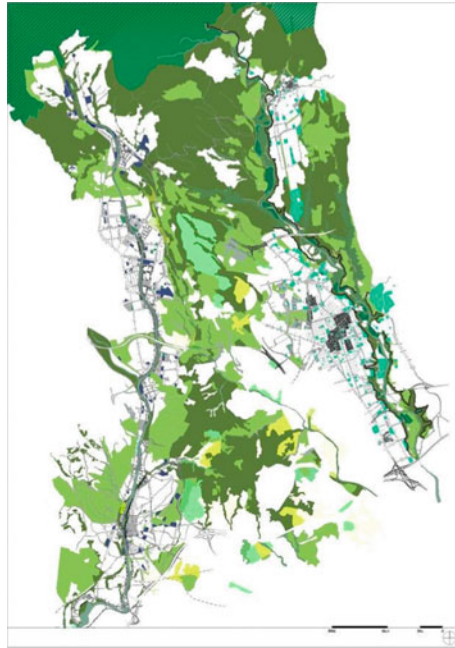
Fig. 2.13 Free spaces in the study area

2.5   Conclusion

The methodology employed in this study relies upon studying the territory layers from different perspectives, examining at a regional scale as proposed by Patrick Geddes and considering the territory as a mosaic. This research methodology based on ecology, landscape and urbanism reveal several essential observations.

First, a new Ripoll-Arenas territory can be identified. Because the Ripoll and Arenas rivers lie in different watersheds, the two urban systems of Sabadell and Terrassa's towns have never been unified. This explains why each city has sprawled along its river rather than in the space between them, despite their immediate proximity. This has created a distinct linear bordering neighbourhood. Second, the Ripoll, the Vallparadis, and the Palau rivers are best understood as structuring elements of the city. They are part of the "Garden of the Metropolis," described by Enric Batlle. Finally, in future planning of the territory, which tends to become urbanised and encompass significant areas of the metropolitan area, rivers must be considered spaces of opportunity. They are potent axes of the city's structure. This is also because they have become their own functional and economic structures, demonstrating the permanence of the city's identity. The territory is defined by water.

Several additional points are important to highlight here:

This methodological analysis has allowed us to transform the Arenas and Riereta rivers (Eix Macià) into road axes where pedestrians' space was not prioritised. However, although the Arenas river has not been transformed in urban ecological concepts, and its form and appearance do not enable use by residents, its length and continuity are conducive to its use as an essential structuring element in the territory. Despite the present character of Eix Macià, in which the car receives priority over the pedestrian, it is one of the city's main streets that unifies neighbourhoods and structures. For this reason, of the five river axes analysed, the research detected that the project to transform the public space of the Arenas river and the Riereta river into the Eix Macià is urgent. In the Arenas river case, actions must first be taken to naturalise its channel and turn it into an ecological corridor. Secondly, action must be taken in its road section to make it the backbone of some "civic axes". The main objective is to act as a generator of broader transformations, affecting residential and industrial fabrics and generating new urbanity areas in short: APPROACHING DISTANCES. In the Eix Macià, the actions to be carried out must be linked to the road section's transformation to reduce the traffic lanes and provide more pedestrians. These actions would convert the two river axes into Enric Batlle's "Garden of the Metropolis" constituent elements.

The challenge will continue to transform the rivers and their relationship to the urban areas at present and in the future. In particular, attention to the Arenes river and the Eix Macià (Riereta) combines the Palau river and the Vallparadís river. Thus, they become effective structural axes of the cities and unify the different towns of the two urban subsystems.

References

AA.VV (2005) The territory of the urbanist. In: Font A, Corominas M, Sabaté J (eds) 10 years 1994–2004. Master in urban planning. Polytechnic University of Barcelona

Battle E (2002) ElJardí de la Metrópoli.Del paisatge romàntica l'espai lliure per una ciutat sostenible. Doctoral thesis, Polytechnic University of Catalonia, Department of Town Planning and Territorial Planning

Battle E (2014) La matriu ecològica metropolitana i les diverses escales de les infraestructures verdes. L'urbanisme dels espais oberts: paisatge, lleure i producció. Quaderns 03 –PDU Metropolitan Magazine

Bertran J (2012) Sky, earth and gene. Floods are a recurring phenomenon in the Vallès, which with their contribution of sediments, have shaped the Vallesana plain. Magazine "losVallesos" 3(spring-summer)

Corner J (2014) The landscape imagination. In: Corner J, Hirsch AB (eds) Collected essays of James Corner 1990–2010. Princeton Architectural Press. ISBN 978-I-61689-I45-9

Department of Territory and Sustainability of the Generalitat of Catalonia (2010) The territorial metropolitan plan of Barcelona

Forman RTT, Olson JD, Dramstad WE (1996) Landscape ecology principles in landscape architecture and land-use planning. Harvard University Graduate School of Design. Island Press. ISBN 1-55963-514-2

Geddes P (1908) The survey of cities. Social Rev 1:74–79

Geddes P (1960) Ciudades en evolución, 1ª edn. 1915. Ediciones Infinito, Buenos Aires

Hough M (1998) Naturaleza y Ciudad. Ed. GG (English version: (1995) Cities and natural process. Michael Houg originally published in 1995 by Routledge 11 New Fetter Lane, London EC4p 4EE)

Institut d'Estadística de Catalunya (IDESCAT) (2013) Statistical Institute of Catalonia

Landscape Observatory (2014) The landscape catalogue of the metropolitan region of Barcelona written by CCRS, Architects (LCMB)

M-Marsh W (2010) Landscape planning. Environmental applications, 5th edn. University of British Columbia-University of Michigan, Wiley Editions, Wiley

Mobility Director Plan of the Metropolitan Region of Barcelona (2013–2018)

Urban Mobility Plan of Sabadell (2009) Terrassa mobility study that analyses what changes have occurred between 1986 and 2001

Chapter 3
Boundary Typologies and Their Effect on Paired Border Cities

Rüya Erkan-Öcek

Abstract There are different typological approaches to demarcation and classification of boundaries in discourses about borders. One of the classifications is based on the components used to determine the boundaries, such as natural or human-made. Regarding boundary characteristics, the main issue is whether it divides two sides or connects them. In addition, there are other considerations for the relations between two sides of the boundary: alienation, coexistence or integration. Although there are some classifications for paired border cities, such as partitioned or duplicated, typological studies of cities located on the borders and frontiers are lacking. Worldwide, there are approximately 300 border towns, and approximately half of them are paired border cities. In this study, paired border cities and their urban networks are examined. Internal and external connections, functional differences using land-use decisions and cross-border relations are analysed to indicate the structural relationships between the cities. The most critical examples of each type of paired border city are selected. Finally, the main effects of boundaries on the different paired border cities worldwide are analysed and mapped.

Keywords International boundary · Paired border cities · Border condition · Mapping

3.1 Introduction

International borders are concrete places containing many dynamics expressed by abstract lines or spaces on the map. The concept of the border has existed in the past and has undergone spatial and semantic changes over time. During these changes, human relation problems, represented in border crossings between the two sides of a border, and the interface between the structure under two separate systems have always remained fresh and on the agenda, although their content has changed. Moreover, it has always been an important research topic among many scientists.

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In many social sciences, borders that have been examined in different contexts have not found sufficient merit in the field of urbanism. In every study area, classifications and typologies are made to understand the border or boundary. Different social science disciplines have different typological approaches to boundaries, borders and cities. Considering the previous studies on border conditions, specific boundary classifications include physical features, emergence and relations. Even though all boundaries are examined only depending on these primary classifications, they are not enough to understand all types of boundaries in detail.

Analysing the international boundaries around the World is to understand the different dynamics essential for designing the borders for future studies. Hinges on all boundaries around the World, it can be argued that each has unique characteristics. However, there are also certain similarities, such as their relations and components. To reveal such similar features will be essential for the studies in both borders and paired border cities. Besides, mapping around the World helps to understand the relationships between countries, region to region or continent to continent.

On the other hand, it will also help understand the problems posed by these features. These classifications will help define the types of paired border cities and the border condition's design problem. Similar problems with similar features allow more accurate solutions and meaningful definitions of paired border cities. Despite the categorisation made so far, it is an incomplete issue to analyse the borders and border cities from urbanism and show how the boundaries affect the paired border cities.

3.2 Distribution of the International Boundaries Around the World

Due to the complexity of modern nation-states and the different characteristics of every nation-state, their borders also have unique features. According to Kireev (2015), different classifications and typologies are essential study areas for borders and boundaries. A literature review reveals several different typologies for boundaries. However, a detailed examination demonstrates two typological approaches: relations and components. These are significant because the main characteristics of boundaries lie in these two categories. Throughout history, settlements have always wanted to be protected from the outside. Therefore, they have always used natural elements such as a river, lakes and mountains or physical characteristics created to limit their relationships, whether to protect them from wildlife or other invasions by other communities. Understanding these boundaries will help analyse paired border city relations and their effects on urban morphology.

3.3   Categories of International Boundaries in Terms of Relations of Neighbouring Countries

Boundaries and borders between two or more nation-states have regulative functions. They can be dividing barriers, or they can be connecting elements (Kireev 2015). To explain the cross-border movements and the trans-border interactions in more detail, Martinez (1994) proposes four models of borderland interaction; (i) alienated borderlands, (ii) coexistent borderlands, (iii) interdependent borderlands and (iv) integrated borderlands (pp. 5–10). However, in general terms, border relations are explained by three fundamental characteristics: (i) open, (ii) controlled or (iii) closed borders. In this study, these three categories are defined by comparing the relationships of adjacent areas.

1. **Open**: Open boundaries can be defined as a spatial system to enable free movement between nation-states without restriction or security control. The Schengen Area in Europe is the most well-known example of an open boundary. Another example is the East African Community, Kenya, Tanzania, Uganda, South Sudan, Rwanda and Burundi. Other examples are included in the mapping study.
2. **Controlled**: Controlled boundaries can be defined as the type of borders that allow people's movement with some restrictions and controls. People must show their identities using passports and visas to cross these borders. Most boundaries exemplify this type. Borders between the US and Mexico, India, Bangladesh, Turkey and Greece are examples of controlled boundaries.
3. **Closed**: Closed boundaries prevent the movement of people between the two states. These boundaries usually have physical barriers such as fences or walls and non-physical restrictions such as electronic or photographic monitoring systems. The Demilitarised Zone (DMZ) between North Korea and South Korea is an example. The physical border between Armenia and Azerbaijan is closed due to the Nagorno-Karabakh conflict. In this study, borders that impose restrictions on the passage are considered closed borders. For example, a Turkish citizen whose passport holds a Turkish Republic of Northern Cyprus stamp cannot cross Greece's border despite the coexistence of two sides of the boundary. Israel and Palestine in Jerusalem are other examples of a closed boundary that creates ambiguity in defining Palestine's sovereignty.

3.4   Categories of International Boundaries in Terms of Components

The primary classification of boundaries is based on their physical ability to demarcate. These can be found in either natural elements or artificial elements. Artificial elements are often invisible or non-physical. During all these constitutional elements are used as classification tools differently in the literature. In some of the categorisations, boundaries divide into physical and cultural boundaries. They are classified

as natural, artificial and geometric within the physical boundaries. The oldest international boundary classification is natural and non-natural (artificial) boundaries (Bakhashab 1996, p. 36; Boggs 1940, p. 22). This distinction has become classic and was loosely connected to that other classic distinction, which is 'good borders' and 'bad borders' at the beginning of the twentieth century.

The notion of good was used for natural boundaries like rivers, forests and deserts. The notion of dreadfulness was used for the 'human-made' (artificial) boundaries. The beginning of the twentieth century was before the First and Second World Wars. During this period, this classic distinction, which was 'good' and 'bad' borders, was used in border studies from a military point of view (Van Houtum 2005, p. 675). After the First and Second World Wars, the nation-states' boundaries began to be demarcated more strictly. The studies on the classic distinction of the 'natural' and 'non-natural' boundaries have been continued. However, it could be correct to say that all international boundaries are human-made, whether called 'good' or 'bad' borders or classified as 'natural' or 'artificial'. This is because nature does not separate human beings according to their nations, languages, economics and cultures. Throughout these perspectives in this study, boundaries will be divided into two depending on their components: natural elements used to separate two sides or not-natural/artificial elements.

Natural: Natural boundaries include rivers, lakes or seas, mountains, forests, deserts, swamps or marshes and bays or straits that demarcate states' lines. Rivers are common linear borders between many nation-states separated by zonal borders such as deserts or mountains.

Artificial: Artificial boundaries have been used with no natural elements to demarcate political territories (Fawcett 1918). Another critical reason artificial boundaries were used in the past is the difficulty of defending territory far from the centre of power. Nevertheless, artificial boundaries helped defend distant territories (Fawcett 1918, p. 62). Examples are stones, monuments, posts, walls, towers, gates and trenches. As city-states emerged, physical elements like monuments, walls and canals became more frequent. Along with this, their significance for both inhabitants and outsiders grew. Concepts such as 'us' and 'them', 'insider' and 'outsider', 'citizen' and 'foreigner' and 'here' and 'there' result from these visible, perceivable and memorial barriers.

Many artificial boundaries are geometric. Boundaries that emerged in periods of colonisation and expansion are typical. They ignore existing natural, cultural, ethnic or linguistic patterns. Straight lines follow geometric boundaries. These boundaries can be based on meridians of longitude, parallels of latitude or arcs of a circle (Bakhashab 1996, p. 39; Jones 1943, pp. 113–114).
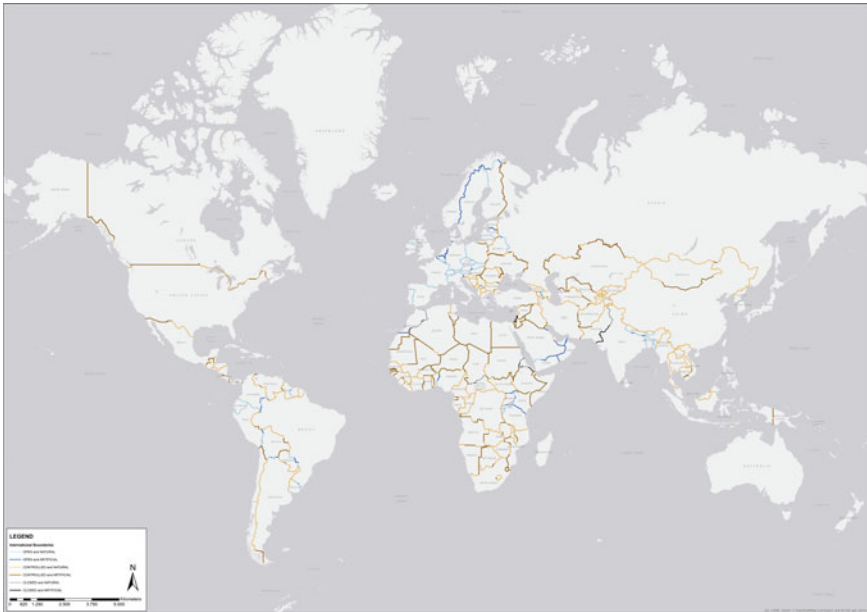
Fig. 3.1 International boundaries

3.5 The Results of the Mapping of International Boundaries

Except for areas defined by agreements or arrangements, such as the Schengen Area, most boundaries around the World are controlled (see Fig. 3.1). While 70% of world boundaries are controlled, 26% are open. Only 4% are closed (see Fig. 3.2). Currently, most nation-states allow people to move with or without restrictions as long as there are no serious conflicts with neighbouring countries.

There is no significant difference between the boundaries; 60% are natural, and 40% are artificial (see Fig. 3.3). Open and controlled boundaries are primarily composed of natural elements, while closed boundaries are composed of either neutral or artificial elements in equal share (see Fig. 3.4).

3.6 Distribution of the Paired Border Cities Around the World

A border city is settled near a border. The most appropriate definition of border cities given by Buursink's (2001) is '*A border city is…a place that is more or less dependent on the border for its existence…it is not just a city located close to the*
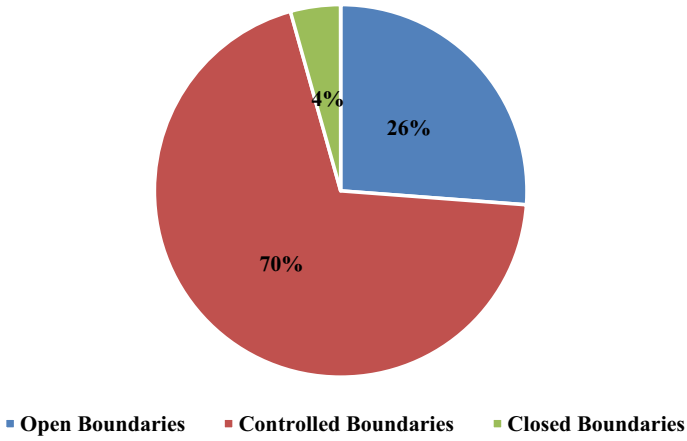
Fig. 3.2 Typology of international boundaries regarding relations between neighbouring countries

Fig. 3.3 Typology of international boundaries regarding relation to physical features
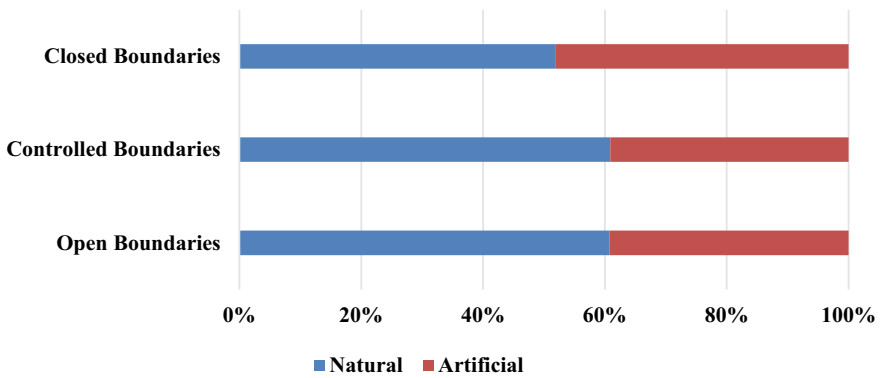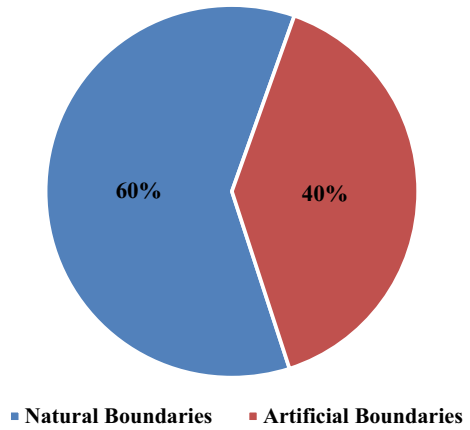
Fig. 3.4 Relational features of international boundaries regarding physical features
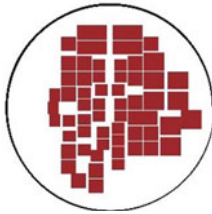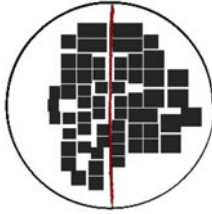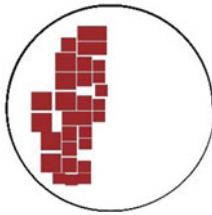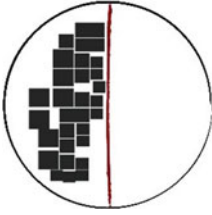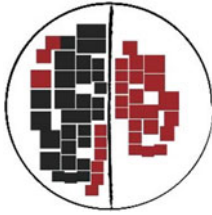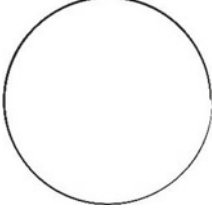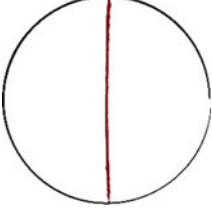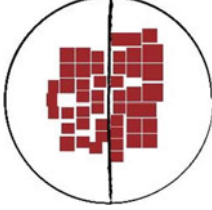
border, but it also came into existence because of the border. Without the border, it would not be there' (pp. 7–8).

All over the World, border cities face each other across boundaries of all types. This study examines paired border cities and urban areas separated by an international boundary. Paired border cities vary in their distances from each other, their economic or social situations or their formations. Three types of paired border cities are identified and examined: partitioned, duplicated and cross-border activity-dependent (see Table 3.1).

Paired border city types are determined by how they developed and their interrelationship formed. The first type is partitioned paired border cities, which developed due to their political aftermath. '*Partition occurred mainly in Central Europe, after World War 2 when previously united cities were divided into two different entities by drawing new boundaries*'. (Buursink 2001, p. 8). The line, river or other boundary split a formerly unified city. After demarcation, one part of the city changed according to its new nation-state's rules, and a different cultural formation emerged.

The second type duplicated paired border cities formed due to the relationship between areas. 'Duplication refers to situations where the establishment of border settlement sooner or later was followed by the rise of a second settlement on the other side of the border'. (Buursink 2001, p. 8). The second city is generally developed to

Table 3.1 Formation of paired border cities

	Before demarcation	Demarcation	After demarcation
Partitioned paired border cities			
Duplicated paired border cities			
Cross-border activity-dependent paired border cities			

benefit from the border economy or develop a difference between locations in these border cities. Often, one city was located in a more developed country. However, examining these cities demonstrates that each city was a duplicate of the other.

The last type, cross-border activity-dependent paired border cities, is particularly characteristic of border cities in Africa. 'The colonial dispensation was conducive to the emergence of border towns where they did not already exist' (Nugent 2012, p. 566). Generally, urban areas in border zones are attractive due to economic opportunities. Besides, borders offer opportunities to benefit from smuggling and other uncontrolled or illegal activities, which increases the population (Buursink 2001; Nugent 2012; Payan 2014; Soi and Nugent 2017).

3.7 Partitioned Paired Border Cities

Partitioned paired border cities are located mainly in Europe, America and Asia resulting from demarcation processes (see Fig. 3.5). After the World Wars, especially in Europe, international boundaries were re-determined. They caused the split-up of the united cities. Examples include Jerusalem in Israel-Palestine, Nicosia in Cyprus and Nogales in US-Mexico. Forty-five per cent of partitioned paired border cities are located in Europe; 29% are located in Asia 22% in the Americas and 4% in Africa (see Fig. 3.6).

Fig. 3.5 Distribution of the different ranges of partitioned paired border cities in the World
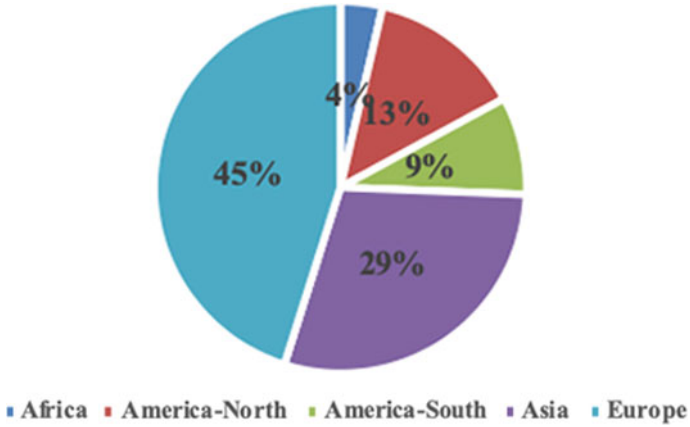
Fig. 3.6 Locational distribution of partitioned paired border cities through continents

3.8 Duplicated Paired Border Cities

Examining duplicated paired border cities' locations shows they are located in more populous countries, unlike the partitioned ones (see Fig. 3.7). Comparatively, in Europe, there are fewer duplicated paired border cities than partitioned ones. While
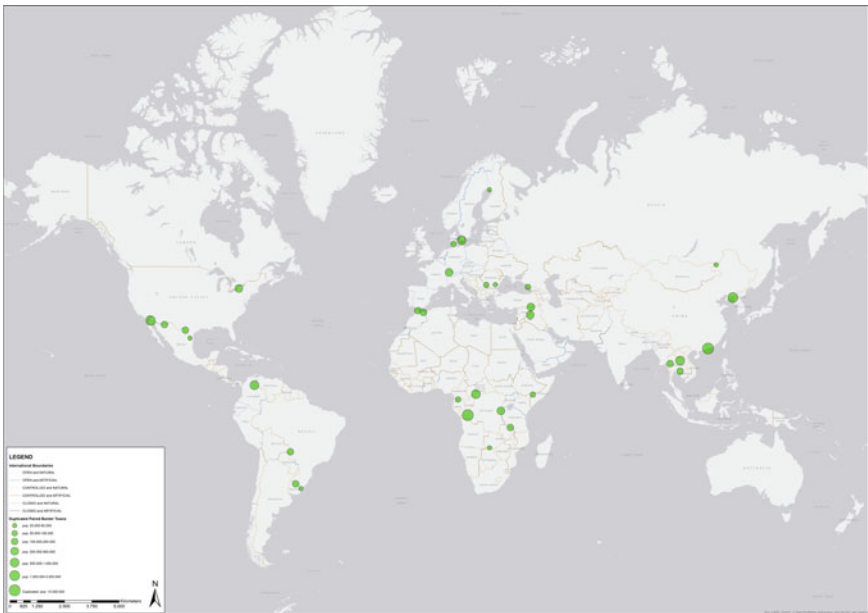
Fig. 3.7 Distribution of the different ranges of duplicated paired border cities in the World
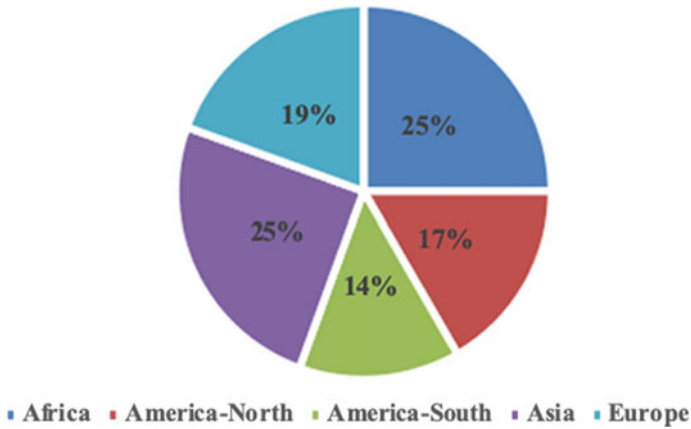
Fig. 3.8 Locational distribution of duplicated paired border cities through continents

50% are located in Asia and Africa, 17% are in North America, specifically the US-Mexico border (see Fig. 3.8). That is primarily the result of boundaries established after wars between the US and Mexico; in many cases, American colonists left south bank settlements and settled to the north side of the relatively more developed country. This site was also closer to their former places of residence. After demarcation, Mexican cities gained American counterparts with emerging new settlements along the border (Buursink 2001, pp. 9–10).

3.9   Cross-Border Activity-Dependent Paired Border Cities

Most cross-border activity-dependent paired border cities are located in the southern hemisphere; none are in Europe (see Fig. 3.9). Because many illegal activities, such as smuggling, are more common in border cities, many are located in less developed countries. As a result, there are many cross-border activity-dependent paired border cities in Africa and the Americas. While 20% are located in Africa, 36% are in America. However, 44% of the cross-border activity-dependent paired border cities are in Asia (see Fig. 3.10). In the southern part of Asia, the boundary determination before the development of the cities could not take advantage of the border condition, and it did not influence their formation.
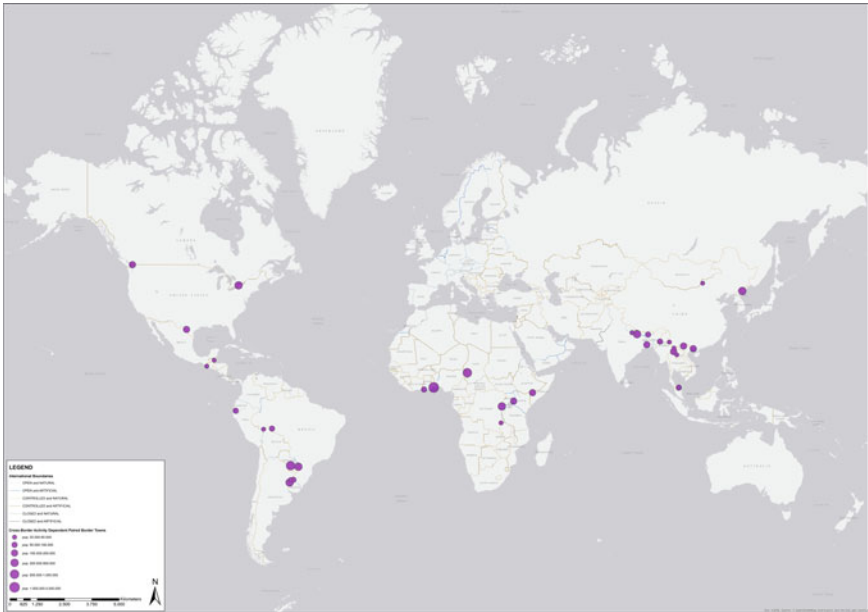
Fig. 3.9 Distribution of the different ranges of cross-border activity-dependent paired border cities in the World
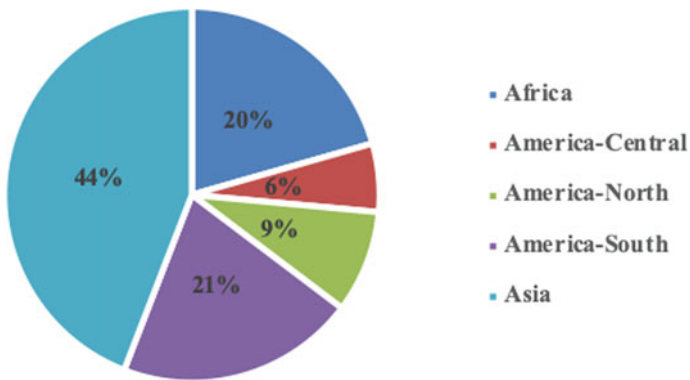
Fig. 3.10 Locational distribution of cross-border activity-dependent paired border cities through continents

3.10   Comprehensive Typology of the Paired Border Cities

The ArcGIS program created informative comparative maps to examine paired border cities. All boundaries and paired border cities are examined individually on World Maps and Google Earth.
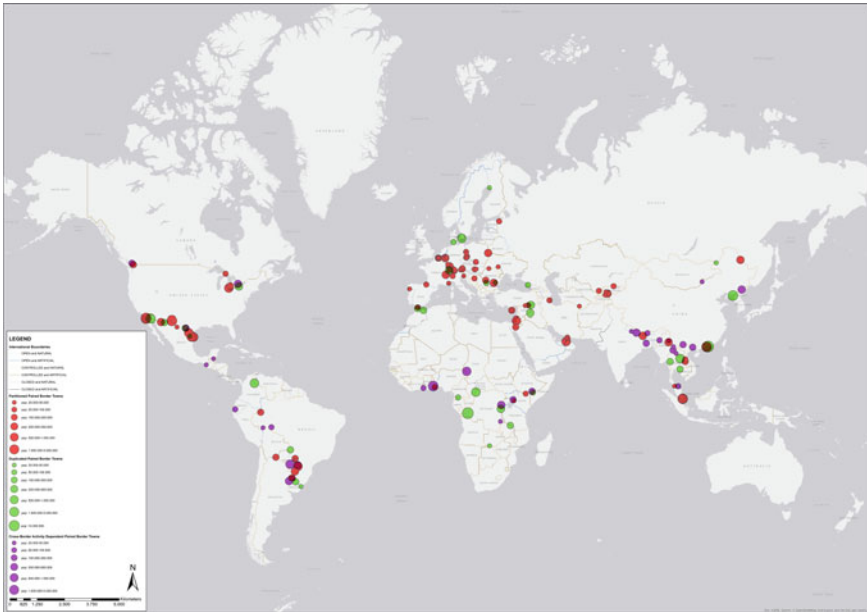
Fig. 3.11 Locational distribution of the paired border cities around the World

Only paired border towns with a combined minimum population of 25,000 were selected for analysis for this research. The examination of settlements under 25,000 was problematic due to their physical features and spatial problems. Thus, although thousands of paired border cities and villages have limited population input, this study contains 152 paired border cities and towns for analysis by mapping (see Fig. 3.11). Eighty-two selected settlements are partitioned paired border cities, 36 are duplicated, and 34 are cross-border activity-dependent. This implies that the human environment profoundly influences the demarcation of boundaries of nation-states.

Eighteen potential types of paired border cities were identified. These can be seen in Table 3.2 to understand the categorisations which create a world map of border conditions. Although 18 potential types were identified, today's border cities fall into 13 types (Types 1–12, 14 and 16). Four other paired border cities are feasible; however, no examples exist (Types 14, 15, 17 and 18). Due to the dynamic nature of urban development and political, social, economic and natural events, nothing precludes existing paired border cities from changing types or ceasing to exist and new paired border cities developing.

In Fig. 3.12, the 14 selected examples of the paired border cities are mapped out. These sampling cities are Germany-Poland, Brazil-Uruguay, Ecuador-Perú, Germany-The Netherlands, Brazil-Uruguay, India-Bhutan, US-Canada, US-Mexico China-Vietnam, Spain-the U.K., Spain-Morocco, Kenya-Somali, TRNC-Cyprus and Israel-Palestine.

Table 3.2 Comprehensive typology of 'paired border cities' based on selected categories

Relations	Components	Paired border cities	Types	Number of cities
Open	Natural	Partitioned	Type 1	23
		Duplicated	Type 2	5
		Cross-border activity-dependent	Type 3	3
	Artificial	Partitioned	Type 4	11
		Duplicated	Type 5	2
		Cross-border activity-dependent	Type 6	3
Controlled	Natural	Partitioned	Type 7	38
		Duplicated	Type 8	20
		Cross-border activity-dependent	Type 9	22
	Artificial	Partitioned	Type 10	8
		Duplicated	Type 11	9
		Cross-border activity-dependent	Type 12	6
Closed	Natural	Partitioned	Type 13	1
		Duplicated	Type 14	0
		Cross-border activity-dependent	Type 15	0
	Artificial	Partitioned	Type 16	1
		Duplicated	Type 17	0
		Cross-border activity-dependent	Type 18	0

Fig. 3.12 Locations of the selected 14 types of paired border cities

Figure 3.13 provides a comparison of paired border cities. Their urban networks analyse the cities' internal and external connections within the second-column framework. In the third column, land-use patterns of paired border cities are given. The land-use maps are aimed to show the subtle differences between the two paired cities in economic and social conditions. The side with more qualifications in the land-use pattern maps, such as cultural or educational facilities, cultural places, green areas, public spaces and transportation infrastructure, is noticeable. Urban equipment is shown in blue, purple or green within these land-used maps to recognise them. Finally, their cross-border relations are diagrammed to indicate structural relationships between the cities.

Selected examples are examined in three groups. Table 3.3 compares Type 1, Type 2 and Type 3. These paired border cities have the same features. All are in open and natural boundaries, which provides them with similar problems or problematic features. Since they are located on open boundaries, there are no border control points to cross from one city to another. The border is open even in the border city with a bridge crossing. This shows that natural elements play a limited role within open boundaries. If people's movement been allowed between two cities of two countries, natural features like rivers would not be a problem. A bridge could be used to cross the line, or people can use boats also. However, from an urbanistic perspective, cities limit crossing. Urban planning is one of the tools to restrict the activities between two cities. For example, they can build only one bridge between the two sides, and do not plan any public transportation system between the two cities like tramlines or railways. If the citizens are offered the only option to walk or private car, it will decrease the borders' crossings. Thus, it can be said that urban planning approaches applied through the paired border city plans perform as a controlling element for border crossings. It also could be said that if they were a united city within the rule of one nation-state, there are probably some other alternatives to cross the line.

Type 1 is a partitioned city between Germany and Poland. These two cities were united before World War II in the name of Frankfurt am Oder. After the war, the boundary was changed, and the east side of the river fell under Poland's control. During the war, two sides of the city were damaged and reconstructed separately after the war. The connections between the two cities also changed with the city's integrity. For example, there was a tram line between the cities. However, today buses are the only public transportation system. Besides, there is no railway between Frankfurt and Slubice; although close, both cities have the same partitioned proximity to the boundary.

In Type 2, Jaguarao and Rio Grande border cities are examples of duplicated paired border cities. The city of Jaguarao in Brazil was created as a military town to maintain the territory. After demarcation, the Uruguay city of Rio Grande was established. The Rio Grande is the second city and is not located as close to the boundary as Jaguarao. The historic International Baron de Maua Bridge links the two cities and is the only connecting element. The Rio Grande is rural compared to Jaguarao, which is urban. This is one of the economic and social differences between the cities and their citizens. While there is a railway station in Rio Branco, there is no connection between the two cities through public transportation.

Fig. 3.13 Comprehensive typology of paired border cities
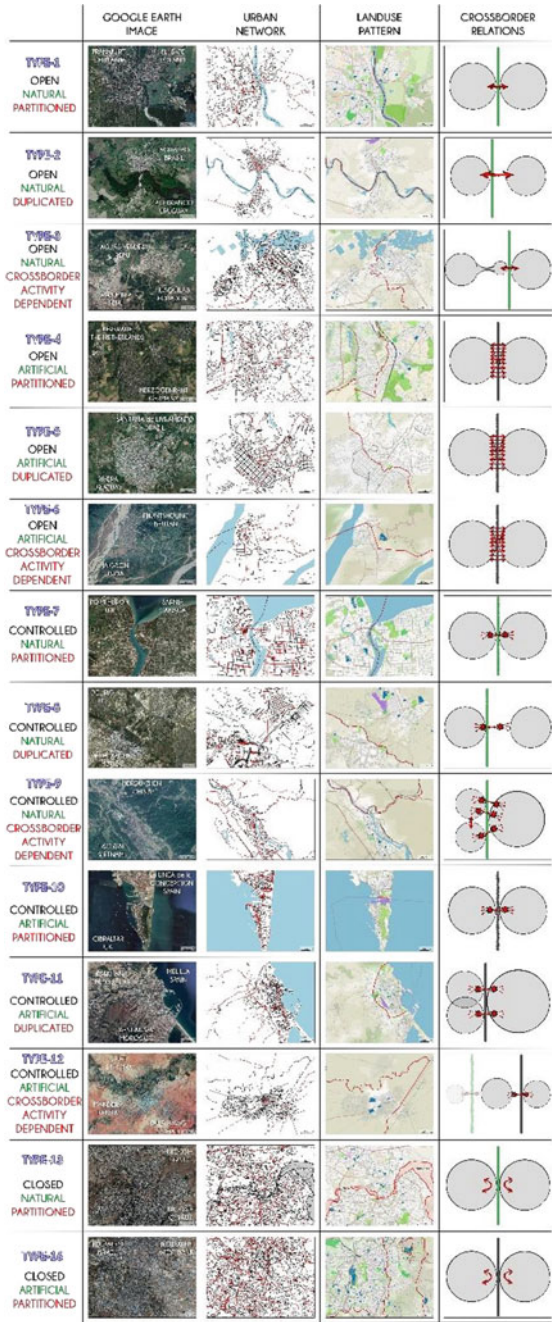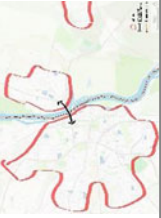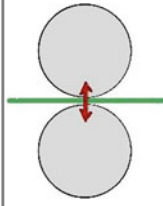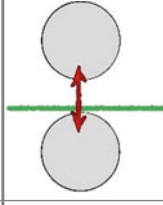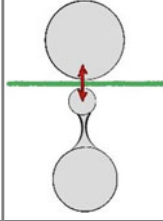
Table 3.3 Paired border cities with open and natural boundaries

	Type 1 Open-natural Partitioned Frankfurt (Oder)/Germany-Slubice/Poland	Type 2 Open-natural Duplicated Jaguarao/Brazil-Rio Branco/Uruguay	Type 3 Open-natural Cross-border activity-dependent Huaquillas/Ecuador-Aguas Verdes/Peru
Google Earth image			
Urban network			
Land-use pattern			

(continued)

Table 3.3 (continued)

Cross-border relations	Type 1 Open-natural Partitioned Frankfurt (Oder)/Germany-Slubice/Poland	Type 2 Open-natural Duplicated Jaguarao/Brazil-Rio Branco/Uruguay	Type 3 Open-natural Cross-border activity-dependent Huaquillas/Ecuador-Aguas Verdes/Peru

Type 3 is the cross-border activity-dependent city between Ecuador and Peru: Huaquillas en Aguas Verdes. They were established after demarcation. Aguas Verdes, Peru, has emerged as the extension of the city of Zarumilla. In this example, there is also one bridge to cross the river inside the settlements. It can be seen in the land-use pattern map that Aguas Verdes exists due to the border condition. Establishments like Aguas Verdes are generally seen in cross-border activity-dependent paired border cities. The satellite image seems that Aguas Verdes is not the extension of Zarumilla but part of Huaquillas. This also means that the proximity of cities to the boundary is quite strong, and they are almost attached.

Table 3.4 compares Types 4–5 and Type 6. All are located in open and artificial boundaries. A road defines the boundary, or the boundary line passes through a building. That is why there is no restriction when crossing from one city to another. Two sides of the boundary are seen as a whole. Even though the artificial elements on the open boundaries have no limitations, the two cities' settlement patterns or urban structures are the main differentiation factors.

In this framework, Type 4 is a partitioned city located between Germany and The Netherlands. Unlike Type 1, the city of Herzogenrath was divided much earlier, at the beginning of the nineteenth century. The development of the two cities occurred in two different countries for an extended period. Today, the boundary serves as a unifying element through the street, not separating. These two cities use the same public institutions since there are some initiatives for one municipality's foundations as they are next to each other and close to the boundary. Even if both are partitioned on the open boundary, the main difference between Types 1 and 4 is related to connections. In Type 4, both boundary sides are connected with urban networks, public transportation systems and public organisations.

Type 5 is duplicated. Santana do Livramente is a city in Brazil, and its counterpart, Rivera, was established after the demarcation in Uruguay. There are no restriction elements and no border control. On the contrary, the boundary, a street, is a path that connects rather than separates. Unlike Type 2, a railway connects the two cities and two nation-states. It also connects other cities in each country. As shown in Table 3.5, these two cities look like a united city. Unlike Type 2, which is also located between Brazil and Uruguay, these two cities are significant examples of binational cities.

Type 6 is a cross-border activity-dependent city between India and Bhutan, Jaigaon and Phuentsholing. They were established after the demarcation. In this example, the boundary corresponds to the street, buildings, parks and other urban areas. These two cities appear united without any boundary line. Their proximity to the boundary and each other is very close. The difference between Type 3 and Type 6 is about the formation of cities and cross-border relations.

Table 3.5 compares Types 7, 8 and 9.

These paired border cities are located in controlled and natural boundaries. This characteristic provides the same problematic features within different contexts. Different from the open boundaries within these cities, border ports occur. While crossing the boundary, there are controlled border checkpoints. Besides, on the boundary river, the border ports control the movement of people and goods.

Table 3.4 Paired border cities with open and artificial boundaries

	Type 4 Open-artificial Partitioned Herzogenrath/Germany-Kerkrade/The Netherlands	Type 5 Open-artificial Duplicated Santana do Livramento/Brazil-Rivera/Uruguay	Type 6 Open-artificial Cross-border activity-dependent Jaigaon/India-Phuntsholing/Bhutan
Google Earth image			
Urban network			
Land-use pattern			

(continued)

Table 3.4 (continued)

Cross-border relations	Type 4 Open-artificial Partitioned Herzogenrath/Germany-Kerkrade/The Netherlands	Type 5 Open-artificial Duplicated Santana do Livramento/Brazil-Rivera/Uruguay	Type 6 Open-artificial Cross-border activity-dependent Jaigaon/India-Phuntsholing/Bhutan

Table 3.5 Paired border cities with controlled and natural boundaries

	Type 7 Controlled-natural Partitioned Port Huron/US-Sarnia/Canada	Type 8 Controlled-natural Duplicated Del Rio/US-Ciudad Acuna/México	Type 9 Controlled-natural Cross-border activity-dependent Hekou-Zhen/China-Lao Cai/Vietnam
Google Earth image			
Urban network			
Land-use pattern			
Cross-border relations			

Type 7 is a partitioned city with two settlements on the US and Canada border. The history of cities as united cities dates to the US-Canada demarcation. Once a uniting element for two sides of one city, the river has separated and blocked features between these split-up cities. The Bluewater Bridge is the only connection between the city of Port Huron and the city of Sarnia. At the end of the bridge, there are border checkpoints on both sides. It can be argued that Port Huron and Sarnia, divided by a river, seem united in urban networks and land-use patterns. However, the checkpoints' existence, locations and the limited connection between the two cities separated them socially, spatially and economically.

Type 8 is an example of duplicated paired border cities located on the US-Mexico border: Del Rio and Ciudad Acuña. These two cities are established near the Rio Grande River. The first settlements were on the south side of the river, in present Mexican territory. Until the American Civil War, the city of Del Rio did not exist. After demarcation, Del Rio was established on the US side. Only one bridge connects the two cities: Del Rio-Ciudad Acuna International Bridge. On the Mexican side of

the end of the bridge, there is border control. The border control checkpoint is located further inside the border on the US side. As shown in Table 20, the differences in the built fabric and the land-use patterns demonstrate the differences in socio-economic patterns between the two sides of the boundary. The more developed the city is located, the more influential the nation-state. It is located further from the boundary for security reasons—to prevent smuggling and other illegal border activities.

In Type 9, an example of a cross-border activity-dependent paired border city can be examined. These cities are located on the China-Vietnam border. Similar to Type 3, there are two settlements on the China side in this example: Hakou and Hakou-Zhen. However, unlike Type 3, one is not an extension of the other. Due to geographic reasons, two nearby cities occurred on the China side. Unlike other natural boundary examples, many bridges connect the Red River and the Nanxi River. Consequently, there are many controlled points on two sides of the boundary. In this example, crossing the border is more accessible than the US-Mexico border or the US-Canada border due to several bridges and border control points.

In Table 3.6, Types 10–11 and Type 12 are compared. These paired border cities are located in controlled and artificial boundaries. In these examples, there are not any natural limitations like rivers. However, artificial elements like walls, fences, or other fortification components exist in these examples due to a lack of natural restrictions. Therefore, the border ports limit the crossing of people and goods with artificial features.

Type 10 is a partitioned paired border city, and Type 11 is a duplicated paired border city. However, these two examples have a standard feature autonomous cities.

In Type 10, Gibraltar is an independent city under the British government's rule located on Spain's south coast. Due to the strategic importance of the Straits of Gibraltar, this region has always been famous. Under the Gibraltar constitution of 2006, the city governs its affairs, and the city is separated from its Spanish counterpart: La Linea de la Concepcion. Since Gibraltar is located on a peninsula, the boundary is almost 1222 m, and there are artificial fortification components. Both sides of the boundary have one border point to cross from Spain to the UK. On the opposite side of the straits of Gibraltar is Ceuta, a Spanish-autonomous city in Morocco. These two cities control the straits of Gibraltar.

Melilla is also a Spanish autonomous city located on the north coast of Africa in Morocco. An example of Type 11 is Melilla and its counterpart city of Beni Ansar. After the boundary of the city of Melilla was determined, the city of Beni Ansar was established. Rural areas started to emerge around the city of Melilla. These surrounding developments necessitated walls and fences around the Melilla. Two border points are located on the boundary between Spain and Morocco. One is the south bank of the boundary between Melilla and Beni Ansar, while the other is located between the city and the rural settlements on the west side of the Melilla. In African cities, the built fabric is economically less developed. For example, the city of Melilla is located in Africa, while the Spanish initiated the development of fabric. In Table 21, the socio-economic differences can be observed in both satellite images and the land-use patterns.

Table 3.6 Paired border cities with controlled and artificial boundaries
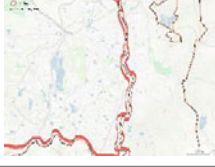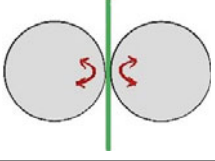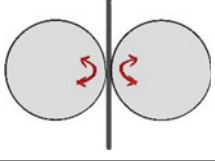
	Type 10 Controlled-artificial Partitioned Gibraltar/UK-La Linea de la Concepción/Spain	Type 11 Controlled-artificial Duplicated Melilla/Spain-Beni Ansar-Farkhana/Morocco	Type 12 Controlled-artificial Cross-border activity-dependent Mandera/Kenya-Beled Hawo/Somali
Google Earth image			
Urban network			
Land-use pattern			
Cross-border relations			

Type 12 is an example of a cross-border activity-dependent paired border city from the southeastern part of Africa, Mandera and Beled Hawo. These cities are located on the Kenya-Somali border. Mandera is situated on Kenya's border with Somalia and Ethiopia. There is a rural settlement with a smaller population on the Ethiopian side. However, in this case, Mandera-Kenya and Beled Hawo-Somali focus on the paired border cities. In this case, there is a buffer zone of agricultural land between Mandera and the boundary.

In contrast, Beled Hawo is located next to the boundary. Similar to the other controlled boundaries, there are also checkpoints. Border points have to be crossed to move from one city to another. Moreover, although both countries are not well developed economically, there are more economic opportunities on the Kenya side than on the land-use pattern map (see Table 3.6).

In Table 3.7, two partitioned cities are compared. Both are located on closed boundaries, and Type 13 is on the natural boundary while Type 16 is on the artificial boundary. In both examples, there are border points that allow border crossing.

Table 3.7 Paired border cities with closed boundaries

	Type 13 Closed-natural Partitioned Nicosia/Cyprus	Type 16 Closed-artificial Partitioned Jerusalem/Israel-Palestine
Google Earth image		
Urban network		
Land-use pattern		
Cross-border relations		

However, in both examples, there are different crossing conditions. For example, the Ministry of Foreign Affairs of the Turkish Republic (2020) has a publication that found on *Attention of Turkish Citizens to Travel to* Greece. In the second entry of this 3-item document, the phrase '*Greek authorities do not grant permission to enter the country if there is a TRNC/*Turkish *Republic of Northern Cyprus) entry/exit stamp in their passports*'. This is a fundamental problem about how two different countries' engagement affects the other country. Because of that, even if someone could travel from Turkey to Greece without restrictions except for a visa, they will not travel to Greece after TRNC. Although Cyprus's north and south parts started to allow people to cross one side with stringent restrictions, this boundary is evaluated under closed boundaries.

The history of the city of Nicosia dates back to ancient times. In the nineteenth and twentieth centuries, the significant populations were Turkish, Greek and British. After 14 years of republican government in Cyprus, the island was divided into north and south. After the demarcation, the city was divided; Turkish people lived in the north, while Greek people in the south. Buffer zones and walls between the two sides of Cyprus now separate the city and protect the city from conflict.

The city of Jerusalem is also a partitioned city that is divided by a wall. This region has always been conflicting because the area is sacred land for all Abrahamic religions. Wars in this region have always caused the borders to be strictly regulated, and religions play a fundamental role (Kelman 2001; Sela and Kadish 2016). In this case, according to historical studies, the division was made according to religion. For this reason, this case has to be determined differently because of its situation. Every paired border city has unique social, economic, political, cultural or religious backgrounds. As shown in the land-use pattern map, the fundamental problem is that the Israeli side has more socio-cultural advantages than Palestine. Economic and sociological differences affect urban development and life qualities.

3.11 Instead of the Conclusion

Based on these analyses, it would be correct to claim that all paired border cities have unique border conditions, relations and urban dynamics. Even if both cities on opposite sides of the boundary appear to be a united urban area, many separation elements and problematic connections arise from international boundaries. Citizens living on each side of the border also have different challenging issues regarding seeming united or being separate or close to neighbouring countries.

In the direction of the analysis, each paired border city may have similar problems, even if the cities have unique problems. The most important of these is the integration problem in every sense. Socio-spatial integration of people living in the same geography under different political and economic statuses of other countries always leads to difficulties whether open or controlled, natural or artificial and partitioned or duplicated cross-border activity-dependent. For this reason, urban designers, planners, historians, politicians or economists must take holistic approaches when they begin to think about the border conditions.

At this point, two issues are essential to realising the holistic and urbanistic approach. One is scale, and the other is the form of intervention. In English, three words have connotations but express different meanings: *boundary, border and frontier*. While *boundary* defines the border as a line, the *border* represents a more urban scale and political and social relations when observed at the spatial scale. *On the other hand, the frontier* has a regional meaning on a spatial scale. For these reasons, these three scales and border approaches should not be considered separately. Simultaneously, a direct intervention should be made, and both urban and regional effects should be considered. It should not be overlooked what kind of damage the top of the border region can cause the paired border cities on an urban scale. Moreover, the spatial intervention of the connections, crossings or prohibitions between two cities to the borderline must be considered in-depth on a regional scale.

Another critical point is that the interventions should include holistic and systematic social, economic, political and spatial approaches. Ignoring all social status, economic conditions and political forces would be a reductionist approach to implement a design intervention that merges two sides of the border. Therefore, design approaches to connect two sides with some physical elements such as bridges, roads or public open places, such as used areas like common or public places, universities and green regions, should consider integrating with public transportation systems both in urban and regional scales within a boundary, border and frontier. Furthermore, united plans and interventions, connecting cities within border regions, using no man's lands as Allman's land, and creating focal nodes and shared places for visitors from both sides are significant to connect two sides of people.

In short, it is necessary to put forward relational, network, focal, and a real and spatial integrity strategies at all scales and by evaluating all social, economic, political and spatial issues. Thus, before studying border cities, all the historical, cultural, social, political and economic features, opportunities or problems must be determined to understand border conditions correctly.

References

Bakhashab OA (1996) The legal concept of international boundary. Econ Adm 9(1):29–66

Boggs SW (1940) International boundaries: a study of boundary functions and problems. Columbia University Press, USA

Buursink J (2001) The binational reality of border-crossing cities. GeoJournal 54(1):7–19

Fawcett CB (1918) Frontiers: a study in political geography. Clarendon

Jones SB (1943) The description of international boundaries. Ann Assoc Am Geogr 33(2):99–117

Kelman HC (2001) The role of national identity in conflict resolution. Social identity, intergroup conflict, and conflict reduction. Oxford University Press, Oxford and New York, pp 187–213

Kireev AA (2017) State border. Introduction to border studies, pp 98–117. Dalnauka (2015). Retrieved 30 Oct 2017, from http://absborderlands.org/wp-content/uploads/2013/04/Introduction-to-Border-Studies-2.pdf

Martinez OJ (1994) Border people: life and society in the US-Mexico borderlands. University of Arizona Press, USA

Ministry of Foreign Affair of Turkish Republic (2020) Yunanistana Seyahat Edecek Türk Vatandaşlarının Dikkatine (To the attention of Turkish citizens traveling to Greece). Retrieved 4 May 2020, from http://www.mfa.gov.tr/yunanistan-seyahat-edecek-turk-vatandaslarinin-dikkatine.tr.mfa

Nugent P (2012) Border towns and cities in comparative perspective. In: A companion to border studies, pp 557–572

Payan T (2014) Theory-building in border studies: the view from North America. Eurasia Border Rev 5(1):1–18

Sela A, Kadish A (2016) Israeli and Palestinian memories and historical narratives of the 1948 war—an overview. Isr Stud 21(1):1–26

Soi I, Nugent P (2017) Peripheral urbanism in Africa: border towns and twin towns in Africa. J Borderlands Stud 32(4):535–556

Van Houtum H (2005) The geopolitics of borders and boundaries. Geopolitics 10(4):672–679

Chapter 4
The Boundaries of Heritage: The Paradoxes of Ouro Preto

Ricardo Ali Abdalla

Abstract Currently, an increasingly urgent need is to protect the cultural heritage, over many years, missing values and meanings as a result of the rupture and the various transformations from the Industrial Revolution that led to the abandonment of traditional technologies and ways of doing, at the expense of modernity and the mechanization of the processes of human creation. In Brazil, it was in 1920 that such goods, products of human creativity, and fruits of various social and historical methods became part of the conservationist ideas of the country, only then made arrangements to ensure their maintenance. This understanding intends to analyse the maintenance process, which deals with the protection and development guidelines focused on Ouro Preto, a world heritage site, a veritable laboratory for producing protective standards. Various instruments of the various spheres of Government were created throughout the twentieth century. However, the exaggeration of the protection and default on urban management transformed the city into a territory divided between historic X and non-historical cities. Even with the evolution of urban management practices to pursue sustainable development that reconciles the needs and potentialities, the insistence on treating the city depends on growth and conditioning, structural, aesthetic and economical, the historic. The standards of more recent heritage protection seem to perpetuate these paradoxes in establishing the bounding border of the historical and non-historical city.

Keywords Heritage · Borders · The industrial revolution · Brazil

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4.1   The Intense Urbanization

Profound changes in Brazil marked the 1930s. The establishment of Getúlio Vargas's government, established in 1930,[1] inaugurated a period of high economic and social development, characterised by industrialization and the beginning of significant migration from the countryside to the cities.

The shift from the country's economic base, from agrarian to industrial, throughout the 1930s and 1940s meant that the cities were attractive to rural workers who could not work in the countryside. With several labour rights guaranteed by law and a broad programme of industrialisation led by the government, the urban labourer expanded and occupied the main metropolises. Cities have become major centres, requiring profound structural changes, with large-scale operations—real estate "boom"; the emergence of incorporating capital and housing policy. The urbanization process was widespread, with extensive commercial and residential building production.

With the quick demolition process of old and degraded houses to give rise to new buildings, there was a marked appreciation of the areas that suffered intervention, forcing the low-income population to occupy favelas or move to the periphery that has expanded sharply. Furthermore, the diffusion of public transportation and large industrial plans favoured peripheral expansion. This mechanism extended the city indefinitely, making peripheral areas cheaper, without infrastructure or being environmentally fragile.

Consequently, a significant part of real estate investments and urban infrastructure was concentrated in the most valued and legally constituted centres. Thus, the cities were divided: a legal and rich portion in counterpoint to an illegal, poor and precarious portion.

The production of this urban space, within a system of capitalist orientation, obviously has support in the private ownership of the land. According to government legal guidelines, the citizen needs to have income money or resort to illegal occupations to obtain access to the land used to inhabit. In this way, occupations and other forms considered illegal access to housing in urban spaces reveal the unequal logic of the economic and political system.

For Mancuso, "Zoning is that operation performed on the floor of a city to assign to each function and each individual his rightful place." (1980: 275). In general, according to the characteristics that the zoning practised in Brazil presupposes, the control of the use and occupation of the soil has provoked in the cities a marked process of division: a legal portion in the counterpoint of an illegal portion. Raquel Rolnik explains that "there is a dominant model of urban planning instruments applied to most Brazilian cities, dominated by Zoning Laws, which as a rule, divide cities into zones for which specific urban parameters are applied. This approach will be called Traditional Planning." (1999: 77).

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[1] Provisional Government, instituted by the coup of 1930 that prevented Paulista and President-elect Júlio Prestes, representative of the coffee oligarchies of São Paulo, from taking office and leading Getulio Vargas to power on November 3, 1930.
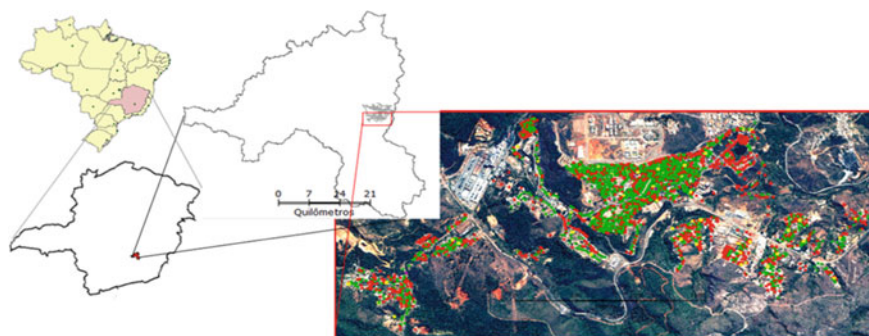
Fig. 4.1 Minas Gerais's capital on 18 August 1721

Therefore, the main instrument of urban intervention became traditional or technocratic planning. Invariably, this instrument generates urban legislation that ignores any dimension that recognizes conflicts—the laws of zoning and land use and occupation—whose most direct effect is the demarcation of territories of inclusion and exclusion, which shocks the ideal city view confirmation of the royal city.

4.2   The Ouro Preto Paradox—The City of the Heritage and the Simulacrum

Founded in 1711 because of the discovery of rich gold deposits in the region, the old Vila Rica, due to its economic and social relevance, was quickly elevated to Minas Gerais's capital on 18 August 1721 (Fig. 4.1).

Its importance was directly related to the production of gold withdrawn from its slopes. It is estimated that between 1700 and 1790, between 150 and 200 tons of gold were extracted. By 1760, the gold was already showing signs of decay. The economic collapse was imminent as the whole economy of the province was subsidiary to gold production. In addition, the city's topography has come to be seen as an obstacle to its growth. The ancient capital of Minas Gerais no longer presented viable alternatives to urban physical development, which generated the need to transfer the capital to another locality. In this sense, the idea of changing the seat of the government gained momentum, which was consolidated with the inauguration of the new capital, Belo Horizonte, on 12 December 1897 (Fig. 4.2).

With the loss of capital status, Ouro Preto emptied itself almost completely. Entire families moved to the new capital.[2] Many houses collapsed due to lack of use and conditions of maintenance. Yet, paradoxical as it may seem, the emptying of the city eventually contributed to the urban preservation of old Vila Rica.

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[2] It is estimated that about 45% of the residents of Ouro Preto left the city. At the turn of the twentieth century, the population was just over 10,000 people. CPDOC.

Fig. 4.2 Partial view of Ouro Preto

Without the accelerated growth imposed on Brazilian capitals in the twentieth century, their architectural and artistic complex remained practically unchanged until the city's rediscovery in 1924. In the search for a Brazilian cultural identity, resulting from a mixture of contributions from different races, avant-garde modernists found in the colonial architecture of the city and the Baroque what became known as a national style, arousing also the interest of the artist Antônio Francisco Lisboa, the Aleijadinho, in the country and the world, elevating it to the category of "national hero".[3]

Due to its artistic importance and the risk of losing its rich heritage, Ouro Preto served as a laboratory for creating norms to protect Brazil's historical heritage. Throughout the 1920s, several proposals for laws relating to property protection arose. Finally, in 1933, the city was considered a work of art and declared a National Monument.

In 1937, Ouro Preto was registered as National Historic Heritage by the National Artistic and Historical Heritage Institute – IPHAN, the institution responsible for establishing measures to protect the historical heritage. Ouro Preto started to have its urban growth controlled by that body in charge of issuing opinions regarding approving projects to be executed in the city. Excluded from this obligation were any constructions to be completed outside the historical set. Due to many people's lack of economic alternatives, living in the historic centre became prohibitive. The growing periphery did not follow the rules but commonly "emulated" what was done in the historic centre. Due to the local topography, it occurred on the slopes surrounding the historical whole (Fig. 4.3).

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[3] GRAMMONT, Guiomar de. Aleijadinho e o aeroplano – O paraíso barroco e a construção do herói nacional. Rio de Janeiro, Civilização Brasileira, 2008.

Fig. 4.3 City rises the hill

Until the end of decade 30, the main concern of the institution was with the preservation of the façades of the houses, believing that this is the most fragile element of the historical setting and that the city did not show a tendency for the accentuated growth.

In the 1940s, Ouro Preto resumed considerable economic and urban growth due to installing the Alcan aluminium industry, known as the "Aluminium Cycle". Motta points out that the economically active population of this new industry grew by about 70%. To understand the effect of the recent economic base, the author extended the statistical data analysis for the following decades and verified that in the decade of 50, the population grew 19% and reached a record of 131% in the next decade. Still, within the same study, the author reports that in the central archive of IPHAN, 15 applications for new works were registered in the 1940s, 124 applications in the 1950s and 495 in the 1960s.[4] Therefore, it is easy to conclude that the urban effects of such growth were dramatic.

The city, whose preservation was due partly to the lack of growth pressure in the first decades of the '20s, has now been the victim of a new economic cycle. The expansion broke the city's limits of the periphery, and new modalities of occupation overvalued the historical centre. As a result, the city of art was threatened with de-characterization. Moreover, with the increase in requests for approval of projects, it was no longer possible to analyse on a case-by-case basis, beginning with creating the first general building regulations.

From the '70s, IPHAN established fixed stylistic and aesthetic parameters from the entire city, especially to the front faces, since it was considered the most deforming element.[5] "It was then demanded the use of the structural elements of the wood in the front faces, such as dog eaves, sills in external coffins and patella leaves, gutters

[4] op. cit p. 114.

[5] This rule prevails until today in ordinance 312, of 20 October 2010, of IPHAN.

Fig. 4.4 Alignment and uniform aspect of front faces

Fig. 4.5 View of the rear of some houses

or guillotines."[6] In the historical centre, the relationship of the building with its environment prevails, or the face of the block (Fig. 4.4).

This front face logic adopted by IPHAN dismissed the rear of the houses (Fig. 4.5).

The typology of the neighbouring buildings (openings, colours, material), volume, especially the roof and implantation in the ground, among other items, are considered references for any other works, being their new constructions or restorations. Thus, Ouro Preto grew up under the light (or shadow) of the stylistic norms of IPHAN.

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[6] MOTTA, Lia. Revista do Patrimônio Histórico e Artístico Nacional, n° 22, 1987, p. 12.

Fig. 4.6 New buildings merged with old ones

As a "guardian of the National Heritage", this institute sought to establish norms that would guarantee the integrity of historical sites and their traditional aspect, often in the absence of regulatory standards in the cities where these groups are located.

The false historical or the simulacrum was institutionalized, inserted in the genuinely old set, merging the old and the new (Fig. 4.6).[7]

Plato defines the term simulacrum as "the identical copy of something whose original has never existed", transforming not only historical time but also constructed space and its meaning. As Guy Debord noted in one memorable phrase, "the image has become the ultimate form of reification".[8]

The new constructions constitute a *pastiche* that "is to imitate a unique style, peculiar or idiosyncratic, is to put off a linguistic mask, is to speak in a dead language (Fig. 4.7)".[9]

According to accepted norms worldwide, the representation of historical reality (the interventions carried out in the well-documented) must be easily identifiable. The observer differentiates the new from the old and can vision a reality through this distance between the two. However, in Ouro Preto, the copies of reality are so many that any distinction between real and unreal becomes impossible, "which radically transforms our life experiences, destroys the senses and meanings, and empty the concept of reality". There is a difference in the understanding of the city when it is shown as reality or as the representation of reality. With this, it can be said that Ouro Preto is a "Disneyfied" city (Jameson 2000) (Fig. 4.8).

4.3   Heritage and Hybridism

The notion of heritage defined by Motta is that "historical centres are understood to be those areas that are institutionally protected against situations or interests that

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[7] Due to the requirements of the IPHAN concerning the materials and formal coatings carried out until today. Therefore, it is difficult to distinguish what is a historical building.

[8] DEBORD, Guy. A Sociedade do espetáculo. Digital version, disponible in http://www.geocities. com/projetoperiferia.

[9] Jameson, op. cit.: 44.

Fig. 4.7 Historical falsification produced in the 50s—in the name of the "historical set"

Fig. 4.8 Garages disguised as an architectural element, like reproduction of the original

may put them at risk of disappearing or suffering the de-characterization of essential elements for the understanding of the society that produced them".[10] Such a definition, by itself, already presupposes differential treatment concerning urban regulation. Unfortunately, however, what happened was that after Ouro Preto was considered a National Monument in 1933, few urban regulation norms effectively covered the entire city and made the growth compatible with preservation. Instead, successive federal laws and decrees have tried to protect the historical whole, leaving the rest of the city at the mercy of its fate regarding urban norms. This fragmentation in two territories—"historic city" and "unhistorical city"—refers to the confrontation

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[10] MOTTA, Lia. Revista do Patrimônio Histórico e Artístico Nacional, n° 22, 1987, p. 108.
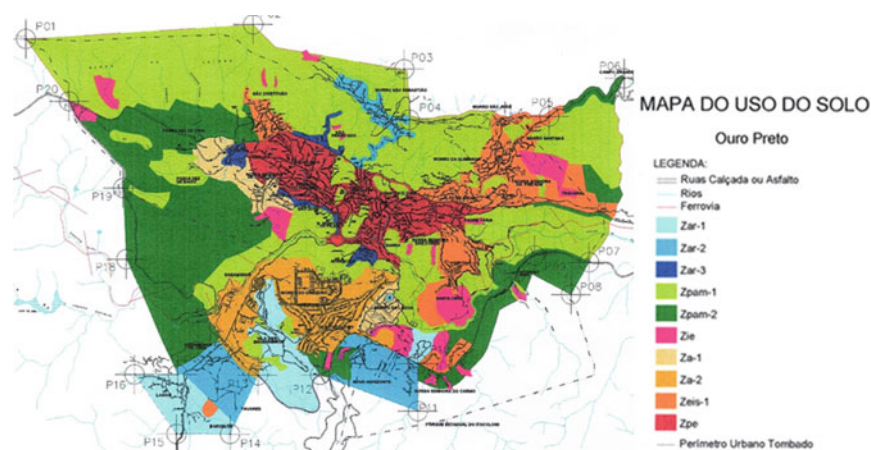
Fig. 4.9 Land use map with specific zones

between ideal city X real city, "metaphysical or celestial city and earthly or human city, as Argan has well illustrated.[11]

However, the need for a stylistic model that, under the call of maintaining an "architectural set", eludes the observer, no matter how attentive it may be, is consecrated. In theory, the model was intended to spread throughout the city, especially in greater visibility, from the historic centre—the growing periphery. However, due to incapacity for inspection, it is believed public agents have monitored a higher level of interest, only interventions in the historic centre. At the periphery, there is at most an emulation of what is consecrated in the historic centre (arched windows, elimination of setbacks) with contemporary additions (a kind of "terrace" on the top of the house, a common habit in place, an increase in rooms, etc.). There is no respect for any regulations of land use. Again, the lack of supervision is alleged to cause this situation. It is this city that is observed from the historical centre.

In 1989, the protected perimeter was physically delimited, creating zones of historical inclusion and exclusion, consequently, differential treatment. This decision made explicit the limit of control of the heritage, defined as Special Protection Zone (ZPA). As a result, their perimeter is both old and modern buildings with the appearance of ancient (false history) (Fig. 4.9).

On 2 April 2004, the IPHAM published ordinance 122, whose purpose was to give guidelines and criteria for urban and architectural interventions in an area part of the Architectural and Urbanistic Complex of the City of Ouro Preto. This ordinance was planned to control interventions in the centre delimited and immediate surroundings with visibility from the historic centre. It also established urbanistic indexes to guarantee the typology of seventeenth-century occupation.

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[11] ARGAN, Giulio Carlo. A história da arte como história da cidade. São Paulo, Martins Fontes, 2002, p. 74.

The newest instrument for heritage protection is ordinance 312, published by IPHAN on 20 October 2010, which applies to the entire city. All neighbourhoods will have height and volume control to harmonize with the old area. In the historic centre, historic houses cannot be changed. This ordinance divides the city into six "macro-sectors", called preservation areas, with greater or lesser constructive permissiveness, subdivided into three building blocks, and establishes a territory plan. For IPHAN, standards will be good for residents and tourists who pass through the city; according to the agency, "having preserved heritage is one factor to have a quality of life and a development tool".

The site covers about 80% of the area of the host district. The Special Protection Zone, where the largest concentration of historical and cultural importance build-ings, has been scaled down compared to what was established in the previous ordi-nance. What is striking is the search for a practically homogeneous typology for the whole city when it establishes the type of roof for all situations (two waters, one facing the street), the implantation on the ground, conditioned to the face of the block, the requirement of the predominance of verticality in the openings of the front faces respecting the rhythm of full and empty, characteristics of the eighteenth century, painted in light colours, wooden frames, among other requirements. It is the consecration of the "IPHAN style".

4.4   Final Considerations

Cities like Ouro Preto, considered for their historical, artistic and cultural value, a common heritage of Brazil, need to be the target of sustainable public policies that make compatible urban norms with the protection of the heritage since they tend to interfere directly with the historical cities. However, it must be borne in mind that the city is an indivisible whole. Therefore, establishing territories of privilege or differential treatment often permeates the configuration of cities. Centres, noble neighbourhoods, periphery, in short, and the territory's logic impose different modal-ities and typologies. In the case of Ouro Preto, the contrast between historical and unhistorical is too great because the present (not historical) city, due to the geographic configuration, is leaning over the historical centre. As an aggravating circumstance, the application of urban laws did not extend throughout the city, which consolidated a landscape in constant opposition (Fig. 4.10).

This visibility, coupled with the irregularity of the settlement patterns practised in the city, fuels a sense of territorial division more intense than in other regions. For the immense majority of the inhabitants of Ouro Preto, the borders of the protected historical area constitute a factor of social differentiation. The reason for which the conscience of the importance of preserving the built heritage was not consolidated as a whole.

Fig. 4.10 Partial view from 1950 and 2010

Ouro Preto is a city that assets a significant part of the Brazilian cultural heritage and entails responsibilities of various natures. One of these responsibilities is planning about tourism that emerges as an economic activity, a product of this characteristic of which the city is a carrier and which plays an essential role as a disseminator of this heritage, treated as a product, a result, among other things, in tourism marketing, whether it is positive or negative. However, there is no way to decouple tourism from heritage. It is with this in mind that public policies must turn around and offer guidelines and strategies that increasingly seek the valuation of this heritage for present and future generations, who carefully take care of the impacts and pressures that the tourist activity will exert on a historic city, working in such a way that, guided by protection, will contribute even to the perpetuity of this activity that directly affects the local economy.

Sustainability emerges as a synonym for the preservation of heritage and should be directly related to the quality of life within the city. "From it also derives a notion of urban sustainability that is linked to the idea of heritage"[12] and when associated with heritage category refers not only to the materiality of cities but to their character and their identities, to values and inheritances built over time, proposing that from there, the strategies seek to strengthen the sense of appropriation of the inhabitants by their cities.

However, all actions aimed at city management and protecting the heritage need to consider the city in its full scope. Argan affirms the necessary interdependence between the ancient and the modern city as a condition of mutual survival:

"The modern city cannot aggregate and work except at the expense, at least in part, of the old city. (…) it must be taken into account that the condition of survival of the remaining ancient nuclei is determined by the general urban solution and the criteria by which the disastrous *periekon* of the urban peripheries" (2002: 77).

The interdependence between the ancient and the modern city is evident. A complex order is established between old forms and new uses and functions that produce a differentiated identity. The old and the contemporary need to merge without annihilating each other. However, "the appropriation of cultural goods has

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[12] Cidades Sustentáveis, cidades globais. COMPANS, Rose. in: ACSERALD, Henri. A duração das Cidades. Sustentabilidade e risco nas políticas urbanas. DP & A/CREA-RJ, Rio de Janeiro: 2001.

Fig. 4.11 Irregular/illegal occupation in Ouro Preto

been following the process of transforming cultural heritage into merchandise, just as its re-functionalization has now served the ideology of consumption and no longer represent cultural practices in the sense of belonging to local cultures and populations".[13] In this sense, it is evident that a continuous process of changes in values promotes a postural change in the population concerning cultural heritage, assigning to it a purely scenographic and overvalued symbolism.

In Ouro Preto, this excessive scenic value, especially from the historical centre, and the lack of a consistent planning policy had two main consequences. First, most of the population was forced to settle on the city's outskirts, occupying some slopes close to this overvalued area. Secondly, given the urgency and high concern of protecting the built heritage of the city, for decades, stylistic norms have been established, perpetuated until today that have contributed significantly to the construction of a hybrid identity, half historical, half false historical, living together side by side and surrounded by irregular / illegal occupations (Fig. 4.11).

The high complexity of urban organizations, primarily where historical sites are situated, has rendered traditional forms of planning insufficient, especially understandable urban planning. If this complexity is perceived today, what about its future projection? There is a need for a profound change of attitude regarding the development of cities and the preservation of their cultural heritage: moving from a reactive and introspective situation to a proactive attitude in the search for effective responses to the local demands of society, whose participation is fundamental to the outcome or whose opposition is synonymous with failure.

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[13] Luchiari, Maria Tereza Paes. Patrimônio, natureza e cultura. Campinas-SP, Papirus, 2007.

References

Acselrad H (Org) (2001) A Duração Das Cidades. Sustentabilidade E Risco Nas Políticas Urbanas. Dp&A/Crea-Rj, Rio De Janeiro, Rio De Janeiro

Argan GC (2002) A História Da Arte Como História Da Cidade. Martins Fontes, São Paulo

Choay F (2001) A Alegoria Do Patrimônio. Rio De Janeiro, Estação Liberdade Iphan. Cartas Patrimoniais

De Grammont G (2008). Aleijadinho E O Aeroplano – O Paraíso Barroco E A Construção Do Herói Nacional. Civilização Brasileira, Rio De Janeiro

Holston J (1993) Legalizando O Ilegal – Propriedade E Usurpação No Brasil. Artigo Publicado Na Rcbs, Edição N° 21, Ano 8, São Paulo

Jameson F (2000) A Lógica Do Capitalismo Tardio. In: Pós-Modernismo: A Lógica DoCapitalismo Tardio. Ática São Paulo

Jameson F. O Modernismo Como Ideologia. In: Modernidade Singular. Civilização Brasileira, Rio De Janeiro

Luchiari MTP (2007) Patrimônio, Natureza E Cultura. Papirus, Campinas-Sp

Mancuso F (1980) Las Experiencias Del, Zoning. Gustavo Gili, Barcelona

Motta L (1987) A Sphan Em Ouro Preto – Uma História De Conceitos E Critérios. Revista Do Patrimônio Histórico E Artístico Nacional. Edição N° 22, Rio De Janeiro

Motta LS, Rezende MB (Org) (1998) Inventários De Identificação: Um Panorama Da Experiência Brasileira. Iphan, Rio De Janeiro

Rolnik R, Bonduki NG (1979) Periferias: Ocupação Do Espaço E Reprodução Da Força De Trabalho. Fauusp/Edusp, São Paulo

Rolnik R (1997) Instrumentos Urbanísticos Contra A Exclusão Social. Revista Polis, Edição Nº 29, São Paulo

Rolnik R (1996) Políticas Públicas Para O Manejo Do Solo Urbano. Revista Polis, Edição Nº 27, São Paulo

Rolnik R (1999) Regulação Urbanística E Exclusão Territorial. Revista Polis, Edição Nº 32, São Paulo

Villaschi J (2000) Caderno De Ofícios 2 – Cidade. Governo Do Estado De Minas Gerais; Secretaria De Cultura Do Estado De Minas Gerais; Fundação De Arte De Ouro Preto. Ouro Preto

Chapter 5
Regional Architecture in the Persian Gulf: Conflicting Architectural Narratives of Global–Local Border Convergence

Ben Tosland

Abstract During the twentieth century, the Persian Gulf's regionalism created architecture representing the Persian Gulf, rather than each nation-state's distinct characteristics. This differs from contemporary historiographical thought. How international borders within the Persian Gulf have contributed to architectural development is an enlightening case study that considers the interface between modern architectural design vocabularies and regional design languages. Primary material from archives around Europe and the United Kingdom has formed a data set of buildings, architects and years constructed, establishing a correlation between building projects and geopolitical events. Furthermore, analysis of these events suggests that these events have caused geographical shifts in developmental focus and aesthetic evolution.

Keywords Architecture · Urbanism · Borders · Aesthetic · Regionalism · Modernism · Development · Evolution

5.1 Introduction

Between 1950 and 1998, varieties of architectural language produced by Westerners proliferated in the Persian Gulf. As a result, architectural influences became increasingly globalised. They were juxtaposed to root designs in the locale and transcended international borders. Western architects sought to create functional, modern buildings grounded in the broader region rather than a specific nation or local culture. This became evident in the similarities of architectural style and ornamentation across the Gulf. Architects still attempted to design contextually despite architectural language and theory changes between early iterations of Modernism and the recognition of critical regionalism (a term often cited as problematic). However, how a building was

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contextually varied significantly within the region resulting in contradictory notions of homogeneously produced yet stylistically varied architecture.[1]

This transnational response resulted in iconic buildings like the Kuwait National Assembly. Buildings like this represented the nation-state, where they were built and drew upon broader aesthetic influences. However, numerous ill-researched and poorly advised projects attempted to create an architectural identity. These were often funded by exorbitant new wealth from expanding oil markets.

How this manifested itself within the built environment is shown in two periods. The first period was 1950–1973. During these years, the European styles of Modernism, intended to represent ideology and style, proliferated. In the second period, 1973–1998, Western architects' critical regional projects were influenced by local geography and culture to represent identity rather than notions of progress. All projects examined are physically rooted within the surrounding arid landscape and climate spanning the Persian Gulf; however, as architectural ideologies and languages developed, a blurring of national borders and architectural styles occurred. This resulted in a mixed design language, incongruous with specific nations that spoke more widely for the region.

Modernist architects, including Candilis-Josic-Woods, Alfred Roth, Maxwell Fry, Jane Drew, and Max Lock, deployed a similar architectural language in their projects in countries such as Iran, Iraq and Kuwait during this period seeking to focus on sociological, cultural and climatic issues rather than use identity and representation as a focal point of their work. However, the architecture in 1976–1998, following the Yom Kippur War and the ensuing oil crisis, is examined separately due to changes in the economic and political relationship between the West and the Gulf.

This period resulted in increased building growth and Arab autonomy in design that historians such as Asseel Al Ragam described as an Arab awakening or *al nahda*.[2] Architectural histories of this period generally have a mono-national focus, sometimes neglecting the transnational architectural language procured in the second half of the twentieth century. This awakening occurs across national borders and affects each state's building programme differently.[3] In the second period, architects and planners, composed of Jørn Utzon, Henning Larsen, Arne Jacobsen, Constantinos Doxiadis and HOK, were assessed. All working in Saudi Arabia, Iraq, and Kuwait exemplify the different clients' will.

The Persian Gulf region is the land area surrounding the body of water of the same name, as shown in Fig. 5.1. Acknowledging the Persian Gulf naming dispute is necessary as it concerns the body of water at the centre of the countries from which borders emanate. It is named after Persia's land—the Western exonym for Iran—and has been contested by Arab countries since the 1960s, a contest rooted in

[1] Botz-Bornstein, T. Transcultural Architecture: The Limits and Opportunities of Critical Regionalism, London: Ashgate 1–10. (2015).

[2] Al-Ragam, A. *Towards a critique of architectural Nahdha: A Kuwaiti example*, Unpublished Thesis: University of Pennsylvania. (2013).

[3] Al Nakib, F. *Kuwait Transformed: A History of Oil and Urban Life*, Stanford University Press: Stanford, 105. (2016).
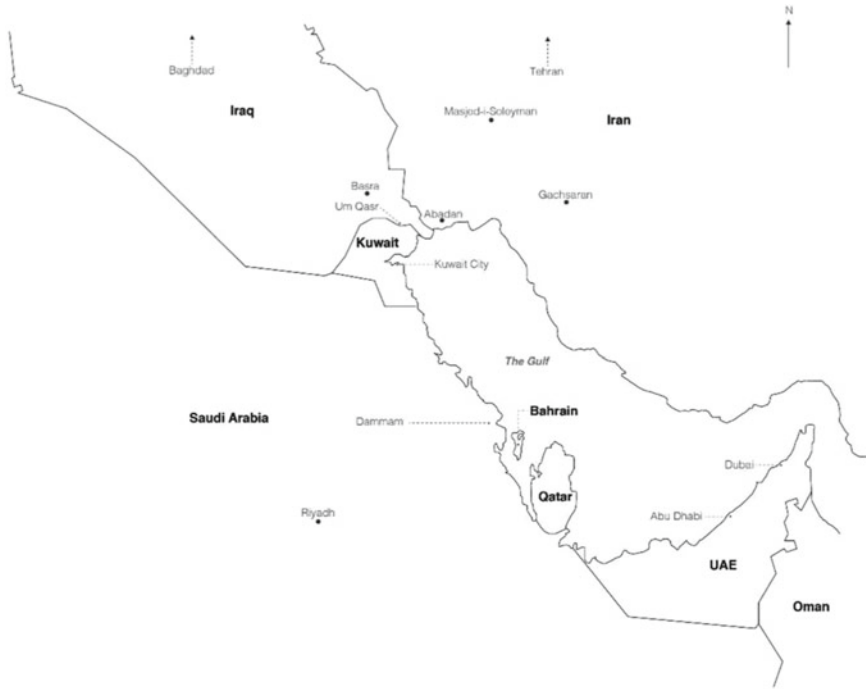
Fig. 5.1 Gulf areas, including Riyadh and Gachsaran, addressed in this study (Map by Author)

the Arab nationalism. Following centuries, ancient geographers Strabo and Ptolemy established the Persian Gulf and European mapmakers. The naming of this body of water presents numerous dilemmas, given that Iran and the disputing Arab countries surrounding it are all featured in the analysis.[4] Riyadh and Gachsaran are included within its scope due to their cultural similarities and economic relationship to the Gulf lands. Historically, there is a large degree of political, cultural and religious variation within this region—an example being the majority of Iranians being Sunni Muslims and most Saudi Arabians being Wahhabi Muslims (also a form of Sunni Islam).

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[4] Levinson, M. H. (2011) Mapping the Persian Gulf Naming Dispute', ETC: A Review of General Semantics, (68:3), pp. 279–287; Author's note: In no way is the chapter title and use of 'Persian Gulf' intended to be a provocative statement about Gulf politics, as its focus is an assessment of architecture—which of course is not mutually exclusive to politics—though it does not make a stance on the complexities of Arab-Iranian relations. As a matter of simplicity, it might be better to refer to it as 'the Gulf', but this goads Iran, who have censored copies of Western magazines such as the *Economist*, in the past for dropping the 'Persian' from the epithet; a similar and severe case emerged in 2008 when the Iranian government took exception to Google Maps' labelling of the Gulf as both the Arabian and the Persian Gulf. The stance of the US, UN and European nations is generally to refer to it as the Persian Gulf because Iran is the largest country adjacent to this water body with the longest coast.

Furthermore, the alignments of these nations to political systems, like the Western colonial powers and the communist influences of Soviet Russia, caused large-scale instability. Uniting the region are geographical characteristics, such as topography and climate, partly causing the architectural style to ignore national borders. A vital characteristic of the Gulf is its constant interchange of people, with historic migration influxes for the maritime industries that lined the shores and the established caravan routes inland, linking it to Europe in the west and Asia in the east.[5]

5.2   Modernism in the Gulf, 1950–1973

Architects such as Candilis-Josic-Woods, Alfred Roth, Fry, Drew and Partners, Max Lock worked throughout the National Iranian Oil Company (NIOC) region and Kuwait Oil Company (KOC) in the 1950s. They utilised the European-influenced modern design language; their work was not skin-deep and sought to rectify sociological problems often worsened through colonial actions and pressures. These critical protagonists from similar European Modernism backgrounds shared common understandings and philosophies of the Modernist canon. In addition, they had relationships with great European functionalists of the twentieth century, such as Le Corbusier or groups formed with the *Congrès* Internationaux *d'Architecture Moderne* (CIAM). As a result, they focused on the Modernist movement and overlooked cultural sensitivities despite their seemingly good, if sometimes ill-informed, intentions.

A litany of *Arab* references was applied in these architects' schemes, with designs primarily aiming to function in the climate while creating salutary nods to local culture—architects working in these circles during this timeframe corresponded with one another to share information. Top topics of conversation sometimes strayed onto the blanket, avoiding countries and clients with poor payment track records. This allowed them to assess a project based on economic feasibility rather than potential architectural merits. Inversely, as time progressed, clients—who had more money and favour than before—looked to choose architects that would design in a regionally sensitive style, often resulting in more ornamental and aesthetically led projects. Thus, the Gulf became a testing ground for a broad, geographically influenced, varied palette of 'Oriental' decorative references, ranging from modern Moroccan schemes to traditional Chinese architecture.

Projects constructed in the immediate aftermath of the Second World War, such as Le Corbusier's Unité d'Habitation, inspired schemes in the Gulf through aesthetics and ideology; an example of this is the work Candilis-Josic-Woods in Abadan proposed in 1956. These buildings primarily drew upon earlier work by

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[5] Potter, L. G. 'Society in the Persian Gulf: Before and After Oil', *Center for International and Regional Studies.* 1(18), 4. (2017).

Georges Candilis and Shadrach Woods in Morocco, working for Atelier des Bâtisseurs (ATBAT) and their own experiences working in Le Corbusier's atelier.[6] Their Moroccan work influenced squatter settlements that defined Morocco's new urban areas known as 'bidonvilles' described as low-rise buildings, tight-winding streets, and bricolage of materials created dynamic and socially tight-knit communities within north African cities.[7] This terminology manifests further by creating vague Modernist languages, such as 'mat', 'stem', or 'web', commonly used throughout their work in this period and more increasingly commonly employed in later periods.[8]

Another aspect of influence is the kasbah, a building typified by four-storey structures with high walls for privacy. Candilis-Josic-Woods took cues from these influences for the Abadan housing proposals submitted for the NIOC and the concept of flexibility central to the mass-housing units, both low and high-rise, all proposed by this trio of architects.[9] One of their residential schemes' striking features was the large, high-walled courtyards, which offered flexibility to tenants who often covered them to create an extra room for living. If uncovered, these courtyards, particularly in the high-rise blocks, allowed families to have their own private outside space—central to the way of Gulf life—often utilised for sleeping on hot summer nights. Building around this space was necessary for the architect. It retained the vital cultural function of outdoor space, activity and life while providing high-density housing for its clients, the oil companies.

In Candilis-Josic-Woods' Iranian housing, border convergence is prevalent through this research process in Morocco, a hot, dry, arid country with a similar culture to southern Iran upon their earlier transnational experiences.[10] The buildings they proposed in Iran were culturally relevant and climatically functional, yet, they employed an aesthetic and architectural language that was recognisable as modern. The project's flat roofs, white-rendered walls and dynamic facades shared similarities with their work in Morocco at the Carrières Centrales and with Le Corbusier's Unité d'Habitation, but also shared similarities in the form with later social housing projects in Britain, such as Park Hill in Sheffield or Robin Hood Gardens in Poplar, London. Furthermore, the clean lines, the open interior spaces, and the project's overall configuration continues this architectural linguistic expression. The Abadan scheme was a mix of low-rise buildings rarely exceeding one storey, pockmarked with a few higher four-storey blocks, focusing on low-rise but high-density construction. In the context of Candilis-Josic-Woods' careers, this low-rise 'web' and 'stem'

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[6] Avermaete, T., Ockman, J. and Available, N. *Another modern: The post-war architecture and urbanism of Candilis-Josic-Woods.* Rotterdam: Nai Uitgevers Pub, 66. (2005).

[7] Chaouni, A., Depoliticizing Group GAMMA: Contesting Modernism in Morocco. In: *Third World Modernism* (London: Routledge), 59–69. (2011).

[8] Avermaete, T. Ockman, J. and Available, N. *Another modern: The post-war architecture and urbanism of Candilis-Josic-Woods.* Rotterdam: Nai Uitgevers Pub, 111–139. (2005).

[9] Archival material from Shadrach Woods' Columbia University archive underpins this section's knowledge. I am grateful to Chris Barker of Columbia University, who photographed and sent me the drawings of this scheme.

[10] Chaouni, A. Depoliticizing Group GAMMA: Contesting Modernism in Morocco, *Third World Modernism* (London: Routledge), 59–69. (2011).
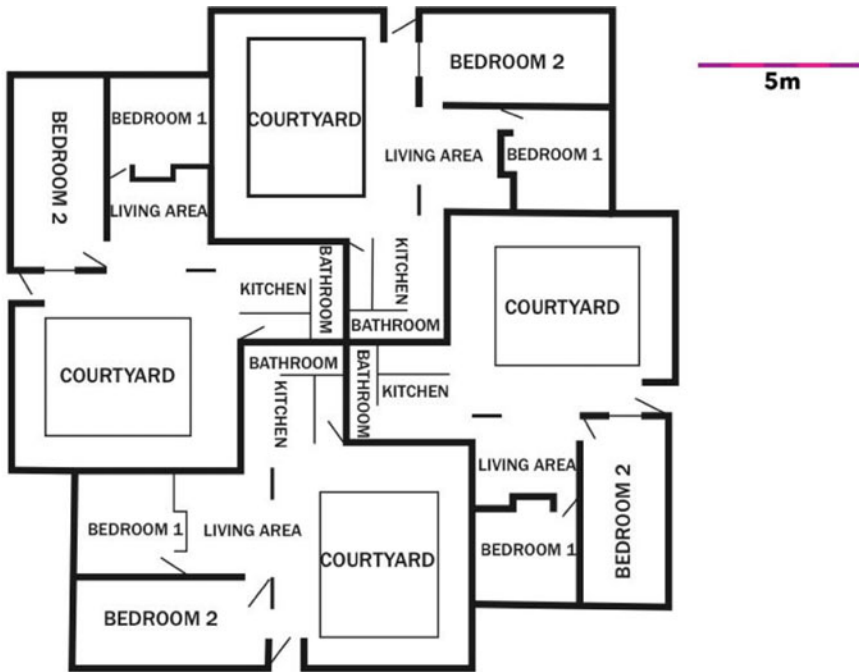
Fig. 5.2 Plan form of a section of a CJW proposal for housing (Drawn by Author)

Fig. 5.3 Elevation of CJW housing (1956) (1:20) (Drawn by Author)

housing in Abadan formed an early prototype for the Berlin Freie University, their career-defining building.[11] The Abadan proposals' setting was also typically modern; the surrounding spaces were open and landscaped, encouraging people to spend time outside their private courtyards (Figs. 5.2 and 5.3).

Like Candilis-Josic-Woods' housing in Abadan, in August 1956, Max Lock published his plans for the Ubullah neighbourhood, forming part of a town plan for 15,000 people, which again looked at low-rise but high-density construction. This plan formed an area of Margil, one of the trilogies of plans Lock produced

[11] Krunic, D., The 'Groundscraper': Candilis-Josic-Woods and the Free University Building in Berlin, 1963–1973, *ARRIS: The Journal of the Southeast Chapter of the Society of Architectural Historians*, 23(1), 30–49. (2012).

in the mid-1950s for southern Iraq, including Basra and Umm Qasr.[12] The plans predominately sought to cater to the client's requirements, which regularly opposed the Lock's socially informed views and opinions, looking to provide a modern imprint from a tabula rasa.[13] Despite this, the architectural design formed a vital element of the Ubullah Neighbourhood Plan, delineating five house types (Type A, Type B, etc.). It was rare for Lock to include such a distinct palette of architectural design options within a town plan. However, he was an accomplished architect, predominantly working in Britain's interwar period.[14]

The forms and materials of his housing displayed significant similarities to the work of Fry. They Drew at Gachsaran in the mid-1950s—low-rise, single-storey, and plain elevations with timber window frames and small windows generally masked by a basic wooden mashrabiya—and primarily sociologically led. The plan form provides evidence of cultural thought with housing, including enclosed courtyards to the rear of the house. In some examples, most rooms open to the courtyard space, enabling families to use it as a critical space for circulation. House Type E, for example, exemplified this to the extreme; the main living area at the front of the house was detached from the bedrooms accessed through the courtyard. However, Fry and Drew's designs for homes in Gachsaran differed slightly in their spatial configuration. While they utilised similar spatial and architectural concepts to Lock, they provided internal circulation rather than a courtyard as the focal point in Lock's plan forms.

Lock's designs' essential feature is that he provided roof space, primarily intended for sleeping, though not in every house.[15] The exception is House Type C, where Lock designed a pitched roof adding variety to the overall layout while conducting an economic experiment to determine which method is cheaper.[16] As Lock stated, the design combined 'practicability with the economy'.[17] Fry and Drew differed in their design approach in Iran through mostly mono-pitched roofs, allowing more space within the courtyard houses and streets. The mono-pitched roofs added benefits, including more light to dark, unlit areas and better air circulation with vents near the ceiling out of sight.

Aesthetically, Lock's housing design at Ubullah was an assemblage of influences, primarily utilising the architectural language developed in the 1950s by other Western architects in the Persian Gulf. Subsequently, this was combined with his knowledge of materials available to him when constructing in Europe, which could now be transported to southern Iraq areas with greater ease. Lock's planning for Basra

[12] Tosland, B. Planning Southern Iraq: Placing the Progressive Theories of Max Lock in Umm Qasr, Margil, and Basra in the Context of Iraqi National Development, 1954–1956. *Planning Perspectives*, 1–23. (2018).

[13] Ibid.

[14] This evidence is found in plans produced 1940–1956 for various countries. The Ubullah neighborhood drawings are unique and offer insights into Locke's thinking for desired urban scale and enclosures.

[15] Gardiner, S. *Kuwait: The Making of a City*, Harlow: Longman, 13–59. (1983).

[16] Lock, Ubullah Neighbourhood Plan, 22. (1956), (Max Lock Archive: University of Westminster).

[17] Gardiner, *Kuwait*, p. 23.
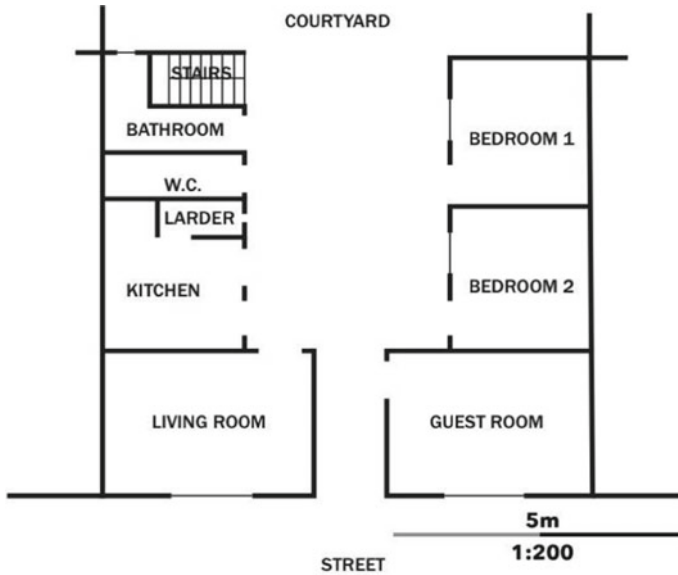
Fig. 5.4 'Type A' house by Lock (1:20) (Drawn by Author)

demonstrated sharp detail. Moreover, it exhibited his knowledge of local culture gained in the late 1940s while working on projects in the region, which he achieved through living in the location he was working in.[18] Lock's designs further show his understanding of the regional vernacular and his sensitivity for inhabitants, which he advanced through tours of towns throughout southern Iraq and Kuwait. In particular, Lock used archways drawn from the nearby town of Zubayr and constructed a townscape with tall minarets of public mosques visible from all around his development; both of these small and more significant scale elements contributed to the regional sensibilities of his work.[19] Besides, the synthesis of Western influence and local vernacular in Lock's housing options for Ubullah shows perhaps a merging of traditional design with a society striving for modernity (Figs. 5.4, 5.5, and 5.6).

Alfred Roth's approach to design in Kuwait mostly concerned climatic factors rather than the sociological approach others took, leading to a standardised aesthetic and architecture configuration in his Kuwaiti work.[20] In a one-off design for a prominent politician in Kuwait, Roth designed a country house on Kuwait's coast and completed it in 1976. It employed many spatial features of earlier oil worker housing

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[18] Tosland, B. Planning Southern Iraq: Placing the Progressive Theories of Max Lock in Umm Qasr, Margil, and Basra in the Context of Iraqi National Development, 1954–1956. *Planning Perspectives*, 1–23. (2018).

[19] Ibid.

[20] Letter: Alfred Roth to the Kuwaiti Ministry of Education, (26.06.1975) (gta Archiv: ETH Zurich, box 131-0162). This explains configuration of schools in relation to climatic elements; however, it fails to mention sociological factors and compares them to Chinese courtyard houses thousands of miles away.
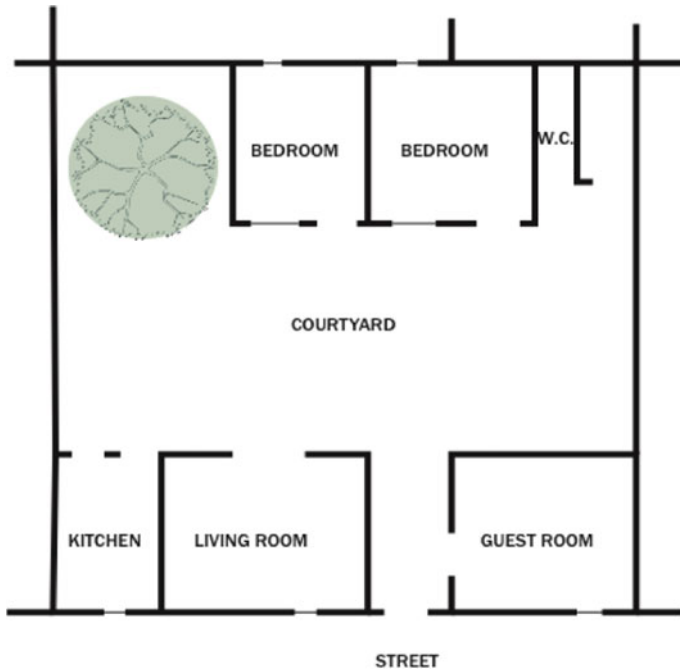
Fig. 5.5 Max Lock, house 'Type E' (Drawn by Author)
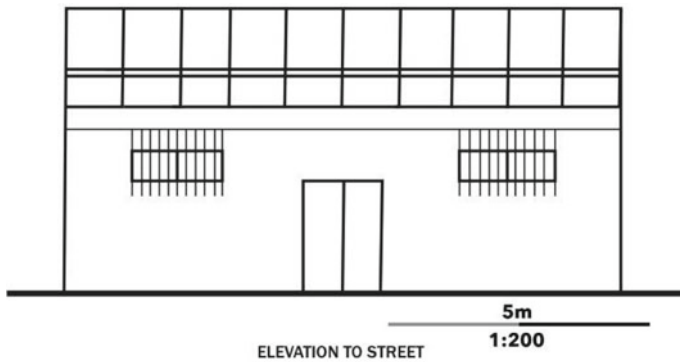
Fig. 5.6 Elevation of a 'Type A' house by Lock featuring the roof terrace for sleeping (1:20) (Drawn by Author)

designed by architects such as Fry and Drew, Lock and Candilis-Josic-Woods, but translated into a private, isolated dwelling. Roth's functional idealism continued into construction methods regarding the schools he designed, attempting to use prefabricated building techniques intended for quick construction. In doing so, his architecture responded to the state's requirements while being rooted in a climatic sensibility, through the minimal amounts of glazing used, contrasted to his European

works, which often utilised large windows and balcony spaces as in his Doldertal Apartments in Zurich.[21]

The country house in Kuwait featured the main area around a central courtyard, from which a staircase provided access to the second floor and roof beyond. Roth staggered the bedrooms on the south side of the building to ensure that glazing could be orientated eastwards, avoiding south-facing windows to minimise the harsh Kuwaiti sunlight. The living areas on the north side of the building, including the family dining room, reception room, and kitchen, had limited glazing instead of opening to the communal courtyard.[22] Roth designed a sizable overhanging roof around the courtyard, which created shade on all walkway areas and minimised solid walls in the dining and reception rooms to increase cross-ventilation. These forms echoed those of the case study houses in California, including Pierre Koenig and John Lautner's works. While many of these features Roth designed are exclusive to this private dwelling, the spatial configuration around the outside space was imperative to the house's construction. There is little ornamentation within the design. Thus, Roth's work showed a purity often associated with the earlier modern movement. The more expressionist and ornamental architecture developed from the early 1960s, making his designs outdated. However, the flat-roof, white-rendered walls and landscaped garden created an apparent continuity with the early Modernists' designs and the overall architectural language of the Persian Gulf as procured by Western architects in earlier eras.[23]

The courtyard configuration also appeared in the schools Roth designed throughout the 1960s and 1970s in Kuwait. He produced many unique designs, such as the girls' school at Rumaithiya (1971), and prepared prototype designs for the Kuwaiti government.[24] The designs for Kuwaiti schools followed the same principles: prefabricated construction and large overhanging roofs above the central courtyard to provide shade outside the classroom, which also reduced glare in the classroom and minimal external glazing. Unfortunately, the early attempts at prefabricating units off-site were not as successful as anticipated. However, this was central to Roth's functional ideology and was necessary for the Kuwaiti state to build a rapidly growing population that required education to partake in genuinely modern society (Figs. 5.7, 5.8 and 5.9).[25]

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[21] Roth, A., *Alfred Roth: Architect of Continuity*. (Zurich: Waser). 260. (1985).

[22] Drawings of the country house (gta Archiv: ETH Zurich, box 131-0165).

[23] Ibid.

[24] Drawings of the school schemes, specifically Rumaithiya girls school (gta Archive: ETH Zurich, box 131-0162).

[25] Ibid.

Fig. 5.7 Plan form of the country house designed by Alfred Roth (Drawn by Author)
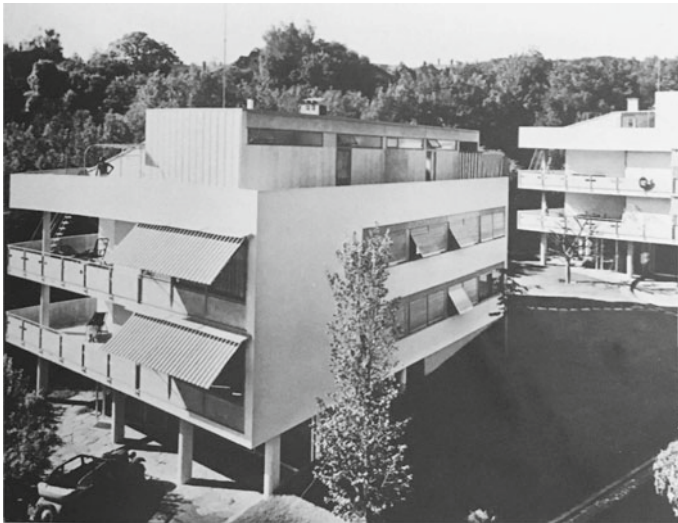
Fig. 5.8 Doldertal Apartment complex in Zurich that Roth designed collaborates with Emil Roth and Marcel Breuer (Roth, A., *Alfred Roth: Architect of Continuity*. (Zurich: Waser). 89. (1985)

5.3 Ornament, Style and Identity, 1976–1998

As already noted, while Roth was still designing in the more austere Modernist style of earlier periods, other architects began to use more expression and ornament in their produced forms. This was partly due to technological advances in materials and engineering and clients wishing to express identity in their creations. As such, the period 1976–1998 saw architectural projects increasingly reflect Arab culture through visual

Fig. 5.9 Lack of exterior glazing shows that Roth designed it for the Gulf climate; however, the forms and proportions are reminiscent of his European work (*Source* gta Archiv, ETH Zurich)

means. Alongside this shift away from the stark Modernist aesthetic of architects such as Roth, it focused on different typologies, emphasising buildings that reflected nations and identities in line with the growth of Arabism and post-colonialism. These were reinforced with growing respect in Western countries for Arab nations in the global political scene. Only this respect was born from the economic clout they now welded through increasing dependencies on the oil produced in these nations.

Buildings constructed in this period often coincided with significant geopolitical events, including the Yom Kippur War and the ensuing Oil Crisis of 1973. Though these tendencies for traditional ornamentation were also a theme in Western produced architecture in the Gulf in the preceding decade, these events pushed them into mainstream commercialism. The oil crisis resulted in a global upsurge of oil prices, which funded monumental buildings, such as Jørn Utzon's Kuwait National Assembly, HOK's King Saud University, Henning Larsen's Danish Embassy building (1998) and the Ministry of Foreign Affairs. These are representative of the period of the oil crisis. The scale and scope of building projects incorporated traditional elements visually to foster a built identity, keeping modernity through expression and form.

Doxiadis Associates, a Greek design and planning firm, was one of the largest global consultancies undertaking work in the Middle East and Africa during the 1960s, with projects located in Islamabad, Baghdad, and Khartoum; specifically, they had over 20 projects in Nigeria and 65 villages in Libya.[26] Doxiadis Associates was one of the first Western firms to utilise the Gulf vernacular aesthetic in their modern buildings. Much of their work is based upon complete documentation of small towns and villages of Saudi Arabia; this was a theme procured in previous decades by

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[26] Middleton, D. A. *Growth and Expansion in Post-War Urban Design Strategies: C. A. Doxiadis and the First Strategic Plan for Riyadh, Saudi Arabia (1968–1972)*, (Unpublished Thesis: Georgia Institute of Technology), 5. (2009).

architects, including Mohamed Makiya and Rifat Chariji in Iraq, whom Doxiadis himself had directly worked with.[27] Doxiadis encouraged Riyadh's planners to use local and regional architecture examples in Riyadh and the surrounding regions to inform the palette of materials for developments to create somewhere that visually resonated with its location.[28] While Doxiadis did not necessarily analyse how people lived—like Lock had—or utilised their existing living spaces, the focus on the motif and architectural language is an example of traditional architectural approaches. Unfortunately, in many cases, the results led to the proliferation of an arguably kitsch style due to unsubtle and poorly executed designs, often altered by cost consultants—of particular note here is Mohamed Makiya's designs for Kuwait National Mosque, which most infamously suffered from this sort of post-design alteration.

The Western architectural press praised the Kuwait National Assembly during this period and is often highly regarded during Jørn Utzon's career discussions.[29] A high-profile case study demonstrates specific architectural features and tangible and intangible motifs that express Arabism. Utzon won the competition to design the new Assembly for Kuwait in 1972, following decades of sustained economic growth and Kuwait's political development.[30] Upon receiving the news of winning the competition, Paul Rudolph, the American architect,[31] sent his congratulations to John Utzon, saying, '*The architectural situation all over the world seems to be going into another phase. Thumbs down on what is called "monumental architecture"… however, the wheel goes round and round, and there will be another day'*.[32] Out of context, Rudolf's mention of monumental architecture appears ambiguous; considering Utzon's graceful design, Rudolph demonstrated that he admired the sensitive, expressionist forms Utzon produced.

According to numerous historians, critics and architects, the billowing shape of a Bedouin tent or the form of boat sails influenced the Kuwait National Assembly's distinctive contours.[33] Architects and critics often use this simplistic explanation of architectural form with other Utzon projects showcasing similar shapes. The conception of the billowing forms of his Bagsvaerd church in Copenhagen is attributed to his view of clouds on a Hawaiian beach following his contract's termination on the Sydney Opera House. The forms of the National Assembly entrance and the church's entrance are remarkably similar, leading to an evident and unsubtle allegory within

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[27] Documentation evidence is found at the Benaki Museum in Athens in the Doxiadis collection (Doxiadis Archive Saudi Arabia Reports, 23305); also see Doxiadis Associates Sadr City plan for Baghdad, 1958.

[28] Sketches for research of the Najd, October 1969. (Doxiadis Archive, Saudi Arabia Reports, 23312).

[29] Utzon, J., *Jørn Utzon: Logbook, IV. Kuwait National Assembly*, Copenhagen: Edition Blondal, 1–56. (2008).

[30] Ibid.

[31] Known for large-scale buildings, such as the Yale Art and Architecture Building in 1965 and the Lippo Centre in Hong Kong in 1988.

[32] Letter, (09.10.1972) Rudolph to Utzon, (Aalborg City Archives).

[33] Utzon, J., *Jørn Utzon: Logbook, IV. Kuwait National Assembly*, Copenhagen: Edition Blondal, 1–56. (2008).

his architectural design.[34] Regardless of what inspired Utzon, the narrative seems clear—the tent and a boat are physical symbols of Kuwait's heritage before the oil industry's growth—pearl fishing and nomadic populations. This narrative allows people to identify the building with tangible heritage elements and a simplistic design justification. Utzon prophesied in his proposal that 'traditional Arabian architecture will have an enormous influence on the world's future architectural development', which is what the clients and developers in the Gulf aspired to.[35] States and clients did not want to produce an architecture catching up with the West but trailblazer the development worldwide.[36] Spatially, the Assembly building layout was based upon the forms and functions of the typical Arab souk—often a piece of infrastructure embedded into the urban fabric, unlike the National Assembly, which is hemmed in by impenetrable transport infrastructure. Although not a new form, Utzon's utilisation of it as an architectural influence at this time was novel, and it influenced the thinking of future architects working within the region.[37] The souk's primary form was repetitive, geometric, enclosed spaces where people could barter, trade, and meet.

Given that the souk formed the centre of urban areas in the Gulf, its influence in the Kuwait National Assembly's early conceptual sketches is unmistakable.[38] The grid layout of interior courtyards and the succession of structural arches that Utzon devised spatially mimic an Arab bazaar or souk's organisation.[39] Climatically, these enclosures remained vital as they provided a shaded area for people to conduct business before air-conditioning was prevalent (Fig. 5.10).[40]

Elsewhere in the Gulf, the surge in oil prices following the Yom Kippur War had significant repercussions for Riyadh; the city remained undeveloped despite the ruling family's efforts to raise the city to the same level as other international capitals.[41] Planning Doxiadis Associates' proposals in the 1960s demonstrated these desires. However, Riyadh announced itself in contemporary architectural and developmental terms with King Saud University's physical construction. Universities form a crucial function of major international cities through pedagogy and physical campuses that form the urban district. Karl Schwanzer, the Austrian planner, drew up the master plan for a new campus for King Saud University in Riyadh with

[34] Utzon, J. *Jørn Utzon: Logbook, II. Bagsvaerd Church*, Copenhagen: Edition Blondal, 10–26. (2005).

[35] Utzon, J. *Kuwait National Assembly Complex*, Unpublished bid: Aalborg City Archives, 1. (1973).

[36] Hinchcliffe, T. 'British Architects in the Gulf, 1950–1980', in Fraser, M & Golzari, N (eds) *Architecture and Globalisation in the Persian Gulf Region*. (London: Ashgate). pp. 23–36. 2013

[37] Utzon, J., Jørn Utzon: Logbook, IV. Kuwait National Assembly, Copenhagen: Edition Blondal, 1–56. (2008).

[38] Al-Ragam, A. Critical nostalgia: Kuwait urban modernity and Alison and Peter Smithson's Kuwait Urban Study and Mat-Building, *The Journal of Architecture*, (20:1), 1–20.

[39] Utzon, J. *Kuwait National Assembly Complex*, Unpublished bid: Aalborg City Archives, p. 1. (1973).

[40] Al Nakib, F. (2016) *Kuwait Transformed: A History of Oil and Urban Life*. Stanford University Press: Stanford, 23–24. (2015).

[41] Bonnenfant, P. 'Real estate and political power in 1970s Riyadh', *City*. 18(6), 708–722. (2014).
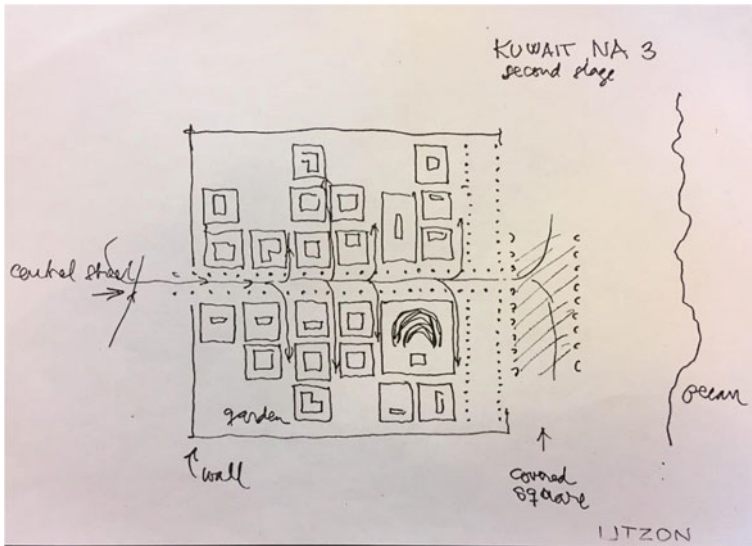
Fig. 5.10 Plan concept by Utzon showing intended flexibility for future additions and the plan form influenced by the Arab souk (*Source* Aalborg City Archives: Jørn Utzon Archive)

archival documents suggesting that it would have been one of the most significant constructions and design contracts worldwide at the time.

In the mid-1970s, considerable wrangling took place between architects and construction companies from the USA and the UK to win the contract for designing and implementing the building, reportedly worth £2.3 billion, which was eventually won by American firm HOK, despite diplomatic efforts from the Chancellor of the Exchequer and the Queen in the United Kingdom.[42] Additionally, the Saudi Arabian state's overall effort was estimated to be one-third of its total construction industry.[43] As a result, the design aesthetic altered primarily from previous designs of large-scale buildings in the region, noting the appearance modification through other large projects, such as the Kuwait National Assembly. However, the changing attitudes to Arab motifs and ornamentation developed from the 1950s onwards became more prevalent as time passed.

Its striking appearance and overbearingly large-scale set it apart from many other modern buildings. The building takes an evident influence from the traditional Arabian designs, particularly the Najd region that Doxiadis had his planners research in-depth when completing Riyadh's plan. Forms such as buttresses and large window-less walls rendered in brown concrete referenced neighbouring regions' mud wall construction. ARAMCO World Magazine greeted this with admiration describing the building's nod to the Najd style as being 'respectful' rather than insincere, which

[42] Development of the Riyadh University, (1974–5), (National Archives, Kew, T317/2144).

[43] Background to the plan, (National Archives, Kew, T317/2144).

Fig. 5.11 Mashrabiya screen at the Embassy (*Source* henninglarsen.com)

might appear to be upon closer analysis.[44] In King Saud University's case, importance is placed on rooting the building within Arab culture and its locality.

As well as building large-scale education facilities, the construction of monumental structures continued into the political sphere during this period in Saudi Arabia. Set in distinctively landscaped grounds inspired by historical Persian gardens in both planting and spatial arrangement, the Ministry of Foreign Affairs' design drew upon traditional Arab buildings both spatially and aesthetically. The layout is similar to the earlier buildings of Candilis-Josic-Woods through organised courtyards creating a densely built web-like plan form, successfully introducing light to areas that might otherwise be in darkness. Interior spaces allow for large multi-storey atria, and materials reflect light and heat, creating cool spaces that allow people to meet and work. Exterior stone and timber shading materials for glazing areas ensure that the building appears visually Arab. However, its function was also to show international politicians how contemporary the nation was through the veneer of architecture.

Overall, the building primarily differed from earlier proponents of Modernism that proliferated in the Gulf by using different shapes and large expanses of the wall with little fenestration. However, these characteristics mark similarities with the Arab vernacular of previous centuries in the region. In addition, there is a strong likeness between the Najd buildings' aesthetic and Henning Larsen's other architectural works at the Danish Embassy of Riyadh (1998). This is furthered by the choice to render the exterior similar to that of the King Saud University; wooden shades on windows reference the mashrabiya screens commonly utilised throughout Arab countries. This provides shade from the sun and allows air to circulate and permeate the building; the architects' also claimed that it reflected Nordic interests in 'precision woodwork', meaning the building was a cultural exchange of ideas (Fig. 5.11).[45]

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[44] Unknown.: ARAMCO World Magazine, 'A Campus for KSU'. (1986).

[45] Henning Larsen, Danish Embassy of Riyadh https://henninglarsen.com/en/projects/0000-0399/0160-den-danske-ambassade-i-riyadh/ Accessed: 05.06.2018.

5.4   Conclusion

Evaluation of essential case studies between 1950 and 1998 demonstrates a trend of development among Western architects within the regional design from the functional to something based more on aesthetics. However, there are numerous crossovers in style and what this meant for the built location. This development of a regional architectural language transcends international borders and national identities, often through the broad range of often global influences upon the designer. The procurement of a transnational aesthetic utilised European design elements, beginning with ideologies of Modernism founded at CIAM conferences and latterly changing in design influences with more focus on the locale. However, Western architects often misinterpreted this local scale and viewed anything east of Europe as Oriental.[46]

Geographically, the selected buildings clearly show that architecture developed in this period to represent what Western architects thought was an Arab or Gulf identity, whether forced through imitative styles in the King Saud University or the spatial configuration of oil workers' housing. In the first period considered, climate and sociological factors formed the primary influence upon buildings' spatial design; in the second period, it is rooted in Arab culture, images and iconography of the surrounding region as with Utzon and Henning Larsen's works. There is an apparent attempt at a Western-implemented architectural language rooted in its influences in the Gulf region throughout both periods, ensuring a common denominator within each scheme.

References

Al Nakib F (2016) Kuwait transformed: a history of oil and urban life. Stanford University Press, Stanford, p 105

Al-Ragam A (2015) Critical nostalgia: Kuwait urban modernity and Alison and Peter Smithson's Kuwait urban study and mat-building. J Archit 20(1):1–20

Al-Ragam A (2013) Towards a critique of architectural Nahdha: a Kuwaiti example. Unpublished Thesis: University of Pennsylvania

Avermaete T, Ockman T (2005) Another modern: the post-war architecture and urbanism of Candilis-Josic-Woods. Nai Uitgevers Pub, Rotterdam

Bonnenfant P (2014) Real estate and political power in 1970s Riyadh. City 18(6):708–722

Botz-Bornstein T (2015) Transcultural architecture: the limits and opportunities of critical regionalism. Ashgate, London, pp 1–10

---

[46] Said, E. Orientalism. (New York: Pantheon), p. 31. (1978)

Chaouni A (2011) Depoliticizing group GAMMA: contesting modernism in Morocco. Third world modernism. Routledge, London, pp 59–69

Gardiner S (1983) Kuwait: the making of a city. Longman, Harlow

Hinchcliffe T (2013) British architects in the Gulf, 1950–1980. In: Fraser M, Golzari N (eds) Architecture and globalisation in the Persian Gulf region. Ashgate, London

Krunic D (2012) The 'Groundscraper': Candilis-Josic-Woods and the Free University building in Berlin, 1963–73. ARRIS: J Southeast Chapter Soc Archit Historians 23(1):30–49

Middleton DA (2009) Growth and expansion in post-war urban design strategies. In: C. A. Doxiadis and the First Strategic Plan for Riyadh, Saudi Arabia (1968–1972). Unpublished Thesis: Georgia Institute of Technology

Potter LG (2017) Society in the Persian Gulf: before and after oil. Center Int Regional Stud 1(18):4

Roth A (1985) Alfred Roth: architect of continuity. Waser, Zurich

Said E (1978) Orientalism. Pantheon, New York

Tosland B (2019) Planning southern Iraq: placing the progressive theories of Max Lock in Umm Qasr, Margil, and Basra in the context of Iraqi national development, 1954–1956. Plan Perspect 36(6):1023–1044

Unknown. (1986) ARAMCO world magazine. A Campus for KSU

Utzon J (2005) Jørn Utzon: logbook, II. Bagsvaerd Church. Edition Blondal, Copenhagen

Utzon J (2008) Jørn Utzon: logbook, IV. Kuwait National Assembly. Edition Blondal, Copenhagen

Chapter 6
Experiencing Authenticity Through Cultural Borders and Experimental Ethnography

Mehwish Abid

Abstract This research demonstrates that borders are geographical and socio-spatial and shape our urban spheres. Therefore, exploring the authenticity present in them is significant. Furthermore, some subcultures prevail in multicultural societies, creating cultural borders that expand beyond geographies. The authenticity can be measured by experimental ethnographic exercises focusing on the cultural borders these urban contexts inhabit. This is done through human interaction in three immersive mediums that act as symbols. The difference in reactions to these interactive mediums (symbols) is recorded through traditional ethnography. This research focuses on the segregation and marginalisation created by meanings that people interpret from the symbols exhibited as part of this research.

Keywords Cultural borders · Borderland · Authenticity · Experimental ethnography · Immersive mediums

6.1 Introduction to the Research

Anthropological experimentation on the boundaries between experiencing media such as art installations, virtual reality (VR) and print provide means to examine cultural borders. These media are methodologies and processes by which the perception of socio-spatial contexts is tested to understand cultural borders in urban spheres. To test these media, the site chosen is *Shahi Guzargah (Royal Passageway)* up to *Rang Mahal area* in the Walled City of Lahore, Pakistan.

The research aims to draw connections and comparisons between methodologies and their limitations/levels of immersion. The interaction of pupils and the city is significant as their experiences build narratives of the city and its authenticity by exploring cultural borders.

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6.2   Authenticity and Cultural Borders

As per the Oxford Dictionary, authenticity is valid in substance. It is understood as a phenomenon rooted in creativity and self-expression rather than conformity to social forces (Jacobs 2008). The research intends to take this notion as the core value of authenticity. Authenticity can neither be created nor achieved. Either the subject has this quality or lacks it (Vannini 2009). Authenticity is a socially constructed phenomenon that forms its basis in interpretivism, phenomenology and social science. The experience of authenticity in urban spheres depends on the culture, language, ethnicity, and set of beliefs; when these change, the definition of authenticity also changes (Peterson 1997). It is understood that inauthenticity is also essential for the presence or realisation of authenticity (Waskul 2009). Authenticity is also regarded as the interpersonal experience of self-reflection (Vannini 2009). This research employed three interactive mediums to explore authenticity through experimental ethnography and understanding cultural borders.

Authenticity forms its basis in cultures and subcultures. To understand how it performs in culture, it is necessary to explain what this research holds to understand the culture. Culture can be manifested in the realm of semiotics. Understanding culture does not involve comprehending scientific laws, but it lies in interpretation. The meanings behind certain things, objects, gestures, and language make culture. Geertz (1973) gives an example of twitching the eyes and compares it with winking—a metaphor by which he argues that the same gesture can have multiple meanings as per the situation (Geertz 1973). Therefore, it is dependent on the interpretation.

The term border is physical (Johnson and David 1997). Borders are meaningless lines, conduits and filters (Nicol and Heather 2011). Many subcultures in society have different meanings associated with cultural borders formation. As long as two societies remain separate, their cultural distinctiveness is expected. When societies come into contact, cultural borders are found between them (Chang 1997). The cultural boundary refers to the presence of cultural differences. These boundaries are essential constituents of any society. Although these boundaries exist, it is concluded from the diffusionist perspective that all cultures borrow some other elements (Linton 1937). According to the diffusionist point of view, when people live with more than one ethnicity, nationality or set of beliefs, there are some crossovers of social practises (Goldenweiser 1925). The 'sense of sharing' or 'social capital' also exists between members of society and different cultures. This sense of sharing depends on the group's size, identity, and collective beliefs, in which transmission of culture ensues (Chang 1997).

The existence of cultural borders is dependent on cultural diversity in society. Cultural borderland develops when two or more races and cultures occupy the same territory where spatial distinctiveness is maintained. This space is political as it creates an order of hierarchy and psychological because it affects pupils (Chang 1997). Borderland culture is the meaning associated with living in a border zone region, and it is imagined, produced and reproduced (Nicol and Heather 2011). The idea of culture is powerful. It has developed under specific historical situations that

later broadened to explain the material difference, social order, and power relations (Mitchell 2000). This research focuses on the culture that prevails inside the Walled City of Lahore specifically on *Shahi Guzargah*. The inhabitants of the area have a distinctive culture. In contrast, people who had migrated from other cities have different cultures, but collectively, they are distinct from the rest of the city.

6.3 Methods of Investigation: Ethnography and Experimental Ethnography

Both people and things inform experiences of authenticity. Jansen (2010) argues that human and non-human actions contribute to cultural borders. The current research explores cultural borders through human and non-human actants (things). However, the mediums used in exhibits become things and symbols here. The research points out the extent to which cultural borders affect perceptions.

The interaction creates a manipulated arena as exhibits in which symbols and gestures of cultural borders exist in the Walled City of Lahore, Pakistan. The hypothesis is that culture inhabits borderlands,[1] which this project manipulates through experimental ethnography.

6.4 Process of the Research

Firstly, the research process includes choosing a site to test experimental ethnography as to whether the phenomenon of authenticity can be confirmed by manipulating the field. Second, the research looks at cultural borders present in the field, considered a borderland (Shahi Guzargah) and the ones that evolved during visitors' interaction with the exhibit's installations.

6.4.1 Rationale for Site

The Walled City of Lahore is one of the few places in the city that has existed for many years, known for its cultural diversity, food, energy, and tradition. The Walled City of Lahore is also of landmark/heritage value.

Individual connection is why an individual may feel drawn more towards one locality than another. Ingold suggests that each person builds a world of familiarity, which contains elements to relate to, catch the eye, and induce a feeling of permanence (Ingold 2000, p. 158). Therefore, the rationale for choosing the site to carry out the

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[1] When two or more races and cultures occupy the same territory within which spatial distinctiveness is maintained is called cultural borderland (Chang 1997).

research is familiarity, ever-evolving socio-spatial nature, historical importance and cultural diversity, making this a borderland.

6.4.2   An Ethnographic Account of the Field—Shahi Guzargah (Delhi Gate to Rang Mahal High School)

The research site was selected for specific reasons related to theories and ideas pivotal in understanding cultural and socio-spatial borders to designate it as a borderland.

The research entails *Shahi Guzargah* (Royal passageway) from Delhi gate to Rang Mahal area in the Walled City of Lahore, Pakistan. It encapsulates various nooks and corners of forgotten heritage on either side of the passageway till Rang Mahal High School. In addition, the leading community space of Masjid Wazir Khan, located in the middle of the stretch from Delhi gate to Rang Mahal, was also explored (Fig. 6.1).

Shahi Guzargah, the historic thoroughfare, extends from Delhi gate to Lahore Fort. It is located west of Delhi gate and is approximately 0.95 km. *Shahi Guzargah* runs on the Northern side of the *Shahi Hammam* (Royal baths). The other side of *Guzargah* has shops that have been uplifted as part of the Contextual Renewal by Agha Khan Cultural Service Pakistan (AKCSP) (Aga Khan Cultural Service Pakistan (AKCSP) 2016, pp. 2–8). It leads to *Kashmiri Bazar* whilst passing by the adjacent *Mohallas* and *Bazaars* on either side. Finally, the route through *Dabbi Bazar* reaches *Shah Almi Road*, where *Rang Mahal* School is located. Borderlands display extended zones of transition, cultural continuity, discontinuity, and interaction zones (Nicol and Heather 2011). The passageway, Masjid Wazir Khan and Rang Mahal high schools are considered Borderlands in this research.
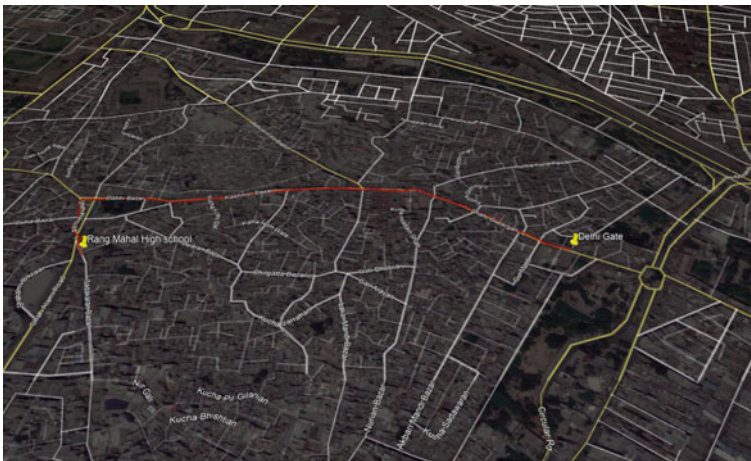
Fig. 6.1 Shahi Guzargah (Delhi gate to Rang Mahal) © *Source* Google Earth

The different spaces documented are the place of a repairman named Asharaf and a dilapidated Rang Mahal High School wall. Upon interview and frequent conversation, the repairman explained that he had lived there for 40 years. He had migrated from North Eastern Punjab to Lahore and set up his work spot to fix pressure cookers and steel utensils. His setup was on the wall, where he had put up nails and hung the objects he repaired. His tools resided next to him whilst he sat in the narrow passageway. Opposite him was another shop which was 3 feet above the ground. On the elevation towards Ashraf's setup, the shop had a cupboard, his storage that shop owners let him have on rent. This narrow passageway had *Rang Mahal* High school wall on one side and the explained shop with a storage area. Also, Ashraf's toolset on the ground and objects on the wall signified a space without a roof but distinguished demarcation. Ashraf has been working there for the past 40 years since he was a ten-year-old boy, but he still feels that he is considered an outsider by the native of the Walled City. He also explained that since he worked there as a young boy and did not go to school in the late 1970s, he felt the closest he could be to the school was this wall. He expressed that boys his age playing with him after school was intimate, and his way to know them was this street. He was grateful to the shop owners opposite his setup for lending him the storage space (4 feet by 2 feet, 2.5 feet depth) on rent. He recalls much diversity in this area; Sikhs, Hindus, and Muslims all lived here together, but slowly Sikhs and Hindus moved from here, and the school is abandoned now. The school's boundary wall with which he has set up his space is deteriorating daily. The niche adjacent to his space had a placard that said *space on rent.*

Just behind the Rang Mahal high school, there lies an antique shop. Imtiaz Sabir occupies it. He explained that his family shifted to this area before the creation of Pakistan. He clarified that the shop (part of the school) had been a considerable part of his life's source of livelihood. He explained how his family started doing the antique business and how his brother and his family were involved in this trifle; he expressed that he used to study in the *Rang Mahal* School and shared his memories of the school corridors and classrooms. Finally, he explained that he had to leave school and join the family business. Imtiaz Sabir belonged to Kashmir, and initially, his family faced multiple issues settling in the Punjabi majority area. He explained that his parents initially felt like outsiders, but they could speak Punjabi as time grew.

He narrated that his brother's family has a larger share of the shop in terms of income because he has sons and a large family, whilst Imtiaz himself had daughters and was dependent on the shop income until their weddings. He explained that they got all the antiques from the vicinity of Walled City and *Rang Mahal* School. He and his family have been collecting these objects since they moved in because they wanted to create a space in their homes, like the one they had emigrated from, and then they started selling it to collectors and museums. The shop's area is 64 sq. ft. The ceiling height is approximately 14 ft. The shop is a few steps directly above the narrow street. The walls are full of shelves that host antiquities from various times and places with a story attached to each of them.

The third occupied space that drew attention was a small wholesale shop in Masjid Wazir Khan's vault occupied by Hafiz Bashir. He explained that he had settled this

space for 30 years. This space is of significance as two different species live in it. Hafiz Bashir, who had migrated to Lahore from Sialkot, and the pigeons living here, have spent decades. Right above the small door of the shop, pigeons have created their crannies in the vault. This small shop, crowded with various everyday wares to sell, continued to be compelling. However, Hafiz Basheer initially hesitated, but it took him three to four months to open. First, it was fascinating as he occupied a fascinating place where pigeons and humans interacted. Second, it was a passageway, and when his shop was closed, people stood outside his shop to obtain goods from him that they could also get from nearby shops, which increased interest. Upon investigating, it turned out that Bashir was very well respected for his honesty.

Moreover, people valued his friendship, and they did not only come to buy groceries, but they liked to discuss their problems, share their stories and meet Basheer. Upon finally opening up, Basheer shared how disappointed he was in the organisations that did the conservation work in the Walled City of Lahore. He said that the community was promised that the whole area would be upgraded; however, streets have started malfunctioning after the conservation during the rainy season. He explained the importance of pigeons in this space and that he has cohabited this alcove with them for decades. He added that the conservation process by authorities resulted in removing this coexistence and his sales.

Due to rapid commercialisation, many people who lived in this area have left, whilst many have also migrated to poor living conditions. The shop's area was 60 sq. ft. This shop is a part of a listed heritage building and faces occupation issues. It raises questions about the usage of heritage sites, people's rights over them, how spatial dynamics change when a building gets listed, and the relationship between two species types in one space.

Faustino (2004) comments on untouched places and calls them *Hygienapolis*. He compares the clock with *Higienopolis*- a super clean city designed based on utilitarianism. His writing suggests comprehending the link between twofold aspects of our connections: senses are through architecture, and space is through the body. He comments that by doing so, he is positioning himself in reality. He suggests that the exploration of research considers the subject causes motion, which is the demand of the discipline. He emphasises going beyond aesthetics. He stresses that perspectives are essential and architecture lives because of all those living there. Representing architecture is just a way to reveal how it has been used (Faustino 2004, p. 30). On the other hand, Heidegger suggests that buildings are the ethos of people residing (Sharr 2007).

The research uses these ideas to explore the above narrations in immersive mediums to manipulate the ethnographical field (borderland). Stories are created when they meet other texts, narrators, and listeners' (Jaago 2012). The stories above reveal the cultural backgrounds in which the narrators of the stories have lived all their lives.

6.4.3 Experimental Ethnography: Manipulation of Field

The manipulated field's execution is envisioned as a series of exhibitions in which interactive pieces have created symbols and gestures representing the documented field. The etymology of *gape* is to look in wonder (Harper 2010), and *within* is used as an adverb that means internally (The American Heritage 1995, 2001, 2002). Therefore, a series of interactive installations with the title of Gape within were produced to exhibit.

6.4.4 Perception as a Catalyst Towards Understanding Cultural Borders

Perception has fundamental issues, and no facts can be presented as an image of the world would permanently alter according to an individual's location and viewpoint (Maurice 2012, pp. 214–223). Faustino's (2004) practice focuses on the relationship between body and space. He contradicts Heidegger's (1962) notion of 'the thing', which revolves around the ideas of sustaining and proposes that his projects' persistence rejects the concept of space. This is because it is just a container. However, his assertions that architecture represents people contradict Heidegger's (1962) notion that buildings inform the ethos of people residing in them (Sharr 2007).

The body is the main constituent that forms the ability to perceive. In simple words, it shapes how and what is perceived. However, when the body, a medium itself, is not entirely in communication with the subject, it eliminates its presence disembodied (Killmeier 2009).

6.5 Immersive Art Installation—Gape Within (I, II, VI)

The process included research for an immersive art installation. Heidegger expresses the concept of *the thing* and gives an example of a jug. He suggests that its shape is not essential, but its capability to *sustain* defines it as a jug (Sharr 2007).

The research progressed in translating the carefully chosen spaces into immersive art installations to manipulate the field. The immersion took place through text, print, photography, virtual reality (VR), sound, and interactive installations. The mediums have been tested in 6 different exhibits. For analysis, they have been clubbed together based on the similarity in the mediums.

6.5.1 Gape Within (I, II, VI)

These installations served a twofold purpose: firstly, depicting the documentation of said spaces, and secondly, as interactive exhibits for the visitors for exhibitions, International Council on Monuments and Sites (ICOMOS) on International Day for Monuments and Sites (IDMS, 2017 and MAKERFEST) (2017), held in Lahore in April and July, respectively. The platform of ICOMOS brought visitors from various backgrounds, such as academia, art and students. MAKERFEST has had a varied age group of visitors. The installations were exhibited recently on 5th April 2019 in CIIT Gallery, Islamabad (Fig. 6.2).

The interactive pieces were designed to engage the viewer through their senses of sight, sound, and cognition. Each piece's specially designed Mp3 was embedded with mapped sounds, stories, and the site's soundscape. Digitally produced photography and audio recordings were embedded in manually handled pieces to demonstrate the borderland, i.e. *Shahi Guzargah.* Activities such as laying miniature bricks, placing origami birds, identifying the correct earpiece to find the story, and using a magnifying glass to observe miniature objects were embedded for multiple-level interaction, which heavily depended on decision-making, perception and preference (Figs. 6.3 and 6.4).

Fig. 6.2 Exhibition space and installation of the project at Maker Fest, Lahore, Pakistan ©M Abid (2017)

Fig. 6.3 Exhibition space and installation of the project at COMSATS Institute for Art and Culture (CAG), Islamabad, Pakistan ©M Abid (2019)
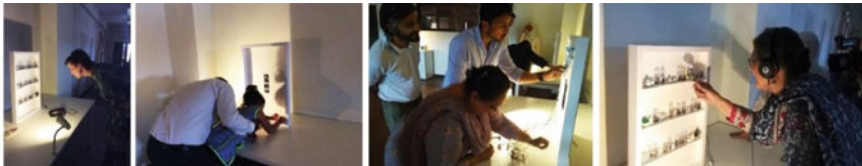
Fig. 6.4 Public immersive and Interaction at the Exhibit, showing various age groups and their engagement with the exhibit © M Abid (2017)

6.5.1.1   Response to the Exhibit

Visitors' responses to the exhibits were enthusiastic. Their age varied from five years old to 68. Their backgrounds were wide-ranging and included architects, artists, researchers, doctors, engineers, journalists, and school/college students.

The stories were in the local language; hence, the visitors listened to the narration and recognised the surrounding sounds like birds and distant traffic; the call for prayers was minimal. In all three exhibits, the immersive installation had many visitors in terms of footfall and interaction. For the academic conclusions, the project was explored in virtual reality (VR) (Abid 2018) and exhibited at other venues.

6.5.2 Experience in Virtual Reality—Gape Within III

The techniques employed included photogrammetry and immersive virtual reality (VR) technologies (Abid 2018). Furthermore, understanding the complex socio-spatial setting (borderland) of the selected field representing various ethnicities' coexistence was explored through 3-D modelling techniques. This technique has proven to help the decision-making and planning of future cities (Tomohiro 2017). Furthermore, such mediums are also essential to ensure participatory public engagement and the preservation of collective historical identity (Luigi 2016). Hence, this technique was explored, and the display was at the University of Wellington in New Zealand premises. The users belonged to the architecture programme; a few belonged to the indigenous Maori community.

6.5.2.1 Procedure Employed

The process included documenting an important landmark in Shahi Guzargah, Masjid Wazir khan, because of its historical, cultural, and social significance in the city and on the Shahi Guzargah. Many stakeholders chose this due to the notion of permanence, familiarity, and ownership of the mosque; hence, it is a borderland. The procedure included research and conceptualisation through historical literature and critique. The Masjid is located almost near the Delhi gate and Rang Mahal. It is about 550 m away from Rang Mahal high school (Abid 2017).

The outer and surrounding areas were documented via an iPhone to produce the immersive and inclusive 3-D model. The researcher employed the method for documenting the Masjid Wazir Khan (SFM) or, called in this research, photogrammetry (Abid 2018). Autodesk Remake was used to produce the model. Before documentation, a couple of essential parameters to be kept in mind included weather, light, orientation, human traffic, and steadiness (Fukuda 2017). Hence, early morning time was preferred for taking photographs. However, due to the sunny day, the white patches in the pictures transformed into black holes in the model. This method is time, and cost-efficient, and the black patches are glitches representing the inaccuracy of vision.

The pictures were taken from iPhone 6 between 8:30 am–10:30 am. The pictures were taken in 360 dials with horizontal orientation. The Mosque façade was photographed from the outer and newly developed inner square. 650 photos were taken to build a 3-D virtual model using the photogrammetric tool. This does not dwell on the technicality of the model production but considers the representation method (Abid 2018).

A spherical curtain defines the VR environment's physical space (5 × 5 m). This method is immersive and embodies nature. First, it is because of its scale. Secondly, it allows users to draw and sketch mobile tablet devices on the reference planes three-dimensionally navigable inside the 3-D virtual environment (Fig. 6.5).

Fig. 6.5 3-D model of the site made with ReCap 360. Textured view ©S Aydin 2017

6.5.2.2 Assessment and Response

The model of the Masjid Wazir Khan was imported into this immersive virtual space, which is called 3-D hybrid virtual reality (VR). This method teleported users to the remote site. Since the users had not interacted with the site in any way before, it had varying results. Users could interact with the site with top, side, and perspective options, which encouraged a collective immersive experience for the users (Serdar et al. 2017a, b, c).

The observations and user feedback led the research towards understanding the qualitative assessment of the VR facility's method. Its capacity to engage the viewer can compensate for the lower resolutions of the models prepared (Abid 2018). The user could view how interaction with any built area through photogrammetry differs from perspective, top and elevation views. The view is dependent on the human eye and cognition.

The users attached their tablets and moved around the site according to their interests, which involved decision-making. In addition, the users could draw and sketch on their tablets. The cultural and geographical differences increased curiosity to consider the model for interaction, induced mystery and attraction towards exploring the medium of VR set up to manipulate the actual field for experimental ethnography (Fig. 6.6).

In this experiment, research dwelled upon creating and displaying the model for interaction to record the responses. The virtual tour through photogrammetry had soundtracks omitted intentionally. There were two types of scales in use. One was displayed on the spherical curtain (5 × 5 m), an embodying and immersive setup, and the other on personal tablets. Both scales had diverse responses.

Visitors could navigate from tabs and interact with the Hyve 3-D through sketches. Some users/visitors sketched over the VR to understand the spaces. Some sketched the details on their notepads, especially similar railing, window or spatial details, and some made notes of the area's materials and colour palette. An essential aspect noted was that the visitors from the indigenous community of *Maori* were critical

Fig. 6.6 Users remotely visiting the front outer courtyard of Masjid Wazir Khan ©S Aydin 2017

about the ethics of digitising heritage buildings? In this case, the research arrived at apparent differences communities hold for documentation and analytical practises.

6.5.3 *Immersion Through Print Media and Soundscape—Gape Within IV, V*

The third medium exploration for experiencing cultural borders was print medium (book) and audio pieces. This was part of the exhibition *Living Otherwise* organised by the Centre of Politics, State and Space at Durham University, the UK, based within the School of Geography and recently as part of the faculty group show at the Institute for Art and Culture Lahore. The visitors to both exhibits were scholars, artists, researchers, and students from various backgrounds.

The book and soundscape of the Walled City of Lahore enabled the viewer to use various senses such as sound, touch, sight, and cognition. The process included choosing the photography done over time from *Delhi gate* to *Rang Mahal* High school. The sequence of the book and the arrangement of audio pieces were aligned. Each time the visitor switched on the iPod, the soundtrack started with the book's first section. After that, there were three sound pieces arranged in a loop. These three sound pieces were narrations, and the surrounding sounds of the individuals from the three sites were covered in the ethnographical survey explained in the section below.

6.5.3.1 Analysis and Feedback

The language was foreign to the visitors at the first exhibit in Durham, UK. However, the response towards the piece exhibited included a variety of observations.

> In terms of my interaction, I remember reflecting on how it interrupted the way I usually interact with the combination of books and audio. Usually, I have to work/think/read without any noise, but because the language was unfamiliar, I did not find the audio distracting, I found it made the viewing of the book and photography more immersive. The audio allowed me to feel like I was in the space of the photographs. Observer 1

The soundtracks were in Urdu language, Pakistan's national language. This medium is intended to focus the user on the surrounding sounds. Maurice (2012) argues in his research that further exploration amplifies our motor being. He explains it with an example that sleep arrives only when an individual prepares for sleep (Maurice 2012). In this case, due to the embedding of the foreign language, the city's soundscape runs as a background of narration (Fig. 6.7).

Observer 1 gave the feedback that it was due to her attempt to listen to the soundtrack that she could concentrate on the background sounds, whilst if the language had been familiar, one would have concentrated on the words.

The same exhibit in Lahore got visitors familiar with the area but belonged to a culturally different setting. The project explored how visitors interact with text and

Fig. 6.7 Gape within III exhibited at LIVING OTHERWISE, at the Centre of Politics, State and Space at Durham University, UK

images by introducing text as an image on the wall. The installation acted as a symbol and gesture for experimental ethnography for research on experiencing authenticity and cultural borders. Following are the comments left by observer two and observer three at the Lahore exhibit (Figs. 6.8 and 6.9).

Shifting between a sense of fragmentation, nostalgia, and integration (not in a conventional way, rather strange). Still thinking, what is more real? Image? Sound? Or what I imagine of life there? Observer 2

The sounds in the background the how the narrator is talking about his life dedicatedly indicates the area of Walled city of Lahore; I do not know, maybe because of the Punjabi accent and hums of so many things going on in the background, i.e. Azan (Prayer Call), pigeons, distant walking sounds and people chatting. It is so different from other parts of the world, even other Walled cities in Pakistan, as the streets are a bit wider, and hence, the distant chat is not clear, plus the language of the narrators and their stories also give it away. Observer 3

Fig. 6.8 Observer 1 during the exhibition at LIVING OTHERWISE at Durham University, UK

Fig. 6.9 Visitor during the Faculty exhibition at Institute for Art and Culture, Lahore
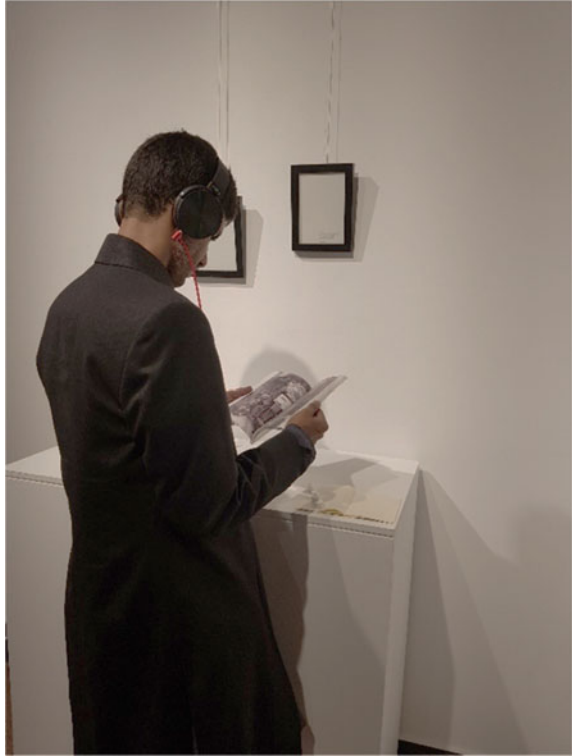
6.6 Cultural Borders and Experimental Ethnography as Agents for Authenticity

Culture is the choices and standards that people practise in their daily routines. The differences in cultural values and lifestyles are the primary catalyst for the distinctiveness of perceptions (Chang 1997). Culture and borders are similar (Nicol and Heather 2011). There is no precision in perception. It can vary from one person to another and from one subject to another. Birth and death cannot be experienced; preexistence and existence are necessary to experience both (Maurice 2012, p. 224).

This research has investigated cultural borders and strived to establish perceptions regarding reactions to specific situations because of these differences. Therefore, the differences between them are indicators of cultural borders.

The type of visitors for exhibits I, II, and VI varied in age groups as the platform of ICOMOS, MAKERFEST, and IAC created the opportunity for inclusivity of the public, be it academics/artists or others. The art installations attracted all age groups due to their various activities, such as building the wall using miniature bricks, placing origami birds, considering miniature objects, or listening to stories from mp3 players. According to the installations, people's interaction with pieces in this

exhibit annotates their cultural backgrounds, which act as symbols and gestures. Geertz (1973) also emphasised the symbolism that reveals the frames of meaning through which each culture views the world.

The interaction with III incorporated opportunities for the researcher and students to create an essential breakthrough in VR that could benefit the documentation of heritage spaces, planning, virtual tours, and understanding of values about the digitisation of heritage value, most notably in being a tool for experimentation ethnography. An essential aspect that research arrived at is ethics regarding digitising heritage buildings, as there are communities with firm opinions that counter the medium's use.

The IV and V were immersive print media; text and soundscape were the simplest way to represent borderlands. However, it explored the relationship between tactility and auditory senses. Due to changes in venues, visitors and mediums, the interaction and immersion levels varied. There is much room for exploration and theorisation for each medium that contributes to the understanding, exploring, and representing borderlands for experimental ethnography to understand cultural borders.

Art installations, photography, documentation, soundscapes, videos, and photogrammetric models produced in this research can be used as a database. Thus, each method employee becomes part of disseminating the lived body experience (Seamon 2015). Furthermore, this research highlights that through experimental ethnography, people can experience cultural borders that indicate the city's authenticity. First, the cultural borders can be understood by documenting the borderlands (field) and then recreating them as manipulated fields. Hence, these cultural borders can contribute to the awareness and recognition of the authenticity of socio-spatial fabrics in the city. Therefore, this methodology may be adopted for research on a broad spectrum of studies on Culture, Urbanism, and borders.

References

Abid M (2017) Being and the city. In: Vandal P (ed) Thaap: people and the city (Thaap) 8 (forthcoming)

Abid M, Aydin S, Schnabel MA (2018) Reclaiming heritage by retelling 'The Thing' in virtual reality: decoding walled city of Lahore. In: Schnabel MA (ed). Back to the future: the next 50 years. Wellington: Architecture Science Association (ANZAScA) Australia, pp 15–24. https://doi.org/978-0-9923835

Aga Khan Cultural Service Pakistan (AKCSP) (2016) 2016 Unesco Asia Pacific Awards for Cultural Heritage Conservation. Project description, Lahore: (AKCSP)

Chang H (1997) Review of the book the heartland chronicles. J Contemporary Ethnography

Faustino DF (2004) Antibodies collection of the FRAC Center. Regional Contemporary Art Fund of the Center, France

Geertz C (1973) The interpretation of cultures. Basic Books Inc., Publishers, New York

Goldenweiser A (1925) Diffusionism and the American school of history ethnology. Am J Sociol 19–38

Harper D (2017) 2010.Dictionary.com. 7 28. Accessed 24 Mar 2017

Heidegger M (1962) Being and time. 18th. Harper & Row

Ingold T (2000) The perception of the environment. Routledge, New York

Jacobs TD (2008) Authentic dissertation: alternative ways of knowing, research and representation. Publisher, Thousand Oaks

Jaago T (2012) Cultural borders in an autobiographical narrative. Folklore 16–38

Jansen S (2010) Of wolves and men: postwar reconciliation and the gender of international encounter. J Global Hist Anthropol 57:33–49

Johnson SM, David E (1997) Border secrets: an introduction to border theory. University of Minnesota, Minneapolis

Killmeier MA (2009) The body medium and media ecology: disembodiment in the theory and practice of modern media. Media-Ecology.org. Accessed 08 Mar 2018. http://www.media-ecology.org/publications/MEA_proceedings/v10/5_body_Medium.pdf

Linton R (1937) The one hundred percent American. In: The American mercury, pp 427–429

Luigi F, Francesco F, Cristiana A, Andrea A, Sebastiano A, Alessia N, Daniela G, Vittoria C (2016) 3D survey technologies: investigations on accuracy and usability in archaeology. The case study of the new "Municipio" underground station in Naples. Acta 5 (No.2 , article 8)

Maurice MP (2012) Phenomenology of perception. Translated by Donald A Landes. Routledge, New York

Mitchell D (2000) Cultural geography. Blackwell, Oxford

Nicol VK, Heather N (2011) Beyond walls: reinventing the Canada–United States Borderlands. Geopolitics (Ashgate) 20–90

Peterson R (1997) Creating country music: fabricating authenticity. University of Chicago Press, Chicago

Seamon D (2015) Situated cognition and the phenomenology of place: the lifeworld, environmental embodiment, and immersion-in-world. Cogn Process. https://doi.org/10.1007/s10339-015-0678-9

Serdar A, Marc AS, Sayah I (2017a) Association rule mining to assess user-generated content in digital heritage. In: Gül LF, Özkar M, Çağdaş EGG (eds) Participatory content making in 'The Museum of Gamers'. Computer-aided architectural design, future trajectories. Springer Nature, vol 17, pp 231–251. https://doi.org/10.1007/978-981-10-5197-5

Serdar A, Marc AS, Sayyah I (2017b) Association rule mining to assess user-generated content in digital heritage: participatory content making in "the museum of Gamers". In: Computer-aided architectural design futures, CAAD Futures 2017b, Future Trajectories, pp 231–251

Serdar A, Mehwish A, Marc Aurel S (2017c) Digital conservation: case of Masjid Wazir Khan. THAAP: the city: an evolving organism. THAAP, Lahore, Pakistan (Under Review)

Sharr A (2007) Heidegger for architects. Routledge, Abingdon

The American Heritage. 2002, 2001,1995. Definitions. Accessed 03 27, 2017

Tomohiro F, Hideki N, Haruo A, Shunta S, Chikako T, Yusuke S, Nobuyoshi Y, Ali M (2017) Integration of a structure from motion into virtual and augmented reality into virtual and augmented reality. In: Çağdaş G, Özkar M, Gül LF, Gürer E (eds). Springer Nature, Singapore, pp 60–76

Vannini P (2009) Authenticity in culture, self and society. The University of Michigan: Ashgate Pub

Waskul D (2009) Authenticity in culture, self and society. In: Vannini P, Patrick Williams J (eds). Ashgate, Michigan

Chapter 7
Urban Liminality: Negotiating Borders and the Pilgrimage to the Monastery of St. George Koudounas

Christos Kakalis

Abstract Sacred practices connected to the celebration of Saint George take place on the Island of Prinkipos (Büyükada), the largest of the so-called Princes' Islands in the Sea Marmaras and is included in the urban context of Istanbul. A close examination of the pilgrimage to the monastery of St. George Koudounas on the day of Saint George's commemoration (23rd April) provides insights into its importance as a liminal place in topography and a place that reflects the negotiation with important urban geopolitical boundaries.

Keywords Urban liminality · Pilgrimage · Monastery and St. George Koudounas

7.1 Introduction

Tsoureki is a sweet pastry that is made in Greek Orthodox Communities during the celebration of Easter. Tsoureki, in Turkish known as *Paschalia Tsourek*, has interestingly become a liminal object that triggered the beginning of this research and keeps renewing it through its active presence in the creation and maintenance of multi-national relations using its exchange as a gift. I met my Turkish colleague and good friend, Dr Nese Yildiz, during a conference when she showed warm enthusiasm because I was Greek and vividly described that her mother's best friend was married to a Greek architect in Istanbul in the 1950s and was expelled from the country in 1964. Paschalia Tsourek was a usual gift given by one friend to the other. In Spain in the 1970s (after the expulsion of the Greek Orthodox population from Istanbul), 10-year-old Nese missed the taste of Tsourek. Her mother communicated with her friend, and the sweet pastry recipe arrived from Greece in a parcel with the required spices: *masticha* and *machlep*. My first gift to Nese was a Tsoureki that my mother, originally from Anatolia (Turkey), sent to her during the Greek Orthodox Easter in 2015.

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A piece of Tsoureki was also the first thing I ate when I first arrived in Istanbul in April 2018 to continue my fieldwork for this study. It was given to me by a member of the Rum Vakıfları Derneği (RVMV, Association for the Support of the Rum Community Institutions), Eleni, as a welcoming treat. Paschalia Tsoureki is easily found in Turkey, but very few pastry shops (such as the Bistro Pastanesi in Feriköy) make the *proper* one used for Christian celebrations. These are found in Greek minority citizens' lives, making it only during the Greek Orthodox Easter period. Eleni also sent a Tsoureki to Nese, re-enacting the series of stories of displacement told through the exchange of this pastry's recipe (written or materialised).

This story embodies several ideas: a nation's purification processes, borders related to minority populations, and porosity through liminal objects, situations, and people, conditions that are further unpacked here by a closer examination of several sacred practices connected to the celebration of Saint George on Prinkipos (Büyükada), the largest of the Princes' Islands that lie in the Marmara Sea and are included in the urban context of Istanbul. Through a closer examination of the pilgrimage to the monastery of St. George Koudounas on Saint George's Day (April, 23), its importance as a *liminal* practice in a topography reflects the negotiation with important urban geopolitical boundaries established.

Before the population exchange of the 1920s and the further displacement of the Greek Orthodox with the Istanbul programs of the 1950s and 1960s, the island was part of the multicultural environment of Istanbul, with Greek, Armenian and Jewish populations playing a protagonistic role in its daily life.[1] In this context, the sacred landscape of the island was multi-faith, with diverse religious spaces and calendars coexisting peacefully. However, following the twentieth-century "unmixing" of populations, this reality has drastically changed, with most Christian sacred spaces being destroyed/abandoned, desacralized or re-sacralised into Muslim ones. Nonetheless, the pilgrimage to St. George Koudounas is still considered one of Istanbul's most significant religious events. Thousands of pilgrims participate in it, 95% of whom are Muslims and only 5% Christians.

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[1] On how expulsion tactics have formed modern Greece and Turkey see Bruce, Clark (2006) Twice a Stranger. How Mass Expulsion Forged Modern Greece and Turkey. London: Granta Books. On the current state of the Greek minority of Istanbul see Association for the Support of Greek Community Foundations (2015) Minority Citizens – Equal Citizens, Reports on the Rum Community of Turkey. Rum Vakiflari Derneg. On the Armenian minority in Turkey see Fatma et al. (2015) Denial of Violence. Ottoman Past, Turkish Present and Collective Violence against the Armenians 1789–2009. Oxford: Oxford University Press; Sossie K (2016) 'The Istanbul Armenians. Negotiating Existence', pp. 207–237 in: Bryant R (ed.) Post-Ottoman Coexistence: Sharing Space in the Shadow of Conflict. Space and Place. New York: Berghahn Press; and Ulf, Bjorklund (2003) 'Armenians of Athens and Istanbul: the Armenian diaspora and the 'transnational' nation,' Global Networks, 3(3), pp. 337–354. On Jewish minority in Turkey see Rifat N. Bali (1999) The image of the Jew in the rhetoric of political Islam in Turkey'. *CEMOTI, Cahiers d'Études sur la Méditerranée Orientale et le monde Turco-Iranien* Année. *28*, pp. 95–108; Bali (2014) Model Citizens of the State. The Jews of Turkey during the Multi-Party Period. Translated by Paul F. Bessemer. Madison, Teaneck: Fairleigh Dickinson University Press). On issues of gentrification in Istanbul see Nilgun Ergun (2004) 'Gentrification in Istanbul'. Cities. 21(5):491–405.

Examination of the liminal qualities of this *shared* sacred place reveals the monastery and the surrounding landscape during the pilgrimage of April 23rd, which opens a unique urban field. Besides the inhabitation of the boundary between the sacred and the profane, the pilgrimage of St. George Koudounas also involves the performative negotiation of borders that were violently redefined, changing the character of the city (and the country in general) in the relatively recent past. As a historical and cultural construct, the study of how pilgrimage allows a space for this negotiation to occur aims to unearth traces of the "urban unconscious" (such as the displacement/absence and reduced presence of Christian Orthodox populations).

7.2 Unmixing Population/Minority Landscapes

RVMV is based in the Greek Orthodox Church of the Holy Trinity at Katip Celebi Mahala, near Taksim square. The area is heavily loaded with memories of the minority populations of the city. A few metres away from the church, Istiklal Avenue connects Taksim Square with the medieval neighbourhood around Galata Tower. During the Ottoman period, the street was known as Cadde-i Kebir (Grand Avenue) or Grande Rue de Péra and was an area where Armenians, Greeks and Jews lived and worked many high-profile shops, banks and companies placed along its route. Ottoman intellectuals also used to spend time there. After the declaration of the Turkish Republic on October 29, 1923, the avenue's name was changed to Istiklal, meaning Independence, in commemoration of the triumph of the Turkish War of Independence. Thus, Istiklal Avenue is a geopolitical landscape that briefly introduces critical moments of the city's history that affect its urban environment.

During the late nineteenth century and early twentieth century, the Ottoman Empire was reformed through processes of "unmixing populations" (Brubaker 1995), which were instigated by Kemal Ataturk and aimed to cleanse Turkey of non-Turkish citizens (Greeks, Armenians and Jews), thus creating a "pure" nation-state. This was a gradual process of vanishing and expelling populations (my mother's father, who was born in Anatolia in 1900 as a Greek Orthodox member of the Ottoman Empire, had to swim to Lesvos Island to escape from the catastrophe in Izmir) that involved numerous violent practices, culminating in the early 1920s with atrocities taking place in a manic way in different parts of the Empire and generating the genocide of the Armenians, Jews and Greeks.[2] The Turkish nation's "purification" process ended with the Treaty of Lausanne, which confirmed the exchange of populations between Greece and Turkey (excluding Istanbul, the islands Imbros and Tenedos on the Turkish side and Eastern Thrace on the Greek side). It also stipulated equal treatment under the law for the minorities of Turkey and privileges to be given to them, such as maintaining important institutions (schools, churches, and so forth) and customs and religious habits (articles 38–45). Religious and cultural identities were to be respected within their new "minority" status limits.

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[2] Bruce Clarke. ibid, pp. 65–86.

The idea of a minority pre-considers one of a majority (Hirschon 2003).[3] For the maintenance of the status of a Turkish "majority", the existence of minorities and their consistent oppression (becoming even more minor than they were about the "majority" population) has played a principal role in the development of modern Turkey. The boundary between the majority and the minorities has been a field of negotiation and conflict since the nation's establishment in 1923. The changes in this street from Pera to Istiklal are an exercise in political toponymic engineering.

Therefore, one of the results/upshots of the Treaty was creating the notion of the "minority citizen". The notion of "minority" suggests a gap or incompleteness in the legal system and the following needs for protection that arise from this gap. Simultaneously, the notion of "citizen" suggests equality under the law and the governing authorities. This paradoxical co-existence of "lack" and "equality" has led to the difficult position of these citizens in the country (Sigalas 2003). Minority citizenship is animated in the landscapes of daily life. Visible and invisible borders reveal the paradoxical consequences of unmixing tactics. Ghetto communities and refugee camps are typical examples, even in contemporary urban landscapes. Gradually, the geopolitical processes of constant negotiation of this balance between "minor" and "major" in Turkey have transformed the country from a landscape of co-existence into a field of silencing otherness and religious otherness, especially becoming the protagonist of these processes.

It is challenging, for example, to map all the pastry shops in Istanbul that make the "proper" Paschalia Tsoureki to be used in the Easter celebration. People do not usually share 3000 this information publicly, and it is made as a side product, in small amounts and only during a specific period. "All the areas of Istanbul where Greeks live have pastry shops that make them only during Easter, and we know where to find them"[4] was the comment of one Greek of Istanbul (Rum, as they are called in Turkish). The people that share this information resonate with the porosity of the examined borders. Although, in this case, the border is not materialised in the form of a wall or a fence, it has an exact spatial experience through the mixture of quietening minority realities and religious practices or even entirely silencing them. Armenians, Jews and Greeks still live in Istanbul. However, their numbers continue to decrease (currently around 2000 Greeks, 12,000 Jewish and 70,000 Armenians throughout Turkey), following pressure from the state through policies of fear and uncertainty.[5]

Examining the role of boundaries in the relationship between hygiene and the ideas of order and disorder, Mary Douglas argues that pollution is a way to protect an "ideal order of society", as the latter is defined by several "danger-beliefs" (Douglas 1966). Showing how different societies have dealt with the notions of uncleanness and contradiction, she describes several similar regulations between other societies and "rituals of purity and impurity". This danger of "pollution behaviour" is also

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[3] Ibid, pp. 87–107. Renee, Hirschon. 'Consequences of the Lausanne Convention: An Overview'. In Renee Hirschon, ibid, pp. 13–22.

[4] D.P, Fieldwork—April 2018.

[5] Fieldwork—April 2018.

expressed through the transgression of external and internal boundaries. This is the case with the urban palimpsest of Istanbul. Turkey has allowed a painful urban unconsciousness to work as a vibrating net under the city's lived landscape in its denial to confront the reality of violence and oppression. Nevertheless, hidden borders and discrimination situations bubble underneath and are always revealed when they are penetrated, violated or re-established, as in the Saint George pilgrimage, where their permeability discloses their presence.

A characteristic action of purification that greatly affected Istanbul was enacting law 4305/1942, establishing a property tax, named Capital Tax, Varlik Vergisi in Turkish, for all Turkish citizens. The taxpayers were distinguished into Muslims and non-Muslims (Greeks, Jews, Armenians). While the former had to pay a symbolic tax, the latter had to pay the most significant proportion. The committee of public servants in charge of applying the law had the authority to confiscate any property if individuals failed to make the payment, an act of violating the hidden borders between minorities and Muslim populations that were spatially expressed in the changing ownership of property. This led to a significant financial catastrophe for the minorities, reducing their numbers and active presence in their economic life. Between 1943 and 1944, 1869 merchants, business people and, in general, minority communities who could not afford to pay the imposed tax were exiled to the labour camps while their property was confiscated (Ayhan 2009).

These tactics led to political and economic instability, the ethnic-cleansing foundations expressed by riots, turbulence or even atrocities against minorities. The events of September 6–7, 1955, also known as Septembriana (the events of September), were an excruciating moment in Istanbul's history. Istiklal Avenue and its surrounding area became the location/site of a massive riot against Greeks' properties, businesses and human lives. Armenians and Jews were also affected (Torne 2015). Istiklal Avenue is a place of remembering and forgetting simultaneously. Remembering and forgetting are merged, following different directions depending on the individual's identity. Nostalgic recollections of Pera Street in the minds of diaspora Anatolians are combined with the lively shopping reality of the Istiklal Avenue, along which Turkish people and tourists spend leisure time and the painful memories of dead people and damaged properties of the Septembriana events.

Even geographically, Istanbul is between and betwixt Christianity and Islam, Europe and Asia, and the European Union and Turkey. Moreover, it is still known today as Constantinople, the name was the capital city of the Byzantine Empire, and Greeks usually call it Poli (meaning the City). Ankara has been the capital city since Ataturk's establishment of the Turkish Republic. However, Istanbul is still a geopolitically vibrant urban environment because of its important geographical position and scale and the living traces of the Ottoman Empire's multicultural past.

The "cosmopolitanism" of Istanbul's past has been used in different ways to facilitate different people's motivations, sometimes even conflicting with each other, especially since the last decade of the twentieth century. Although a detailed discussion of this subject warrants further consideration, it is evidence of Istanbul's multicultural and dynamic past that is both remembered and forgotten (Mills 2010). Even before the 1920s, lines separated the different spheres of each citizen group. There

Fig. 7.1 Armenian Church in Istanbul—the target for racist vandalism

were processes (rituals, customs and cultural activities) that defined their horizon of daily action and legal status. Some of these processes were permeable and respected by all the citizens (mainly those related to everyday life—rituals, neighbourhood activities and so forth) and even experienced by multicultural populations (without even a direct religious or national connection to them in some cases). This led to Gadamer's urban conditions as a "fusion of horizons" (Gadamer 2004). However, the cleansing processes of the 1920s created gaps that had to be filled. Undoubtedly, these gaps were never adequately served, allowing cracks to always exist under a superficial understanding of a homogeneous nation-state. Whenever these cracks, or borders, are violated, they become present.

A very recent example of these situations is the violation of an Armenian church in Istanbul. On the morning of April 30, 2018, a pile of trash was found thrown in front of the Armenian Takavor Church in Istanbul. In addition, graffiti on its external wall declared, "This homeland is ours". This clearly shows how religious identity has become a core concept for establishing and further developing the Turkish nation in the name of a "secular country".[6] On the one hand, the line between Armenians and Muslims is transgressed as expressed in vandalism (Fig. 7.1).

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[6] https://armenianweekly.com/2018/04/30/armenian-church-in-istanbul-racist-vandalism/ last accessed 30/04/2018.

On the other hand, both groups' religious identity opens a conflict zone, revealing a crack spatialized in the activities against the church. In the case of Turkey, religion becomes the principal definer of national identity, as proven by the establishment and evolution of what is known as modern Turkey. Also, it is worth stating that the term minority in the Lausanne Treaty is coined only about non-Muslim constituencies. Thus, it is reinforced by Turkey and the other countries that signed the treaty and historical developments.

Central vexing questions were how to define a sacred space in such a geopolitically sensitive landscape and how to document the religious landscape of Istanbul. First, it is the idea of borders as an experienced phenomenon. Second, something more than a line suggests the existence of these intangible borders through their liminal penetration during the pilgrimage to St. George Koudounas monastery.

Examining the case of La Frontera in Mexico, Edward S. Casey describes the difference between a border and a boundary and how these may co-exist. On the one hand, a border is a clear frontier between two territories, the constitution of which is based on standard texts ("conventional agreements", oral and written laws) and can be represented in traditional maps (border-line) (Casey 2011a, b, c). The border crossing is carefully controlled by rules that highlight the importance of its clear inscription. For example, one must carry specific identification documents or have already acquired a visa to cross the country's border. On the other hand, a boundary is a porous membrane, either natural or artificial, that allows the passage of different elements through it in a more accessible way than borders, carrying- an intense sense of *liminality* (ibid, p. 385). According to Casey, "borders are always already in the process of becoming boundaries" as open to a possible (legal or illegal) penetration or ruination (ibid, p. 390). According to Casey, boundaries are *intrinsically permeable and porous edges* that can be divided into three main categories: the elemental, the external, and the internal. The first category comprises the four basic place-worlds: the horizon, the sea, the sky and the earth, which usually constitute a natural landscape or seascape.

Moreover, the external boundary is an integral part of a natural scene, coinciding with its outer natural edge most of the time. Finally, the internal boundaries relate to an edge or a set of edges that inscribe different interior elements of a landscape and can be both natural and constructed (Casey 2011a, b, c). Adding to this, the definition is the existence of no concrete borders, or perhaps *process* borders, that are inscribed in (urban) material reality through the practice of formal or informal rules related to fulfilling a vision for a nation at any cost.

Turning to the current political condition of Turkey, a re-emergence of *unmixing tactics*, with Islam gradually taking a pivotal role in the definition of Turkish identity, was evident. Since 2001, there has been a gradual return to the ethnic cleansing culminating in the Turkish government openly silencing any voice suggesting something different from its intentions. In 2001, a group of members of the Islamist conservative party founded the Justice and Development Party (AKP), promising a new Turkey different from Atatürk. One of its founding members, the ex-mayor of Istanbul (1994–1998), Recep Tayyip Erdogan, emerged as the most *charismatic*, attracting a positive reaction from parliament and the Turkish members' population.

Fig. 7.2 On 23 April 2018, Istanbul was fully decorated with Turkish flags

In 2003, Erdogan was elected Prime Minister, a position he retained until he was elected President of Turkey in 2014. While initially, the AKP government appeared as a good marriage between conservatives and liberals, allowing the minorities space to breathe and hope for a long, peaceful period in the country, Erdogan's policies have gradually turned towards a more austere, exclusive and violent reality in which Islamic faith has once again emerged as a critical driver for the development of the new "nation". For example, in 2011, the Prime Minister underlined that minorities secured the legacy of the Ottoman Empire. However, he never clearly declared the equality of minority citizens (if this term can exist in reality) with Turkish citizens. Similarly, a new faith-based educational system is gradually emerging in a "secular" country, with the Imam Hatip Schools rising from 2 to 10% and non-religious schools being closed or unaffordable for citizens to send their children. This directly affects non-Muslim citizens, adding to their difficult position in the country.

The current status of religious minorities in Turkey was noted in a recent article:

> The [US] State Department reports that "Religious minorities said they continued to experience difficulties obtaining exemptions from mandatory [Islamic] religion classes in public schools, operating or opening houses of worship, and in addressing land and property disputes. The government restricted minority religious groups' efforts to train their clergy…. [Islamic] religion classes are two hours per week for students in grades four through to twelve. Only students who marked 'Christian' or 'Jewish' on their national identity cards may apply for an exemption from religion classes. Atheists, agnostics, Alevis or other non-Sunni Muslims, Bahais, Yezidis, or those who left the religion section blank on their national identity card may not be exempted."[7]

On 23 April 2018, Istanbul was fully decorated with Turkish flags (Fig. 7.2), Ataturk's images and other historical photographs. People were selling colourful

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[7] https://armenianweekly.com/2018/06/26/us-state-department-slams-turkey/ last accessed 30/04/2018.

plastic wreaths in the streets, and a mood of joy and celebration was spread around. April 23 is a bank holiday for Turkey to commemorate a new parliament by Mustafa Kemal Atatürk on 23 April 1921. After signing the Treaty of Lausanne, Atatürk formed new, independent, secular state institutions. Besides the "Day of National Sovereignty", April 23 is also dedicated to all the world's children (Day of National Sovereignty and Children's Day) as a successor of the future. This national holiday is celebrated mainly by the young population of Turkey, with school ceremonies and performances of diverse scales (even in large stadiums and watched by the entire nation). International organisations, such as UNICEF, recognised as an important day for children identified 23 April as International Children's Day.

23 April is also for Greek Orthodox Christianity when Saint George is commemorated and celebrated. Saint George is a "legendary" figure in the country. It has a Turkish parallel, Hidrellez (or Hidir Ilyas), which combines the words for springtime and Elias (symbol of the sun) that play a significant role in Anatolian Balkan folklore culture. Saint George is a liminal figure, believed to be a miracle worker by the Muslims and a Saint by Christians. Interestingly, in this culture of Saint George, members of the Jewish community might also be involved. While the monastery of Saint George Koudounas remains closely connected to the Christian Orthodox faith, its pilgrimage topography is mapped in a shared and "ambiguous" way, according to F. Hasluck, by a significant number of diverse, shared practices that leave temporary or permanent traces upon it (Hasluck 2020). According to Couroucli, "shared ritual practices in Anatolia are highly codified social activities involving ritual objects, gestures and postures relating pilgrims to sacred places" (Couroucli 2012) that do not necessarily involve interacting with the clergy. The pilgrimage to the monastery on the 23rd of April has always been a liminal event in which both Muslims and Christians participate. Although before the 1920s, pilgrims were mainly Christians, nowadays, 95% of them are Muslims, and the others are Greek and Armenian Christians and a few Jews.

7.3 Performing Liminality

To reach the monastery of Saint George, it is necessary to take the ferry (*motori* as it is called) from Eminönü or Karaköy Piers to the Princes Islands. One hour and fifteen minutes after departure, it arrives at Buyukada; the monastery is located atop one of its hills. Although as an island, Büyükada is geographically separated from the rest of İstanbul, administratively, it is part of the province and the metropolitan municipality. This geographical boundary between the island and its surrounding urban environment (including the sea) is perceived by the residents of the islands as an in-between zone that separates them from Istanbul and at the same time connects them to it in a different way than the inland, more lucid boundaries between the different neighbourhoods. In my discussions with members of the Islands' Greek community, two terms were used to define themselves: "Polites" (from the Poli, meaning Constantinople-Istanbul) and "Pringkipianoi" (from Princes

Islands), which is something that definitively expresses the liminal character of the island populations.[8]

Because cars are not allowed on the island, the area is reached by horse carriage (*Payitoni*) or walking to "Luna Park", where four roads meet. One of them is the path that leads up to the monastery on foot (20 min walk). The monastery's absolute path is considered an essential part of the pilgrimage, which is understood on the walk-up. Pieces of colourful threads, clothes on the trees, and small stones placed neatly along the path introduce the visitor to the pilgrimage character of the place. While the distance is not long, the steepness of the slope can be exhausting, which makes it an integral part of the pilgrimage. Two monks from Mount Athos are currently in charge of the Monastery. Mount Athos administratively belongs to the Ecumenical Patriarchate of Constantinople, which adds another layer of boundaries to understanding Istanbul's Greek Orthodox minority populations. Based in İstanbul's Phanar district, the Greek Orthodox Ecumenical Patriarchate not only rules Turkey's religious institutions, but the sphere goes beyond the limits of Turkey, even reaching Mount Athos and Crete.

During discussions with one of the monks on Friday, 21 April 2018, *insiders'* feelings about the pilgrimage after 22 years of serving the place and interacting with visitors became evident. "People come for Saint George. To honour him and ask for his help with different problems. It is not about Christianity; it is about belief in Saint George".[9] The monk believes that the scale of the Koudounas pilgrimage (millions of pilgrims every year) does not depict the superiority of Christianity over other faiths and does not have any proselytism purpose. Instead, this pilgrimage is an established annual ritual that deals with the multi-faith worship of Saint George. "I love all the people that come here, Muslims, Armenians, Jewish, Greeks. For me, all of them are the same. People that want to be closer to the Saint and the notion of faith".

As a social and cultural construct, pilgrimage allows borders to penetrate and liminality to uncover their presence. Therefore, liminality has been considered an integral part of the pilgrimage process. In particular, Victor Turner connects social rituals and dramas with the theory of the rites of passage of the Belgian folklorist Arnold Van Gennep. Rites of passage are rituals "which accompany every change of place, state, social position and age" (Turner 1969). According to van Gennep, they are divided into three stages: departure, *liminal* and return. *Limen* means threshold, and thus *liminality* refers to the spatio-temporal event of the passage through the threshold(s) that connect(s) and divide(s) two social structures (*structure* and *anti-structure,* according to his words). *Thus, liminality* is directly connected to several boundaries of a sacred topography (Turner 1969).[10]

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[8] Fieldwork—April 2018.

[9] Fieldwork—April 2018.

[10] For Turner, these boundaries are closer to the border's definitive character; he believes that the distinction between *secular* and *sacred* is clear. This underscores that boundaries are blurred, which creates hybrid experiences in which the inside's character comes closer to the outside's character.

Entering the *liminal* phase, the individual is *betwixt* and *between* all familiar lines of classification" (Turner 1969, p. 2). Passing through this "threshold", he/she is neither in his/her former framework nor in his/her destination is one (Turner 1969, p. 3). He/she is in an intermediate state during which he/she can be actively engaged in the whole process, aiming most of the time at participation in a shared event or ritual place, during which the sense of the community is redefined from a more objectified to a more inter-subjective one. He/she aims to experience *communitas*, a type of social "communion of equal individuals" (Turner 1969, p. 127). Regarding the rites of passage, pilgrimage is also divided into the three main phases of separation, the journey to stay at the sacred place and re-integration into everyday life.

On 23 April at 06:00 in the morning, a massive crowd was already leaning against the church's door. The opening of the door signalled the beginning of the pilgrimage for the "insiders" (monks and laypeople helping) and the arrival at the destination of the pilgrims that had already walked up to the hill or had even slept on its slopes (Fig. 7.3).

The interaction with the Church and the icon of Saint George regards the liminal stage of the pilgrimage, standing between the secular and the profane. Several rituals re-enact both the natural and architectural landscapes.

Sixty thousand pilgrims of different religions visited the monastery on that day. The inclined footpath was full of stalls selling candles of different colours, religious
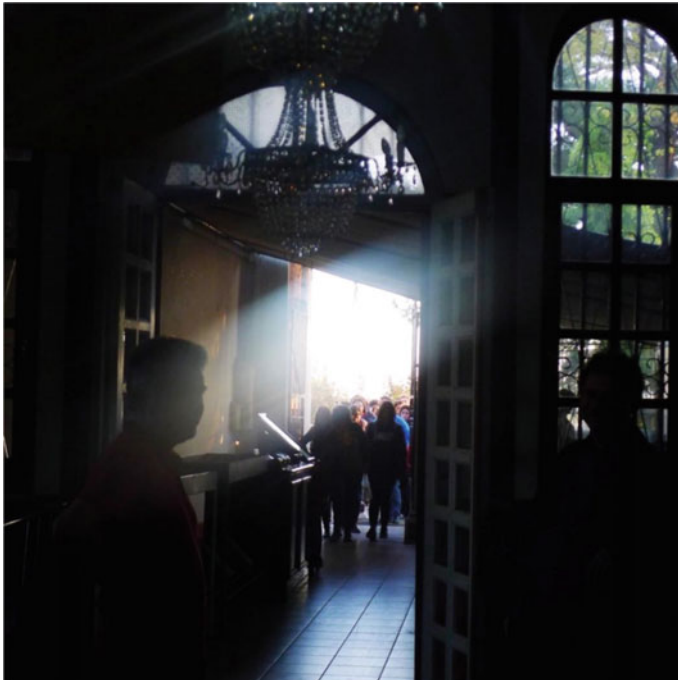
Fig. 7.3 Pilgrimage entering the Church on 23 April

charms and thread coils. Most participants were Muslims, while Greeks, Cypriots, Jews and Armenians were also there. Rumanian and German Christians were also recognised during my interviews with them.[11]

Pilgrimage involves a series of practices. Walking or not wearing shoes expresses devotion and gratitude for a fulfilled wish in different pilgrimage sites and beliefs. In her book, *Wanderlust: A History of Walking,* Rebecca Solnit underlines the significance of walking as a state in which the mind, the body and the world are aligned, as though they were three characters finally in conversation together, three notes suddenly making a chord' (Solnit 2000). Acknowledging the phenomenal qualities of walking, this quote illuminates the ideas explored. As an embodied mapping, walking can be connected to a type of cognitive mapping as generating and narrating a spatio-temporal situation (Lynch 1960). As Karen O'Rourke interestingly underlines, "wayfinding" carries learning and mnemonic aspects in the model of a cognitive map being created during its course (Rourke 2013). Therefore, the organic nature of the footpath is directly connected to its creation and preservation through the embodied movement of the walker and the existing topography.

On the one hand, they are mapped most genuinely only through the movement of the pilgrims. On the other hand, for the pilgrims, walking involves the initiative qualities of bodily tiredness combined with the embodied recollection of the spiritual meaning of the topography. In parallel, this walking and the rituals along its course uncover the urban unconscious of the city, its multicultural past that is still there (Fig. 7.4).

In this context, creating a three-dimensional surface woven with multicolour threads takes place along the path. First, the pilgrims buy a threaded coil of a specific colour at the Luna Park entrance. Each colour relates to a different type of wish (acquire a house, find a job, heal illness and so forth). Then, each pilgrim starts unfolding the thread and attaching it to the trees and bushes on the right side of the path while simultaneously praying. Walking and weaving are combined with phrases or even closing the eyes and navigating the crowd and the weaving process. Gradually, a multicolour surface is created that expresses the visitors' different motivations and the event's multivocal character. A mapping of the hidden political borders might reveal this three-dimensional body-crafted piece materialises them, as revealed in their violation during the multi-faith (not *pure*) pilgrimage to Koudounas.

Also, someplace small stones and sugar cubes on the ground to represent the wish to be fulfilled (i.e. having the shape of a house) or tie colourful pieces of fabric onto the trees' branches (Fig. 7.5). Sharing sugar cubes and candies are usually an expression of gratitude to the Saint for fulfilling a wish.

Arriving at the church, the pilgrims light numerous candles of different colours (responding to the colour above coding of wishes); some wait in front of them and pray as they melt. Writing the desire onto a surface is also essential to the pilgrimage. Initially, people used to write on the walls, but due to the damage caused by excessive/too many markings, the pilgrims were asked to write their wishes on paper and put it in a *box of prayers.* Nevertheless, some pilgrims write on the walls

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[11] Fieldwork—April 2018.

Fig. 7.4 Walking as part of the rituals

quickly and avoid noticing the people managing the pilgrimage. Placing coins upon the icon is another expression of asking for something in combination with different gestures of worship (kneeling in front of the icon, kissing it and so forth).

An essential element of the pilgrimage is the distribution of a small bell, called in Greek the koudouni, which also gives the name "Koudounas" to the monastery. Each of the pilgrims is given a small bell and keeps it until his/her wish is fulfilled when he/she has to bring it back. It is characteristic that at the end of the pilgrimage, three different types of returned bells were found in the relevant box: the one given twenty years ago, the one given seven years ago, and the current one, testifying to the continuity of the pilgrimage.

The image of the multi-religious crowd of pilgrims waiting outside the monastery's door early in the morning of 23 April 2018 reminds us of Georg Simmel's model of the door as an expression of a liminal experience (Simmel 1994); Whereas in the case of the open door, the threshold functions as part of a penetrable boundary when the door is closed, this boundary may be transformed into a clear border: a limit, the crossing of which is not allowed. It is usually the insider who controls the closing of the door, leaving the outsiders (or some of them) outside the territory that belongs to him/her. In this sense, an area can be demarcated by what is beyond it or/and divided into different zones in which not everyone or everything is allowed to enter. In this rather turbulent period of Turkish history, otherness is pushed again

Fig. 7.5 Colourful fabric onto the trees and stones and sugar on the ground—for pilgrimage wishes to fulfil

outside the realm of free expression and living through the closing of the "doors" by the governing authorities. There are still activities that reveal these tactics by opening "doors" to allow for the Muslim majority to co-exist with the non-Muslim minorities on equal terms — organically linked to the idea of liminality, pilgrimage, as a construct opens in the case of Saint George Koudounas that type of field of co-existence.

References

Ayhan A (2009) Turkification Policies in the Early Republican Era. In: Dufft C (ed) Turkish Literature and Cultural Memory. Harrassowitz Verlag, Wiesbaden, pp 29–62

Bali RN (2014) Model citizens of the state. The Jews of Turkey during the multi-party period. Translated by Paul F. Bessemer. Madison, Teaneck: Fairleigh Dickinson University Press)

Brubaker R (1995) Aftermaths of Empire and the unmixing of peoples: historical and comparative perspectives. Ethnic Racial Stud 8(2):189–218

Casey E (2011a) Border versus boundary at La Frontera. Env Plan, D: Soc Space 29(2011):384–398

Casey E (2011b) The edge(s) of landscape: a study in Liminology'. In: J. Malpas (ed) The place of landscape. Concepts, contexts, studies. Massachusetts Institute of Technology, pp 91–110

Casey ES (2011c) The edge(s) of landscape: a study in Liminology'. In: J. Malpas (ed) The place of landscape. Concepts, contexts, studies. Massachusetts Institute of Technology, pp 91–110

Clark B (2006) Twice a stranger. How mass expulsion forged modern Greece and Turkey. Granta Books, London

Couroucli M (2012) Chthonian spirits and sacred shrines: the dynamics of place among Christians and Muslims in Anatolia. In: Bowman G (ed) Sharing the Sacra: the politics and pragmatics of intercommunal relations around holy places. Berghahn, Oxford, p 45

Douglas M (1966) Purity and danger. An analysis of pollution and taboo. Routledge and Kegan Paul, London, p 3

Gadamer HG (2004) Truth and Method. London

Hasluck FW (2020) Ambiguous sanctuaries and Bektashi propaganda. The Annual of the British School at Athens

Hirschon R (2003) 'Unmixing peoples' in the Aegean Region'. In: Hirschon R (ed) Crossing the Aegean, Oxford: Berghahn Books, pp 3–12

Lynch K (1960) The image of the City. MIT Press, Cambridge

Mills A (2010) Streets of memory. Landscape, Tolerance, and National Identity in Istanbul. The University of Georgia Press, Athens and London, pp 1–34

Ors IR (2018) Diaspora of the City. Palgrave Macmillan, London, pp 171–205

Rourke KO (2013) Walking and mapping: artists as cartographers. MIT Press, Cambridge, p 112

Sigalas N (2003) 'The de-politicization of the minority citizens: the case of the Rum of Turkey. Minority Citizens—equal citizens, reports on the rum community of Turkey, ibid, p 45

Simmel G (1994) 'Bridge and door'. Theory, Culture and Society. 11:5–10 (1994)

Solnit R (2000) Wanderlust: a history of walking. Penguin Books, New York, p 5

Torne A (2015) Recent studies on the September pogrom in Istanbul. Iran and the Caucasus 19:283–294

Turner V (1969) The ritual process. Structure and anti-structure. Chicago, Aldine, Illinois, p 94

Part III
Political Boundaries and Spatial Segregation

Chapter 8
Borders for Peace: Controls Within a Kenyan Informal Settlement During Political Conflict

Stephen Vertigans, Neil Gibson, and Natascha Mueller-Hirth

Abstract During periods of heavily contested elections, accompanying political tensions are often most prevalent within informal settlements. Consequently, the prolonged political tensions experienced in Kenya during 2017 were expected to have the most adverse impact in Kibera, Nairobi, the largest informal settlement in East Africa. Fears about what could happen in Kibera were also informed by recent history, most notably in 2008, when many people were killed in the post-election conflict. Moreover, the marginalisation residents experienced in 2008 largely remain today. Differences between this urban area and the surrounding golf course and middle-class residential-gated enclaves are immediately apparent. Nevertheless, despite these deep-rooted issues and differences, the extent of the violence was considerably less than in 2008. The primary focus is understanding why relative peace prevailed in very challenging conditions. The analysis is based on research incorporating photovoice, focus groups and interviews with residents in early 2018. Photographs taken by participants framed the themes explored in greater depth through focus groups and interviews. A preliminary study of resilience also informed fieldwork in 2017. The research discovered that residents' attachment to Kibera and collective sense of identification and cohesion contributed to weaker, more permeable barriers between potentially competing political supporters. A range of community-based initiatives, such as pacification messages and peace activities, partly created this greater sense of interconnections. Together, they contributed to deeper senses of self-control and broader forms of social control that restricted the potential for political tensions to descend into inter-ethnic violence.

Keywords Election · Informal settlement · Kenya · Kibera · Place attachment · Social control · Violence

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8.1 Introduction

Kenya is currently experiencing an annual population increase of 2.5%. Patterns of growth place the most significant pressure on informal settlements where the cheapest accommodation is found for the most impoverished city residents and recent arrivals. In Nairobi, Kenya's capital city, between 50 and 70% of the city's population of over three million people, is estimated to be based in informal settlements that cover only five per cent of the city's residential space (Elverson and Hoglund 2017; Schuberth 2018). Kibera, the focal point for the fieldwork, is located on Nairobi's outskirts and is one of Africa's largest settlements.

The density of living conditions in Kibera and data collation uncertainties has led to population estimates varying from 250,000 to one million living in 2.2 km^2 (Elverson and Hoglund 2017) or one square mile (Praszkier et al. 2010). This level of uncertainty is typical of how postcolonial notions of the 'norm' have shaped urban life in the southern hemisphere. Considerable urban growth within the southern hemisphere has been most pronounced within informal settlements. However, these urban areas largely remain 'off the grid', subjected to cursory population estimates and widely different figures representing conflicting self-interests such as those of residents and national politicians. Facilities also characterise informal settlements they are believed to lack when compared to the postcolonial benchmark, such as sanitation, freshwater, 'standard' housing, services, and transportation that classify 'slum habitus' (Roy 2011). Being outside 'normal urban considerations' is problematic in terms of broader political neglect of these locations. Because these areas are considered transitory and temporary, there is limited outside intent or pressure for long-term investment. Such a perception overlooks the longevity of many settlements, with Kibera, for example, first established at the beginning of the twentieth century (Parsons 1997).

Moreover, the focus on informality is underpinned by a sense of deregulation and lack of control that Lombard (2014) argues is used to justify political and business decisions that are designed to 'address' these unplanned/disorderly structures. Consequently, informal settlements can be destroyed in the name of progress when required for road building or to take advantage of the rising demand for property development. Many miles away, residents are often relocated into substandard housing or similar conditions on much less coveted land.

Alongside these relative absences, Kibera is also associated with high levels of crime, substance and alcohol abuse, gang membership and unemployment (Chege and Mwisukha 2013; Mitya et al. 2017; Osborn 2008). Young people are most adversely affected and often recruited to political protests, causing disruptions during election campaigns (De Smedt 2009; Schuberth 2018). Following the 2007 elections, young males were instrumental in violent attacks across Kenya when between 1300 and 2000 people were believed to have been killed. Kibera was at the forefront of the violence. Supporters of the Presidential candidate, Raila Odinga, who was contentiously declared to have lost the election, attacked and raped rival ethnic groups, most notably Kikuyu, associated with the victorious incumbent President

Mwai Kibaki. Businesses and houses were looted and destroyed, and long-running battles were carried out between youth gangs and the police (De Smedt 2009).

At the time, Odinga was MP for the Langata Constituency including Kibera. De Smedt (2009) estimates that Kibera constitutes less than 2% of the constituency in terms of area and more than 60% of the area's population. Many of Odinga's supporters belong to his Luo ethnic group. They are disproportionately represented in Kibera, especially the more deprived parts, whilst Kikuyus in the settlement are more associated with better quality housing, local businesses, and property management. During the violence that followed the 2007 election, local demographics were forcibly shifted, with many Kikuyus forced out of their homes, including property landlords. The legacy of the shifted populations remains today, with some villages in Kibera dominated by one ethnic group, including Gatwekera, which is believed to be overwhelmingly Luo. Although other villages remain multi-ethnic, notably in the 'middle class' areas, the changing demographics raised further concerns that levels of daily interaction between groups had reduced since 2008. Therefore, levels of ignorance about the 'other' and willingness to believe the 'worst' could have been higher.

With political violence, a regular feature of Kenyan national elections, recent history and ongoing levels of structural disadvantage meant that Kibera was again expected to be the focal point for heightened tensions, especially if Odinga lost in another tightly fought contest. In the event, the incumbent President Uhuru Kenyatta was declared to have won the August 2017 election. However, Odinga successfully challenged the decision based on electoral irregularities, and fresh elections were ordered for October. Arguing that systemic problems remained with electoral procedures, Odinga withdrew from the repeat election, which Kenyatta won. In January 2018, Odinga declared himself as People's President and, amid the fieldwork, was sworn in at an oppositional coalition ceremony. That a maelstrom of violence was anticipated is typical of wider portrayals beyond the settlement's boundaries and the tendency to focus on what is considered wrong in abundance and what could be helpful that is lacking. The spectrum of extremes neglects secure networks, community layers of identification, and innovative and resilient residents. By comparison, the middle of the spectrum helps understand how residents and organisations within Kibera were mainly able to control peace during periods of political turmoil and utilise senses of collective identification created within the demarcated space. Because young people are most likely to participate in political agitation with heightened vulnerability to fluctuating local economic conditions and opportunities (Golub and Hansen-Lewis 2012; Human Development Report 2012), the research participants were predominantly from this generation.

8.2 Methodology

Fieldwork design was based on qualitative methods such as photovoice, semi-structured interviews and focus groups. These methods were introduced to enable

participants to share insights into their experiences through photographs and words. The first method introduced was 'photovoice', which sought to overcome some fundamental problems within the empirical fieldwork, such as power differentials and the researcher's interpretative dominance (Wang et al. 1996; Wang 1999). These problems can be magnified when research is undertaken in the southern hemisphere by northern hemisphere academics. Western norms and values' imposition onto different complex social interactions and experiences have been prevalent within social science within these dynamics. A community-based participatory research technique (Minkler and Wallerstein 2011) enabled greater collaboration between researchers and participants. In the process, participants can be empowered to take control over parts of the project, directing insights to their selection of issues and experiences (Duffy 2011) or, as Harris (2017: 3) explained, 'using a wide-angled and open-ended approach to generate a participant-driven analysis of everyday life'.

In the 2017 phase of the research, following training in the operation and sensitivities of using camera phones to capture images, the participants were asked to highlight images that helped explain resilience in Kibera. Then, in the following workshops, they explained the significance of the photographs. Fieldwork into the election period undertaken in 2018 followed the same initial sequence of photography and then workshops. These sessions then analysed semi-structured interviews with initial participants and local young people. In total, 40 participants contributed to this second stage, which is the main focus.

8.3   Results

Thematic analysis of photographs, accompanying narratives, and more detailed interview discussions highlighted various essential factors that young people considered instrumental in peace maintenance. These issues ranged from sharing identifications within Kibera's barriers to processes designed to weaken localised barriers between opposing political and ethnic groups.

8.4   Place Attachment

Place attachment is an emotional bond to a particular geographic space Perkins et al. (2002) that was emphasised in the 2017 and 2018 fieldwork. Building upon emotional connections, some localities have a sense of unique living. For example, most Kenyans have a sense of attachment to place, even though this can often be up the country and some distance from where they mainly reside (Van Metre 2016). Despite these shared spatial forms of identification, it is important not to over-emphasise commonality because place attachments are fluid. Accompanying attachment to Kibera as a place are internal borders that coalesce around ethnicity, income and geographical demarcations into different villages, some of which are

'middle class' areas or the 'slum within the slum'. Identifications can be further spread through upcountry 'homeland' roots and ethnic connections. Such diversity can weaken local allegiances, and as Forrest and Kearns (2001) explain, place attachment can conflict with national purpose and cohesion. Within Kibera, loyalties to different political parties and villages within and regions beyond are interwoven with ethnicity that contributes, as Schuberth (2018) explains, to the community's fluid boundaries that are often overlapping and continuously changing. Hence, the unifying potential of collective identity within the settlement's boundaries can be undermined.

Against these alternative sources of difference and identification, research by Waters and Adger (2017) highlights how attachment to place can influence residents' adaptive capacity enhancing resilience and stability. Perkins et al. (2002: 41) expound how place attachment can '…lead us to stay and protect what we cherish most in our communities and to invest time, energy and money to improve that with which we are dissatisfied'; sentiments that the participants for the electoral period often expressed. Attachments to Kibera and surrounding issues of cohesion were to feature heavily in the fieldwork. Kibera was photographed from various angles highlighting challenges, specific locations and feelings of pride. The image below captured the sense of pride expressed and young people's identification with a place (Fig. 8.1).

Participants did not idealise a place, and a range of locational difficulties such as space, sanitation and facilities was raised. Nevertheless, powerful expressions were made about attachment to a place highlighted by this qualified observation 'In spite [of difficulties] we love the place where we come from'.

Kibera, rather than Nairobi, was the focal place for young people. In so doing, Gordon's (2016) finding from research into urban resilience in Managua, Nicaragua, has relevance, namely that residents tended to identify with neighbourhoods rather than the city. These comments reflect that many residents spend most of their time in Kibera with distinct everyday activities and patterns of behaviour, helping shape

Fig. 8.1 Sign welcoming to Kibera (author)

dispositions and placemaking. These processes often occur through social networks concentrated within Kibera's borders, which are discussed shortly. Moreover, the population's density and tight living arrangements result in intergenerational sharing of space and experiences. As a participant outlined,

> We have 16 villages in Kibera, and that bond is not just in those villages … in the 16 [13 is the more widely recognised number] villages, they have something in common. So, they have like a bond, so when I move to Gatwekera [a village in Kibera], I am still staying in Kibera surroundings so that bond is still there.

This quality of 'neighbouring' shapes how people cope with the neighbourhood (Forrest and Kearns 2001) and how the neighbourhood helps shape personal characteristics. As another participant stated, *'Don't judge my home …if I would not be born in a … rich home … I would not be so determined.'*

Within the first phase of the research, participants stressed close ties in terms of spatial proximity and interdependence for everyday life because '*we come together as in Kibera the houses are too small so you just have to talk to your neighbour. You see your neighbour's doings'.* Titeca and Vervisch (2008) and Zhang et al. (2017) have observed that such strong localised ties can restrict access to other networks and resources. In the process, more rigidly bound forms of social capital help shape trust levels and altruism within the relationships' boundaries. In contrast, low levels exist between less porous networks in interactions and business development. As Nguyen and Rieger (2016: 30) explain, the consequence of reduced wider opportunities is that forms of social capital help 'align individual actions with the community interest'. The following sections indicate an interweaving between place attachment and processes to protect community interests and change behaviour that threatens those attachments. Multiple groups, organisations and activities were instrumental in informing attitudes and behaviours.

8.5 Messages for Peace

Walking through Kibera, graffiti messages of peace are visible in many places, including road surfaces, buildings, gateways and hoardings (Figs. 8.2 and 8.3). Many participants referred to these messages, with one artist Solo7 prominent in the signs and the comments raised.

Alongside individual activities, there were a plethora of community-based events and meetings. For example, one community leader explained how, 'we talked, and we made and repeated and repeated, and we begged … we were trying to pull people together …we are telling these people to look to forget about those people [politicians] up there those people are rich … that person you are talking is sending to kill is not even living in Kibera …'.

The fora he was involved with was typical of numerous arranged initiatives held across Kibera. One young person explained that '*personally, I can say that the difference this time around [compared with 2008] is that there were many forums, there*

Fig. 8.2 Graffiti: a sign to show people they should have peace amongst themselves (author)

Fig. 8.3 Graffiti: a sign to show people they should have peace amongst themselves (author)

were people preaching about peace, so maybe you were being told, when that politician comes to you and tells you, don't run to go and fight your neighbour, don't run to the street'.

Accompanying fora and meetings were cultural and sporting events that promoted peace and/or intergroup interactions. Examples included: '*We do creative arts, and sports and dances use of talent to show peace-promoting.*' (Fig. 8.4); and 'to talk about unity, they were doing it as a drama' (Fig. 8.5).

Participants also highlighted the significance of music concerts, different sports events and a pageant that was '… looking for Mr and Mrs Peace Kibera'.

The multi-layered impact of family members was stressed. Parents had been encouraging their offspring to react peacefully to political events and, as outlined below, to learn from past experiences. There was also an awareness of the practicalities of becoming involved in the protest for the young people because '*they had families to feed, bills to pay, for real if you have many issues to deal with, you do not*

Fig. 8.4 Dance (author)

Fig. 8.5 Drama (author)

have time for fighting.' Moreover, '*Parents … thought about children's future and would see that if they could fight where will their children go … they had to remain calm so their lives would not be at risk*'.

Religious institutions played a prominent role throughout this tense period. However, unlike the preceding examples, there was disagreement about the nature of the clergy's role. Some young people considered 'Fathers, the pastors, evangelists, they were urging people to be one's brother's keeper'. Other participants took a different view, believing that 'Religious Preachers …say, "this is wrong. The police need to restrain" … other preachers would take sides'.

The role of social and mainstream media also aroused different impressions concerning the spread of messages. During the 2008 turmoil, recent technological advancements resulted in the widespread use of social media such as text messages, websites and blogs that were considered integral in the rapid spreading of rumours

that were often false or exaggerated (De Smedt 2009; Osborn 2008). These rumours contributed to rising levels of fear and insecurities that weakened restraints against the use of violence. For example, for some respondents in 2017, 'This time around the media was a lot [more] responsible of what they were reporting' and 'individuals took on it on social media to make sure they preach the message of peace …'. By comparison, other young people stated, 'There were very irresponsible social media', and mainstream coverage exaggerated incidents because 'They are saying Kibera is on fire, but that is not the case'.

8.6 Learning from the Past

With the threat of misleading, media and social media coverage continuing to influence how residents view outside reporting, the community-organised messages were interwoven with communal and personal experiences that contributed to the internalisation of self-control.

> The fear of death made them have self-control. Also, they didn't want to lose more … they didn't want to burn their houses, they didn't want their family to get hurt, they were afraid of being injured, GSU beats people … if they catch you they tear gas, they sometimes shoot so that fear of death made to have self-control.

Recognition of local interdependencies also contributed to stronger self-control and reflection, '*so this person is* likely *to take a machete and kill, is the person who can probably take me to the hospital when am sick so these small realities were coming to dawn on them*'.

Alongside the social controls within the community and family networks outlined above, there was also the physical presence of the police, especially in villages where support was high for Odinga. For some participants, 'There was tight security so that no one would dare'. Nevertheless, the police had some challenges that caused anxieties within local populations, as outlined below.

Experiences of previous election periods and subsequent consequences were also shown to inform processes of pacification, '*Because the result of violence is death, poverty, destruction of property. So I think they learnt a lot from that [2008 violence].' Another participant explained that there was greater awareness that 'if we kill each other … it will only destroy us and bring loss to us alone*'.

Previous costs inflicted included material factors that restricted mobility beyond Kibera and the availability of essential daily items. A residence describes the situation and its impact.

> There was a lot of death, destruction of property, anger you see, and businesses were put on hold. You find most people were suffering. Like for example me, even me I faced that because I could not even get some food'. Another participant explained that 'a lot of commodities especially basic commodities, the prices were skyrocketed [in 2007/2008 unrest], so … last year … they had families to feed, bills to pay … you do not have time for fighting, why should I fight … when my child is going hungry ….'

Other forms of social controls were introduced in broader engagement and commitments. For example, the knowledge that young people, predominantly males, had been instrumental in previous episodes of electoral violence and were the most likely to be so again in 2017 led to longer-term planned prevention by CBOs.

> So, the best thing was make them [youths] busy, organise seminars, organise workshops, get them into some activities which they can do just for them to pass their time and forget about destruction. Because you know the devil's mind is the devil's workshop and the other time [07/08] they were doing that because they were totally idle and they were being paid to harass people by the big politicians.

Throughout the election period, young people were paid by organisations to clear passageways, and rain and wastewater channels. However, rather than being attracted to potential disorder by financial incentives, 'institution[s] *ensures that the youths were engaged in productive activity, so they didn't have time to go and get involved in a war*'.

Further insights were also evident about flaws in democratic processes learnt through the long experience of post-election outcomes. Barriers between politicians and residents were emphasised on numerous occasions, '*The politicians will go and live in their rich suburbs and all that and we the poor people will remain together despite whatever tribe you come from … every other person in Kibera will be affected by the same issue also*'.

There was a greater sense that '*guys have learnt politicians are not to be trusted all over … politician is there for his own interest but not for the interest of the people*'.

The below photograph was taken from inside an umbrella, and the accompanying explanation captures the sentiments because '*This pole is the politician…used to separate us, but now Kibera has learnt about peace, we are held together with no matter what*'. (Fig. 8.6).

Fig. 8.6 Umbrella and accompanying explanation captures the sentiments

8.7 Peace in the Everyday

The tight proximity of residents living and often working within the boundaries of Kibera provided the base for acknowledging spatial commonalities. Everyday activities in shared space and amenities proved influential, 'because the thing is that we are going to shop at the same place, we are going to use one tap, we are using the same toilet, one bathroom, so just had no choice but to live in peace'.

Shared experiences and limited personal space carried significance.

> Here, in Kibera, what gives us strength is I live with you in the same…just different rooms, but you live alone, but we are living in the same structure … when you feel that we are at the same level as your neighbour or your friend … and you feel there is no need of doing anything to this person, this is like now my brother.

That residents recognised the importance of shared everyday activities reflects what has been learnt since 2008 and the effectiveness of spreading messages that emphasise commonality with no distinction. Nevertheless, it is important to stress that accompanying attempts to build intergroup connections were personal and familial tactics to avoid conflict that exemplified the insecurities people felt and the risks they encountered. These tactics included, *'People in Kibera travelled up country' and 'Forced…to remain indoors'*.

Such comments highlight that although violence was significantly less than in 2008, 2017 was not without attacks, and tensions were prevalent. The young people's perceptions of the insecurities were shaped by gender and location, the village's political associations and police presence level.

> In my area [one of the opposition strongholds], it was not that safe, the reason being those policemen were using excessive force'. For another female participant, 'I have children in the house, and with bullets outside, there is no transportation, and there is no shop that is open for you to buy food'. You are in the house with the kids; tear gas is being thrown in the house, and you cannot go out because you are scared of the bullets.

8.8 Breaking Down Barriers Within Kibera

Drawing upon the preceding sections, post-2008 experiences, peace programmes, and events have weakened barriers between groups. For example, some photographs showed young people, 'they are from different ethnic groups…they are still talking to each other, so it does not matter if a Kikuyu, Luhya, there is still that communication and relationship'.

The sense of interdependence was mentioned about friendship groups, the local economy where 'You will find a Kikuyu woman doing business, next to her a Luo woman…as they coexisted before', education and sport. Much of this emphasis was underpinned by the role of local people and organisations. Some participants acknowledged the impact of international NGOs, which tended to be related to the resources they provided. Building upon the preceding points, overall, there was a

broader sense that solutions could often be found within local knowledge and experience. As one participant explained, 'If you live in Kibera, you know the best place [to provide services and premises] and know security for locations…People from outside you see do not know this, so things are not in the right place or not what people want'.

Across the participants, the emphasis was placed upon how attachment to place, shared forms of identification, experiences from the past, and the sharing of messages through different processes had resulted in barriers between ethnic groups, if not broken down, then becoming more permeable. Nevertheless, alongside these developments, there are legitimate concerns about the sustainability of intergroup interactions and the robustness of the base for shared attachments that rely on peace processes.

8.9   Concluding Thoughts

There appears to be greater cohesion through tighter support networks, community engagement, shared values, and common attachment to Kibera at one level. Relational binds between groups were tighter and sufficiently embedded. When the political situation became tense, the extent of violent reactions and the targeting of previously vulnerable people was restricted by the greater sense of mutual identification. Participants reported lessons learnt from 2008 and the motivation to ensure that such atrocities were not repeated. Moreover, crucially, there needs to be an acknowledgement, that as De Smedt (2009) identified, within the 2008 bloodshed and looting, there were numerous examples where Luos protected fleeing Kikuyu neighbours, helping them to escape and safekeeping their property. Consequently, local attitudes and moral frameworks could be built upon and inform subsequent peace programmes.

In 2017, despite fewer examples of violence, insecurity and fear persisted alongside more general pacification. These differences can partly be attributed to the location where participants resided. Luos-dominated areas were subjected to heightened police pressure and tear-gassing, which fuelled anxieties. By comparison, members of other ethnic groups, who may have been possible targets for opposition attacks, found some reassurance in the policing presence. There is also a danger that the relative lack of oppositional violence hides the anger, resentment and greater marginalisation of Luos living in Kibera. This study indicated that politicians and their manifestos lack trust alongside oppositional supporters' lack of confidence in the national electoral process.

Consequently, such optimism stemming from participants' emphasis on the effectiveness of peace programmes and activities needs to be tempered. Indeed, multiple organisations and socialising agents were instrumental in shaping attitudes and sufficiently robust behaviours to withstand the pressures at the height of the political uncertainties. However, there is a limit to how deep these constraints can be internalised in areas where people face more significant difficulties in daily life than

neighbouring villages and have limited interaction. Without addressing the structural difficulties facing Kibera residents, deep-rooted inequalities within the settlement peace during subsequent election periods will continue to rely upon widespread, multi-agency programmes and community engagement. The effectiveness of these programmes will be more straightforward when memories of 2008 remain fresh. However, with a disproportionately young population, the past's hold on forthcoming youths will be less tight.

References

Chege PW, Mwisukha A (2013) Benefits of slum tourism in Kibera slum in Nairobi, Kenya. Int J Arts and Commerce 2(4):94–102

De Smedt J (2009) No Raila, No Peace! Big Man Politics and Election Violence at the Kibera Grassroots', African Affairs 108(433):581–598

Duffy L (2011) 'Step-by-step we are stronger': women's empowerment through photovoice. J Commun Health Nurs 28(2):105–116

Elfversson E, Hogland K (2017) Home of last resort: Urban land conflict and the Nubians in Kibera Kenya. Urban Studies 53(1):1–16

Forrest R, Kearns A (2001) Social cohesion, social capital and the neighbourhood. Urban Stud 38(12):2125–2143

Golub S, Hansen-Lewis J (2012) Informal trading networks in West Africa: the mourides of Senegal/the Gambia and the Yoruba of Benin/Nigeria. World Bank The Informal Sector In Francophone Africa: Firm Size, Productivity, And Institutions. pp 173–193. Available at: https://openknowledge.worldbank.org/handle/10986/9364

Harris J (2017) Vulnerable youth's perspectives and priorities for informal settlements: photovoice evidence from Lusaka, Zambia. J Plan Educ Res 37(1):1–15

Human Development Report (2012) Sustaining human progress: reducing vulnerabilities and building resilience. United Nations Development Programme, New York

Lombard M (2014) Constructing ordinary places: place-making in urban informal settlements in Mexico. Prog Plan 94:1–53

Minkler M, Wallerstein N (2011) Community based participatory research for health: From process to outcome. John Wiley & Sons, NJ

Mitchell C et al. (2006) "Why we don't go to school on Fridays": on youth participation through photovoice in Rural KwaZulu-Natal. McGill J Educ 41(3):267–282

Mitya et al. (2017) Developing risk or resilience? effects of slum upgrading on the social contract and social cohesion in Kibera, Nairobi. Environment and Urbanization 29(1):103–122

Mutisyau E, Yarime M (2011) Understanding the grassroots dynamics of slums in Nairobi: the dilemma of Kibera informal settlements. Int Trans J Eng Manage Appl Technol 2(2):197–213

Nguyen T, Rieger M (2016) Community driven development and social capital: evidence from Morocco, 91:28–52

Osborn M (2008) Fuelling the flames: rumour and politics in Kibera. J East African Stud 2(2):315–327

Parsons T (1997) Kibra is our blood: the Sudanese military legacy in Nairobi's Kibera location, 1902–1968. Int J African Histor Stud 30(1):87–122

Perkins D, Hughey J, Speer P (2002) Community psychology perspectives on social capital theory and community development practice. J Commun Dev Soc 33(1):33–52

Praszkier R, Nowak A, Coleman P (2010) Social entrepreneurs and constructive change: the wisdom of circumventing conflict. J Peace Psychol 16(2):153–174

Roy A (2011) Slumdog cities: rethinking subaltern urbanism. Int J Urban Reg Res 35(2):223–238

Schuberth M (2018) Hybrid security governance, post election violence and the legitimacy of community-based armed groups in Urban Kenya. J Eastern African Stud 12(2):386–404

Titeca K, Vervisch T (2008) The dynamics of social capital and community associations in Uganda: linking capital and its consequences. World Dev 36(11):2205–2222

Van Metre L (2016) Community resilience to violent extremism in Kenya. Peaceworks, United States Institute of Peace, Washington

Wang CC (1999) Photovoice: a participatory action research strategy applied to women's health. J Womens Health 8(2):185–192

Wang C, Yuan Y, Feng M (1996) Photovoice as a tool for participatory evaluation: the community's view of process and impact. J Contemporary Health 4(1):47–49

Waters J, Adger WN (2017) Spatial, network and temporal dimensions of the determinants of adaptive capacity in poor urban areas. Glob Environ Chang 46:42–49

Zhang Y, Zhou X, Lei W (2017) Social capital and its contingent value in poverty reduction: evidence from western China. World Dev 93:350–361

Chapter 9
Malaysia-Singapore Geopolitics Spatialised: The Causeway as a Palimpsest

Chiew Hui Tan and Simone Chung

Abstract While scholars in the region have extensively mapped research on Malaysia–Singapore relations, little has been stated about the participation of physical border landscapes in such geopolitics. The Causeway, a historic road and rail linkage between Singapore and Johor and the southernmost state in Peninsular Malaysia, serves as a case study to analyse the geopolitical landscape. The study elucidates research interests in governments' relations and their impacts on everyday people's bordering process. The spatial transformations of the Causeway have been discussed in three phases, (i) namely the instigation of its checkpoints in 1967, (ii) its expansion in 1976–1989, and (iii) its partial transformation into a halved bridge in 2003. Until today, the Causeway's significance for people in Johor and Singapore remains, as evidenced by the massive volume of people and goods that traverse between the state capital and city-state daily. Moreover, economic and political developments are tangibly acted out in this border space and will continue to do so in years to come.

Keywords Border · Infrastructure · Borderland population · Commuters · Causeway · Transborder link · Geopolitics · Bilateral relations · Border cities · Singapore · Malaysia · Johor

9.1 Introduction: The Causeway as a Palimpsest

The Causeway between Singapore and Malaysia is a confluence of road and rail linkage bisected by the international boundary line dividing Singapore and Malaysia (Fig. 9.1). It is the first of the two land infrastructures connecting Singapore and Johor

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Fig. 9.1 Aerial view of the Johor–Singapore Causeway. Image from GoogleMaps, 24 June 2018

Bahru, the border city within the state of Johor.[1] It holds historical and economic significance, facilitating the flow of goods and people between Singapore and Johor and other parts of Malaysia since 1924.

The existing Causeway comprises a water conduit,[2] a rail track, six vehicular lanes for buses, cars, motorcycles, heavy-duty vehicles, and a one-metre wide pedestrian walkway. Two border clearance checkpoints belonging to Malaysia and Singapore stand at opposite ends of the Causeway. The Woodlands Checkpoint, Immigrations and Quarantine (CIQ) Complex belongs to Singapore, while Malaysia's Sultan Iskandar CIQ is. A significant feature of the Causeway is a triangular-shaped extension abutting its middle, which only came into existence in 2003 (Fig. 9.2). By contrast, the Causeway, in its original form in 1924, was narrower and more straightforward, with two vehicular lanes and half its current width. It has undergone extensive physical transformations in the past nine decades.

The Causeway is a unique case as it only became a border separator more than four decades after its conception. It was commissioned by the Federated Malay States in 1924 when both Singapore and Malaya were still under British rule as colonial territories (Yap 2001). In 1963, Malaya and Singapore became one sovereign entity with Sabah and Sarawak, forming Malaysia. However, the merger ended in 1965 as political hostility between the People's Action Party (PAP) and United Malays National Organisation (UMNO) culminated in Singapore's expulsion from Malaysia.

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[1] The Tuas Link, completed in 1998, is the second land infrastructure that bridges industrial areas of Singapore and Johor.

[2] The state of Johor, on behalf of Malaysia, is obligated to supply Singapore with water for 3 cents per 1000 gallons until 2061 under the 1960 and 1961 Water Agreements.

Fig. 9.2 (Left) Abutment may be observed on the left side of the Causeway as viewed from Singapore. Photo by the author (2018). (Right) View of the Causeway without the abutment in 2002. Photo from Comaroff (2014), http://www.harvarddesignmagazine.org/issues/39/built-on-sand-singapore-and-the-new-state-of-risk

Soon after their separation, passport checks were officiated with immigration controls at both ends of the Causeway in 1967 (Alphonso and Lau 2011). Consequently, the Causeway became a transborder infrastructure co-owned and co-managed by two sovereign nations.[3]

The capricious geopolitical climate between Malaysia and Singapore has shaped the Causeway. Several contentious events, political grievances, and disputes marked bilateral relations in the twentieth century. Distrusts and resentments between Malaysian and Singaporean leaders had their roots in ethnic politics, a critical factor that instigated their separation in 1965 (Thayer 2008).[4] As a constituent of Malaysia, Johor and the immediate neighbour of Singapore are often affected by their political rifts.

Politically and socially charged, the Causeway is a contentious shared border infrastructure. The Causeway may be likened to a palimpsest, a material landscape where intangible border processes and geopolitical relations are inscribed and materialised spatially with time. It exemplifies complex border processes occurring between Johor, Malaysia, and Singapore. Thus, the Causeway is taken as the point of reference to elucidate MalaysiaSingapore–Johor relationships over the years, frame the interests of authority-yielding stakeholders, and examine their impacts on populations reliant on these border dynamics. On the one hand, discussions on the Causeway

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[3] Before their separation, the Causeway was managed and maintained by the Johor Causeway Control Committee under a railway operator in British Malaya (Alphonso and Lau 2011).

[4] While Malaysia's UMNO favours prioritising Malay rights in its communal polity, Singapore's PAP practises multiracial and meritocratic principles.

development over the past decades is expected to reveal the governmental level's economic motivations and political tensions.

On the other hand, experiences of everyday users and commercial exchanges illustrate how geopolitics inflicts shared border landscapes in reality. Thus, the Causeway serves as a lens to scrutinise stakeholders' interests across scales and borders. The discussion is supported by relevant literature, media coverage of related events, and fieldwork.

The main discussion centres on three specific major events, phasing the transformation of the Causeway. Firstly, the Causeway border checkpoints in 1967 are discussed concerning Singapore and Malaysia's political feuds. Secondly, the Causeway expansion project is overlaid with economic integration efforts between Singapore and Johor from the 1970s to the 1980s. Thirdly, the particular configurations of the existing Causeway reveal the complications in the Johor–Singapore–Malaysia relations echoed by the "Crooked Bridge" dispute in 2003. Finally, the conclusion sheds light on emerging trajectories based on recent economic and political developments, specifically Iskandar Malaysia[5] and the Pakatan Harapan coalition's watershed victory in the recent 14th Malaysian General Elections.[6]

9.2   Contextualising the Johor–Singapore Relationship Through the Causeway

Understanding how identity, territory, and the state are interrelated requires understanding the political economies of geopolitical entities defined by geophysical borders (Wilson and Donnan 2012). While there is often an implicit understanding that border cities near distinctive politics and possess significant sociocultural autonomy from the rest of the country (Wilson and Donnan 2012), contextualising the Johor–Singapore relationships would be vital in examining the geopolitics of the Causeway.

Johor and Singapore Islands historically shared the same cultural identity under the Johor-Riau-Lingga kingdom until the seventeenth century (Abdullah 2008). Under British rule, the two territories were part of the same colonial entity until 1946 (Andaya and Andaya 1982). Moreover, it was common for people from Johor Bahru to have families, relatives, and friends in Singapore and vice versa (Abdullah 2008; Alphonso and Lau 2011). Even after Singapore separated from Malaysia in 1965, human relations remained strong between Johoreans and Singaporeans (Abdullah 2008; Mohamad 2015).

Politically, the state government of Johor has been represented in bilateral discussions between the two countries. However, its direct negotiation power is limited.

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[5] Iskandar Malaysia is an economic development project in Johor's curtilage that saw substantial foreign direct investments into the state.

[6] The ruling Barisan Nasional coalition, which had been governing Malaysia for 60 years since its independence in 1957, was defeated in the 2018 elections.

Under the Federal Constitution, the state of Johor has the right to protect its natural resources, land, customs, and religious affairs. Furthermore, federal laws take precedence should there be a conflict between state and federation interests. Therefore, while the Johor government has been highly influential in instigating bilateral cooperation, its role in mediating federal-level disputes remains limited. The Sultan of Johor's state monarch has also advocated for the state government to play a larger role in Singapore–Malaysian relations despite its limited prerogatives (Hutchinson and Nair 2016). He has also been voicing out on matters concerning Johor and Singapore, such as the replacement of the Causeway (The Star Online 2016) and the design of the Johor–Singapore Rapid Transit System (RTS) (Hammim 2017).[7] The Causeway's construction was also predominantly funded by the grandfather of the current Sultan (Alphonso and Lau 2011).

Economically, Johor and Singapore have been interdependent on trade and development since the late nineteenth century. Under the colonial administration, Johor exported its products to the world through Singapore's shipping port, while international businesses' capital in Singapore boosted Johor's local economy (Alphonso and Lau 2011; King 1965b). These transactions were so significant that they motivated Causeway's decision in the early 1900s. Since then, much of the trade exchanges between Malaysia and Singapore have been made through Johor via the Causeway (*News* Nation 1972; Rizzo and Glasson 2011; Rizzo and Khan 2013).[8] Since 1968, Johor has been Singapore's primary source of labour. Relaxation of tight Singaporean immigration policies following its high export growth encouraged many Johoreans to commute to Singapore to work in the 1960s (Hui 1997). Singapore's daily work permit system enacted in 1978 increased labour flow from Johor to Singapore (ibid.).

In the 1980s, when Singapore was restructuring its domestic economy, Johor's workforce was crucial in easing the semi-skilled and skilled labour shortages faced by the republic (Ye 2016). Simultaneously, Johor aided Singapore's globalising economy by supplementing land resources, evidenced by the accelerated relocation of Singaporean-based manufacturing businesses to Johor Bahru (Barter 2006). Moreover, their economic integration was cemented by the SIJORI[9] Growth Triangle in 1989, which underpins a strategic regional agreement that combines Singapore's capital and technological expertise with the land and labour resources in Johor and Riau.

The strategic economic role of Johor was also recognised by the federal government in Malaysia when it was gazetted as the country's leading development corridor in 2006 (Rizzo and Glasson 2012). Iskandar Malaysia (Fig. 9.3) is an ongoing visionary project that aspires to transform Johor Bahru physically and economically while capitalising on its proximity to Singapore. From 2014 to 2016, Singapore was

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[7] The RTS, a metro system to link Singapore and Johor Bahru, is projected to be completed in 2024.

[8] In the 1970s, Malaysia was the leading exporter of raw materials, equipment, and machinery to Singapore (Abidin 2008). In 2016, Singapore was Malaysia's top trading partner, while the latter was the former's third largest (World Bank 2018a, b).

[9] A short form for Singapore-Johor-Riau Islands began in 1989 as a complementary triadic agreement to make the sub-region more attractive for investors.

Fig. 9.3 Iskandar Malaysia development region in Johor Bahru highlighted in orange, shows its proximity to Singapore. Graphics by IRDA (2015), http://iskandarmalaysia.com.my/downloads/IRDA%20ENG%202015.pdf

the top investor for Iskandar Malaysia, having committed a total amount of S$1.6 billion (TODAYonline 2017, 2018).

Many people from Singapore and Johor depend on the border relations manifested in the socio-economic mobilities to sustain their livelihoods. These are reflected in the massive volume of human and vehicular traffic at the Causeway each day. As one of the busiest borders globally, statistics from 2014 revealed that an estimated 400,000 pedestrians and 126,000 vehicles cross the land checkpoints daily.[10] The majority of these travellers are transborder workers who commute to Singapore and return to their homes in Johor Bahru on the same day.[11] In addition, many Johoreans commute daily to take advantage of the lower living costs in Johor Bahru and higher wages in Singapore (TODAYonline 2016).

More than 5000 Singaporean families have relocated to Johor Bahru's new Iskandar Malaysia township in recent years. While retaining their citizenship, they return daily to the city-state for work and school (Tan 2016). They are drawn to the luxurious lifestyles promised by Iskandar Malaysia's settlements and/or relocate to escape the high cost of living in Singapore (Lim 2015; Tan 2016). Johor Bahru also serves as a recreational and retail destination for Singaporeans. In 2013, up to 60,000 tourists travelled through the Johor land checkpoints per day (Barter 2006), with an estimated 17 million trips made by Singaporeans into Johor (Oh and Jagtiani 2016).

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[10] In comparison, 25,000 people and 50,000 vehicles enter the USA from Mexico through the border between San Diego and Tijuana (Khor 2017).

[11] According to 2015 statistics from the Human Resource of Malaysia, approximately 350,000 non-permanent Malaysian residents work in Singapore (*Malaysian* Digest 2015).

The Causeway has been key to fostering positive relationships between Johor and Singapore. Their geographical proximity shared histories, and cultural similarities are further leveraged by border populations to enhance their livelihoods and to achieve personal aspirations through the frequency of transborder mobility. However, as much as Singapore's importance to Johor's economy is unquestionable, it is highly susceptible to volatile Singapore–Malaysia political relationship played out on the Causeway.

9.3 Geopolitical Events and the Transformation of the Causeway: The Becoming of Border Checkpoints

The absence of border controls at the Causeway meant that goods and people traffic between Johor and Singapore moved freely between 1924 and 1967. While essential customs checkpoints regulated goods and exports (The Straits Times 1967a), checks on people were activated only during turmoil[12] to impede combatants and weaponry movement (Alphonso and Lau 2011). The becoming of the border checkpoints in 1967 marked a change in political situations followed by mindful decisions.

In 1963, independence from British colonial rule was conditional on Singapore merging with the Federation of Malaya, Sabah, and Sarawak to form Malaysia. The union allayed fears amongst Singapore's People's Action Party (PAP) and Malaya's United Malay National Organisation (UMNO) that the Chinese Communists would control Singapore and become a regional security threat.[13] However, the merger between the Chinese-dominated Singapore and Malay-dominated Malaya was short-lived despite their shared motivations.[14] Divided by racial politics, disagreements between Singapore's PAP and Malaya's UMNO leaders escalated into hostile competitions for control and power (Mohamad 2015). While the PAP leaders advocated for equal participation of all ethnicities in Malaysian politics, UMNO believed that the Malays, "the sons of the soil", should be privileged (Thayer 2008). After several heated confrontations, Singapore was expelled from Malaya on 9 August 1965. Ethnic politics resulting in the separation would set a precedent for subsequent political frictions.

After Singapore became a republic, uncertainties arose amongst the masses about the fate of the Causeway (The Straits Times 1965c). Initially, the Johor state government reassured that movements between Singapore and Johor would be unaffected (The Straits Times 1965b). Singaporean Deputy Prime Minister Dr Toh Chin Chye had a similar stand, announcing that Singapore would not implement border controls

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[12] These included the Communist Insurgency (1946–1960) and the Indonesian Landing (1964).

[13] Then Prime Minister of Malaya, Tunku Abdul Rahman, likened the communist threat to "having a second Cuba in the region of Asia" (Mohamad 2015; King 1965b).

[14] Of Malaya's 6.2 million population, 49.8% were Malays, 37.1% Chinese, and 11.1% Indians (Federation of Malaya 1961). Singapore's 1.4 million population was 13.6% Malays, 75.1% Chinese, and 8.6% Indians (Colony of Singapore 1959).

unless Malaysia instigated them (The Straits Times 1965a). However, during the post-separation period, several interviews made by the media[15] also demonstrated that the Johor and Singapore populace preferred to maintain the borderless status quo (The Straits Times 1966d, e). It is estimated that 30,000 people moved between Johor and Singapore daily for social visits, education, work, and leisure[16] in that year (The Straits Times 1965c, e,).

However, hatred on the federal level overshadowed state-level neighbourliness as leaders disparaged each other. Distrust and resentment between Singapore and Malaysia's leaders were carried forward, and such political enmity became intertwined with sovereignty and security concerns. These would be felt by local people and business people who traversed and depended on the Causeway. Singaporean regulations such as quotas and tariffs were removed earlier after the 1963 merger was reintroduced (King 1965a), while work permits were required for Johoreans employed in Singapore (The Straits Times 1965e). This resulted in a temporary mobility impasse[17] faced by people with relations and commercial interests in both countries (The Straits Times 1965d).

The Causeway situation was made worse when Singapore sought to reaffirm its sovereignty and advanced diplomatic relations with Indonesia, with whom Malaysia was waging an informal war.[18] Tun Abdul Razak, the Deputy Prime Minister of Malaysia, was aggravated that Singapore did not consult Malaysia with its diplomatic decisions (The Straits Times 1966f). Citing national security as a concern, Malaysia carried out thorough checks at the customs on Singaporeans entering Johor (New York Times 1966; The Straits Times 1966a). The unprecedented move shocked many travellers who experienced a free flow of movement (The Straits Time 1966c).

As a direct response to Singaporean Prime Minister Lee Kuan Yew's statement, which welcomed Jakarta's recognition, Malaysia eventually announced the permanent installation of border controls at Johor's end of the Causeway in June 1966 (The Straits Times 1966f). The Malaysian government declared that inherent differences in trade and foreign policies required sovereign safeguards (The Straits Times 1966f). The proposal was not rescinded even though people in Johor and Singapore viewed the move as unnecessary and divisive (The Straits Times 1966d, e). The Malaysian government eased their concerns by downplaying the inconveniences of immigration controls. The Secretary of Home Affairs emphasised that visitors had to flash their Singaporean identity cards (The Straits Times 1966i). At the same time, Prime Minister Tengku Abdul Rahman welcomed Singapore to do the same (The Straits Times 1966j). Singapore agreed to reciprocate the checks, meaning Malaysian

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[15] The period between August 1965 and June 1966 before Malaysia officially implemented immigration controls.

[16] In the 1960s, people moved casually between Johor and Singapore for everyday activities, such as purchasing lottery tickets or having a quick meal.

[17] In some cases, traders were unable to export goods to Singapore, even after paying tariffs (King 1965a).

[18] *Konfrontasi*, marked by bombings and acts of subversions between Indonesia and Malaysia, was ignited by Indonesia's protest against the formation of the Federation of Malaysia.

nationals had to produce their identity cards to enter Singapore (Chandran 1966).[19] Although border security checks were still rudimentary. This episode marked the beginning of the bordering process. It sets the grounds and rationale for intensifying border controls in subsequent decades.

The following months witnessed more restrictions and laws requiring Malaysians and Singaporeans to legitimise their entrance into each other's country. Singaporean motorists entering Johor had to apply for international circulation permits under new Malaysian legislation (The Straits Times 1966k). Instead of identity cards, citizens from both sides must show special passports, re-entry permits, and work passes to travel between Malaysia and Singapore (The Straits Times 1967a, b, c, d, e). As checkpoints were being constructed, Singaporeans and Johoreans who commuted between Johor Bahru and Singapore were the most affected (The Straits Times 1967b). Confusion ensued as many Singaporeans were rejected entry for holding invalid documents. Malaysians also found themselves stranded in Singapore as their temporary re-entry permits were only valid for two weeks, after which they were barred from entering Singapore (Sam 1967).

The border checkpoints in Singapore and Malaysia went into the whole operation in June and September 1967 (Alphonso and Lau 2011). Today's checkpoints are their successors, albeit with increasingly advanced border technologies and more prominent in scale. The immigration controls marked the transformation of the Causeway from a territorial connection to a border separator. Importantly, they were the manifestations of conscious political decisions to differentiate and divide. The conflicting needs to preserve sovereignty and integrate mutual benefits would continuously shape the border dynamics between Singapore, Malaysia, and Johor.

9.4   Expansions and Progressions

The Causeway was widened thrice to cope with the increasing traffic flow and goods from Johor to Singapore.[20] The most significant expansion project happened in 1976 when the Causeway's width almost tripled from 30 to 83 feet. In 1989, Malaysia and Singapore replaced their checkpoints with elaborate immigration complexes. These massive transformations may be superimposed by the extensive economic integration between Singapore and Malaysia through Johor in the 1970s and 1980s.

In 1972, the Malaysian government initiated a study to widen the Causeway (*New* Nation 1972). The Malaysian and Singapore governments swiftly gathered to crystallise the same year's plans (The Straits Times 1972c).[21] The two governments demonstrated their commitment by setting aside S$16 million and S$18.5 million

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[19] Of 13,910 Malaysians crossing the Causeway daily in 1965, 10,300 were Johoreans (The Straits Times 1967e).

[20] It was expanded in 1964, 1976, and 1989 to 1991 (Alphonso and Lau 2011).

[21] This came several months after the Johor Chamber of Commerce, trade associations, and customs department proposed to enlarge or build a new Causeway (The Straits Times 1972a).
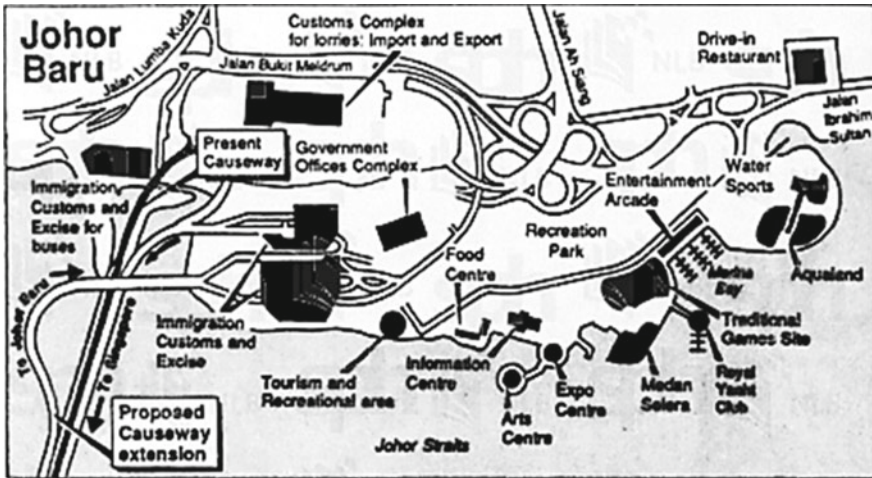
Fig. 9.4 Proposal for the new Malaysian immigration complex came together with reclaim land proposals for tourist activities. Image from *The Straits Time* (1988), http://eresources.nlb.gov.sg/newspapers/Digitised/Article/straitstimes19880820-1.2.20

for the expansion project on their side of the Causeway, instigated by rising traffic volume (The Straits Times 1972b). It is of little surprise that this initiative coincided with when both countries' economies proliferated and were interdependent. In the 1970s, Malaysia capitalised on Singapore's logistical trade and port services for its exports. Simultaneously, the latter benefitted from the former's land and labour for its textile and wood-based industries (Abidin 2008). The industrialisation phase of Malaysia's economy also relied heavily on direct foreign investments from Singapore (Khor 2016). The economic twinning boosted goods and people's movements across the Causeway. Consequently, the expansion project of 1976 allowed the Causeway's capacity to be doubled[22] with new immigration complexes constructed (New Nation 1974).

In August 1988, Deputy Prime Minister of Malaysia Ghafar Baba approved a major Causeway development project proposed by Johor's Chief Minister Muhyiddin Mohamed Yassin. It would cost RM300 (S$230) million, widen the Causeway, build a new immigration complex, and include a tourist zone adjacent to the checkpoint (Fig. 9.4). In the same year, Singapore planned a S$10 million upgrade of its immigration infrastructure in the interim of a much bigger immigration facility (Alphonso and Lau 2011). Subsequently, in 1989, the SIJORI Growth Triangle's collaborative agreement was first mooted by the Deputy Prime Minister of Singapore, Goh Chok Tong. This proposal was received favourably by the Johor state government and the Malaysian government (Khor 2016). In addition, optimism for integration efforts was evident when both governments agreed to build a second transport link costing S$1.5 billion after the Chief Minister of Johor proposed the concept to the federal

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[22] The number of vehicular lanes on the Causeway increased from three to six.

government. Local business people, everyday workers, and tourists in Johor and Singapore welcomed these plans to increase transborder exchanges. In 1988 alone, 70% of tourists and business people in Malaysia arrived through the Causeway from Singapore, and 64.5% of applications to invest in Johor hailed from Singaporean business people.

The economic partnership between Singapore and Malaysia was crucial between 1970 and 1990, synchronous to the Causeway's physical expansions. While Malaysia expanded its domestic market to the global arena through Singapore, the island republic depended on Malaysia's land and labour resources in Johor to ensure the success of its economic restructuring. Those disputes did not impede cooperation despite sporadic bilateral tensions and were often negotiated or put on hold. Some lengthy overdue disputes were even resolved. For instance, both countries agreed to demarcate their territory based on the Thalweg principle, and Malaysia withdrew its military forces from Singapore in 1981 (Thayer 2008). In addition, Barter (2006) reasoned that the new establishment of the Association of Southeast Asians (ASEAN) in light of Cold War threats helped improve bilateral relations. Nonetheless, both governments saw immediate benefits that would propel their economies further and were willing to set aside enmities, albeit temporarily.[23] The role played by Johor was especially significant: Other than being the main contributor of land and labour resources in Malaysia-Singapore exchanges, Johor's persistence in instigating bilateral initiatives was paramount to the erosion of federal–federal political barriers.

9.5   The Halved "Crooked Bridge"

From 1996 to 2003, bilateral and economic relations were particularly tense. Hostile political relationships between Malaysia's Prime Minister Mahathir Mohamed and Singapore's Senior Minister Lee Kuan Yew resurfaced ideological differences from the 1965 separation, causing unhappiness among Malaysia's Malays and UMNO leaders.[24] At the same time, new disputes emerged before outstanding bilateral issues from the past decade were resolved, further worsening political relations (Ooi 2008).[25] The economic partnership that had motivated bilateral cooperation in the 1980s also deteriorated; instead, an apparent economic rivalry began, with Malaysia implementing policies to compete with Singapore (Khor 2016). In an upfront attempt to challenge Singapore and be more self-sufficient, Malaysia started to develop its own logistical and international trading infrastructure in Johor, such as the Tanjung

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[23] Between 1981 and 1991, Malaysia enjoyed a substantial increase in foreign investment of around US$1 billion per annum through Johor, much of which hailed from Singapore (Bhaskaran 2016).

[24] In 1996 and 1998, Lee Kuan Yew criticised Malaysia's affirmative action, remarking that it privileged Malays (Ooi 2008).

[25] These include disputes over Singapore land occupied by the Malaysian Railway (KTM), the sovereignty of Pedra Branca, revised prices on water sales to Singapore, and the Singapore air force access to Johor airspace.

Fig. 9.5 Proposed design of the "Crooked Bridge" as viewed from Johor Bahru. Image from The Straits Times (2015). https://www.straitstimes.com/asia/se-asia/najib-mahathir-on-crooked-bridge-what-is-the-issue-about

Pelepas port and Senai International Airport (Abidin 2008; Barter 2006). Economic relationships were further strained when Singapore refused to discharge the retirement savings held by Malaysian workers in Singapore (Malaysia had intended to channel those monies to augment its foreign reserves during the Asian Financial Crisis).

Under this political and economic backdrop, Mahathir asserted the replacement of the Causeway with a bridge in 2000 (Fig. 9.5). The primary objective was to allow ships to pass through the Straits of Johor, a move that would presumably benefit the Johor port of Tanjung Pelepas (Barter 2006). However, the proposal also lacked evidence to improve traffic and capacity. Seeing no pragmatic urgency to replace the Causeway, Singapore expressed reluctance to the costly demolition (Mohamad 2015; Barter 2006). Instead, it acquiesced to a full-bridge proposal if the project was deferred to 2007, and other unrelated bilateral issues were negotiated as a package (Mohamad 2015). Mahathir did not agree to the new terms and proceeded unilaterally with the project. He intended for the Malaysian portion of the Causeway to be converted into a "Crooked Bridge", curved to create the height allowance needed for ships to pass beneath while meeting Singapore's half of the Causeway. Construction of the new Sultan Iskandar CIQ commenced immediately. The elevated site of the new immigration complex was chosen to align with the landing point of the "Crooked Bridge". The scheme also made provisions for partial and complete demolition of the Causeway (ibid.).

The project was shelved when Mahathir retired as Prime Minister and Abdullah Badawi, his successor, suspended the works in secrecy (Mohamad 2015). As a result, flyovers and roads meant to connect to the "Crooked Bridge" had to be re-routed. New contracts were issued to reconstruct linkages from the new Sultan Iskandar CIQ

to the existing Causeway. Finally, however, a full-bridge proposal was discussed with Singapore as a sovereignty-related issue (Barter 2006). In exchange for a full bridge, the Malaysian government agreed to lift the ban on selling sand to Singapore and permitted Singapore's military to use Johor's airspace (Mohamad 2015). Surprisingly, the Johor government was neither consulted beforehand nor involved in the discussion (Abdullah 2008).

Consequently, public outcry from Johoreans followed. As a result, the bridge proposal was permanently called off in 2008 by the Malaysian government (Mohamad 2015; Barter 2006). However, preliminary works for the "Crooked Bridge" rock base support are still visible today and form a visual reminder (Fig. 9.6).

Under the guise of border-related friction, the "Crooked Bridge" saga illustrates the capacity of physical border landscapes to become political tools beyond utility. Mahathir's initiative to replace the Causeway was explicitly motivated by national economic agendas—redirecting maritime traffic to the Tanjung Pelepas port would raise the port's regional competitiveness (Jaipragas 2018). The malleable design of the bridge—from a full, straight bridge to a half, crooked bridge—meant its resultant form mattered little so long as maritime traffic along the Straits of Johor was unimpeded. The same was evident in Singapore's negotiation strategy to use the proposal as a bargaining chip for unrelated issues. Singapore's willingness to demolish the Causeway was contingent on the supply of sand for its reclamation projects to expand its scarce land resources. Simultaneously, the authorised use of Johor's airspace would enlarge its military training ground. Both deals would safeguard the island state against broader scarcity and security threats. There were no guarantees that the bridge proposal would enhance transboundary movements had it been realised.

Nonetheless, Johoreans and Singaporeans dependent on the Causeway daily had every reason to be concerned. Though they were not affected by the project's termination, it rhetorically exposed their vulnerability as border populations caught up in international crossfires. Even though they are crucial to enabling Johor–Singapore

Fig. 9.6 Remnants of the rock filling remain at the Causeway. Photo by the author (2017)

economic interdependencies as labour, talent, tourists, and investors, their interests and welfare were inevitably sidelined over critical national issues. The situation is further worsened by the limited decision-making power the Johor state government yields, attributable to prevailing multi-layered diplomacy between border states and federations (Hocking 1993).

9.6 Conclusion

Since its inception, transformations of the Johor–Singapore Causeway have materially evidenced decades-long MalaysiaSingapore geopolitical developments that carry regional repercussions, simultaneously underscoring the inextricable socio-economic dependencies between the Malaysian state of Johor and the Republic of Singapore. Moreover, as a physical infrastructure linking the city-state of Singapore with Johor Bahru, Johor's state capital, the bridge remains the lifeline of many transborder commuters who reside and work in these cities even before present-day international boundaries were instated. Thus, for the most part, modifications to the Causeway have been a win–win situation when stakeholders cooperate across scales and borders. However, the "Crooked Bridge" saga also revealed how this ill-conceived scheme was promptly (mis)appropriated to broker terms to further national agendas instead of the local population's well-being.

The Causeway is unique because it straddles two countries that, in addition to their shared colonial history, were for a brief two-year independent federation. Moreover, unlike many border cities, Johor's state monarch has historically initiated discussions on many improvement initiatives along the border. It actively promotes joint ventures enabled by Malaysian federal support and Singapore investment. Despite Johor's role in the tripartite management of the Malaysia-Singapore border, the hierarchy of federal-state relations tends to downplay state government contribution in the discourse and marginalise Johoreans' welfare over the long term. A critical economic corridor launched in 2006, Iskandar Malaysia, marks a turning point as an exemplary MalaysiaSingapore–Johor collaboration.

When the corridor was instigated by then Malaysian Prime Minister Abdullah Badawi's administration, Iskandar Malaysia was explicitly marketed for its proximity to Singapore. More importantly, the project not only grants Johor a substantial economic foothold but also re-establishes the state's significance to the nation's economy following the Johor government's concomitant role in overseeing the Malaysia–Singapore joint ventures in this gazetted area.[26] However, the fate of Iskandar Malaysia and future border developments have become tenuous again following the watershed victory of the Pakatan Harapan coalition in the General Elections in May 2018, which unseated six decades of unbroken rule by the Barisan

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[26] Via the Malaysia-Singapore Joint Ministerial Committee for Iskandar Malaysia (JMCIM) and the Iskandar Regional Development Authority (IRDA), which administers state and private investments from Singapore.

National Alliance.[27] Although the concurrent victory of Pakatan Harapan in wresting the majority of contested seats in Johor (previously a Barisan National stronghold) bodes well for the state. The newly elected national government's immediate concern is stabilising Malaysia's economy domestically.[28]

Subjected to socio-economic interactions between border populations, local politics and geopolitical forces, border dynamics are in a constant state of flux. Collaborative efforts alone are insufficient to yield beneficial outcomes for governments and people in the long term—fundamental conflicts in political ideologies and interests must be mediated. As ongoing developments seem to pose an uncertain future for Johor–Singapore relationships, including Johor state authoritative bodies is crucial in overseeing federal-level commitments. The Johor state government's elevated role in decision-making for Iskandar Malaysia and the autonomy of Johor's state monarch in instigating corporations could serve as solid anchors to the MalaysiaSingapore–Johor relationship. However, the extent to which they may exert fundamental, effective changes beyond their influences remains visible. For better or worse, acts of negotiations and transgressions amongst power actors will continue defining, shaping, and transforming physical border landscapes.

References

Abdullah K (2008) Johor in Malaysia-Singapore relations. In: Across the causeway: a multi-dimensional study of Malaysia-Singapore relations. Institute of Southeast Asian Studies, Singapore

Abidin MZA (2008) Malaysia-Singapore economic relations: once partners, now rivals. What next?" In: Shiraishi T (ed) Across the causeway: a multi-dimensional study of Malaysia-Singapore relations, 200–230. Institute of Southeast Asian Studies, Singapore

Alphonso G, Albert L (2011) The causeway. National Archives of Malaysia, Kuala Lumpur

Andaya BW, Leonard YA (1982) A History of Malaysia. University of Hawaii Press, Honolulu

Barter PA (2006) Multiple dimensions in negotiating the cross border transport links that connect and divide Singapore and Johor, Malaysia. Asia Pacific Viewpoint 47(2):287–303. Available at https://doi.org/10.1111/j.1467-8373.2006.00306.x. Accessed 24 June 2018

Bhaskaran M (2016) The political economy of closer relations: a perspective from Singapore. In: Hutchinson FE, Chong T (eds) The sijori cross-border region: transnational politics, economic and culture. ISEAS-Yusof Ishak Institute, Singapore

Chandran R (1966) Smooth first day for Singapore's new entry controls. The Straits Times, August 2, 1966. NewspaperSG. Available at http://eresources.nlb.gov.sg/newspapers/Digitised/Article/straitstimes19660802-1.2.97 [accessed 24 June 2018]. U.S. Government Printing Office. 1959. "Colony of Singapore: Annual Report, 1958, U.S. Government Printing Office

Comaroff J (2014) Built on sand: Singapore and the new state of risk. Harvard Design Magazine, 2014. Available at http://www.harvarddesignmagazine.org/issues/39/built-on-sand-singapore-and-the-new-state-of-risk. Accessed 24 June 2018

Federation of Malaya (1961) Official yearbook 1961. Kuala Lumpur: Government Printers

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[27] Mahathir, who switched allegiance to Pakatan Harapan in April 2017, became Prime Minister for a second time.

[28] Many development projects, either underway or approved, such as the greenlighted KL-Singapore high-speed rail link, have been halted pending a thorough review.

Hammim R (2017) Sultan of Johor consents revised rapid transit system link alignment design. New Straits Time, November 17. Available at https://www.nst.com.my/news/nation/2017/11/304311/sultan-johor-consents-revised-rapid-transit-system-link-alignment-design. Accessed on 24 June 2018

Hocking B (1993) Localising foreign policy: non-central governments and multi-layered diplomacy. St Martin's Press

Hui W (1997) Regionalization, economic restructuring and labour migration in Singapore. Int Migr 35(1):109–130

Hutchinson FE, Nair VP (2016) The Johor sultanate: rise or re-emergence? Trends in Southeast Asia

IRDA (2015) Annual report 2015. Iskandar Regional Development Authority. Available at http://iskandarmalaysia.com.my/downloads/IRDA%20ENG%202015.pdf. Accessed 24 June 2018

Jaipragas B (2018) Old Mahathir could be frosty with Singapore. New Mahathir …? South China Morning Post, May 19. Available at http://www.scmp.com/week-asia/politics/article/2146854/old-mahathir-mohamad-was-not-always-pals-singapore-what-about-new. Accessed 24 June 2018

Khor YL (2016) Political contestation in Iskandar Malaysia. In: Hutchinson FE, Chong T (eds) The Sijori cross-border region: transnational politics, economic and culture. ISEAS-Yusof Ishak Institute, Singapore

Khor YL (2017) Commentary: Johor-Singapore tolls and the impact on commuters on both sides of the causeway. Channel News Asia. Available at https://www.channelnewsasia.com/news/asia/commentary-johor-singapore-tolls-and-the-impact-on-commuters-on-9376738. Accessed 24 June 2018

King SS (1965a) Malaysians face test in Singapore: economic tie strained as products start piling up. New York Times

King SS (1965b) The future of Malaysia: separation raises many questions, answers few. New York Times.

Lim Y (2015) The big read: Iskandar's lure is a strong pull for S'poreans. TODAYonline. Available at https://www.todayonline.com/singapore/big-read-iskanders-lure-strong-pull-sporeans. Accessed 24 June 2018

Malaysian Digest (2015) Working in Singapore vs Malaysia: is the grass always greener on the other side? Available at http://www.malaysiandigest.com/opinion/559568-working-in-singapore-vs-malaysia-is-the-grass-always-greener-on-the-other-side.html. Accessed 24 June 2018

Mohamad, K (2015) Malaysia Singapore: fifty years of contentions 1965–2015. The Other Press, Kuala Lumpur

New Nation (1972) Improving traffic across the Singapore-Johor causeway, June 5, 1972. Newspaper SG. Available at http://eresources.nlb.gov.sg/newspapers/Digitised/Article/newnation19720605-1.2.44.2. Accessed 24 June 2018

New Nation (1974) "$1.2 Million Bridge for Traffic from Johor," April 9, 1974. Newspaper SG. Available at http://eresources.nlb.gov.sg/newspapers/Digitised/Article/newnation19740409-1.2.16.1. Accessed 24 June 2018

New York Times (1966) Malaysia imposing Singapore checks. April 20. ProQuest Historical Newspapers: The New York Times

Oh, S-A, Jagtiani RB (2016) Singaporeans living in Johor and Batam: next-door transnationalism living and border anxiety. In: Hutchinson FE, Chong T (eds) The Sijori cross-border region: transnational politics, economic and culture. ISEAS-Yusof Ishak Institute, Singapore

Omar M (2008) Indonesia–Malaysia confrontation | Infopedia. Singapore Infopedia. 2008. Available at http://eresources.nlb.gov.sg/infopedia/articles/SIP_1072_2010-03-25.html. Accessed 23 June 2018

Ooi KG (2008) Politics divided: Malaysia-Singapore relations. In: Across the causeway: a multi-dimensional study of Malaysia-Singapore relations. Institute of Southeast Asian Studies, Singapore, pp 80–91

Rizzo A, Glasson J (2011) Conceiving transit space in Singapore/Johor: a research agenda for the strait transnational Urban Region (STUR). Int J Urban Sustain Dev 3(2):156–67. Available at https://doi.org/10.1080/19463138.2011.590722. Accessed 24 June 2018

Rizzo A, Glasson J (2012) Iskandar Malaysia. Cities 29(6):417–27. Available at https://doi.org/10.1016/j.cities.2011.03.003. Accessed 24 June 2018

Rizzo A, Khan S (2013) Johor Bahru's response to transnational and national influences in the emerging straits Mega-City Region. Habitat International 40(October): 154–62. Available at https://doi.org/10.1016/j.habitatint.2013.03.003. Accessed 24 June

Sam J (1967) "Don't travel yet' advice," July 4. NewspaperSG. Available at http://eresources.nlb.gov.sg/newspapers/Digitised/Article/straitstimes19670704-1.2.83. Accessed 24 June 2018

Tan L (2016) How feasible is it to move to Johor Bahru and Drive back and forth for work and school? The Straits Time, May 28. Available at https://www.straitstimes.com/lifestyle/motoring/how-feasible-is-it-to-move-to-johor-baru-and-drive-back-and-forth-for-work-and. Accessed at 24 June 2018

Thayer CA (2008) "Political Relations." In: Across the causeway: a multi-dimensional study of Malaysia-Singapore Relations. Institute of Southeast Asian Studies, Singapore, pp 80–91

The Star Online (2016) Consider replacing the causeway, says sultan Available at https://www.thestar.com.my/news/nation/2016/03/23/consider-replacing-the-causeway-says-sultan-more-reports-tomorrow/. Accessed 24 June 2018

The Straits Times (1965a) Causeway always open to Malaysians says Toh, August 10. NewspaperSG. Available at http://eresources.nlb.gov.sg/newspapers/DigitisedArticle/straitstimes1965a0810-1.2.116. Accessed 24 June 2018

The Straits Times (1965b) Johor causeway traffic movement normal. August 10. NewspaperSG. Available at http://eresources.nlb.gov.sg/newspapers/Digitised/Article/straitstimes1965b0810-1.2.83.14. Accessed 24 June 2018

The Straits Times (1965c) No Wall At Causeway, August 30. NewspaperSG. Available at http://eresources.nlb.gov.sg/newspapers/Digitised/Article/straitstimes1965c0830-1.2.99.1. Accessed 24 June 2018

The Straits Times (1965d) Causeway trade—guts of the problem. September 17. Available at http://eresources.nlb.gov.sg/newspapers/Digitised/Article/straitstimes1965d0917-1.2.75.1. Accessed 24 June 2018

The Straits Times (1965e) Work Permits, October 18. NewspaperSG. Available at http://eresources.nlb.gov.sg/newspapers/Digitised/Article/straitstimes1965e1018-1.2.85.2. Accessed 24 June 2018

The Straits Times (1966a) Sudden check on causeway for Singapore travellers, April 17. NewspaperSG. Available at http://eresources.nlb.gov.sg/newspapers/Digitised/Article/straitstimes1966a0417-1.2.18. Accessed 24 June 2018

The Straits Times (1966b) 'Security Move...' Spore identity card holders must report to police on arrival in Malaysia, April 20. NewspaperSG. Available at http://eresources.nlb.gov.sg/newspapers/Digitised/Article/straitstimes19660420-1.2.2. Accessed 24 June 2018

The Straits Times (1966c) 'Drop Causeway Clamp' Call in Spore, April 23. NewspaperSG. Available at http://eresources.nlb.gov.sg/newspapers/Digitised/Article/straitstimes1966b0423-1.2.55. Accessed 24 June 2018

The Straits Times (1966d) "Don't Turn Causeway into a Wall Says Devan," April 24. NewspaperSG. Available at http://eresources.nlb.gov.sg/newspapers/Digitised/Article/straitstimes1966c0424-1.2.20.36. Accessed 24 June 2018

The Straits Times (1966e) Dividing the same people, April 30. Available at http://eresources.nlb.gov.sg/newspapers/Digitised/Article/straitstimes1966d0430-1.2.123.2 Accessed 24 June 2018

The Straits Times (1966f) "Causeway Clamp for the Sake of National Security," May 6. NewspaperSG. Available at http://eresources.nlb.gov.sg/newspapers/Digitised/Article/straitstimes1966e0506-1.2.10. Accessed 24 June 2018

The Straits Times (1966g) "$lm Causeway Checkpoint," June 16. NewspaperSG. Available at http://eresources.nlb.gov.sg/newspapers/Digitised/Article/straitstimes1966f0616-1.2.70. Accessed 24 June 2018

The Straits Times (1966h) "Johor Call to Demolish Causeway," July 12. NewspaperSG. Available at http://eresources.nlb.gov.sg/newspapers/Digitised/Article/straitstimes1966g0712-1.2.49. Accessed 24 June 2018

The Straits Times (1966i) Causeway controls will not hit spore Citizens, July 14. NewspaperSG. Available at http://eresources.nlb.gov.sg/newspapers/Digitised/Article/straitstimes1966h0714-1.2.7. Accessed 24 June 2018

The Straits Times (1966j) "Causeway Clamp 'Not Aimed at Causing Hardship,'" July 15. NewspaperSG. Available at http://eresources.nlb.gov.sg/newspapers/Digitised/Article/straitstimes1966i0715-1.2.141. Accessed 24 June 2018

The Straits Times (1966k) Causeway Permits 'Nothing but a Barricade Bid,' October 19. NewspaperSG. Available at http://eresources.nlb.gov.sg/newspapers/Digitised/Article/straitstimes1966j1019-1.2.158. Accessed 24 June 2018

The Straits Times (1967a) In between—the Causeway..., February 24. NewspaperSG. Available at http://eresources.nlb.gov.sg/newspapers/Digitised/Article/straitstimes1967a0224-1.2.111. Accessed 24 June 2018

The Straits Times (1967b) Passport Or I-Card? March 21. NewspaperSG. Available at http://eresources.nlb.gov.sg/newspapers/Digitised/Article/straitstimes1967b0321-1.2.76.1. Accessed 24 June 2018

The Straits Times (1967c) "Singapore to issue 'causeway' passports," April 14. Available at http://eresources.nlb.gov.sg/newspapers/Digitised/Article/straitstimes1967c0414-1.2.7. Accessed 24 June 2018

The Straits Times (1967d) Spore all set for entry control, June 30. NewspaperSG. Available at http://eresources.nlb.gov.sg/newspapers/Digitised/Article/straitstimes1967d0630-1.2.93. Accessed 24 June 2018

The Straits Times (1967e) It's on: full travel control, September 10. NewspaperSG. Available at http://eresources.nlb.gov.sg/newspapers/Digitised/Article/straitstimes1967e0910-1.2.9. Accessed 24 June 2018

The Straits Times (1972a) Call to govt to enlarge causeway or build new one, January 24. NewspaperSG. Available at http://eresources.nlb.gov.sg/newspapers/Digitised/Article/straitstimes1972a0124-1.2.73. Accessed 24 June 2018

The Straits Times (1972b) Malaysia to start talks on widening the causeway, May 23. NewspaperSG. Available at http://eresources.nlb.gov.sg/newspapers/Digitised/Article/straitstimes1972b0523-1.2.88. Accessed 24 June 2018

The Straits Times (1972c) Hush hush talks on wider causeway, November 14. NewspaperSG. Available at http://eresources.nlb.gov.sg/newspapers/Digitised/Article/straitstimes1972c1114-1.2.34. Accessed 24 June 2018

The Straits Times (1988) 7.2 ha of reclaimed land in JB plan, August 20. NewspaperSG. Available at http://eresources.nlb.gov.sg/newspapers/Digitised/Article/straitstimes19880820-1.2.20. Accessed 24 June 2018

The Straits Times (2006) KL issues causeway statement, April 26. Available at http://eresources.nlb.gov.sg/newspapers/Digitised/Article/straitstimes19880820-1.2.20. Accessed 24 June 2018

The Straits Times (2015) Najib, Mahathir on 'Crooked Bridge': what is the issue about, April 13. Available at https://www.straitstimes.com/asia/se-asia/najib-mahathir-on-crooked-bridge-what-is-the-issue-about. Accessed 24 June 2018

TODAYonline (2016) Hard work pays off better in Singapore, say Malaysian odd job workers. Available at https://www.todayonline.com/world/asia/hard-work-pays-better-across-causeway-say-malaysian-odd-job-workers. Accessed 24 June 2018

TODAYonline (2017) China overtakes Singapore as top property investor in Malaysia. Available at https://www.todayonline.com/world/asia/china-overtakes-singapore-top-property-investor-malaysia-report. Accessed 24 June 2018

TODAYonline (2018) Distrust, Disconnect Cause Johoreans to Spurn China, Embrace Singapore. Available at https://www.todayonline.com/world/distrust-disconnect-cause-johoreans-spurn-china-embrace-singapore. Accessed 24 June 2018

Wilson TM, Donnan H (2012) Borders and border studies. In: A companion to border studies, 1st edn. Blackwell Publishing Ltd., New York, United States, pp 1–25

World Bank (2018a) Malaysia trade at a glance: most recent values. Malaysia trade at a glance: most recent values. 2018a. Available at https://wits.worldbank.org/countrysnapshot/en/MYS. Accessed 25 June 2018a

World Bank (2018b) Singapore trade at a glance: most recent values. Malaysia trade at a glance: most recent values. 2018b. Available at https://wits.worldbank.org/countrysnapshot/en/SGP. Accessed 25 June 2018b

Yap YF (2001) The wild days of the causeway. Today, January 8. Sec. Shared Memories. NewspaperSG. Available at http://eresources.nlb.gov.sg/newspapers/Digitised?article/today20010108-1.2.19.3. Accessed 25 June 2018

Ye J (2016) Commuting to Singapore: Johorean Malaysians. In: Class inequality in the global city: migrants, workers and cosmopolitanism in Singapore. Palgrave Macmillan UK, pp 93–117

Zhai K (2018) The leader who wanted a 'Crooked Bridge' with Singapore is back. bloomberg. Available at https://www.bloomberg.com/news/articles/2018-05-13/the-leader-who-wanted-a-crooked-bridge-with-singapore-is-back. Accessed 1 July 2018

Chapter 10
Borders of Precincts: Unpacking the Politics of White Neighbourhood Identities in the Post-apartheid Black City

Denver Hendricks and Alona Martínez Perez

Abstract The middle-income white precinct in Melville, South Africa, and Johannesburg's predominantly black post-apartheid city are still separate entities. This threatens the democratic production of space in a post-apartheid city like Johannesburg. Through a city-funded "bottom-up" approach, the Johannesburg Development Agency (JDA) funded a Community Participatory Design (CPD) project known as the Melville Precinct Plan. This plan involving the Melville Residents Association (MRA) helped voice a different opinion about how the urban area is envisioned concerning the Strategic Area Framework (SAF) set out by the City of Johannesburg. Several questions were central to this research. First, why does the MRA disagree with the Metropolitan Development Framework? To what extent do race and fear play a part in the argument? Second, how can a sustainable and equitable post-apartheid city be achieved? Third, what are the values of the government? How do they relate to policies, filter down to the municipal level, and make a difference in communities on an urban level? (Marinova and Hossain J Urban Regeneration Renewal 7:343–350, 2013, p 347). The relationship between pro-liberal urban development and planning projects and the responses of a resistant minority group in Johannesburg in 2017 are considered in this light. The post-apartheid city and the pertinent arguments for and against development are contextualised. What kind of development is essential on the city's borders, what fears are synonymous with that and unfair and exclusionary practices are also considered? Melville Precinct Plan serves as a case study to examine its framing policies and the general outcomes to unpack how the borders, peripherals and edges are used politically to undermine generous public participation processes in planning a new vision of a community.

Keywords City · Precinct planning · Values · Neighbourhood · Residents · Exclusivity

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10.1 Introduction

"*This will not be another Hillbrow.*"[1]

This was one of the statements made by the Melville Resident Association (MRA) members at a participatory community design (CPD) session concerning the Melville precinct in Johannesburg in early 2017. This statement is problematic because it contradicts the post-apartheid government's spatial planning policies and exhibits exclusionary values. A CPD process should be used to ascertain the on-the-ground values and understand their fears and aspirations (Marinova and Hossain 2013, p. 343). CPD sessions are not only an opportunity for the community to articulate their collective vision of the city, but it is also a process where the community, consultants and city officials learn from each other, share ideas, build capacity and develop a sense of community (Marinova and Hossain 2013, p. 346).

Johannesburg's planning policies and urban development projects aggressively address the post-apartheid city's concerns, segregating people by race. Today, the long-lasting dire effects of spatial inequality are still experienced by the marginalised. The "Corridors of Freedom" scheme is a unique project initiated by Mayor Parks Tau a few years ago and aimed to re-stitch the city again. Amongst many other policies that echo the same anti-apartheid values, the SAF exhibits progressive socio-economic place-making strategies and mainly focuses on three main transport corridors around Johannesburg. The Empire-Perth corridor connects Johannesburg Central Business District (CBD) and the township of Soweto. Along this corridor, on the border of the CBD, Melville is a white middle-income neighbourhood. The JDA was commissioned to undergo a CPD for a new vision of the precinct to support Freedom Project's Corridors. However, the project received resistance from the MRA due to the imposing effects of urban densification on the precinct.

The research draws directly upon personal experience. In 2015, we won a bid as urban design consultants to facilitate a precinct plan for the Melville suburb in Johannesburg. The precinct plan is guided by the growth and development strategy's overarching values, Spatial Development Framework, Regional Spatial Development Framework and Strategic Area Framework (SAF). These framing policies are guides and allow applications to differ in regions, areas and precincts. The city's implementing agent and the client was the Johannesburg Development Agency (JDA). The project's objective was to facilitate a series of CPD workshops to solicit a new urban vision for the Melville precinct and support the SAF's Empire-Perth Corridor. CPD processes can be rewarding and pose complex challenges due to conflicting interests. This particular CPD process was challenging as the MRA threatened to stop it. The MRA's values and ideas did not align with the city's SAF. The underpinning reasons for this are multi-layered and will be discussed later.

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[1] Hillbrow was an affluent white-only inner-city neighbourhood. During the 1980s political uprising that led to the first 1994 elections, it was known for its crime and rubbish-strewn streets and became a slum.

Ways in which communities envision their urban environment and how this relates to the broader SAF are considered using the Melville Precinct Plan[2] as a case study. This consideration not only contextualises the wider socio-economic, political and historical issues of planning in a post-apartheid city, it examines how the new pro-liberal planning policies and values are interpreted into a tangible vision of the neighbourhood scale (i.e. with precinct plans). However, before unpacking the Melville Precinct Plan (MPP), it is essential to contextualise the broader dynamics of white resistance in three categories of fear: post-apartheid, crime and the Corridors of Freedom.

10.2   The Fear of Post-apartheid

The apartheid and post-apartheid eras are essential influencers in understanding white fear and the white resistance to pro-liberal post-apartheid planning. For example, the 1950s Group Areas Act was a spatial policy that forced black South Africans from the city's borders to the city's outskirts into featureless and undignified informal townships such as Orlando in Soweto.

When the Group Areas Act was repealed in the 1980s, many black[3] people from the rural areas subsequently flocked to the city for economic opportunity. This led to white property and business owners fleeing Johannesburg's high-density inner city for its northern suburbs, such as Sandton,[4] Hillbrow. In the 1980s, this place became a slum due to an influx of rural black people and neglect by property owners. Initially a thriving clean, and prosperous inner city suburb where white people lived, shopped and worked (Fig. 10.1). To some of the privileged white home and business owners of Hillbrow, this downturn symbolises the first experience of white fear and the failures of anti-apartheid values.

10.3   The Fear of Crime

In the 1980s, Johannesburg gave rise to the northern suburbs' peripheral gated community model, which mushroomed around these and other competing versions of Sandton (Dirsuweit 2009, p. 77). This model directly responds to crime and fear in the post-apartheid era (Landman 2004, p. 151) and actively fragments, segregates and isolates communities with shrinking public space and restricting access to the

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[2] Melville Precinct Plan provides detailed design and development guidance for specific local areas, nodes and corridors. (for more detailed information: https://mra.ilovemelville.co.za/melville-precinct-plan-2017/).

[3] In South African the term "black," in political terms, refers to all races other than white.

[4] Sandton was established in the 1970s to recreate a new financial district away from Johannesburg Central Business District. Today it is the most expensive real estate in South Africa.

Fig. 10.1 Left: Orlando was one of the first black townships established as part of the relocation policy in 1960 Chipkin, Clive (1993). Right: Hijacked buildings in Hillbrow. *Photo credit* L. Krige

public roads. As Landman (2004) argues, this is due to the political transition, post-apartheid poverty, crime and increased unemployment; thus, an agglomeration of gated communities mushrooming in other peripheries occurred.

Today, Johannesburg is a multi-centred patchwork of different places (Murray 2011, p. 180). It has a dominant central nucleus and dependent residential suburbs dividing it into a polycentric, post-industrial metropolis. This heterogeneous assemblage of highly differentiated and relatively autonomous "edge cities" comprises commercial clusters and business notes that have blossomed along the urban fringe (Murray 2011, p. 180). It assembles unplanned, market-driven urban forms and insular sovereignty (Murray 2011, p. 181). The obsession with fortification results from the city's failure to create safe environments. Although Melville residents are security conscious, they enjoy the privilege of not living in an enclosed lifestyle estate. However, Melville plays a significant role in creating a sustainable and compact city due to its proximity to the city and its relationship to the Corridors of Freedom.

Suburbs are often associated with prosperity, the refuge of the white middle class in America that wants to escape downtown's poverty and crime. This *white suburbia* is very different from a busy New York neighbourhood with community stores and cafes where residents meet. However, Jane Jacob's ideas concerning the neighbourhood's spirit are no longer present in the gentrified areas emerging in downtown New York or even Johannesburg (places like Maboneng, a downtown district that is now changing). The new creative classes are welcomed. Ehrenhalt (2013), a leading American urbanologist, explains in "The Great Inversion" that emigrants now move to the suburbs. The new creative classes move back to the centre to gentrify these downtown areas. Ehrenhalt writes, "*Much of what Jacobs loved and wrote about will never return: The era of the mom-and-pop grocer has ended for good. We live, for*

the most part, in a big-box, big-chain century" (p. 21). The reality in Johannesburg is somewhat different. The centre, which used to be prosperous in the 1960s with white European communities in Hillbrow areas, is now full of emigrant communities that come and settle illegally from other parts of Africa or South Africa. It is a city where crime and fear make everyone vigilant in the white middle class and the new emerging wealthier coloured and black new creative classwork in the city.

Consequently, affluent communities move to the suburbs, where the houses look suburban but are full of fences and gated communities. However, Johannesburg is also an exciting metropolis, a city that emerged from gold and mining exploitation and attracted thousands of emigrants to work and search for a better life. The chapter focused on the vibrant city of Melville that lies in the borders, the suburbs, and the areas between the downtown and the periphery where exciting things happen.

As Bremner (2000), the South African architect, writes about Johannesburg: "The restructuring of the economy and increasing political pressure had resulted in a city whose economic base was declining and in which the social and economic exclusion upon which it had been built was no longer sustainable. This resulted in successive attempts by the urban authorities to reinvent a city which could claim a position in the mainstream global economy and become a city all its citizens could feel part of" (p. 185). In this critical affirmation of post-1990s Johannesburg, Bremner mentions a city in economic decline but suggests that its citizens should be at the heart of this process to reinvent the city. In this critical approach, the Melville project as a case study is relevant because the work involves different community stakeholders. Moreover, it shows that the existing conflicts in the city in border areas are subject to change.

Bremner writes that in the 1970s: "The city's image was an exclusive one that celebrated white dominance and brushed aside the alternative black experience of the city" (Rogerson, cited in Bremner 2000, p. 186). This is a critical point evident in the resistance that white residents expressed about the alternative black experience of the city in the Melville case study meetings. This is a critical point in a modern South African democratic context where any decisions involving existing communities in the urban context should affect all sectors of this community. However, here in Melville, the concept of a multi-faceted community was confronted with opposition from the white South African residents.

As architect-academics from South Africa and Europe, our personal experience complements this research. Notably, as a European, my observations were critical.

> For me, as a European walking and living in Melville when visiting South Africa, all my previous preconceptions and knowledge disappeared. I felt I was in front of a new city. In this new place, the borders meet those tensions between the resistances of the previous white suburban neighbourhood, which is now becoming a laboratory where new creative people are coming into the neighbourhood, and mixing with African and even European emigrants who are looking at this fascinating city as a place of opportunity. The city in front of me today is the same vibrant place full of opportunities, full of hidden tensions and opportunities, a city of gold full of interesting people and places looking for opportunities. What I see in the city today as a European is what attracted thousands of European emigrants to work and make the city their home.

Practitioners and academics see this new emerging city, a city where we find tensions between different social groups. This is the legacy inherited from the spatial segregation left after the apartheid city when the culmination of colonial power informs the settlement and how the community is created. Much literature has been written about this, and there is also an autobiographical element in observing the city. Rossi (1981), in his later book A Scientific Autobiography, departs from his earlier work and connects different fragments to illustrate his oeuvre. In his earlier work from the 1960s, he tried to arrive at a theory of the European city in the book The Architecture of the City (1984) using a structuralist approach to understand the city. This departure offers different ways of looking at the metropolis.

Bremner (2000) writes: "The depression of the 1930s, which saw the abandoning of the gold standard in 1932, resulted in foreign capital flooding into the country and transformed Johannesburg into a little New York, or if not New York, then at least Chicago or St. Louis" (De Kiewiet 1966, in Chipkin 1993 cited in Bremner 2000, p. 186). This comparison with New York or the American metropolis shows an exciting process. The inner city that attracted white Europeans in the 1960s is now a black city with illegal settlements in abandoned buildings such as Hillbrow and a mix of new gentrified and diverse areas such as Maboneng. In today's Johannesburg, the border areas, the leafy suburbs, such as Melville, close to the centre and has a nice high street, but are also far enough to have a different character, have become critical spaces in the suburban areas. Here the suburban typologies, inhabited by white residents during and post-apartheid, are also secured to protect the residents from crime. This is a city where a wealthy suburb is a safe place. There is daylight and a gated community, which becomes essential as the private home or the controlled environment is safe, but at the expense and absence of a remarkable public safe space.

Post-apartheid segregation is still present in the physical form of the areas in the city and is even more embedded in the psychology of space and how people live and walk in the city. Notably, as a European, the multiple security layers that the city possesses are always evident and evident from the way one enters one's home to the way one projects one's car. These means are necessary to separate oneself from both crime and poverty.

Confronting all these issues is critical to planning a community where the public realm and the inclusion of all community sectors can help frame urban design strategies that will not resolve all these issues but will allow a community to be much more inclusive. Johannesburg is a fascinating city, a city full of tension and interest. The city neighbourhoods' borders are the perfect place to understand the issues and the conflicts left in the city after the apartheid. Separation is connected to segregation when a system is in place for an extended period. The social change required to effect integration and equality is complex, and incorporating processes dealing with such complexities takes time.

However, society demands decolonisation and integration in modern South Africa. Urban strategies have to incorporate a different approach to urban development and master planning, and community consultation is one of the most successful ways to achieve this. Design Surgeries or Community Participation Workshops are great ways to ensure integration and inclusion are at the heart of urban change processes. These

issues are still relevant in today's South Africa. The Gauteng City-Region Laboratory has carried out numerous studies at the city-region level of these discrepancies, and they mention some of these challenges in the Gauteng region:

> These include high levels of poverty, unemployment and social exclusion. South Africa is one of the world's unequal societies, and this stark reality is particularly evident in Gauteng cities and towns. There remain spatial concentrations of huge wealth alongside large informal settlements. Moreover, although there is gradual integration, the concentration of different population groups in specific areas previously designated for them by apartheid remains to this day. (GCRO 2019)

10.4 Fear of Trust: The Corridors of Freedom

The Corridors of Freedom (City of Johannesburg 2013) was a mayoral initiative based on the Curitiba model of the Bus Rapid Transit System. It was framed within the SAF in early 2000 and implemented through three routes across Johannesburg to link disenfranchised parts of the city, catalyse urban nodes, and stimulate public and private sectors to create a high-density mixed-use corridor. Although the Corridors of Freedom Project's intention echoed anti-apartheid and inclusive values and ethics of urban planning, the project started with insufficient community participation and an overly aggressive densification plan. Up to six storeys were prescribed as a blanket along the corridors and adjacent neighbourhoods like Melville. The MRA subsequently took the city to court, and the MRA won the court case to scale down the densification plan. As a result, the city had to revise its density in the SAF to a more strategic and nuanced plan.

This was the third encounter with the white fear experience. These are real fears experienced by the privileged white and their economic investments in Johannesburg City. However, as a progressive city, we need to understand the broader socio-political context of advanced planning. These issues are deeply rooted in several intersectional concepts of white, black, rich, poor, fear, aspirations, values, planning, policy and economics.

If all these pro-liberal planning policies exist, is the argument exempted from the city's planning policies as a legitimate argument? What is the argument that the MRA is putting forward? Landman (2004) quotes Vanessa Watson (2003)…" urban restructuring efforts in this period of transition have been mostly ineffective, and many South African cities are almost divided, spatially, economically, as was in the days of apartheid… (Landman 2004, p. 165). Fataar (2012) questions whether all the post-apartheid policies which enhance the recalibration of the city socio-spatial condition is enough to "inspire the spatial restructuring and in particular densification" (p. 7).

Fig. 10.2 Corridors of freedom, Empire-Perth Avenue (http://www.corridorsoffreedom.co.za/ 2018)
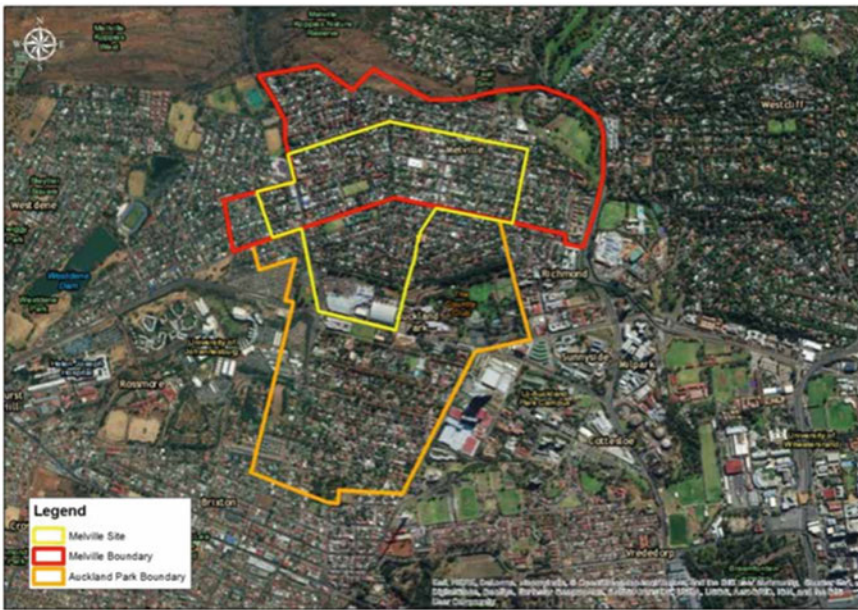
Fig. 10.3 Corridors of freedom, 1993: author's own

10.5   The Melville Precinct Plan

To answer some of these difficult questions, allow me to reflect on the case study. The Melville Precinct Plan is part of The Corridors of Freedom[5] 2040 Johannesburg Strategic Planning and feeds into a broader corridor (Figs. 10.2 and 10.3). It is envisaged that this project would address apartheid planning aggressively and dramatically improve people's lives daily. "…safety, comfort and economic well-being is placed

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[5] http://www.corridorsoffreedom.co.za/.

at the core of planning and delivery processes. This will reduce poverty for most of the city's residents (http://www.corridorsoffreedom.co.za/ 2018).

Melville is located about five kilometres North West of the inner city of Johannesburg, on the border of the inner city periphery. A middle-income, mostly white neighbourhood. It is still one of the few public-orientated walkable neighbourhoods. It has the advantage of being located adjacent to Johannesburg's only two public institutions[6]; parastatal and private media houses, and the natural attraction of an archaeologically significant hill known as the Melville Koppies.[7] Due to its location, it is susceptible to high transience of visitors, academics, students, musicians and entertainers. Therefore, cultural and social networks are unique, and due to their location, it cannot exist in a vacuum- it is an extension of a democratic city.

The MRA is a voluntary body representing the voices of the general residential community. It is not a legal entity. However, the residents voted to designate the collective interests and communicate information to the larger body. It is also important to note that the MRA is only one of the many stakeholders required to be consulted through the process. The other stakeholders were the businesses, traders, students who attend university in the adjacent neighbourhood, frequent social spaces, places of education, religious instruction, the homeless, organisations, patron of social places, institutions and sports facilities that engage or are affected in Melville.

An initial misconception about the MRA was that their opinion counted more than any other stakeholder. They argued that they had *more to lose* as they had financially invested in Melville. This idea was discouraged by the city and framed the engagement of the CPD in the future (Fig. 10.4). Another pertinent issue was student accommodation. There is an imminent fear that policy and CPD would encourage student dormitories. Student dormitories are viewed as places of high-density, noise and disturbance. The MRA employed tactics through social media using excuses like heritage preservation and the celebration of architectural style to avoid the possibility of developing a mixed, vibrant, close-knit community. Petitions stating: "do you want to live next to a student dormitory?" and "I do not want to live in another Hillbrow" were slogans punted in meetings and via emails to the residents. The MRA wrote petitions and initiated surveys to persuade the city not to develop.

The relationship between knowledge and power is a crucial sub-theme. Members of the MRA include professional lawyers, journalists and other white-collar citizens. This means they can analyse, understand, and argue spatial confrontations through resources. They search for loopholes, using technical arguments to preserve the homogenous urban environment. The MRA claims three main points which pertain specifically to the borders.

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[6] The University of Johannesburg and the University of Witwatersrand initially registered mostly white students but today reflect the true demographic of South Africa—that being predominantly black.

[7] Refers to the Afrikaans term for "peak".

Fig. 10.4 Melville community participatory design Session. *Photo credit* Marina Meyer, 2017

10.6   Borders

The research was well-rooted in the knowledge of the urban and its spatial policies. The client, the JDA, earmarked a precinct mainly concerned with the high street of 7th street, which falls within Melville's suburb and its relationship to the main arterials (The Corridors of Freedom). However, the high street overlaps with the adjacent precinct of Auckland Park. There are three ways the MRA used the borders as a tool during the project to dampen its momentum. One of the initial disputes and misinterpretations of the broader precinct plan project was that the MRA rejected this project because it was suspicious that Melville was the only suburb earmarked for a Precinct Plan. The MRA further suggested that this project is a façade to help developers grab properties and convert them into high-rise student dormitories. Whether this claim was valid or not, it raised fear.

First, the MRA argued that the project must remain demarcated (the yellow border). This limits the extent and scale of the project. Containing the project's planning meant that the community could ensure that the "affected" area would not spill over or creep into other areas of development. However, the general community saw this demarcation as flexible (and so did the client). The community's enthusiasm framed exciting links and relationships between the Melville precinct and the adjacent leisure and sports facilities. The MRA did not well receive this idea. Second, the MRA argued that the project's mandate only falls within the boundary of the stated brief.

Second, the SAF states that the new post-apartheid urban agenda is to condense, diversify and capitalise on the current economy. The MRA felt that the Melville suburb should not apply to the SAF's general intentions to oppose the hegemonic

urban condition and facilitate a community that encourages mixed racial profiles. Third, concerning the high street (7th street), which has a distinct low-rise architectural character of parapet walls, pedestrian overhangs and classic columns, they articulated that 7th street has high heritage value and should remain this way. They fear that the character will be destroyed. Therefore, the densification should remain outside this precinct boundary.

Third, the MRA was instructed to include the Auckland Park adjacent community towards the end of the community design process. This community was briefed and was unhappy about the late engagement. During presentations, they were less conservative than the Melville community.

10.7 Conclusion

The statement "This will not be another Hillbrow" refers to several historically complex socio-political layers which directly translate into the dichotomy of interests in public and private productions of space. The South African government planning policies aptly recognise and guide progressive urban planning values. However, the responsibility falls on the city, the municipality and the community to interpret and implement them. This has proved to be challenging when white fear becomes present. White privilege requires a big fight and resisting the city's forces to protect the private interests within the public domain. Unfortunately, the approach by the MRA is underhand. It undermines the democratic processes of the country by being obstructive.

The production of space and borders are powerful tools within the CPD processes, and it is intertwined with the skilful use of knowledge and power. Khan states that "citizens and strangers are controlled through the spatial confined of the divided place, these geometries—the spatial categories through and in which the lived world is largely mapped, experienced and disciplined—impose a set of internalities and externalities" (Goldberg 1993, cited in Kahn 1993, p. 185).

He discusses the dichotomy between "the condition of modernity: the dichotomy between public and private…" (p. 185). Goldberg/Khan (1993) points out that racism has become institutionally normalised in and through spatial configuration and that it has become customary to associate a geographical location with racial practices. Therefore, social spaces inherently become labelled and identified (p. 185).

Furthermore, the Melville Precinct Plan case study highlights that exclusionary practices still prevail in the most subtle and indirect ways. Although the city is living up to its mandate of the "good city", deepening its democracy, developing good governance and caring about its citizens, the same white fear still prevails in manipulating the CPD process. The minority again influences and maintains the South Africans' spatial patterns, which today, the shoddy urban battle with every day to survive. The urban environment is complex. We are not advocating for extreme and

irrational, overtly dense and unsustainable cities but at least afford Melville's residents an untainted opportunity to debate and design multiple facets of their precinct to live, work and enjoy.

References

Bremner L (2000) Reinventing the Johannesburg inner city. Cities 17:185–193. https://doi.org/10.1016/S0264-2751(00)00013-5

Chipkin C (1993) Johannesburg style: architecture and society 1880s–1960s. David Philip Publishers

City of Johannesburg (2013) Corridors of Freedom re-stitching our city to create a new future, p 16. Available at: http://www.corridorsoffreedom.co.za/attachments/article/1/corridorsoffreedom_s.pdf

Corridors of Freedom. http://www.corridorsoffreedom.co.za/

Dirsuweit T (2009) 'New urbanism, public space and spatial justice in Johannesburg : The case of 44 Stanley Ave', Annales de Géographie, 118e Année (No. 665/666), pp 76–93. Available at: https://0-www-jstororg.ujlink.uj.ac.za/stable/pdf/23457533.pdf?refreqid=excelsior%3Aba5dd326b03bfb97f560ea73ba79bf0e. Accessed 12 May 2018

Ehrenhalt A (2013) Great inversion and the future of the American city. Vintage, New York

Fataar R (2012) Densification and the ambition for a democratic city. ETH Zurich

Goldberg DT (1993) Racist culture—philosophy and the politics of meaning. Blackwell

GCRO (2019) http://www.gcro.ac.za/about/the-gauteng-city-region/

Khan P (1993) Racist culture: philosophy and the politics of meaning, polluting the body politic: race and urban location. Blackwell Publishers

Landman K (2004) Gated communities in South Africa: the challenge for spatial planning and land use. Source: The Town Planning Review. Liverpool University Press, vol 75, no 2, pp 151–172. Available at: http://www.jstor.org/stable/40112598. Accessed 12 May 2018

Marinova D, Hossain A (2013) ContentServer.asp-11. J Urban Regeneration Renewal 7(4):343–350

Murray M (2011) City of extremes: the spatial politics of Johannesburg. Duke University Press

Rossi A (1981) A scientific autobiography. MIT Press

Rossi A [1966] (1984) The architecture of the city. MIT Press

Chapter 11
India's Shift to Soft Power in Nepal: A Case Study of the Borderland City of Birgunj

Suraj Paneru

Abstract A variety of factors influenced India's shift from hard power to soft power diplomacy in Nepal. The factors that influenced the Indian economic blockade on Nepal in 2015 and the interaction between the agent of power (India) and the subject of power (Nepali) are examined through a case study of the borderland city of Birgunj. It is argued that India shifted from hard power to soft power diplomacy in Nepal after the 'unofficial' border blockade imposed by India over Nepal for five months in 2015. The five key factors that influenced the shift from hard power to soft power policy are (1) the internationalisation of Nepal's conflict; (2) the opening of border transits and construction of roads to China; (3) the trade agreement and signing of Chinese One Belt One Road (OBOR) initiative by Nepal; (4) change in interpretation and recipient of activities of official Indian governmental and bureaucratic structures by the subject of power (Madheshi ethnic Nepali) and (5) contemporary political situation in India. The Borderland city of Birgunj is used to discuss these factors.

Keywords Hard and soft power · Economic blockade · Borderland · Birgunj · Nepal · India

11.1 Introduction

According to Das (2016a), borderlands do not indicate a fixed topographical site between two selected locales (nations, societies, cultures). However, an interstitial zone of displacement and deterritorialization shapes the identity of the hybridized subject. Evans-Pritchard (1940), as cited by Das (2016a), states that 'borders' are traceable to analysing social and territorial borders. These definitions indicate that the concept of borderland is more concerned with the people and their interaction in the natural and built environment of the location than a political border between countries. The term *borderland* indicates an urban area and its inhabitants forming a political boundary between two countries.

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Nepal has three topographic regions: mountains (the Himalayan range), hills (the Shivalik range) and the Terai or Madhes (the southern plains). Amongst the different narratives about the origin of Madhes, the most accepted version is that it stands for 'Madhya-desh', a region between hills and plains (Nayak 2011). The Madhesh region of Nepal borders India. Hence, the inhabitants of Madhesh are often called Madheshi. These ethnic Nepali, mainly living in province-2 of Nepal's current federal structure, share close cultural, linguistic and family ties with the bordering Indian states of Uttar Pradesh and Bihar (Figs. 11.1 and 11.2).

The inhabitants of the borderland Madhesh, in particular, are targeted as the subject of power, using both hard and later soft power by India to influence and to implement its multi-dynamic interests in Nepal. *Soft power* is 'Getting others to want what you want'. Soft power is also referred to as 'inducing others to do what they otherwise would not do', which is referred to as 'framing and setting agenda' and 'shaping others' preferences' (Nye 2011) cited by Cheskin (2017). Soft power focuses on shared political values, peaceful conflict management and economic cooperation to achieve standard solutions. On the other hand, hard power focuses on military intervention, coercive diplomacy and economic sanction (Wagner 2005). In other words, hard power is 'making others do what you want'.

The theoretical discussion on borderlands (Brunet-Jailly 2005) refers to the borderland cities in South Asia as stated in Banerjee and Chen (2013) and Das (2016b) and on soft power refers to Cheskin (2017), Wagner (2005) and Purushothaman (2010). The case study of the borderland city of Birgunj focuses on four analytical lenses to study the borderland proposed by Brunet-Jailly (2005). First, various archival data, news, articles and government archives are analysed and presented for the chapter's argument. The primary data source is government websites, archival data, and newspaper articles.

Finally, the conclusion is drawn based on the theoretical discussion and case study. The discussion and conclusion focus on the factors that helped clarify the intent of the Indian Hard power during the 2015 Indian blockade and the key factors that influenced the shift from hard power to soft power diplomacy in Nepal. This helps to explain better the use of hard and soft power in the Nepal and South Asia borderlands.

11.2   Indian Hard Power Diplomacy in Nepal: A Regional Bully?

India often exercises 'regional bully' for its power ambitions, which applies to the practice of hard power and regional hegemony in South Asian Association for Regional Cooperation (SAARC) countries. It is still technically at war with Pakistan (Schofield 2010). It used military intervention in then East Pakistan (now Bangladesh) for the benefit of liberating from West Pakistan in 1971 (Marwah 1979) as well as intervening in Sri Lanka in 1987 (Pfaffenberger 1988). India ingested Sikkim's

Fig. 11.1 Nepal reference map showing China and India. *Source* OCHA, United Nations
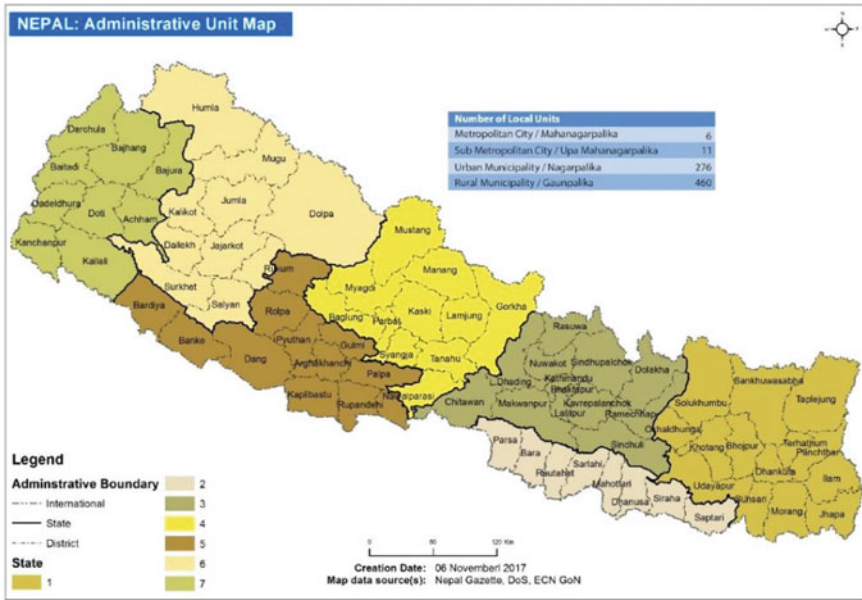
Fig. 11.2 Nepal administrative unit map. *Source* Government of Nepal

Himalayan kingdom into its Union in 1975 (Gupta 1975) and boasted a 'guiding role' in another Himalayan kingdom—Bhutan, for external relations (Appadorai 1982).

Modern-Day India and Nepal's formal diplomatic relationship is primarily defined by Hindu religious ties and the Treaty of Peace and Friendship (Government of India 2018b). The treaty has ten articles, amongst which, articles 4 and 7 directly apply to the people and cities, particularly the borderland cities. Article 4 ensures that 'The two Governments agree to appoint Consuls-General, Consuls, Vice-Consuls and other consular agents, who shall reside in towns, ports and other places in each other's territory as may be agreed to' and Article 7 of the treaty states that 'the nationals of one country in the territories of the other the same privileges in the matter of residence, ownership of property, participation in trade and commerce, movement and other privileges of a similar nature' (Government of India 2018b). Furthermore, article 5 of the treaty indicates that 'arrangement (to import arms, ammunition or warlike material for Nepal) shall be worked out by the two Governments', which can be easily classified as a diplomatic hard power strategy (Wagner 2005).

According to Wagner (2005), India used hard power to maintain the regional hegemony since Indira Gandhi's rule, often labelled the 'Indira doctrine'. India's South Asian strategy's main point was that the neighbouring countries were considered part of India's national security. Therefore, domestic conflicts of neighbouring countries should only be solved with India's help, not by outside powers or international organizations.

Indian use of hard power in Nepal has always cohered diplomatic measures, border blockades and economic sanctions and not direct military intervention. Although the focus is the 2015 border blockade, it is essential to mention India's previous hard power policy on Nepal. Before 2015 India had imposed a blockade in 1970 for building the Araniko Highway connecting Kathmandu with Tibet and a second time in 1989 for purchasing arms from China (The Kathmandu Post 2015). In addition, in 1989, India closed 13 transit points out of 15 in Nepal, leaving Raxaul and Jogbani open (Garver 1991).

The India-Nepal diplomatic row over Nepal's new constitution and 2015 border blockade has never been officially publicized by the Indian and Nepalese governments when India has consistently denied its involvement in the blockade (Ojha 2015). However, from the historical context and documents, it can be found that India's primary concerns include its security (Murthy 1999), access to Nepal's water resources for the provision of irrigation and electricity for its vast population (Upreti 1993; Gyawali 2002); dissatisfaction over Nepal leaving Hindu state status for the secular state (Majumder 2015); and persistent fear of losing ground in Nepal to China (Jain 1959; Shneiderman 2013) in Nepal's new political structure.

11.3   Birgunj: The City that Brought a Nation to a Standstill

This section looks at the case of Birgunj, which lies in southern Nepal, north of which is attached to the city of Raxaul of the Indian state of Bihar. The key factors permitting Indian hard power in this borderland city of Nepal are analysed in this section. The following four analytical lenses are used to study borderland Birgunj, as proposed by Brunet-Jailly (2005):

- Market forces and trade flows
- Policy activities of multiple levels of government on adjacent borders
- The political clout of borderland communities
- The specific culture of borderland communities (Fig. 11.3)

Rana Prime Minister Bir Samser established the settlement in Birgunj in the late 1880s (Birgunj Metropolitan City 2018). Therefore, it has most trading communities and is just a few metres from the Indian city of Raxaul. Birgunj lies north of Raxaul on the border of the Indian state of Bihar and is an entry point to Nepal from the Indian cities of Patna and Kolkata, also known as the 'Gateway to Nepal'.

Nepal's new constitution was promulgated on 20th September 2015. However, that hardly satisfied the Madheshis and Tharus forming 70% of Nepal's Terai (southern plains) population (Jha 2015). The dissatisfaction soon turned into a tense movement known as Madhesh Movement and escalated to the death of over 50 people. During the Madhesh Movement, this border city, which is currently in province-2 of Nepal's new federal structure, came into the centre stage of negotiation between the Madheshi ethnic people of Nepal, the Nepal government, and the Indian government. The
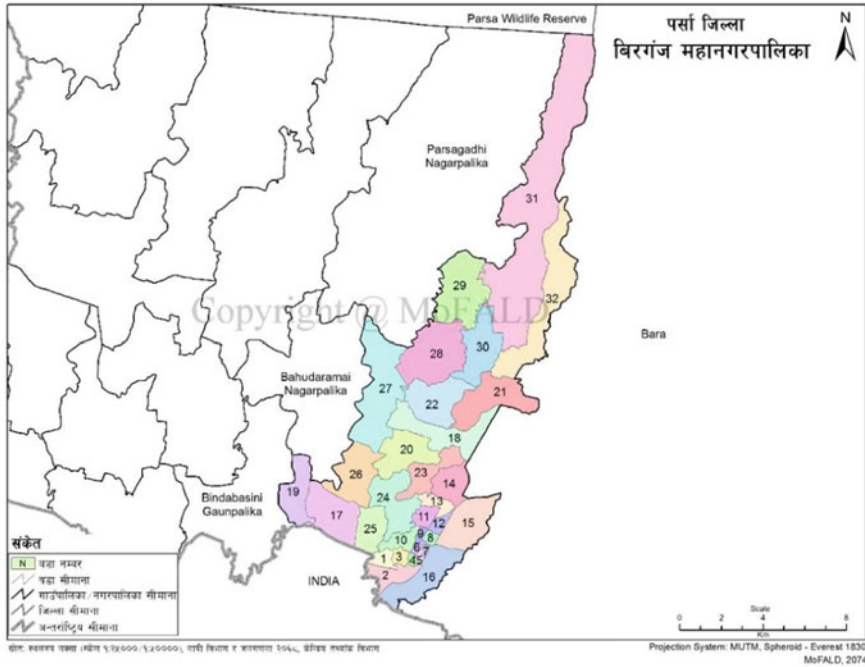
Fig. 11.3 Map of Birgunj Metropolitan City. *Source* Birgunj Metropolitan City

Madheshi protests occupied the bridge connecting Birgunj and Raxaul, blocking the vehicles and other trade flows (Fig. 11.4).

The protesters were staging a similar protest on other transits, but they were not as effective as the protest in Birgunj. From the scale of trade flow and type of goods coming in from India through Birgunj, it can be understood that the blockade's effect would have been more negligible if it was the case of any other transit than Birgunj. Trade between India and Nepal through Birgunj accounted for 158,030 million Indian Rupees (approximately £1,776 million), the most extensive trade compared to other transits between the two countries (Land Port Authority of India 2018). The second-largest transit Jogbani—Biratnagar, traded only 53,070 million Indian Rupees in the same term. India's four main imports using Birgunj transit are petroleum, motor vehicles, iron and steel and medicines. As Nepal is entirely dependent on India for petroleum, the blockade for five months after the catastrophic Nepal earthquake (Goda et al. 2015) almost brought the country to a standstill. Apart from petroleum, the shortage of day–to–day goods such as medicine and rice brought the crisis on a humanitarian level in many sectors, including Nepal's public health (Lamichhane 2015).

Another critical factor permitting Indian hard power effectively from this border-land city was the Consulate General of India located in Birgunj. The consulate general's role in Birgunj was widely criticized in Nepali media as provoking and

Fig. 11.4 Nepal-India border gate (Shankaracharya Gate) in Birgunj. *Source* The Kathmandu Post

facilitating the border protest. However, the consulate general denied the criticism (Business Standard 2015). On the other hand, Nepal Police and Nepali state presence in the borderland had been negative; the authorities were condemned for using excessive force during the protest (Sharma 2015), which eventually fuelled the protest and helped implement Indian hard power citizens of Birgunj and surrounding area.

The southern borderland's regional politics in Nepal is determined by this ethnic clout known as Madheshis. The Madheshi parties focused on regional issues and identity-based politics and started the protest in early 2007. The 2015 protest was ignited after the new constitution did not address their demand for more inclusive and 'democratic' rights. Their strong presence in the borderland city was the right environment for India to 'make Madheshi do what it wanted'. In other words, India implemented its hard power tactics by utilizing the Madheshi parties and their protest.

Moreover, the Madheshi parties (the subject of power) received the Indian (source of power) instructions to utilize it to their benefit to pressure the Nepal government for a constitutional amendment.

Birgunj, having close cultural and linguistic ties with the neighbouring Indian city of Raxaul, was another factor that helped the blockade become more successful in Birgunj. People on both sides of the border speak Bhojpuri; cross-border marriage is expected and has a strong cultural and economic bond (Birgunj Metropolitan City 2018). This added the sympathy of the people of the Indian city of Raxaul to the protestors on the other side. During the protest, the protesters often took refuge in Raxaul when chased by Nepal police.

Three built heritages of Birgunj, Sirsiya Bridge, Nepal-India border gate, and clock tower became a persistent symbol of protest during the Madhesh Movement. The Nepal-India border gate in Birgunj, also known as Shankaracharya Gate, symbolizes

Fig. 11.5 The clock tower of Birgunj and protesters. *Source* My Republica

strong Hindu religious ties. The distance between Shankaracharya Gate and the Sirsiya Bridge is approximately 450 m. The clock tower (Ghantaghar) is another 3 km from the Gate. The protestors utilized the space between these three built heritages as a protest zone to block the movement between the two countries. Protestors also utilized the Sirsiya Bridge to run towards Raxaul in Nepal, police firing their tear gas and rubber bullets. The other place of continuous protest was the iconic clock tower of Birgunj, also known as Ghantaghar. The protesters used the clock tower; the Ukrainians used Maidan Nezalezhnosti during pro-EU protests (Oliynyk 2015). When looked closely, these natural and built environments of Birgunj provided a perfect environment for the blockade to last longer (Fig. 11.5).

The final factor that helped the blockade last longer and became effective was the reactionary forces active at the border. Since India and Nepal have different policies and governments, the goods' market price varies across borders. Moreover, some ever-present gangs and smugglers smuggle goods such as petroleum, rice, and sugar from Nepal to India and vice-versa. These smugglers react rapidly to any event of political unrest, natural disaster or other change that can benefit them. During the economic blockade, petrol and other essentials were still available on the black market for people who could afford a higher price (Kazmin 2015). Therefore, the gangs could smuggle petroleum and essential supplies to Nepal in the black market by prolonging the protest. The nexus of smugglers with politicians on both sides of the border is so substantial and evident that it was also one reason for the prolonged blockade.

Along with the four analytical lenses to study borderland proposed by Brunet-Jailly (2005), from the case study of Birgunj, the following two more analytical lenses to study borderland city can be identified:

- The natural and built environment

- Reactionary forces

The case study gives insight into what happened in the borderland city of Birgunj during the protest. However, this protest had international attention and lasted five months, changing the India-Nepal-China relationship significantly. India's excessive use of hard power in the Madhesh Movement cover had many consequences and forced India to change its policy towards Nepal. This is discussed in the following section.

11.4 Indian Soft Power Diplomacy in Nepal: A New Beginning?

Soft power focuses on shared political values, peaceful conflict management, and economic cooperation to achieve standard solutions. 'Getting others to want what you want' is soft power (Wagner 2005). India used coercive diplomacy in full force from its Kathmandu Embassy and Consulate General in Birgunj, followed by the five-month blockade, which became provocative and led to more Chinese influence in Nepal. The 2015 economic blockade had a clear message from Nepal that if the southern border (with India) is closed, the Northern border (with China) will open. India used the hard power Indira doctrine, primarily defined by the treaty of 1950 on Nepal until 2015. However, the border blockade, Birgunj was the epicentre, ironically helped India's Nepal diplomacy transition, almost entirely from hard power to soft power diplomacy. In light of the 2015 border blockade, the following section looks at the key factors influencing the change.

11.5 Internationalization of Nepal's Conflict

The foundation for the Indian soft power in Nepal was laid back in 2007 when the United Nations Mission in Nepal (UNMIN) was established on 23 January 2007 to monitor the disarmament of Maoist rebels and the preparations for Constituent Assembly elections in Nepal. The involvement of the UN in Maoist fighters (People's Liberation Army) cantonment in Nepal's peace process (Martin 2012) inflicted a substantial change in Indian power policy in Nepal. The Indira doctrine that 'Domestic conflicts of neighbouring countries should only be solved with India's help and not by the interference of outside powers or international organizations' was denied by the Maoists demanding UN involvement in the peace process to end the decade-long war in Nepal.

The internationalization of the peace process forced the change in Indian power in Nepal in the coming years. Since the Madhesh Movement's roots can be traced back to the Maoist war and the awakening of ethnic dimensions in Nepali politics (Kantha 2010), the internationalization of Nepal's Madhesh Movement also

became inevitable. Madhesh Movement also became internationalized due to its liberal values, such as the demand for secularism, inclusion and gender equality, which are not ideal in the Indian bureaucratic structure dominated by traditional Hindu nationalistic values.

11.6   India-China Rivalry

Nepal shares centuries-old cultural, religious and family connections with China, similar to its ties with India. The Nepali capital of Kathmandu has a centuries-old trade relationship with China, which has fuelled a significant exchange of cultural, gastronomical, architectural and religious mix between the two countries. The strong Chinese Tibetan influence is everywhere in Kathmandu, from ancient temples to modern centres, typical local food to modern restaurants, and images of Buddhist stupas to Hindu temples. Similarly, Arniko, a Nepali architect's profound contribution to Chinese art and architecture, can still be witnessed today in Beijing's iconic Miaoying Temple designed by the Nepali Architect called Araniko (Bhandari 2017). Cross-border marriage between Nepali and Chinese (Tibetan) is still common and can be traced back to the thirteenth century. Princess Bhrikuti of Nepal was married to Tibetan King Songsten Gampo (Koon 2015), who brought Buddhism to Tibet.

China-India rivalry in Nepal and South Asia (Garver 1991) means they often compete to influence neighbouring countries. When India imposed a border blockade in 2015, the Nepalese government led by Prime Minister Khadga Prashad Sharma Oli opened the northern border to China. The Chinese and Nepali governments agreed to conclude a commercial deal on the supply of petroleum products from China to Nepal, ending the Indian monopoly on the Nepali petroleum market (Reuters 2016). The Chinese government sent convoys of oil tankers to fuel choked Nepal during the blockade backing the Nepal government's decision (Cabinet Decision of 17 March 2016, 2016) to import oil and gas from China, surpassing the Indian monopoly. In a further move to counter India's coercive hard power policy, Nepal signed China's One Belt One Road Initiative (OBOR), marking Nepal's official move to become part of Beijing's ambitious plan to revive ancient Silk Road trade routes (Giri 2017). These events made India rethink its rigid power policy, losing ground to China in Nepal.

11.7   India's Contemporary Political Situation

In India, 80% of the population are Hindus (Government of India 2018a); in Nepal, 81.3% are Hindu (Government of Nepal 2018), sharing major religious significance between the two countries. The 'char dham' (four abodes) in India, Pashupatinath and Muktinath in Nepal and Mt. Kailash in Tibet (China) are considered the most important holy places for Hindus. India and Nepal also are connected through Major

Hindu Religious texts, Ramayana and Mahabharata. The chronicles of Ramayana describe that goddess Sita of the present-day Nepali borderland city of Janakpur was married to the god Ram of the present-day Indian city of Ayodhya; the marriage is still remembered at the Hindu festival of Ram Navami every year through five days of the marriage ceremony between two cities. Siddhartha Gautama, widely known as the Buddha, was born in Lumbini, in present-day Nepal, and later gained enlightenment in the present-day Indian city of Bodhgaya.

India's ruling party BJP, which has Hindu-nationalist agenda, wants to utilize Hindu religious stunts such as visiting Pashupatinath, Muktinath and Janakpur of Nepal as a tool to influence Indian voters. After the blockade ended in February 2016 (Pokhrel 2016), major cities across Nepal started to lobby for the provincial capital. In province-2, Birgunj was the most anticipated city because of its proven political strength during the Madhesh Movement and commercial importance.

However, Janakpur, another Nepali city 123 km (76 mi) south-east of Kathmandu close to the Nepal-India border, was well-positioned for Indian attention due to its religious significance and the city leaders' close ties to Kathmandu. Therefore, India favoured Janakpur leaving Birgunj alone in the race for the provincial capital of Nepal's new federal structure. Eventually, the city of Birgunj, the Madhesh Movement's epicentre and the city that brought Nepal to a standstill, lost a bid to become the provincial capital. Thus, Janakpur was made the provincial capital of province-2, the new federal structure of Nepal (DD News 2018). India's move has essential symbolic meaning; it values Nepal's Hindu religious ties over other relations. To make this point further clear, Indian Prime Minister Narendra Modi visited Janakpur in May 2018 (Jha 2018) and said that 'Without Nepal, India's faith is incomplete. Without Nepal, India's history is incomplete. Without Nepal, India's dhams (temples) are incomplete. Without Nepal, our Ram is incomplete' (Kumar 2018). This move by the Indian PM was branded as a 'desperate move to rebuild his image' (Bhattarai 2018) damaged by the blockade. Nevertheless, this move also suggests that India is now pursuing soft power diplomacy in Nepal and targeting a broader Nepali audience as its subject of power whilst also focusing on the regional Madheshi forces.

11.8 Perception of India's Power and Influence in Madhesh

Understanding the Russian soft power in the Baltic States (Simons 2015) has focused on interpreting and reciprocating official Russian governmental and bureaucratic structures by citizens of the Baltic States. (Cheskin 2017) has used a structural perspective to study Russian soft power in Ukraine. Both chapters investigate the people's perspective or the perspective of the targeted audience as the audience of influence. These studies help understand India's interactions (agent of power) and Madheshi (the subject of power).

Although India was using hard power in a border blockade, it was covered by soft power, influencing Madhesh Movement to Indian use until the Madheshi political forces changed in Indian influence. As the long blockade weakened the Madhesh

Movement itself, the Madheshi forces changed their political tactics. This led to the interpretation and reciprocation of official Indian governmental and bureaucratic structures by Madheshi political forces. Madheshis were India's targeted subject of power during the border blockade, but the Madhesh Movement came from an internal force within Nepali society; the United Democratic Madhesi Front. The Madheshi political parties representing regional forces in Nepal started to interpret the Indian governmental and bureaucratic influences to benefit the Indians. The movement's liberal values, such as secularism, inclusion and gender equality contradicted the Indian Hindu-nationalist values. This forced the Indian government to opt for soft power to influence broader Nepali society rather than the regional force.

11.9   Conclusion

From the discussion above, the five key factors that compelled the shift of Indian diplomacy from hard power to soft power can be listed below:

- Internationalization of Nepal's conflict
- Opening border transits and construction of roads to China
- Trade agreement and signing of Chinese One Belt One Road (OBOR)
- The contemporary political situation in India
- Change in the interpretation of activities of official Indian governmental and bureaucratic structures by the subject of power

From the consequences of the 2015 border blockade, India has realized the failure of its hard power diplomacy in Nepal and shifted to the soft power policy. Wagner (2005, 2006) argues that India's soft power strategy in South Asia started in the 1990s, and India's focus increased to intergovernmental cooperation, negotiated settlements and economic collaborations. However, in Nepal's case, the tangible shift from hard power to soft power policy can only be seen after the 2015 blockade, ironically the extreme show of India's coercive diplomacy and hard power strategy.

In the case of Southeast Asia, Purushothaman (2010) states that India's sources of soft power are 'not being alarming' and 'unique advantage of not having a border dispute with neighbouring countries. Purushothaman further states the 'culture', language and 'land where Buddha preached', Bollywood movies and music as India's soft power sources in the region. However, in the case of Nepal, the Border is disputed (Kansakar 2012), the use of the Hindi language is largely unpopular (Khatry 2016), Bollywood movies are very popular but also equally controversial (ABC News 2000), Buddha is often contested by both countries (Skar 1995) as Buddha was born in present-day Nepal and lived most of his life preaching in present-day India. The soft power sources like cross-border marriage, cultural ties, Bhojpuri and Maithili linguistic ties are mainly limited to the Madheshi community. They do not appeal to the whole Nepali society.

It can be observed that India has limited sources of soft power in Nepal, which are not controversial and can appeal to broader Nepali society. Therefore, India is keen

on focusing on the Hindu religious tie as the primary source of its soft power, demonstrated in PM Modi's Janakpur address and his emphasis on Ramayana Circuit (DD News 2018). India favours religiously significant Janakpur strategically, and effective commercial Birgunj indicates India's shift from hard power to a soft power policy. It can be concluded that India's shift from hard power to soft power diplomacy is the result of the systematic strike on India's Indira Doctrine in Nepal by Maoists through the involvement of UNMIN, growing Chinese influence in the region, change in perception of India's power and influence in Madhesh and realization of the negative consequences of 2015 border blockade.

References

ABC News (2000) 2000-last update. Indian Film star sparks riots in Nepal [Homepage of ABC News] [Online]. Available: https://abcnews.go.com/International/story?id=81838&page=1. 11 July 2018

Appadorai A (1982) Select documents on India's foreign policy and relations, 1947–1972. Oxford University Press

Banerjee P, Chen X (2013) Living in in-between spaces: a structure-agency analysis of the India-China and India-Bangladesh borderlands. Cities 34:18–29

Bhandari B (2017) (last update). China's cultural debt to a Nepalese artist in the 13th-century court of Kublai Khan. [Homepage of South China Morning Post] [Online]. Available: https://www.scmp.com/magazines/post-magazine/long-reads/article/2122813/chinas-cultural-debt-nepalese-artist-13th-century. 20 June 2018

Bhattarai KD (2018) 2018-last update. Modi's desperate move to rebuild his image in Nepal. [Homepage of The Diplomat] [Online]. Available: https://thediplomat.com/2018/05/modis-desperate-move-to-rebuild-his-image-in-nepal/. 13 July 2018

Birgunj Metropolitan City (2018) 2018-last update. Brief introduction. [Homepage of Birgunj Metropolitan City] [Online]. Available: http://birgunjmun.gov.np/en/node/194. 18 Apr 2018

Brunet-Jailly E (2005) Theorizing borders: an interdisciplinary perspective. Geopolitics 10(4):633–649

Business Standard (2015) 2015-last update. Indian embassy denies blockade at the Indo-Nepal border. [Homepage of Business Standard] [Online]. Available: https://www.business-standard.com/article/news-ani/indian-embassy-denies-blockade-at-indo-nepal-border-115100400586_1.html. 01 Aug 2018

Cabinet Decision of 17 Mar 2016 (2016)

Cheskin A (2017) Russian soft power in Ukraine: a structural perspective

Das N (2016) Indigeneity, borderlands and memory of homeland: a reappraisal of Zomia Theory vis-à-vis 'tribes' of India-Burma/Myanmar frontier. Bangladesh Social Soc 13(2):51

DD News (2018) 2018-last update. Nepal government announces provincial capitals and chiefs. [Homepage of DD News] [Online]. Available: http://ddnews.gov.in/international/nepal-government-announces-provincial-capitals-and-chiefs. 22 July 2018

Garver JW (1991) China-India rivalry in Nepal: the clash over Chinese arms sales. Asian Surv 31(10):956–975

Giri S (2017) 2017-last update. Nepal, China sign deal on OBOR. [Homepage of The Kathmandu Post] [Online]. Available: http://kathmandupost.ekantipur.com/news/2017-05-12/nepal-china-sign-framework-deal-on-obor.html. 08 June 2018

Goda K, Kiyota T, Pokhrel RM, Chiaro G, Katagiri T, Sharma K, Wilkinson S (2015) The 2015 Gorkha Nepal earthquake: insights from earthquake damage survey. Front Built Environ 1:8

Government of India (2018a) 2018a-last update. Distribution of population by religion [Homepage of Office of the Registrar General & Census Commissioner, India] [Online]. Available: http://census india.gov.in/Census_And_You/religion.aspx. 16 June 2018a

Government of India (2018b) 2018b-last update. Treaty of peace and friendship. [Homepage of Ministry of External Affairs, Government of India] [Online]. Available: http://mea.gov.in/bilateral-documents.htm?dtl/6295/Treaty+of+Peace+and+Friendship. 12 June 2018b

Government of Nepal (2018) 2018-last update. National population and housing census 2011 major findings. [Homepage of Central Bureau of Statistics Nepal] [Online]. Available: http://cbs.gov.np/sectoral_statistics/population/major_highlights. 12 June 2018

Gupta R (1975) Sikkim: the merger with India. Asian Surv 15(9):786–798

Gyawali D (2002) Nepal-India water resource relations. In: Power and negotiation, pp 129

Jain G (1959) India meets China in Nepal. Asia Publishing House

Jha HB (2015) Nepal's Madhesh movement (fall 2015). In: The Peacebuilding Post, Nov 2015

Jha HB (2018) 2018-last update. Modi in Janakpur: cementing bilateral ties. [Homepage of The Himalayan Times] [Online]. Available: https://thehimalayantimes.com/opinion/indian-prime-minister-narendra-modi-in-janakpur-cementing-bilateral-ties/. 21 June 2018

Kansakar VBS (2012) Nepal-India open border: prospects, problem and challenges

Kantha P (2010) Maoist-Madhesi dynamics and Nepal's peace process. In: The Maoist insurgency in Nepal: revolution in the twenty-first century, pp 156–172

Kazmin A (2015) 2015-last update. Nepal crisis fuels black market for petrol. [Homepage of Financial Times] [Online]. Available: https://www.ft.com/content/c207117c-83a2-11e5-8095-ed1a37 d1e096. 07 June 2018

Khatry R (2016) 2016-last update. Demand for Hindi to be Nepal's "national language"—a question of 77,569 versus 26,494,504. [Homepage of SouthAsia.com.au] [Online]. Available: http://www.southasia.com.au/2016/10/01/demand-hindi-nepals-national-language-question-77569-versus-26494504/. 10 May 2018

Koon WK (2015) 2015-last update. How Buddhism came to Tibet from China and Nepal. [Homepage of South China Morning Post] [Online]. Available: https://www.scmp.com/magazines/post-magazine/article/1823095/how-buddhism-came-tibet-china-and-nepal. 02 June 2018

Kumar M (2018) 2018-last update. India's history, faith, Lord Ram incomplete without nepal: PM Modi: 10 Points. [Homepage of NDTV] [Online]. Available: https://www.ndtv.com/india-news/pm-narendra-modi-in-nepal-today-says-neighbourhood-first-10-points-1850555. 27 June 2018

Lamichhane J (2015) Health consequences of the blockade in Nepal. Lancet 386(10010):2251

Land Port Authority of India (2018) 2018-last update. ICP Raxaul. [Homepage of Land Port Authority of India] [Online]. Available: http://www.lpai.gov.in/content/innerpage/icp-raxaul.php 06 Aug 2018

Majumder S (2015) 2015-last update. Why India is concerned about Nepal's constitution. [Homepage of BBC] [Online]. Available: https://www.bbc.co.uk/news/world-asia-india-34313280. 18 June 2018

Martin I (2012) The United Nations and support to Nepal's peace process: the role of the UN mission in Nepal. In: Nepal in transition, pp 201–231

Marwah O (1979) India's military intervention in East Pakistan, 1971–1972. Mod Asian Stud 13(4):549–580

Murthy P (1999) India and Nepal: security and economic dimensions. Strateg Anal 23(9):1531–1547

Nayak N (2011) The Madhesi movement in Nepal: implications for India. Strateg Anal 35(4):640–660

Nye JS (2011) The future of power

Ojha H (2015) 2015-last update. The India-Nepal crisis. [Homepage of The Diplomat] [Online]. Available: https://thediplomat.com/2015/11/the-india-nepal-crisis/. 01 June 2018

Oliynyk O (2015) The architectural image of Kiev's central square as a symbol of national identity. In: Tales of urban lives and spaces—De Urbanitate, vol 3, pp 83–92

Pfaffenberger B (1988) Sri Lanka in 1987: Indian intervention and resurgence of the JVP. Asian Surv 28(2):137–147

Pokhrel K (2016) 2016-last update, Nepal blockade ends but protests continue. [Homepage of The Wall Street Journal] [Online]. Available: https://blogs.wsj.com/indiarealtime/2016/02/09/nepal-blockade-ends-but-protests-continue/. 11 July 2018

Purushothaman U (2010) Shifting perceptions of power: soft power and India's foreign policy. J Peace Stud 17(2.3)

Reuters (2016) 2016-last update, China to supply petroleum products to landlocked Nepal. [Homepage of Reuters] [Online]. Available: https://www.reuters.com/article/us-china-nepal/china-to-supply-petroleum-products-to-landlocked-nepal-idUSKCN0WP1WV. 02 June 2018

Schofield V (2010) Kashmir in conflict: India, Pakistan and the unending war. IB Tauris

Sharma G (2015) 2015-last update, Kathmandu chokes under ethnic blockade, fuel short. [Homepage of Reuters] [Online]. Available: https://www.reuters.com/article/us-nepal-strike/kathmandu-chokes-under-ethnic-blockade-fuel-short-idUSDEL2842920080219. 03 May 2018.

Shneiderman SB (2013) Himalayan border citizens: sovereignty and mobility in the Nepal-Tibetan autonomous region (TAR) of China border zone. Polit Geogr 35:25–36

Simons G (2015) Perception of Russia's soft power and influence in the Baltic States. Publ Relat Rev 41(1):1–13

Skar HO (1995) Myths of origin: the Janajati movement, local traditions, nationalism and identities in Nepal. Contrib Nepalese Stud 22(1):31–42

The Kathmandu Post (2018) Over-reliance on India has hit the economy hard 2015-last update [homepage of the Kathmandu Post] [Online]. Available: http://kathmandupost.ekantipur.com/printedition/news/2015-11-22/over-reliance-on-india-has-hit-economy-hard.html, 31 June 2018

Upreti BC (1993) Politics of Himalayan river waters: an analysis of the river water issues of Nepal, India, and Bangladesh. South Asia Books

Wagner C (2005) From hard power to soft power? Ideas, interaction, institutions, and images in India's South Asia policy

Wagner C (2006) India's new quest for intra-and inter-regional politics. In: Bersick S, Stokhof W, van der Velde P (eds) Multiregionalism and multilateralism: Asian-European relations in a global context. Amsterdam University Press, Amsterdam, 57

Chapter 12
Regional Features of Agglomeration and the Antidote to Almaty's Landlocked Condition

Gulnara Nyussupova, Aisulu Kalimurzina, Roza Kelinbayeva, Shnar Kairova, and Laura Kenespayeva

Abstract Almaty is the largest urban agglomeration in Kazakhstan with regional and global markets, the most significant business transit hubs, and Central Asia's key transport corridors. The Almaty region borders the People's Republic of China east and the Kyrgyz Republic in the south. Even though it has no ports and it relies upon road connections for global access, Almaty is the largest landlocked city. It has been experiencing rapid urbanisation and growth; it increased from 1.3 million in 1999 to 1.8 million in 2018. Unfolding the problems and prospects of the spatial and territorial development of Almaty agglomeration within the geographical constraint of the landlocked situation in the region was an initial goal. The research uses comparative geographical, cartographic, and dynamic statistical methods. GIS and remote sensing are also used to monitor and map urban areas, and infrastructure development. The research builds on these Geodatabases to establish the critical indicators of the quality of life of the Almaty agglomeration to monitor, manage, and forecast the regional development of the Almaty agglomeration. The research aims to establish the parameters that would aid the regional ambition to reach Almaty as the centre of science, investments, and human resources. Further, the objective is to provide a high quality of life under landlocked conditions. The research argues that Almaty should gain more from the innovative use of infrastructure as an antidote to the constraint of being landlocked, which points to the development of several international transport corridors, realising both transit and exporting potential Kazakhstan.

Keywords Agglomeration · Regional features · Landlocked area · GIS

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12.1 Introduction

Almaty agglomeration is one of Kazakhstan's largest established urban settlements (Fig. 12.1). The formation of this settlement took place in the latitudinal direction favoured by the foothills of the Ile-Alatau, in the places of the cone of the outflow of mountain rivers with the advantages of its compatible natural and climatic conditions; a favourable economic-geographical and geopolitical position, the availability of labour resources; the agrarian-industrial orientation of economic development; a dynamically developing transport and logistics system to support the recreational potential of the territory.

The area of the Almaty agglomeration is 9395 km^2 or 4.3% of the Almaty region's territory. The boundaries of the suburban zone of Almaty are changing due to reasons such as (a) to ensure the harmonious spatial development of Almaty and the adjacent territories of Almaty agglomeration; (b) to adjust its dynamic population growth in Almaty and the suburban area; (c) to implement breakthrough projects; and (d) to help resettlement of the prospective population. The Almaty agglomeration includes 46 settlements of the Enbekshikazakh district, 14 settlements of the Zhambyl district, 29 settlements of the Ili region, 47 settlements of the Karasai district, 46 settlements of the Talgar district, five settlements of Kapchagay city (Official Information Source of the Prime Minister of the Republic of Kazakhstan 2015).

Fig. 12.1 Landlocked Almaty (iStock 2019)

12.2 Materials and Methods of Research

The methodological basis of the research was a systematic analysis of Almaty's regional features and socio-demographic problems for the years 1999–2016. The comparative geographic, socio-historical, cartographic, statistical, and GIS methods were used to trace the development of Almaty agglomeration. For the analysis, statistical indicators from the demographic yearbooks of the Committee on Statistics of the Republic of Kazakhstan were used. In addition, using GIS technologies, maps of the borders of Almaty were compiled for 2007, 2012, and 2017.

12.3 Results and Discussion

Almaty is the core of the Almaty agglomeration. Currently, the area of Almaty is 683.5 km^2, the population was 1.7 million people in 2016, and the population density is 2487 people per km^2. According to the territorial-administrative division, Almaty consists of eight districts: Alatau, Almaty, Auezov, Bostandyk, Zhetysu, Medeu, Nauryzbai, and Turksib (Fig. 12.2).

Almaty has a broad demographic and labour resource that constitutes 52.3% of the population. Considering the annexed territories, the population was 1.7 million people in 2016 or 9.7% of the total number of residents of the whole republic, with a steady increase in population in the city (Fig. 12.3).

The birth rate in the period of independence of the republic has been growing since 1991 and reached the highest level in 2008—25.3% since 2009. On the other hand, the fertility rate has decreased, and in 2016, it was 18.4 %. Comparatively,
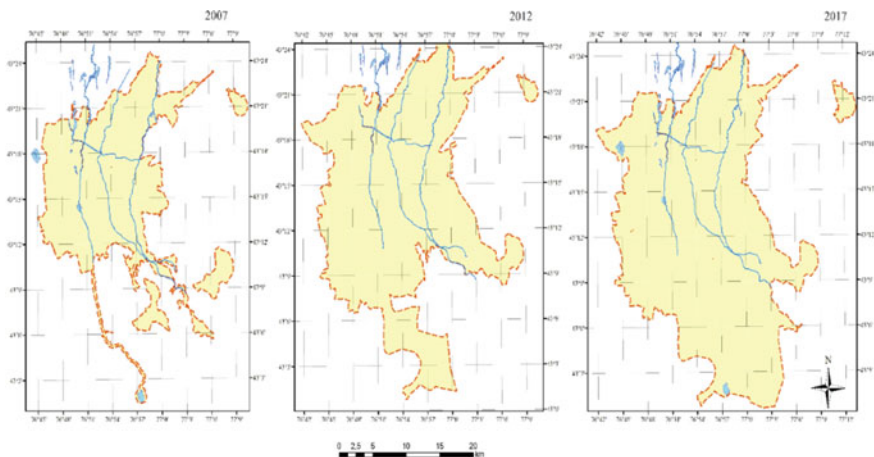
Fig. 12.2 Change of borders of Almaty in 2007, 2012, and 2017
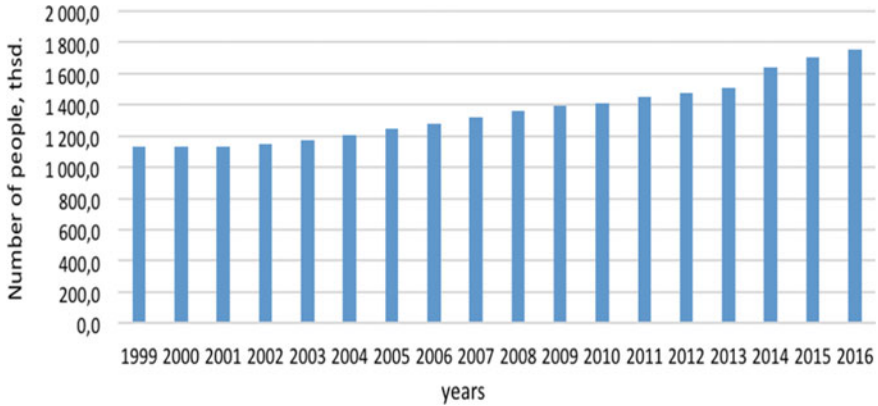
Fig. 12.3 Dynamics of the population of Almaty from 1999 to 2016, thousand people
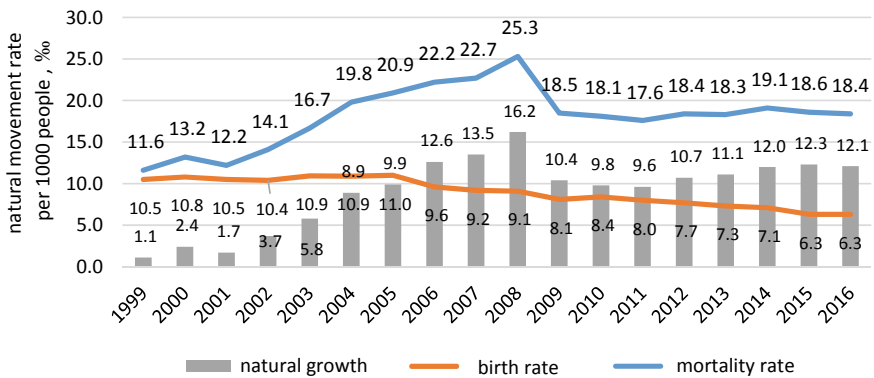
Fig. 12.4 Dynamics of the natural movement of the population of Almaty for 1999–2016

the birth rate in the Republic of Kazakhstan for the current period was 22.8 %.[1] A slight increase in the death rate was observed until 2005 and amounted to 11.0 %. However, in the following, the death rate steadily decreased; in 2016, it was 6.3 %. Thus, the death rate in Almaty is lower than the average republican level, which is 2016 was 8 % (Fig. 12.4) (Nyussupova et al. 2018).

Analysis of the factors of population change in Almaty shows that the population growth occurred due to natural increase and the positive migration balance (Fig. 12.5). Since 1999–2001, the city of Almaty is characterised by low natural growth rates (1.2–2.7 thousand people) and a negative balance of migration. Since 2001, there has been an increase in the population of Almaty due to the positive migration inflow of the population. Since 2000–2016 years, the population of the city increased from 1.12 million to 1.75 million. The total population growth for this period was 622.5

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[1] https://almaty.gov.kz.
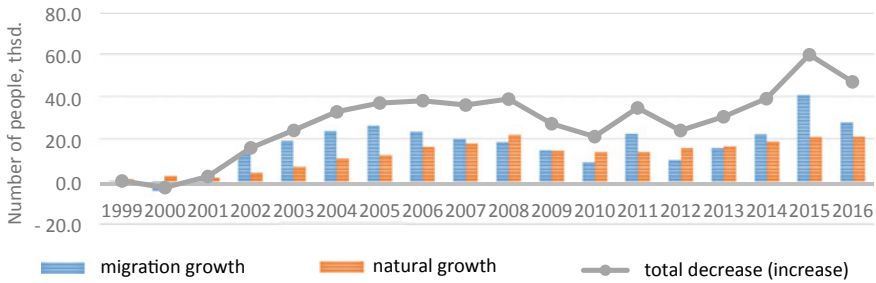
Fig. 12.5 Total increase (decrease) in the population of Almaty for 1999–2016
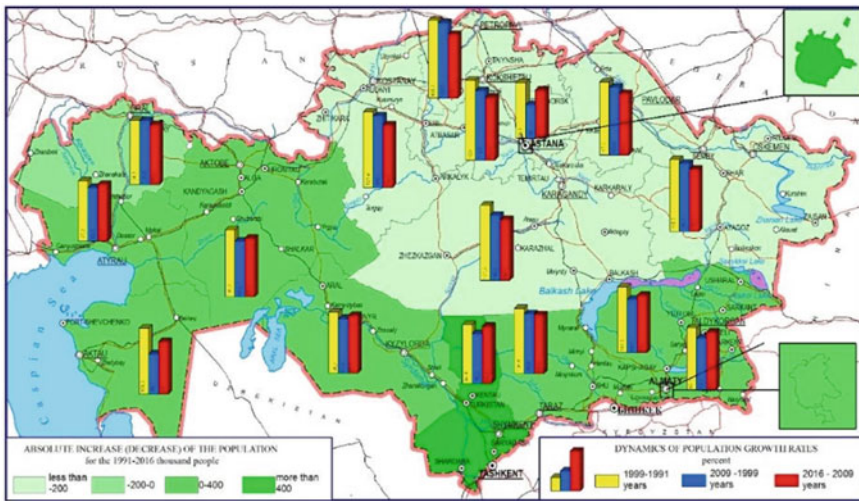
Fig. 12.6 Population growth of the Republic of Kazakhstan in 1991–2016

thousand people due to natural increase—250.2 thousand people, due to migration—372.3 thousand people (Fig. 12.6).[2]

The intensive migration flow creates a certain social tension in Almaty, as the arriving population in need of housing and employment increases competition in the labour market and the criminal situation in the city.[3]

About 98% of the arrivals are migrants from other regions of the republic, the most significant number from Almaty, South Kazakhstan, and Zhambyl oblasts. According to the degree of work capacity, about 90% of the arriving population are working-age persons. They work in the informal economy sector and are engaged in repair and construction, transport services, communal services, and trade. Therefore, the inflow of population from other country regions is unsystematic without considering

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[2] http://atlassd.kaznu.kz.

[3] https://stat.gov.kz.

the city of Almaty's resource potential (social, engineering, transport infrastructure, the ecological condition of the territory, and the labour market).

As of 1 January 2015, the population of the Almaty agglomeration was 2,460,400 people, of which 1,548,400 live in Almaty city. Simultaneously, the annual growth rate of the population in the peripheral agglomeration zone is much higher than the similar growth rate in Almaty. The coefficients of natural population growth in agglomeration areas range from 17.6 people per 1000 inhabitants in the Talgar region to 22.8 people per 1000 inhabitants in the Ili region. The following indicators characterise the population's age structure: the proportion of children under 16 years of age is 23.6%; the ratio of the population of working age is 68%; the balance of the population over working age is 8.4%. The increase in the population of the Almaty agglomeration is associated with natural and migratory growth. Given the continued rise in migration flows and natural population growth, Almaty will remain amongst the leaders in population growth. Over the past ten years, the migration balance in the Almaty agglomeration has had a positive trend; by the end of 2014, it was 22 thousand people.[4]

Among the Almaty region regions that are part of the agglomeration, the Karasai and Talgar districts have had a positive migration dynamic over the same period. According to the data of the General Scheme of the Organisation of the Territory of the Republic of Kazakhstan, it is projected that in the Almaty metropolitan area in 2020, there will be 3057.9 thousand people (of which in Almaty—1882.5 thousand people) and in 2030—3596.6 thousand people (of which in Almaty—2347.5 thousand people)[5] (The Republic of Kazakhstan 2013). As expected, the main migration inflow will occur in Kapshagai, Karasai and Talgar districts. Therefore, the demographic situation of Almaty agglomeration can be considered favourable.

The future population growth in satellite and counter-magnet cities will be due to the high natural and migratory population growth. Thus, demographic processes in the agglomeration become smoother with some positive trends in the reproduction and migration of the population.

According to the Statistics Department of Almaty city and the Almaty region, the analysis of the structure of the leading synthetic indicator of the region's development indicates that Almaty is gradually moving to a post-industrial stage of development characterised by a radical change in the "specialisation" of the city.[6] The fact that 70% of GRP falls in the service sector, including trade, and only 6.2%—in the industry characterises the city as a service centre of the republic. Several backbone enterprises form the basis of the industrial potential of Almaty; in particular, the machine-building industry is represented by JSC Almaty Heavy Machinery Plant, JSC Yrysty—Almaty Electric Car Repair Plant, Belkamit LLP—machine-building plant. The manufacturing enterprises are LLP "Aksai Bakery"—food production,

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[4] Data from the Statistics Department of the Almaty region http://www.almatyobl.stat.gov.kz/.

[5] Decree No. 1434 of the Government of the Republic of Kazakhstan of 30 December, 2013, "On Approval of the Basic Provisions of the General Scheme for the Organisation of the Territory of the Republic of Kazakhstan" (2013).

[6] Data from the Statistics Department of the Almaty region http://www.almatyobl.stat.gov.kz/.
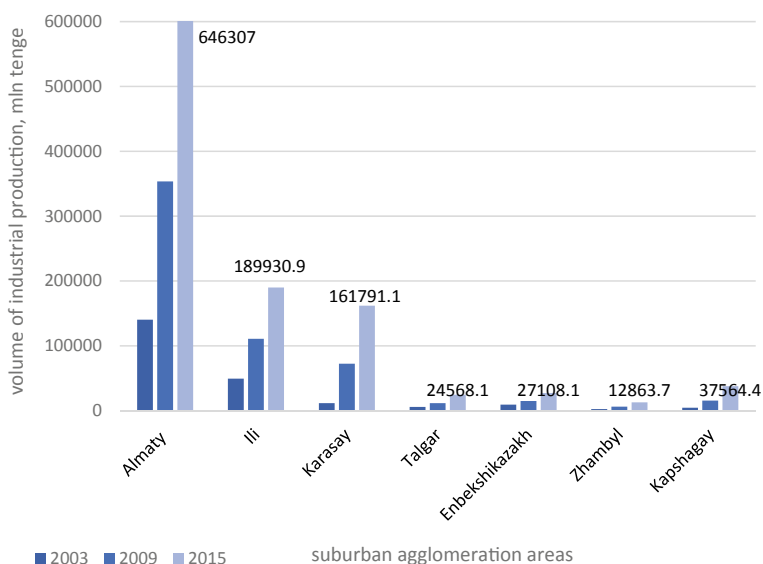
Fig. 12.7 Volume of industrial production of suburban areas of Almaty agglomeration for 2015, million tenge

LLP "Raimbek-Bottlers", JSC "Bacchus"—beverage production, JSC "Rakhat"—production of confectionery. The industry of the districts that make up the Almaty agglomeration specialises mainly in the production and processing of vegetables and fruits, milk and poultry meat, and winemaking (Fig. 12.7).[7]

The availability of valuable land resources in the mountain-steppe agglomeration zone favours the development of crop production. In agglomeration, there are prerequisites for further developing horticulture, viticulture, vegetable, cereal and industrial crops, and dairy cattle. The positive factors for developing the agricultural sector of agglomeration are significant irrigated farmland and water sources.[8] The growing demand is vital for agricultural products and the country's most potent regional consumer market's territorial proximity—Almaty. An essential project for the development of the commuter industry can be called the industry project "Development of the food belt around Almaty", which provides for the creation of modern fattening and dairy complexes, the development of a network of processing enterprises, the construction of greenhouse complexes, fruit and vegetable stores, and the establishment of fruit orchards and vineyards.

Almaty residents consume only $2.5 billion worth of food a year. Almaty oblast covers this volume of food by 40%, and the rest falls on imports or deliveries from

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[7] Long-term concept of economic positioning in Almaty and the Almaty region until 2015. Decree No. 881 of the Government of the Republic of Kazakhstan of September 24, Astana, (2008).

[8] Consolidated analytical report on the status and use of the lands of the Republic of Kazakhstan for 2015. Astana, 34–35 (2016).

other regions of the republic. Thus, a high level of transport security is a relatively low transport component in the region's final price of agricultural products.

The Almaty industrial centre specialises mainly in producing goods for the population. Its largest enterprises are in the light and food industries. In the city itself, there are 276 enterprises. The electric power industry leads all allocated pollutants (TPP-1, TPP-2, AGRES). The leading industrial enterprises outside Almaty are located in nearby settlements.

It should be noted that there are small enterprises of electro-heat supply in almost all more or less large settlements, working, as a rule, on coal. Besides, they are located in enterprises mainly related to the light and food industries. So, Talgar (Talgar region) has felting and garment factories. In Kargaly, Zhambyl district, there is the Kargalinsky cloth factory in the village. Boraldai, Ili district, has various repair and mechanical enterprises, sugar and brick factories, and a factory for building stone. In Kapshagai, a porcelain factory is noted among many sources of air pollution. In Kaskelen of Karasai district, a brick factory. More than 100 enterprises in the suburban area belong to the food, light, and construction industries (Nyussupova et al. 2014).

Two of the five international transport corridors formed the basis of the existing rail network in the country, passing through the agglomeration territory. These are (1) Southern Corridor Trans-Asian Railway: South-Eastern Europe—China and South-East Asia through Turkey, Iran, Central Asia and Kazakhstan (on the Dostyk-Aktogay-Almaty-Shu-Arys-Saryagash section); (2) TRACECA: Eastern Europe—Central Asia, through the Black Sea, the Caucasus and the Caspian Sea (on the Dostyk-Almaty-Aktau section). Besides, along with Almaty agglomeration's territory, the following road corridors pass Almaty—Karaganda—Astana—Petropavlovsk; Tashkent—Shymkent—Taraz—Bishkek—Almaty—Khorgos; Western Europe—Western China (railway branch Zhetygen—Khorgos) (The Republic of Kazakhstan 2010). The main problem of the transport system's development on the territory of the metropolitan area is the lack of modern high-speed urban and suburban passenger transport systems, such as light rail (LRT) and high-speed bus services (BRT), which have high carrying capacity. There is no alternative to road transport in suburban areas that does not meet the needs of existing passenger traffic. The reasons preventing the development of automobile transport in the agglomeration are the existing road infrastructure and the loss of the bearing road surface on the roads of regional and regional importance. In addition, Almaty International Airport, located on the city territory, causes noise and environmental regulatory requirements to be violated.

Anthropogenic pressure on the environment on the territory of the Almaty agglomeration is provided annually by the receipt of harmful substances into the air atmosphere from mobile and stationary pollution sources and the accumulation of solid domestic and industrial waste. There are no equipped landfills for solid household waste on the territory of the Almaty agglomeration, and de facto available are unauthorised dumps. In this regard, solid household waste is a source of environmental

pollution and causes the spread of hazardous substances. However, most of the emissions come from road transport. It should be noted that in Almaty, emissions of this type of source form about 79% of the total mass.

Urbanisation processes are inextricably linked with the region's ecological balance violation. Therefore, the deterioration of the ecology is evident. The qualitative level of environmental destabilisation of natural and territorial complexes is determined based on accounting for the number of natural components susceptible to the anthropogenic impact of various changes that differentiate the region's ecological tension.

The most significant environmental destabilisation level in the territory of the Almaty agglomeration is noted in forest-steppe and forest-meadow-steppe landscapes of middle mountains and steppe landscapes of low mountains, which were under the influence of industrial production, and development of mineral deposits. The land allocated for constructing transport routes in the region (highways—local, regional, regional, republican importance, railroad, pipelines, power lines) is attributed to a healthy level of environmental destabilisation. The territory occupied by agricultural production (plant growing and livestock farming) is a moderate ecological destabilisation. Annual ploughing of lands and cultivation of arable land with agricultural machinery destroy lands' soil–plant structure, worsens their properties, causes erosion, and deflation.

Specially protected natural territories are classified as a weak ecological destabilisation: state national parks, state reserves, state reserves, and state nature monuments. Ile-Alatau State National Natural Park, Almaty Reserve, Kapshagai Reservoir, State National Natural Park "Altyn-Emel", Sharyn Canyon, archaeological landscape "Tamgaly", cultural and historical complexes are located in the region. These facilities have ecological, historical, cultural, and recreational value. The total area of specially protected natural areas of national importance in the Almaty agglomeration is 814,671 hectares (19.3 of the total area of five districts of the region). In Almaty, the share of PAs occupies about 34% of the city's vicinity. The largest city in the state natural park, "Medeu", is located in the Medeu district, in the river's floodplain. In small Almaty, the remaining PAs are fragmentary and occupy a small area of the city (the state nature monument "Bauma Grove", the central botanical garden, the Almaty head republican zoo, and so forth) (The Republic of Kazakhstan 2014, 2015).

An analysis of population resettlement principles in the Almaty agglomeration by satellite imagery will make it possible to determine the most comfortable conditions for living. So, it should be noted that the settlements of the agglomeration are located mainly to the north and northeast of Almaty and towards the Kapshagay reservoir. Consequently, irrigated arable land between Almaty and Kapshagay is valuable to create the agglomeration food belt and is already built up. Therefore, it is necessary to use developed and disturbed territories with enough infrastructure, housing stock, and labour resources (Fig. 12.8).

For the stable functioning of the agglomeration and provision of food and recreation for the population, creating a green and food belt is an obligatory component
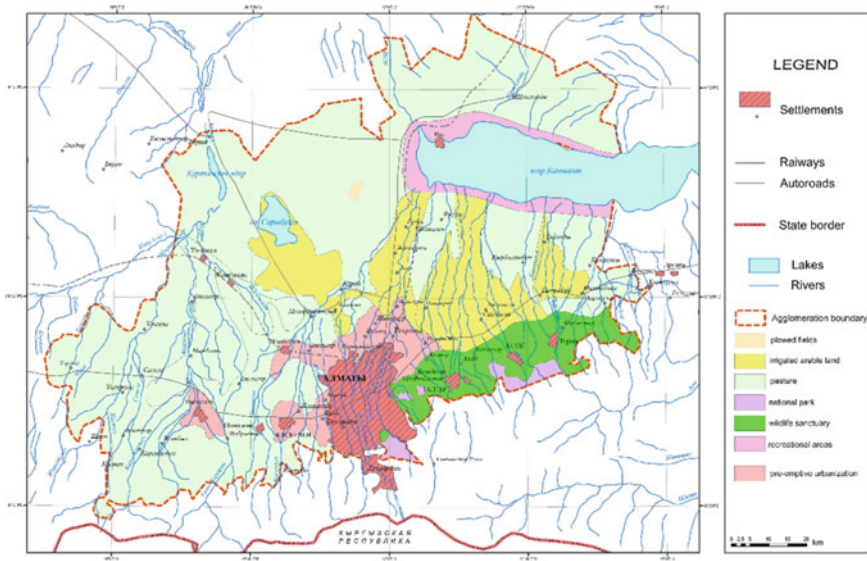
Fig. 12.8 Functional zoning of Almaty agglomeration

of an integrated system structure. Although the role of society's territorial organisation, the nature of the activity, and the formation of agglomerations are similar due to local, natural, and historical features, they differ in the spatial structure of the location. Almaty agglomeration did not form strictly organised concentric zones but developed as a segmental location of these zones. It would be more beneficial to preserve the protected and recreational areas in the southeastern and eastern parts of the agglomeration, which is favourable for creating a green agglomeration belt. The northern and northeastern parts should be defined as the food belt with the regional centres of agro-industrial complexes for the deep processing of agricultural products. Primary processing enterprises are developing in rural districts and supporting villages in conjunction with the service and procurement centres.

12.4 Conclusions

Despite its landlocked location, the Almaty agglomeration has a positive dynamic; many indicators exceed the average republican level. Several factors affect socio-demographic processes. Positive factors include:

- Positive demographic trends, specifically an increase in the population taking into account migration, relatively high rates of reproduction, reduction in mortality, and an increase in life expectancy
- Positive balance of migration, particularly an influx of working-age population

- Availability of highly qualified personnel and a developed educational base enriched by the intellectual environment
- Availability of the Academy of Sciences, universities, and research organisations resulting in a cycle of research and production (e.g. fundamental scientific developments, applied research and development facilities, operating production)
- Rapidly updated information and telecommunications system, availability of innovative infrastructure, and use of new technologies in production
- Low level of social conflict
    At the same time, there are certain risks and constraints to the development of the city:
- The growing share of the population under active working age and the declining proportion of the working-age population
- The significant concentration of older adults in the city; 11.7% of the population are pensioners; and the ageing population is growing with high unregulated migration from other regions, which is not taken into account by official bodies
- Overpopulation of Almaty; according to experts, the population is 2.0 to 2.2 million—a high level of hidden unemployment and a significant problem for city development

The existing opportunities of Almaty for sustainable development are an effective use of the geopolitical and geographical location of Almaty to attract investors, create new industries using advanced foreign technologies for the development of the domestic market, increase financing for innovative projects, a significant interaction of science, business, and government, the development of the city as a Central Asian financial centre, and the comprehensive development of the Almaty agglomeration based on the territorial resources of Almaty region.

References

The Ministry of Energy of the Republic of Kazakhstan (2014) Alma-Ata's region. State of the environment. Almaty

Official Information Source of the Prime Minister of the Republic of Kazakhstan (2015) Conclusion of the complex urban planning expertise of 23.10.2015 "Interregional scheme of territorial development of the Almaty agglomeration", Astana, p 113

Nyussupova G et al. (2014) The concept of formation and development of the Almaty agglomeration. Research project of the authors' team of the Astana branch of JSC "KazNIISA". Astana, pp 51–54

Nyussupova G et al. (2018) Socio-demographical indicators of an electronic atlas of socio-demographical development of the regions of the Republic of Kazakhstan. In: Proceedings of 18th international multidisciplinary scientific geoconference SGEM 2018, vol 18, no 2.3, pp 559–566. https://doi.org/10.5593/sgem2018/2.3

The Republic of Kazakhstan (2008) Long-term concept of economic positioning in Almaty and the Almaty region until 2015. Decree No. 881 of the Government of the Republic of Kazakhstan of September 24, Astana

The Republic of Kazakhstan (2010) National atlas of the Republic of Kazakhstan. Socio-economic Development, Almaty, T.2. 163p

The Republic of Kazakhstan (2015) Consolidated analytical report on the status and use of the lands of the Republic of Kazakhstan for 2015, Astana, 34–35

The Republic of Kazakhstan (2013) On approval of the basic provisions of the general scheme for the organisation of the territory of the Republic of Kazakhstan

Chapter 13
People, Places and Relationships

Vaidehi Raipat

Abstract The big question that haunts urban design today is the classic chicken and egg question: people first? Alternatively, places first? Our cities are a synthesis of a physical and social fabric that confront and interact with each other in urban design. A new approach to urban design aims to sustain urban life's social and cultural aspects, including people's needs, wants, and hopes. Sustaining the socio-cultural fabric of cities can ensure people-centric and inclusive cities. This research investigates the five dimensions: people, places, networks, activities, and territoriality in Ranchi; which constitutes the social fabric of cities. These, when put together, arrange like a solved jigsaw puzzle and give a character to the city. Ranchi was created in Nov 2000 as the capital of the newly formed state of Jharkhand, located on the eastern side of India. In the past, Ranchi was known as the summer capital of Bihar and was a little larger than a town in terms of development. However, since then, it has been vigorously expanding in size, infrastructure, and population. This sudden expansion has created stress on the existing built environment. The large forest covers, agricultural lands, diverse culture, and pleasant climatic conditions have degraded and mainly decreased. The narrow roads and old buildings cannot bear the load of changing requirements, fast-improving technology, and a growing population. Hence, the built environment has been rendered unsustainable and unadaptable through the fastidious changes of the present era. Communities and lifestyles formulate the people dimension, followed by spatial structure and legibility as places. Networks encompass connectivity and accessibility, whilst activities encompass occupations, interactions, and engagements. Finally, territoriality can be defined as utilising space to communicate ownership and convey a sense of personal space and comfort zones in existing communities. With a focus on guidelines, the outcome of this research informs both policies and practices. With the help of user perception surveys and extensive visual observations, this research establishes ways and means to sustain and enhance the existing cultural and socio-spatial relationships in the urban fabric.

Keywords Socio-spatial · People-centric · Inclusivity

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13.1 Introduction

13.1.1 Background

Cities are plural texts and can be understood by deconstructing them into smaller components. They are a palimpsest of evolving trends and habits. People create one of the major components along with their built environment. The built environment encompasses its buildings, circulation networks, and other service infrastructure. The sudden boom in a population's changing needs and demands has rendered the present infrastructure unfitting, incapable, and deficient. Technology in the current era progresses geometrically; hence, it is inevitable for designers to understand this transformation and revamp such outdated, arcane, and inefficient spaces. Though we cannot afford to lose the charm of an old city, it is also essential to consider the present techno era's needs, requirements, and promises.

The objective of urban design should not be to develop a final spatial model similar to the idealised urban setting. Utopia is a myth if the idea of utopia is not contextual. Users respond differently in different urban settings. To analyse the interaction between users and their built environment, it is necessary to categorise the variables that determine the character of the built environment. This is one of the major reasons for developing a 'four-axis study matrix' as the methodology for this research.

Our societies are going through an infinite series of social, cultural, economic, and environmental changes. A static idea or a fixed policy can never be formulated to design urban space. The changing society demands flexible concepts that can intertwine with the contest of time and space. The infrastructure of many ageing Indian cities belongs to a time when the population of these cities was less than one-fourth of today's population, and the technological advances were negligible.

The objective of this research is categorised into a two-step process. The first step involves developing a universally accepted and contextually adaptable methodology to analyse the socio-spatial relationship of a city. The second step involves testing the developed methods by conducting socio-spatial studies in Ranchi. This paper elaborates the discussion on this methodology by illustrating the documentation and analysis of the selected contexts in this city. It further aims to strategise and suggest ways to sustain socio-spatial relationships.

A careful observational study of a selected set of variables was conducted. The selection of these variables was an elaborate process, including developing the study above matrix. Four dimensions considered for the matrix are parameters, indicators, user typology, and contexts. This matrix has been discussed in detail in the methodology section. It has been developed to make it flexible enough to transform itself if one of the coordinates/variables is altered or eliminated.

13.1.2   Definitions

Socio-Spatial Aspect

A city combines the built environment and its people, the target users of this physical space. This research has used socio-spatial to explain the combination of the human and built environment. This encompasses how humans perceive, use, and behave in the physical space.

People-Centric City

Any city is first for its users, buildings, and other physical infrastructure. The people-centric city exhibits cues from how people behave and transforms or evolves accordingly. The design of physical space is determined by its users' activities, interactions, and territorialities.

Inclusivity

This can be defined as the condition in which a city provides for a built environment that values all its users' needs and preferences, irrespective of their economic status, age, gender, ethnicity, and culture. Inclusion can encompass spatial, social, economic, and political inclusion.

13.1.3   Aims and Objectives

To develop a universally acceptable and contextually adaptable methodology to study the socio-spatial relationship in a city, to deduce ways in which they can be sustained and improvised: by testing the developed methods in the town of Ranchi.

13.1.4   Scope and Limitation

The development of a methodology for this research has a complete theoretical basis and has been done with the help of various literature studies. Using the background of the developed methodology, testing the same for the city of Ranchi has balanced the theory with the adequate influence of practice. Therefore, the scope of this paper is limited to testing only a few variables relevant to the context under consideration.

13.2   Inferences from Literature Studies

A city is defined by its buildings, service infrastructures, and people. Personal connections can be established through well-designed spaces. One of the significant aspects

of a sustainable city is its social fabric (how people interact and the built environment). Culture is about people sharing values, beliefs, a worldview, and a symbol system learnt and transmitted. These create a system of rules and habits that reflect ideals and create a lifestyle, guiding behaviour, roles, manners, food is eaten, and built form (Rapoport 2013). A good urban design can be achieved after an in-depth understanding of the place and its context. To understand the context and character of urban space, it is necessary to subcategorise the space into smaller fragments called 'The Urban Parameters'.

People perceive the built environment in images that can be categorised into five elements (as described by Kevin Lynch in his book 'Image of the City'). Urban form is a combination of all morphological attributes of an area. People interact with urban space through the activities that they carry out in it. These activities directly affect the urban form and significantly affect the useability and functionality of an urban area. To understand how humans perceive the urban environment, urban attributes should be studied through space syntax, urban semiotics, and user perception surveys. The built environment affects human behaviour in the form of mood or well-being. It provides possibilities and constraints in making choices based on other criteria, such as lifestyle and culture. The built environment's opportunities and constraints are the variables that differ with changing contexts.

People behave differently in different settings, which implies people behave/act appropriately in other locations: this further means that the built environment provides cues for behaviour and can be seen as non-verbal communication. Hence, we can conclude that people behave based on their understanding of these cues, providing a discreet language that needs to be understood (Rapoport 2013). Therefore, it is essential to study different built environments to understand user preferences, peculiarities, and reasons (Choudhary 2015). It is necessary to recognise that the built environment does not solely comprise buildings, infrastructure, and transport. It includes human activities, cultural experiences, and interactions of people. The interaction between these components influences how the built environment develops over time and contributes to creating a sense of place, meaning, and character, the essence of place comprising all of its features, natural or constructed (Moughtin 2003). The condition of buildings and other infrastructure defines the nature of a city. Authentic sites, time value, and personal connections express the essence of the city (Zari and Jenkins 2009). Urban space can be read in two ways: subjective and objective. Subjective reading depends on spatial cognition (how people perceive and behave in a space). Objective reading analyses urban morphology and examines how spatial characteristics of of urban space, land use, and space use are related (Raipat 2016). The various methods by which the parameters of urban space can be studied include visual observation, user perception studies, image-ability study, figure-ground mapping, land-use analysis, space syntax studies, and urban morphology study. These are conducted by fragmenting the built environment into categories and elements.

Table 13.1 Methodology
flowchart

Methodology overview
Identify parameters: types of land use and building uses (variable 1)
↓
Identify indicators using literature study: aspects that govern how users interact and utilise the built environment (variable 2)
↓
Listing the typologies of users (variable 3)
↓
Listing the typologies of contexts (variable 4)
↓
Developing tables and graphs that help to establish connections between these variables
↓
Developing techniques to analyse these variables and connections in terms of activities, interactions, and territorialities
↓
Infer shortcomings in the relationships between these variables, based on the above analysis
↓
Create strategies to sort these shortcomings for the selected context understudy

13.3 Methodology

13.3.1 Overview

See Table 13.1.

13.3.2 Process

This methodology has been developed considering the study process to be an amalgamation of four significant aspects that determine a city's socio-cultural and spatial character. It is impossible or advisable to work in a single dimension as these four aspects consist of many constants and variables. A study matrix has been developed to overcome these limitations with parameters on X-axis and indicators on Y-axis. This matrix helps to understand the interrelationships between the parameters and indicators. Parameters are the broader terms of classification of a city, i.e. land-use and building-use.

On the other hand, indicators are specific to the aspects that govern how users interact and utilise the built environment. Z-axis represents user typology which classifies users based on their involvement and interactions with the built environment. Every point of intersection of this three-axis (X, Y, Z coordinates) forms a single variable entity defining one of the many characteristics of a city. These variables have been analysed regarding activities, interactions, and territorialities. This paper discusses and analyses only a few of these intersections marked in the study matrix illustrated in the following tables (Tables 13.2a, 13.2b, 13.2c, 13.2d and 13.2e).

The fourth dimension is the variety of city contexts that form a sort of urban setting. As discussed earlier, all the intersections (coordinates of the X, Y, and Z-axis) may not be appropriate for all contexts, hence implementing the fourth axis. Each context has different limitations and characters. The following table illustrates various types of contexts that create an urban setting. Most cities encompass more than one context forming a complicated maze of socio-spatial relationships (Table 13.3).

Table 13.2a Study matrix: Commercial

GENERAL LAND USES	STUDY MATRIX							
	COMMERCIAL							
PARAMETRES(X-Axis)	VENDORS	HAWKERS	PETTY SHOPS	RETAILS STORES	OFFICE BUILDINGS	EATERIES/CAFES	THEATRE/CINEMAS	HOTELS
INDICATORS(Y-Axis)								
BUILDING/PHYSICALLY OCCUPIED SPACE	☐	☑	☐	☐	☐	☐	☐	☐
THRESHOLDS	☐	☐	☐	☐	☐	☐	☐	☐
FOOTPATHS/SIDEWALKS	☑	☑	☐	☐	☐	☐	☐	☐
CARRIAGEWAY	☐	☐	☐	☐	☐	☐	☐	☐
ACCESSIBILITY	☑	☑	☐	☐	☐	☐	☐	☐
CONNECTIVITY	☐	☐	☐	☐	☐	☐	☐	☐
LEGIBILITY	☐	☐	☐	☐	☐	☐	☐	☐
GREEN COVER	☐	☐	☐	☐	☐	☐	☐	☐
LIGHTING	☑	☑	☐	☐	☐	☐	☐	☐
SOUND	☑	☑	☐	☐	☐	☐	☐	☐
SMELL	☑	☑	☐	☐	☐	☐	☑	☐

Table 13.2b Study matrix: institutional/public semi-public

GENERAL LAND USES	STUDY MATRIX					
	INSTITUTIONAL/PUBLIC SEMI-PUBLIC					
PARAMETRES(X-Axis)	COLLEGES	SCHOOLS	HOSPITALS	RELIGIOUS	GOVERNMENT OFFICES	BANKS/ATMS
INDICATORS(Y-Axis)						
BUILDING/PHYSICALLY OCCUPIED SPACE	☐	☐	☐	☐	☐	☐
THRESHOLDS	☐	☐	☐	☐	☐	☐
FOOTPATHS/SIDEWALKS	☐	☐	☐	☐	☐	☐
CARRIAGEWAY	☐	☐	☐	☐	☐	☐
ACCESSIBILITY	☐	☐	☐	☐	☐	☐
CONNECTIVITY	☐	☐	☐	☐	☐	☐
LEGIBILITY	☐	☐	☐	☐	☐	☐
GREEN COVER	☐	☐	☐	☐	☐	☐
LIGHTING	☐	☐	☐	☐	☐	☐
SOUND	☐	☐	☐	☐	☐	☐
SMELL	☐	☐	☐	☐	☐	☐

Table 13.2c   Study matrix: residential

PARAMETRES(X-Axis) / INDICATORS(Y-Axis)	SLUM	SQUATTER	INDIVIDUAL HOUSES	PLOTTED DEVELOPMENT / HOUSING COLONY	ROW HOUSING	APARTMENTS	APARTMENT COMPLEXES	PGS/ LODGES
BUILDING/PHYSICALLY OCCUPIED SPACE	☐	☐	☐	☐	☐	☐	☐	☐
THRESHOLDS	☐	☐	☐	☐	☐	☐	☐	☐
FOOTPATHS/SIDEWALKS	☐	☐	☐	☐	☐	☐	☐	☐
CARRIAGEWAY	☐	☐	☐	☐	☐	☐	☐	☐
ACCESSIBILITY	☐	☐	☐	☐	☐	☐	☐	☐
CONNECTIVITY	☐	☐	☐	☐	☐	☐	☐	☐
LEGIBILITY	☐	☐	☐	☐	☐	☐	☐	☐
GREEN COVER	☐	☐	☐	☐	☐	☐	☐	☐
LIGHTING	☐	☐	☐	☐	☐	☐	☐	☐
SOUND	☐	☐	☐	☐	☐	☐	☐	☐
SMELL	☐	☐	☐	☐	☐	☐	☐	☐

Table 13.2d   Study matrix: public parks open spaces, vacant, industrial

PARAMETRES(X-Axis) / INDICATORS(Y-Axis)	PARKS	GARDENS	GOLF COURSES	VACANT	INDUSTRIAL
BUILDING/PHYSICALLY OCCUPIED SPACE	☐	☐	☐	☐	☐
THRESHOLDS	☐	☐	☐	☐	☐
FOOTPATHS/SIDEWALKS	☐	☐	☐	☐	☐
CARRIAGEWAY	☐	☐	☐	☐	☐
ACCESSIBILITY	☐	☐	☐	☐	☐
CONNECTIVITY	☐	☐	☐	☐	☐
LEGIBILITY	☐	☐	☐	☐	☐
GREEN COVER	☐	☐	☐	☐	☐
LIGHTING	☐	☐	☐	☐	☐
SOUND	☐	☐	☐	☐	☐
SMELL	☐	☐	☐	☐	☐

Table 13.2e   Study matrix: water body, transportation networks

PARAMETRES(X-Axis) / INDICATORS(Y-Axis)	RIVER	PONDS/LAKES	LOCAL STREETS	CONNECTOR ROADS	ARTERIAL ROADS	EXPRESSWAYS
BUILDING/PHYSICALLY OCCUPIED SPACE	☐	☐	☐	☐	☐	☐
THRESHOLDS	☐	☐	☑	☐	☐	☐
FOOTPATHS/SIDEWALKS	☐	☐	☑	☐	☐	☐
CARRIAGEWAY	☐	☐	☑	☐	☐	☐
ACCESSIBILITY	☐	☐	☐	☐	☐	☐
CONNECTIVITY	☐	☐	☑	☐	☐	☐
LEGIBILITY	☐	☐	☐	☐	☐	☐
GREEN COVER	☐	☐	☑	☐	☐	☐
LIGHTING	☐	☐	☑	☐	☐	☐
SOUND	☐	☐	☑	☐	☐	☐
SMELL	☐	☐	☑	☐	☐	☐

Table 13.3 Contexts

Types of contexts						
		A	**B**	**C**	**D**	**E**
Physical	1	New/upcoming Major construction of infrastructure and/or industries	Changing landuse (agriculture to commercial /residential)	Dilapidated infrastructure, scatter or slum	Conservation, historical and excavation zones	Dilapidated infrastructure repaired by spot fixing
Economic	2	Non agricultural labour industry	Informal cash based trades and services	Formal trades and occupations	Close proximity to institutions an educational buildings	
Human centric	3	Dense and over crowded round the clock	Dense and over crowded during work hours	Diverse cultures ethnicity and religions	Diverse language and cultural background	Presence of unregistered migrants or unregistered persons
Political	4	Close proximity to political leaders and authorities	Territories governed by a particular municipalities or administrative entity	Fringe or sprawl zones	Suburban Zones	
Environmental	5	Areas with limited openspaces	Areas undevelopable because of environmental limitation(forest or lake)	Traffic congestion or polluted zones	Waste dumpyards, collection and/or segregation zones	Environmental/in dustrial hazard zones, Depleting natural resources
Cultural	6	Spaces of commercil and public events and other congregations	Religious buildings and religious activities	Festivals and cultural events	Historical events, markets and gatherings	

Each intersection on the matrix considered for this paper has been elaborated with a graph focused on analysing the selected variables. This graph is used to study the typology of activities, interactions, and territoriality for the space considered. The following are the graphs describing these variables.

13.3.3 Study Areas

Triangle within Shaheed Chowk, Sarjana Chowk, and Albert Ekka Chowk

Contexts applicable in this area: 1E, 2B, 2D, 3B, 5A, 6C (refer Table 13.3a).

Most of the buildings in this area, abutting the arterial road, are shophouses and offices, whilst the internal portions of the block consist of institutional buildings. This is one of the most commonly known markers in the city and is also known as Firayalal chowk because of the hundred-year-old Firayalal store located at this junction. It consists of some of Ranchi's oldest institutions and informal shopping zones. Some of the institutions like St. Xavier's College, Zillah School, and Sadar Hospital were established by the British during colonial times. The market on the western side

Table 13.3a Contexts: study area 1

Types of contexts						
		A	**B**	**C**	**D**	**E**
Physical	1	New/upcoming Major construction of infrastructure and/or industries	Changing landuse (agriculture to commercial /residential)	Dilapidated infrastructure, scatter or slum	Conservation, historical and excavation zones	Dilapidated infrastructure repaired by spot fixing
Economic	2	Non agricultural labour industry	Informal cash based trades and services	Formal trades and occupations	Close proximity to institutions an educational buildings	
Human centric	3	Dense and over crowded round the clock	Dense and over crowded during work hours	Diverse cultures ethnicity and religions	Diverse language and cultural background	Presence of unregistered migrants or unregistered persons
Political	4	Close proximity to political leaders and authorities	Territories governed by a particular municipalities or administrative entity	Fringe or sprawl zones	Suburban Zones	
Environmental	5	Areas with limited openspaces	Areas undevelopable because of environmental limitation(forest or lake)	Traffic congestion or polluted zones	Waste dumpyards, collection and/or segregation zones	Environmental/industrial hazard zones, Depleting natural resources
Cultural	6	Spaces of commercil and public events and other congregations	Religious buildings and religious activities	Festivals and cultural events	Historical events, markets and gatherings	

of the street, known as Refugee Market, was established during the partition for the Refugees who fled from the newly formed Pakistan. These buildings have gone through tremendous pressure and changes over the years, but their fixed location and age-old identity have made each of them a well-known landmark (Fig. 13.1).

The central stretch of MG Road, commonly known as the main road

Contexts applicable in this area: 1A, 2C, 3B, 3C, 5C, 6A (refer Table 13.3b).

This area is connected to study area 1 by MG Road, commonly known as 'Main Road'. Most of the malls and high-end shopping stores are located in this area. The oldest and most significant shopping complex GEL Church Complex was built in the 1960s and housed local stores; it now consists of most national and international branded stores. This complex is so named because of its premises within the bounds of Gossner Evangelical Lutheran Church, established on 2nd November 1845 by German missionaries. Opposite this complex is another hexagonal complex with a vast parking ground in its forefront. Dominated by machine and hardware repair stores, it abuts one of the oldest dysfunctional theatre buildings, with a new mall called high street mall on its premises (Fig. 13.2).

Table 13.3b   Contexts: study area 2

Types of contexts					
		A	**B**	**C**	**D**	**E**
Physical	1	New/upcoming Major construction of infrastructure and/or industries	Changing landuse (agriculture to commercial /residential)	Dilapidated infrastructure, scatter or slum	Conservation, historical and excavation zones	Dilapidated infrastructure repaired by spot fixing
Economic	2	Non agricultural labour industry	Informal cash based trades and services	Formal trades and occupations	Close proximity to institutions an educational buildings	
Human centric	3	Dense and over crowded round the clock	Dense and over crowded during work hours	Diverse cultures ethnicity and religions	Diverse language and cultural background	Presence of unregistered migrants or unregistered persons
Political	4	Close proximity to political leaders and authorities	Territories governed by a particular municipalities or administrative entity	Fringe or sprawl zones	Suburban Zones	
Environmental	5	Areas with limited openspaces	Areas undevelopable because of environmental limitation(forest or lake)	Traffic congestion or polluted zones	Waste dumpyards, collection and/or segregation zones	Environmental/i ndustrial hazard zones, Depleting natural resources
Cultural	6	Spaces of commercil and public events and other congregations	Religious buildings and religious activities	Festivals and cultural events	Historical events, markets and gatherings	

Doranda Market and its immediate surroundings

Contexts applicable in this area: 1C, 2B, 3A, 4A, 6D (refer Table 13.4).

   Connected by the same MG Road, 1.5 km away from the previous study area, this area has a combination of high-end residences for judges, large office buildings like MECON, a high court, and a dense informal commercial setup with temporary housing in its interiors and semi-permanent vending stores surrounding them. When Ranchi was established during colonial times, this commercial area acted like a suburban village make-shift market. However, with its residential buildings, the space around the market developed with time, converting the temporary village market into a permanent informal market (Fig. 13.3).

13.4   Analysis and Strategies

As discussed earlier, analysing each variable with a different methodology was inevitable. The following Tables 13.5a and 13.5b illustrate the combination of

Table 13.4 Contexts

Types of contexts		A	B	C	D	E
Physical	1	New/upcoming Major construction of infrastructure and/or industries	Changing landuse (agriculture to commercial /residential)	Dilapidated infrastructure, scatter or slum	Conservation, historical and excavation zones	Dilapidated infrastructure repaired by spot fixing
Economic	2	Non agricultural labour industry	Informal cash based trades and servives	Formal trades and occupations	Close proximity to institutions an educational buildings	
Human centric	3	Dense and over crowded round the clock	Dense and over crowded during work hours	Diverse cultures ethnicity and religions	Diverse language and cultural background	Presence of unregistered migrants or unregistered persons
Political	4	Close proximity to political leaders and authorities	Territories governed by a particular municipalities or administrative entity	Fringe or sprawl zones	Suburban Zones	
Environmental	5	Areas with limited openspaces	Areas undevelopable because of environmental limitation(forest or lake)	Traffic congestion or polluted zones	Waste dumpyards, collection and/or segregation zones	Environmental/i ndustrial hazard zones, Depleting natural resources
Cultural	6	Spaces of commercil and public events and other congregations	Religious buildings and religious activities	Festivals and cultural events	Historical events, markets and gatherings	

Table 13.5a Analysis methods 1

INTERSECTION COORDINATE		Interaction between footpaths/sidewalk and vendors/hawkers	Level of accessibility for vendors	Levels of accessibility for hawkers	Condition of lighting for vendors /hawkers	Condition of sound/noise for vendors/hawkers	Thresholds along local streets
		1	2	3	4	5	6
PEDESTRIANS	A	User perception survey	Semiotics	Semiotics	User perception survey	User perception survey	Semiotics
THOROUGHFARES	B	Semiotics	Semiotics	Semiotics	User perception survey	User perception survey	Semiotics
VEHICLES	C	Semiotics	Semiotics	Semiotics	User perception survey	User perception survey	Semiotics
OWNERS/RESIDENTS	D	Semiotics	Semiotics	Semiotics	User perception survey	User perception survey	Semiotics
VISITORS/CUSTOMERS	E	User perception survey	Semiotics	Semiotics	User perception survey	User perception survey	Semiotics

selected parameters and indicators and selected variables appropriate for the chosen context. The table also details the various methods used to analyse these variables.

Each of these variables illustrated in the above tables has been analysed separately for the three study areas. The analysis inferences have been elaborated in this section, pointing out specific strengths and weaknesses displayed by the variables for the context under study.

Table 13.5b Analysis methods 2

INTERSECTION COORDINATE	Footpaths/sidewalks on local streets	Carriage way on local streets	Connectivity via local streets	Lighting on local streets	Sound/noise on local streets	Smells on local streets
	7	8	9	10	11	12
PEDESTRIANS	Semiotics	Semiotics	Urban morphology study	User perception survey	User perception survey	User perception survey
THOROUGHFARES	Semiotics	Semiotics	Urban morphology study	User perception survey	User perception survey	User perception survey
VEHICLES	Semiotics	Semiotics	Urban morphology study	User perception survey	User perception survey	User perception survey
OWNERS/RESIDENTS	Semiotics	Semiotics	Urban morphology study	User perception survey	User perception survey	User perception survey
VISITORS/CUSTOMERS	Semiotics	Semiotics	Urban morphology study	User perception survey	User perception survey	User perception survey

Study Area 1

Observations

Adequately, wide footpaths can be found around most commercial buildings, but most of these footpaths house clusters of hawkers. Many hawkers encroaching on these footpaths make it difficult for pedestrians (especially thoroughfares) to navigate. Also, rendering the accessibility to the surrounding buildings inferior. Most of these hawkers give the space a sense of memorability because of their fixed location across generations. With no space available on the footpath, the shoppers tend to stand on the carriageway whilst purchasing and negotiating with the hawkers/vendors.
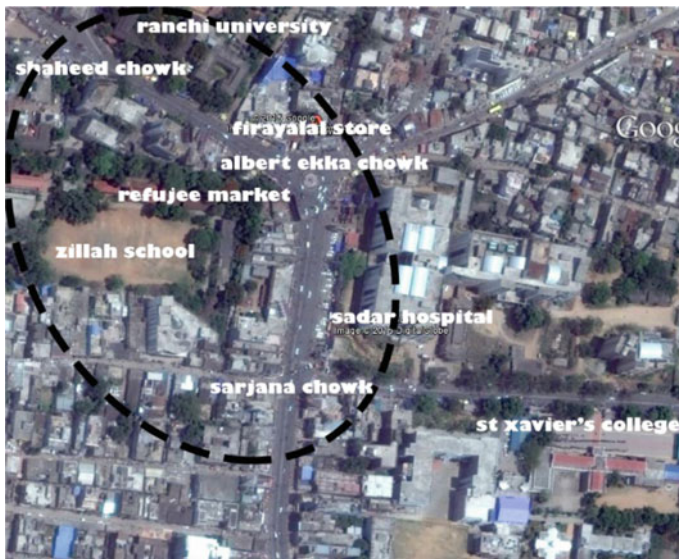
Fig. 13.1 Map of study area 1 showing its extent and important markers and landmarks
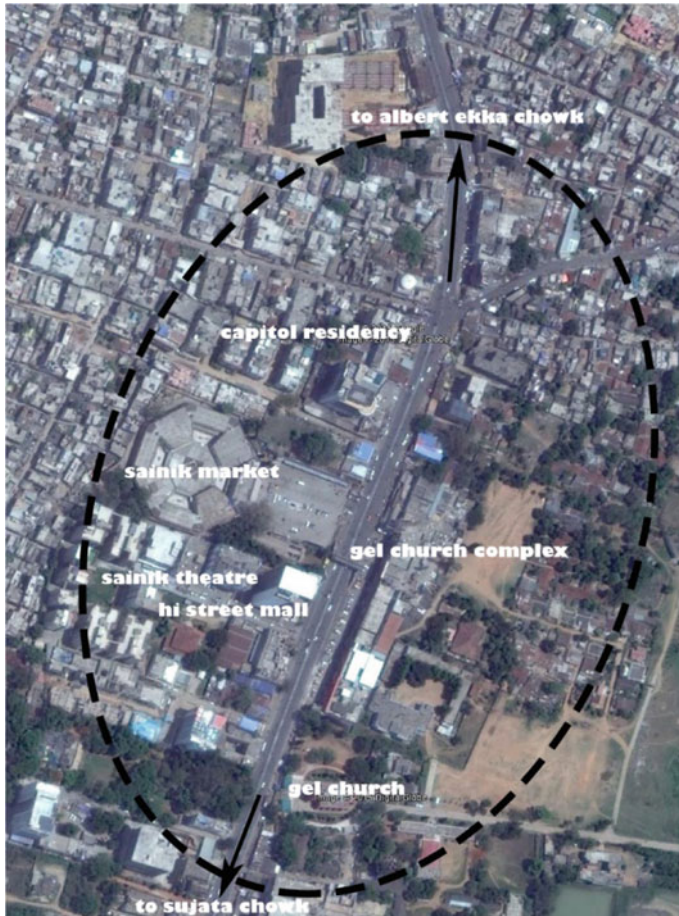
Fig. 13.2 Map of study area 2 showing its extent and important markers and landmarks

The already haphazard vehicular movement is disturbed by shoppers and pedestrians randomly navigating, simultaneously keeping the space around them free from vehicles.

This area stands out in the institutional neighbourhood because of the buzzing informal market and assures well-lit but noisy surroundings. The surrounding experience is a combination of honks and chitter-chatter. Thresholds along the institutional buildings become silent by evening. At the same time, the mornings and afternoons are the most buzzing hours, during which many make-shift stationary and food vendors can be spotted. Long portions along the streets, especially in front of sizeable institutional boundary walls, transform into temporary event spaces during festivals and other cultural events. These spaces at an additional time are used either for parking or for setting up temporary vending units. A wide unsegregated carriageway

Fig. 13.3 Map of study area 3 showing its extent and important markers and landmarks

forms the spine of the study area, increasing the value of vehicular movement over pedestrians, hawkers, and shoppers (Fig. 13.4).

Strategies

It may be too trivial to suggest an increase or improvisation of public space, but it is essential to highlight the sustenance of hawking and vending zones for this study area. Urban planning solutions like the construction of flyovers, widening roads, and conversion of small local stores into large shopping malls usually lead to eradicating the informal market, which will, in turn, lead to a complete transformation of the character of this area. The following figure illustrates the various small micro-level interventions that can help sustain the space's socio-spatial character (Fig. 13.5).

Study Area 2

Observations

Randomly distributed large blue grains of morphology highlight the presence of large commercial establishments, reducing the existence of hawkers and vendors to negligible. Most pedestrians found in these surroundings are thoroughfares, and the interactions between people and buildings are insignificant on the thresholds; whilst maximised in the interiors. Though the large commercial establishments provide for adequate light on the roads, unlike the previous study area, the usability of these

Fig. 13.4 Arial view of Firayalal Chowk

street lights is minimised to walking from one's car to the shopping complex or the mall. Carrying the weight of four different religious buildings in its neighbourhood (Gurudwara at 750 m, Temple at 600 m, Mosque at 250 m, and Church as close as 100 m), the impact of culturally significant activities is fading away. Going through a historic transformation from being a 'main road' that hosted all religious parades and festivals, it has become 'The MG Road', a high-end commercial shopping zone. Nevertheless, this study area remains a palimpsest of lifestyles and cultures experienced by the city.

Strategies

Development is inevitable, but it does not always need to be followed by losing the intrinsic value of a space. Though this area has experienced unmatched transformation, it is essential to restore the cultural essence by ensuring that the character induced by the four religious buildings can be kept intact. To make this happen, it is necessary to provide adequate space in the surroundings (such that it is well integrated with the everyday public space) for the religious and cultural processions and festivals in the religious buildings. Using setbacks and thresholds around the religious buildings to spill their character onto the street in an organised yet, organic manner can help to strengthen the historic character of the space. It is also necessary to make sure that the religious character does not interfere negatively with the space's strong, contemporary, commercial character. For this purpose, it is vital to make sure that the boundaries between these two overlapping districts are blurred, providing a gradual yet distinct transformation.

SMALL PUBLIC PLAZAS CAN BE INSERTED WHERE THERE ARE LARGER SETBACKS AND LARGE EMPTY SPACES BETWEEN BUILD-INGS OR CARRIGEWAYS. THIS WILL HELP IN INCREASING PEDESTRIAN SAFETY AND SO-CIAL ACTIVITY ON THE STREET.

SOME PEDESTRIAN ZONES CAN BE SHAD-ED TO PROVIDE PROTECTION FROM DIRECT SUNRAYS, RAIN AS EXCESSIVE WIND - TREES, PERGOLAS AND ELONGATED CANOPIES

ZEBRA CROSSING FOR BETTER SAFETY OF PEDESTRIANS WITH MEDIANS ACTING AS PE-DESTRIAN ISLANDS FOR EASE OF ACCESS.

THE FOOD VENDORS HUDDLED UP IN THS CORNER PROVIDED WITH ADEQUATE SIT-TING SPACE, SHADED UNDER THE TREES.

INCORPORATING GREEN SPACES GARDENS, PLANTERS AND TREES CAN HELP TO MAKE THE SPACE FRESH AND LIVELY.

TREEN AND PLANTERS CAN BE USED TO BUFFER THE TRAFFIC NOISE FROM THE PE-DESTRIAN ZONES AND SURROUNDING BUID-

PROVISION OF ADEQUATE DUSTBINS IN PE-DESTRIAN AREAS

GREEEN PATCHES CAN BE USED AS MEDI-ANS, THRESHOLDS, SEPARATERS ETC FOR VISUAL SUBDIVISION OF SPACE.

INCENTIVISED SPACES MUST BE PROVIDED FOR HAWKERS. THESE MUST BE PLANNED IN SUCH A WAY THAT THEY DO NOT INTRUPT THE PEDESTRIAN MOVEMENTS AND DO NOT BLOCK THE FRONTAGE OF THE SHOPS.

HAWKERS SHOULD BE REDUCED FROM THE LOCATIONS IN FRONT OF OTHER SHOPS AND RELOCATED NEAR INSTITUTIONAL BOUND-ARIES. THIS WILL HELP IN GENERATING AC-TIVITY IN FRONT OF BLANK BOUNDARIES.

SEPARATE SIDEWALKS MUST BE PROVIDED FOR PEDESTRIANS, KEEPING IN MIND THE CLEARSPACE REQUIRED BY ALL TYPES OF USERS LIKE HANDICAPPED, ELDERLY AND CHILDREN. THE MUST BE WELL SEGGREGAT-ED FROM THE FAST MOVING TRAFFIC FOR BETTER ACCESS AND INCREASED SAFETY.

AUTO/RICKSHAW STAND

SERVICE LANE FOR VEHICLES THAT NEED TO ACCESS PARKING BOTH OFF STREET PARK-ING AND BASEMENT PARKING.

HIGHLY CHARGED OFF STREET PARKING WITH STRICT TIME RESTRICTIONS TO FACILI-TATE PERSONAL VEHICLE RESTRAINT.

ADEQUATE STREET FURNITURE LIKE LAMPS, BENCHES, PLANTERS, TREES, ART INSTAL-LATIONS ETC. MUST BE PROVIDED ON THE STREET TO MAKE IT USER FRIENDLY AND AT-TRACTIVE.

PROVIDING SEPARATE CARRIAGE WAY FOR MOTORIZED NAD NON MOTORIZED TRANS-PORT CAN HELP TO REDUCE CLASH BE-TWEEN SLOW AND FAST TRAFFIC.

WAY FINDING SIGNAGES MUST BE PROVIDED NEAR JUNCTIONS AND AT IMPORTANT LO-CATIONS FOR EASE OF MOVEMENT AND IN-CREASED LEGIBILITY.

PROVIDING TRAFFIC REGULATORY MARK-ING AND TRAFFIC LIGHTS AT REQUIRED LOCATIONS CAN HELP IN ENFORCING TRAFFIC LAWS AND REGULATE TRAFFIC MOVEMENT.

TRAFFIC CALMING MEASURES AT JUNC-TIONS WITH EQUALLY HIGH PEDESTRIAN TRAFFIC CAN HELP IN INCREASING PEDES-TRIAN SAFETY.

LEGEND:
A : PEDESTRIAN
B : NON MOTORIZED
C : MOTORIZED
D : MEDIAN
E : PARKING
F₁ : RAMP TO BASEMENT
F₂ : SERVICE LANE
G : ZONE FOR HAWKERS

Fig. 13.5 Strategies for study area 1

Study Area 3

Observations

A make-shift village market, now a permanent vending zone dominated by vegetable vendors, attracts customers from thousands of neighbouring residences, encompassing the study area. Overwhelmed by the smells of unripe and ripe fruits and vegetables, fish and more, this market is a permanent vending zone with temporary infrastructure. High volumes of negotiations, callouts to purchase fruits and vegetables, and the sporadic spread of cottage industries like terracotta and bamboo dominate the area. Though haphazard to look at and tedious to access, this market has a coded, organic planning understood only by its daily users. This ensures strong territoriality and a high level of safety in the depths of the market.

Strategies

The character of the space lies in its temporal factors, especially sound and smell; hence, physical improvisations in sidewalks and hawking/vending units would not affect its intrinsic properties. On the other hand, provision for side-walks paved hawking zones, and segregated carriageways are essential requirements for improving the user experience in this study area, which shall further help sustain the market's temporal characteristics.

13.5 Conclusion

The city of Ranchi is expanding and urbanising at an unstoppable pace. The need for more and more infrastructure is hence increasing. This research project aimed to explore the extent of socio-spatial sustainability with the help of selected variables and in terms of activities, interactions, and territorialities. The analysis brought to light the discrepancy in development methodology leading to poor usability and socio-spatial sustainability index for these areas. Some of the strategies that can lead to the improvisation of this index have been listed below:

1. Connecting public spaces and side-walk.
2. Strategising the location of hawkers and vendors.
3. Providing for well-defined space for shoppers segregated from the movement space required by thoroughfares.
4. Putting the area marked for events and festivals into specified use and amalgamating it with existing public spaces.
5. Restricting parking spaces along the roads and maximising parking spaces in institutional buildings or basements of shopping complexes.
6. Using the setbacks and gaps between commercial buildings to connect the thresholds to public spaces in the surroundings. This can be done by defining the level of territoriality for different building typologies and activities.

Most of the shortcomings found in the socio-spatial sustainability of these study areas can be solved by micro-level interventions like organisation, segregation, defining territoriality, and utilising thresholds. Most of the time, spaces are planned and designed with specific intentions, but users use them differently, changing the meaning of the space and sometimes leading to conflicting situations (Choudhary 2015).

References

Choudhary P (2015) Humane approach to urban planning

Moughtin C (2003) Urban design. Architectural Press, Oxford

Norman D (2013) The design of everyday things. Basic Books, New York

Raipat V (2016) Sustainability of built environment of Ranchi District. Master's thesis, Sir JJ College of Architecture, Mumbai

Rapoport A (2013) Human aspects of urban form. Elsevier Science, Burlington

Zari MP, Jenkins S (2009) Rethinking our built environments: towards a sustainable future. New Zealand

Part IV
Polarised Borders Cities

Chapter 14
Border[s]lines Between Isolation and Connection: The Disused Railway in Aberdeen

Cecilia Zecca and Richard Laing

Abstract Abandoned railways allow an interpretation of urban borders by considering different scales of connection and separation. The former railway line in Aberdeen is used as a case study to explore how urban linear connections represent a defining linear space and may postulate a socio-spatial statement. The linearity of abandoned railways as an urban design issue is recognised as a characteristic of urban isolation and connection. The contemporary city is no longer a compact and homogeneous entity; its fragmentation and diversity make it prone to rapid transformation. The fragmentation represented by urban voids results from rapid urbanisation and new modes of transportation. Urban infrastructures, particularly railways, often necessitate redesign and are subject to relocation due to urban conditions. This relocation results in abandoned lines and, later, linear voids representing new micro-borders within a city. Focussing on an urban void and a residual form of a spatial condition that resulted from an abandoned railway line in Aberdeen, its potential role in connecting historically isolated and fragmented neighbourhoods are considered through three case studies of the successful transformation of abandoned railways. These are analysed to highlight the potential to develop a methodological approach to conscious urban reuse by addressing the challenges of planning and structuring specific design methods to create a network of connections and reinforce the importance of reactivating surrounding areas and places.

Keywords Railway · Reuse · Greenway · Urban identity · Void · Non-place · Transversal-ways · Micro-areas

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14.1 Introduction

Post-industrial European cities are complex urban forms. This complexity is represented by juxtaposing multi-functional spaces with a mix of historical and contemporary urban readability (Aymonino 1977). Cities require more regeneration than expansion within this urban complexity and persistent decay. This calls for alternate solutions to conserving or replacing buildings and urban spaces. Strategies of interventions—conservation or replacement—are potentially opposing. Even though they may be fundamentally helpful for reactivating potential areas, they often highlight a complex range of issues. These issues include public expectations, new architectural challenges, loss of history, and restoration of style for which creative and planned strategic reuse might compensate.

In the European context, it is challenging to design a project on vacant land; often, every intervention is related to disused or residual spaces around the city, which have gone through demolition and require reconstruction (Cao et al. 2006).

During the second half of the twentieth century, the decommission of industrial areas became a more persistent phenomenon. As a result, infrastructures, predominantly railways that served those areas, fell into conditions of abandonment. Within the United Kingdom, a similar process of decreasing rail travel occurred. A reduction in provincial railway lines was further accelerated by the Beeching Report (British Railways Board 1963).

The industrial areas are, by urban definition, *aerial* abandoned spaces that may represent the urban city tissue in the form of voids that are out of scale and context (Secchi 1984). Likewise, the associated infrastructures, such as highways and railways, are out-of-scale linear voids. However, the term *void* is too generic to describe the city's more profound significance and landscape.

Urban aerial and linear voids are necessary for specific urban intervention and transformation strategies. The debate around the regeneration of these typologies of urban spaces involves the concept of identity and collective memory of the city's future, the relation between urbanism and architecture, the connection between large- and small-scale development, and the association between a programme of intentions and real projects.

The criteria for redesigning an abandoned space may vary radically in how the project is approached or how the intervention is addressed. Conventionally, the intervention of the existing built environment can be identified through three different macro-categories of approaches:

- Conservation
- Demolition and new construction
- Reuse

These approaches provide a way to assess the meaning of linear spaces generated by abandoning railway infrastructures and how they are transformed into greenways.

Across Europe, the old railway lines present an opportunity for investment in redevelopment (Bertolini 1996); they are a flexible and innovative conversion. However,

existing tracks are evidence of a place's history and warrant a reasonable level of analysis. Urban analysis proves to be fundamental if the complexity of regenerating the linear void and its associated structures, such as abandoned stations, bridges, and tunnels, is fully addressed. It requires a careful and mastered skill to consider their full significance.

The nomenclature and the classification of elements constructed at these urban borders are incredibly helpful in analysing conditions of abandonment of the linear spaces along a railway. Accurate identification of the problems and related design solutions exemplified in three successful projects demonstrates a rigorous application of urban design in dealing with abandoned railway lines and transforming them into a viable urban project that neutralises social divergence. In addition, the reprofiling discourse surrounding void urbanism serves as a functional methodological approach to regenerate socially and environmentally responsive urban areas.

14.2 Definitions for the Abandoned Railway as Linear Space

Different approaches to understanding the complexity of urban abandoned spaces in post-industrial cities may be undertaken; many involve interdisciplinary studies.

The abandonment or closure of an aerial or linear space with a specific function generates various configurations and variations of the concept of *absence*. In terms of the city's urbanity and form, the *absence* may be described as the opposite of the *presence* and the *Rossi permanence* (Rossi and Eisenman 1982). Rossi argued that permanence in space exists where the past can still be experienced, whilst an abandoned space within the city no longer encapsulates or allows such experiences. Thus, in investigating the nature of abandoned spaces, it is particularly relevant to address innovative and strategic ways of redesigning them.

It is necessary to introduce the concept and the use of the term *place*, which can reflect the morphological and typological natures of the abandoned spaces. The idea of place is closely connected with beauty, which is both valuable and beautiful in the urban and landscaping context (Turner 1990). In addition, having a *good place* helps consider and create archetypes (Turner 1995). A set of archetypes can provide better landscape planning processes than the vacuous open space concept (Turner 1995, pg. 276). Turner (1995) observed that both Alexander et al. (1977) and Lynch (1960) studied landscape and urbanity more profoundly than *indoor* architecture itself.

This is relevant to linear spaces and exterior spaces. In fact that both, Alexander and Lynch, explored the spaces in between the architecture not only because defining the "indoor space is easier" (Lynch 1960; Alexander et al. 1977) but because the indoor spaces would not have any *raison d'être* without relationships and connectivity with the outdoor spaces.

Gehl (1987) investigated the spaces between the buildings by analysing social activities, the factors influencing their uses and forms, and the relations generated

between the people and the spaces. Relationships and connectivity and archetypes or Rossi's urban artefacts (Rossi and Eisenman 1982) are fundamental to the concept of place. According to this, the lack of relationships and significant urban and social elements generate placelessness. Conversely, exaggerating the dimension of a place generates an opposite concept: a non-place. Thus, it is possible to individuate two functional relationship categories to explore the meaning of abandoned railways and their regeneration methods. Relation means that presences have effectively taken place.

Regarding urbanity and landscape, relationships can be with the surrounding made through paths that emphasise particular points of view and through social functions between users.

Quoting from *Clément:*

> You do not look at the landscape as an object of human activities, discovering a quantity of informal spaces with no purpose, of which it is difficult to give a name (Clement 2005).

An etymological study suggests that the opposite concept of place can be investigated through two different but similar words that originated from Greek, ατοπία or atopía and French, *non-lieu* or non-place (Augé 1995; Rotenberg 2011).

Atopia (from Greek ατοπία, atopía—placelessness, unclassifiable where *a* is the privative of topos or place) represents a condition of non-belonging and describes all parts of the city which determine a variation. That variation is provided by the lapsing of its function and, therefore, by its abandonment. It could be said that atopy is the absence of meaning in the territory and environment (Acuto and Bonfante 2015). The relationship between the concept of atopy and non-place resides in the concept of absence. On the one hand, it is the absence of relationships with the environment, and on the other, it is the absence of social function relations.

Manzione (2012) argued that the concept of non-place should be sought in the infrastructure spaces of the city and its periphery, which are already territories of Atopia. The neologism of the *non-place* defines a space thought to exist independently without any relation to context and only specific functions (Medori 2011).

Railways are geometrically linear spaces appropriate for a specific purpose. These long elements' primary morphological and typological character is defined by the directional flow of humans and goods; this differs entirely from the aerial geometry of a space such as a park (Fig. 14.1).

The intertwined concepts of atopy and non-places help to establish that old railway presents two issues of relationships: (i) they do not relate to the surrounding area; the only exception might be the stations, which would require reuse to have a relationship to the area, and (ii) they do not have particular social functions.

An aspect contributing to the lack of social function relates to different rhythms demonstrated by past and contemporary functions. Rhythm is an approach to analyse the relationships between space, time, and society (Smith and Hetherington 2013). The concept of rhythm is provided by repetition, which regulates and reproduces the sense of urban space and its relational aspects of place life. Lefebvre (2004) argues that analysis of rhythm offers the possibility to understand the complexity of

human flows in aerial space   human flows in linear space

Fig. 14.1 Human flows within spatial configurations. *Source* Zecca, C

the spaces, their interactions, mobility, and the connections between particular and universal.

A railway is an extended linear infrastructure designed for intercommunications and mobility; these characteristics are often geopolitics and national. The relation between spatial dimensions, speed, time, and tempo connects two distant points. Urbanity is a technology-driven, strongly geometric line that indistinctly crosses different landscapes and places. It is indifferent to the porosity and variety of spatial micro-localisms (Lobefaro 2006).

A railway conversion often assumes the form of a long path for walking or cycling. It seems to be a more rhythmic transformation rather than a functional transformation. The spatial dimensions are still the same, but speed, time, and tempo change. Considering only the over-expanded linear object, the line, and overlooking the observation of the various contexts that the line transgresses is one of the most challenging tasks for reprofiling an abandoned railway.

Inhabiting an open public space is entirely different from the rhythm of linearity represented by rail lines. Various relationships between spaces, dimensions, speed, time, and tempo characterise an open and linear space. The length of a railway, in particular, is substantially incompatible with the walking speed and time required for walking unless more entrances and activities are provided at its borders.

In this sense, the "track-vector" (Lobefaro 2008) is a remote element that isolates the spaces along its sides. Thus, the rhythm missed is the intensity of relations with micro-localisms and compresences. In other words, there is no composition of the rhythmicity elements, spaces-dimension-speed-time-tempo; composition in the Latin meaning of *ponere cum*, namely put together, juxtaposing different elements (ibid).

Therefore, the closure of a railway is related to the line itself and all context and micro-spaces around it, which belong to a specific functional logic—the linear space of travelling long distances. In this regard, the surrounding decommissioned elements at the borders become strategic spaces within the process of conversion. Borders have historically defined the linear void/space as a closed urban system or a country through an imaginary margin line. These lines draw the character of a place, providing its identity as a sum of different times and forms.

At borders, paradoxically, the identity of the place is generated by two opposite situations: it can be the image created by someone outside the place and the image built by the sense of belonging possessed by users inside the place. Thus, the configuration of the spaces is a tangible element of identity, but the border itself is not considered a criterion of space definition.

In this sense, there are constant distinct spatial elements along unused railways: stations, platforms, tunnels, bridges it passes under, engine spaces, and various landscapes that border the linear space.

Spatiality Definitions

Stations

The term *station* can be defined as where passenger trains stop (Oxford 2010) and are characterised by the twofold connotation of localism and globalism. Stations are local entities on a micro-scale; however, they have a connective role on a macro-scale. Since the railways became a new form of mobility, many towns became more significant due to their railway junction purpose. This ambivalence rooted in Castells' concept (1989) of "space of flows", or global connections, and "space of places", or local connections, leads Bertolini (1996) to the definition of the stations as both "nodes and places". They are, respectively, nodes of the network and places in the city.

If Bertolini defines the station as permanently and temporarily inhabited by people within the city, Augè, with an anthropologic eye, individuates the lack of human interactions and defines the station as a non-place (Augè 1995).

Given the redevelopment of the stations, Bertolini proposes addressing their characteristics as nodes and places with a project of transformation where the station becomes active poles within the urban system (Bertolini 1996). It can be argued that the terms *node*, *place*, and *non-place* are accurate descriptions. Regarding the design to reuse an abandoned station, it is essential to consider its historical meaning as a node of interconnections, place as a recognisable element within the city and a non-place for its lack of social functions. The non-place interpretation is also present in the abandonment condition of the station itself.

Platforms

The platform is an appealing differentiation of the walkway level and height. However, it is generally closed physically and in terms of access to the station. For this reason, the latter two are not separable regarding analysis and design reconversion. The platform can be read in its long sections and explored in its relationship with human height and its way of disappearing within the terrain in the long section. Because of this, the landscape analysis of the platforms is a critical interpretation of sections rather than plan views (Figs. 14.2 and 14.3).

Fig. 14.2 Two points of view of platforms, Deeside way from the East side. Scotland. *Source* geograph.org.uk

Fig. 14.3 Two points of view of platforms, Deeside way from the West side. Scotland. *Source* geograph.org.uk

Tunnels

The tunnel belongs to another structure different from a proper building, even if enclosed only on two sides. Within the tunnel, the walkway may vary and become slower or faster as the external and surrounding conditions differ from the pathway itself. In this sense, borders become solid and material walls; space reveals its nature as a corridor in its geometrical and functional connotations.

Bridges

Bridges are elements that re-connect two points, overpassing a barrier along its borders. Overall, bridges have a symbolic significance in the history of architecture. Most railway crossings are juxtaposed by roads and bridges, often by bridges. Thus, the spaces that warrant investigation are the vertical connections between the railway underneath and the bridge itself. A bridge over a railway is an infrastructural node that generates an interstitial space beneath it, representing an occasion of newly designed functions.

Observed from below, these nodes are, as Gisela Erlacher (2016) titled her exposition, spaces under "skies of concrete". There are walls, pillars, and roofs, but another connection is above. The dialogue of the vertical-horizontal axis may be interpreted in the two forms of mobility.

Abandonment of the Deeside Way—The History

The Deeside Way was 43¼ miles of railway from Aberdeen to Ballater that was patronised by royalty to visit Balmoral Castle (Holland 2015). The line was used to pass the royal trains and the modern battery-operated railcar. It was introduced in conjunction with steam power, and the level of passengers was anticipated to increase. However, despite introducing battery-operated railcars in 1958, the railway closed in 1966; battery railcars are now preserved as museum pieces (Fig. 14.4).

The Aberdeen to Ballater railway had three construction phases: Aberdeen to Banchory in 1853, Banchory to Aboyne in 1859, and finally, from Aboyne to Ballater in 1866 (Holland 2015). The Beeching Report (British Railways Board 1963) recommended the closure of those underused railways as the UK considered uneconomic routes. Between 1963 and 1970, around 4500 miles of railways and stations were
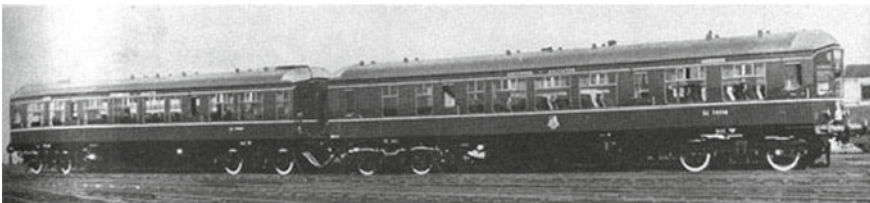
Fig. 14.4 2-car battery set on the Deeside line, Scotland *Source* Courtesy of S. MacKay, railcar.co.uk

closed (ibid). The decommissioning of the Deeside line in Scotland happened as a consequence.

The transformation into a pedestrian and cycle path generated deviations from the original route. Today, the conversion offers different views of the natural landscapes and historic castles from the Western side. The presence of the royal castle at Balmoral, even just as a tourism attraction, ensured that the surrounding spaces at the borders of the railway were preserved and contributed to the restoration of characteristic historic elements related to the railway, such as the Milton of Crathes steam carriage.

The first section of the Deeside line runs from Duthie Park in Aberdeen to Banchory. The first significant trace of the old railway and stations appears at Peterculter station. The length from Aberdeen to Peterculter circa is analysed because it is the most urban line compared to more rural segments of the Deeside line (Fig. 14.5).

Border[s]lines in Aberdeen

A railway takes people from an origin to a new destination by train. However, a new redrawn way along the previous railway, generally a walkway, cannot be rapidly and quickly transported along the historic route. Its paradoxical isolation and connection are presented at different scales. The Aberdeen Deeside line connects two far points that separate two lateral areas. It is, indeed, at once, an element of connection and isolation.

The nature and history of the Deeside railway are essential to this line and represent a significant aspect of the city's identity. The identity of the place means the main

Fig. 14.5 First section of the Deeside line, Scotland. *Source* Digimap

image of the city's positive growth, and its recognisability demonstrates the sum of different ages. Therefore, reconstructing and redrawing the railway are time-sensitive before disappearing within the landscape.

Along the Aberdeen segment of the line, there are many examples of the construction-oriented away from the line. The greenway, therefore, can still be considered a back and not a *new frontage*. The eastern part of the old railway, close to Aberdeen, is less considered a natural heritage. Unfortunately, some recent interventions have weakened the open spaces at the border of the path (Figs. 14.6 and 14.7).

The life of the line in Aberdeen is sharply defined by the seasons. In summer, citizen and tourist trade helps transform the line; however, there is little activity in winter. Even with some deviations, the Aberdeen greenway still connects points A and B, Aberdeen and Ballater. However, various nodes and points have been forgotten in the reconversion of this long-distance route. The secondary stations, in some cases, are in abandonment apart from the historical and listed station of Pitfodels, built-in 1894. One of these has been redeveloped as a private house. This intervention has entirely removed that building's historical and social sense, erasing the connection between the Pitfodels place and the railway (Figs. 14.8 and 14.9).

The original conversion of the Deeside railway sought to recreate a natural wildlife environment, and this objective has been successfully achieved. Nevertheless, the path itself has been poorly replaced with tarmac, erasing the nature of that space, and it remains in its isolation, although it still connects two far points, A and B. It is not evident that a person can walk or cycle long distances; the function of the path for moving between two places is not apparent.

Fig. 14.6 Recent housing intervention along the greenway. Lack of visual relations between the houses and the greenway, Scotland. *Source* Zecca, C

Fig. 14.7 Recent housing intervention along the greenway, Scotland. *Source* Zecca, C

Fig. 14.8 Pitfodels station before the restoration, Aberdeen. *Source* P. Ward geograph.org.uk

Generally, the greenway is a walkway; people use it without interacting with the surrounding green places, towns, or archetypes. Thus, how to reconvert the pathway and reactivate the marginal areas, destinations, and nodes at the borders of a linear straight idea, still running from A to B, requires consideration of numerous issues and factors.

Design Approaches

Whatever their location, railway conversion represents a challenge related to the natural isolation of the old tracks and their narrow size. Moreover, the complexity of dealing with a reconversion of a linear element designed in the past for speedy

Fig. 14.9 Deeside way today, Aberdeen. *Source* Zecca, C

mobility and connecting distant points has to consider many intertwined aspects both at a large scale, between two towns, and small scale, people walking and cycling.

Three successful projects of converting railway lines to linear green spaces provide precedent for how design strategies have arrived at new solutions and mobility means. They are the abandoned railway from Albisola to Celle Ligure in Italy, the Highline in the US, and La Petite Ceinture in France. All three cases have generated potential and new activity networks by acting and designing the lines' borders to relaunch spontaneous surrounding redevelopment initiatives.

These three cases are instrumentally used to introduce possible interpretations in different urban and landscaping contexts. Finally, an interpretation and summary of all possible practices to be adopted are considered a possible methodological approach for re-converting a line from high-railway mobility to slow-green-place mobility. The solution presented is a design project proposed in 2012 to regenerate the S. Vito railway: from abandoned to rebirth in Italy.

Savona—From Albisola to Celle Ligure Railway

In this project, a railway's collective memory and identity character are maintained and interpreted through significant timber elements that simulate and exaggerate the old platform shapes and places people occupied (Figs. 14.10 and 14.11).

The old track is re-interpreted in its section: the sitting areas become renewed elegant citations of the history of the place and the platforms, and divide the width, allowing in specific areas two different forms of mobility, walking and cycling. Close to the tunnel, this wood segment adds to the original width. It is a suspended footway that provides a better view of the sea. The pavement is an eco-friendly material in resin with various colours that respond to the surrounding context.
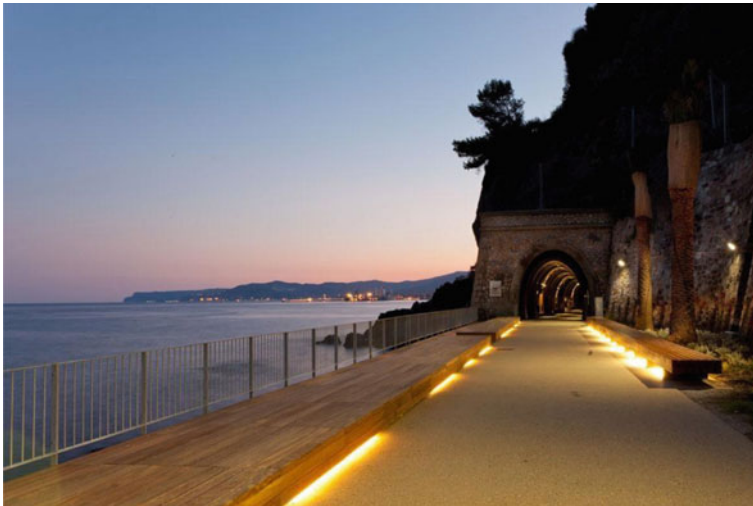
Fig. 14.10   Albisola ex-railway, Italy. Arch 3S Studio. *Source* Courtesy of 3S Studio
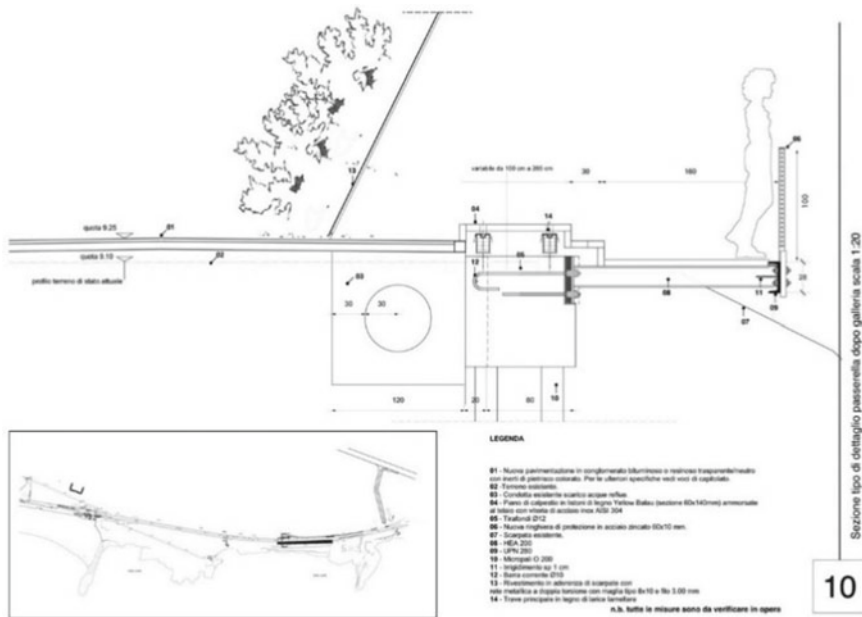
Fig. 14.11   Albisola suspended footway, Italy. Arch. 3S Studio. *Source* Courtesy of 3S Studio

The primary strategy of this successful project aims to change the conditions at the borders of the old railway, activating virtuous circles of micro-economy, social places, and particular points of view of the marine landscape. The old railway is evoked through a linear and constant pavement, emphasising the borders with local vegetation and alluding to the rails through the scenic and dimmed streetlights at the level of the pavements positioned in a linear sequence simulating the old mobility speed. The tunnel is artfully reinforced with a system of corten steel panels strategically distributed along the walls. The gaps between panels expose the original brick and stone walls and their old and fascinating appearance.

Paris—Le Petite Ceinture

The case of Le Petite Ceinture in Paris is not an ordinary work of regeneration but rather a more complex case of re-appropriation and natural hybridisation between tracks, histories, biodiversity, and forestation. The old belt runs around Paris and is divided into not all public segments. Segment number 18 is an example of spontaneous reuse. At this location, the old station of Ornano has been reused and transformed into a café restaurant. In addition, the owners cleaned the entire area to create flower beds and allotments and organise art events.

The Association Sauvegarde Petite Ceinture, together with schools and communities, care for the entire borders of the old railway. Their principal aim is to recycle every material and equipment in a spirit of ecology that goes beyond the building itself and includes an urban goat and chicken farm on the platform. These activities and initiatives have been able to reactivate the neighbourhoods at the edges of the line generating a strong social impact (Figs. 14.12 and 14.13).

Fig. 14.12 Albisola tunnel, Italy. Arch. 3S Studio. *Source* Courtesy of 3S Studio

Fig. 14.13 Reuse of the Ornano station, France. *Source* J. Menjoulet, commons.wikimedia.org

This spontaneous and non-designed project represents renewed urbanity at the borders. Although still abandoned and closed to the public, the old track can catalyse social events raising curiosity and re-appropriation. This may demonstrate that the borders are potential elements of urban relationships.

Fig. 14.14 Highline walkway, US. Arch. Diller Scofidio + Renfro, J. Corner, P. Oudolf. *Source* Courtesy of Diller + Scofidio

Manhattan—The Highline

The old railway in Manhattan, New York, is an ideal example of railway line reuse in which plants and landscapes have been used to transform the raised line into a *suspended forest* above the city. It remains in the collective imagery (Fig. 14.14).

The rails have been retained and reused with a new idea of mobility; rails are used for mobile deckchairs, and their presence is highlighted with the pavement that simulates the idea of movements. However, it does not destroy the Highline's memory and past function and purpose. Instead, it demonstrates that the old urban elements can be reactivated through new functions and design languages.

It is easy to overlook that interconnections can determine the design concept. The Highline reuse project is based on rehabilitating the line and the spaces between it and the city. Many stairs, elevators, and lateral connections are the heart of the project itself (Figs. 14.15 and 14.16).

A micro-economy and different functions have been generated around the Highline. Whilst the line remains constant in length, the spaces around it and its borders have been elevated to social places.

Fig. 14.15 Vertical connections, highline, US. Arch. Diller Scofidio + Renfro, J. Corner, P. Oudolf. *Source* Courtesy of Diller + Scofidio

Fig. 14.16 Micro-activities underneath the highline, US. Arch. Diller Scofidio + Renfro, J. Corner, P. Oudolf. *Source* http://www.flickr.com

Fig. 14.17 Project proposal for S. Vito ex-railway. Masterplan, Italy. *Source* Zecca, C

An Interpretation

These cases are considered for their design principles and theories. They have been re-adopted and re-interpreted to test the effectiveness of the design principles through a project that theorised and designed a possible solution for the old railway in Italy along the Adriatic coast. The abandonment of the old railway generated uncertainty; now, it does not serve any purpose to the urban environment and divides the town from the coastal area (Fig. 14.17).

The transformation of the transversal connections with the old line is at the project's heart. The proposal starts with design elements that allow people to enter and leave the railway at different points. These elements have been called in a second step, faults and terraces. Physically, they are ramps, steps, and transversal paths and accesses.

The station piazza provides a uniform space where new architectural elements and small temporary shop units vary in scale but are similar in appearance; the stations and platforms are reused as community meetings and social places as the original conceptual purpose was. Even the tunnel is redesigned as a space to stay or vary the footstep through temporary activities and expositions.

The railway is segmented into smaller tranches and transformed into a new pedestrian thoroughfare and cycle lanes. The design of urban furniture, greenery, streetlights, and pavement imitates the movement of the trains and rails maintained and embedded in the new pavement. The terrain is steep, and there are constructed sun terraces and places to stop and visit, such as an archaeological site. The steep section allowed us to think and design a hypogeal nautical club in front of the sea and new quays (Fig. 14.18).
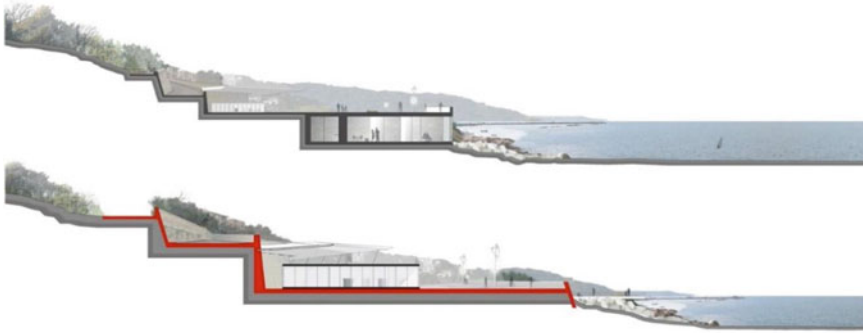
Fig. 14.18 Project proposal for S. Vito ex-railway. Sections, Italy. *Source* Zecca, C

14.3 Conclusions

Three main ideas related to reusing railways, particularly the Deeside line in Aberdeen, have been raised through this research. First, these concepts have apparent implications for reconversion, which requires methodological reading of the historical urban significances of the lines and specific design approaches to recreating interconnections.

Reading the Lines

Projects of conversion involve a higher level of urban and landscaping analysis that explicitly investigates the urban context, the existing objects to be redeveloped, and the interrelated connections between the existing elements and the surrounding areas. This research demonstrated methodological and rigorous analysis to deeply understand the complex urban, landscaping, and architectural systems of the disused railways. Considering the movements in the past and nowadays, the connection functions of these lines and the urban meaning of abandonment, all associated functional spaces built at the borders of tracks are classified. Following a rigorous analysis will help individuate the specific issues related to connection and isolation to find the specific reuse solution.

Rethinking the Borders

From a symbolic perspective, decommissioning an old rail track represents the re-appropriation of particular urban and collective spaces. Being away in the past automatically allows us to use it as a new green path suitable for cycling and walking. The gentle slope, longitudinal configuration, and isolation are safe conditions for new users. The automatic idea of using this natural corridor as a new functional "way" in its various declination, green-natural-walk-cycle-way for new forms of mobility represents, at the same time, innovation and a limitation. It is innovation in terms of renewed interpretations of the past through different possible mobility; it is a limitation in its length and non-variation, immediately affecting slow mobility.

The analysis underpinned suggests investigating and exploring reconversion, what the borders are, and what type of architectural objects and landscapes are there at the borders.

All elements should be transformed in places of memory of the old identity of the line and, on occasion, to better connect the primary way with the surrounding contexts. In this regard, the line itself may become a multi-functional line connected with different micro-spaces. The result would transition from the apathetic concept of renewed "way" to historical-touristic-green-natural-"place".

By enhancing new and variegate mobility, the functions of the old building and constructed elements along the tracks can assume various configurations:

Stations

The reuse project should reactivate the station as a node through a social programme, meeting activities and functions, and enhancing the connections with the city's main-line and micro-areas. This will be possible by laying aside the mono-directional idea of human flows and improving the principle of perpendicular and more aerial flows and interactions.

From a perspective of new mobility, the station may become a "new" station for coming and going, for instance, serving the recent sharing transportation initiatives.

Platforms

Platforms are part of the station and should evolve regarding architectural choices and details. However, looking at the platforms from the old railway instead, they are naturally and already suitable in their dimensions for resting, staying and sitting.

Tunnel

Reusing tunnels is an important moment within the project because it is already an architectural work, is underground, and has poetic relations with its materiality. In this regard, looking at other languages using tunnel and corridor is helpful. For example, the literal translation from Italian is "galleria"; in French, "galérie", is a gallery.

This concept suggests that a corridor or a "galleria" was a narrow and long space within a building connecting different spaces. Furthermore, those long corridors used to be decorated within the buildings.

Following this concept, rather than just functionally connecting two spaces, a tunnel may be designed as an open-covered long gallery where the transition from outside and inside modifies the footstep. The surface of the walls can be used to reinforce the collective memory related to that space.

Bridges

Exploring the relations between two infrastructures defines the basis for interpreting and exploring two different typologies of mobility; in this respect, how can the vertical path between a car way above and a cycle path below? The architectural elements considered, such as the existing walls and pillars, may be exaggerated and

intensified to activate and reuse the spaces underneath, making vertical connections possible for different uses.

Strategy

The urban and landscaping analysis has proved to be fundamental for a coherent project of reuse, especially in dealing with particular extended infrastructures and lines of the territory. The ability to name those abandoned or underused spaces and its related ability to find declinations and different meanings in the context appears fundamental.

All regeneration projects described demonstrated the importance of the borders as a moment of relations and dialogue between different social and functional places. Nevertheless, they also recognise a shift between the lines being used for linear high-speed mobility and newly discovered uses which can benefit from the soft border of the lines and reuse of the existing nodes. In this sense, the projects can be considered conservation-led only if the lines are reused. Finding new uses for the abandoned infrastructure has influenced urban development and demonstrates that positive change can be realised whilst still recognising a legacy and industrial heritage.

The analytical process could be transferred to the practice through more synergic and collaborative work that may involve various expertise. Analysing the territory critically and its elements is a more theoretical and intellectual approach that may positively influence and accompany the preliminary and feasibility study of the project as a starting point of the entire reconversion.

By interrelating the expertise and following specific methods of analysis and multi-scale design approaches, it would be possible to configure other and new ideas of renewed "individual" mobility within a no longer longitudinal way.

References

Acuto F, Bonfante F (2015) The concept of heritage and its possible operational nature. Notes on the Italian case. In: Gospodini A (ed) Changing cities II. Spatial, design, landscape and socio-economic dimensions. Accessed on 10 May 2020 at https://re.public.polimi.it/handle/11311/964460?mode=full.432#.XsFecWj0mUl

Alexander C, Ishikawa S, Silverstein M, Jacobson M, Fiksdahlking I, Angel S (1977) A pattern language: towns, buildings, construction. Oxford University Press, New York

Augè M (1995) Non-places: introduction to an anthropology of supermodernity. Verso, London

Association Sauvergarde Petite Ceinture. Accessed on 23 July 2018 at https://www.petiteceinture.org

Aymonino C (1977) Lo studio dei fenomeni urbani. Officina edizioni, Roma

Bell S, Herlin IS, Stiles R (2012) Exploring the boundaries of landscape architecture. Routledge, London

Bertolini L (1996) Nodes and places: complexities of railway station redevelopment. Eur Plan Stud 4(3):331–345

British Railways Board (1963) The reshaping of British railways. HMSO

Cao U, Romagni L, Foti G (2006) Grandi aree industriali dismesse e progetto urbano. fronte in OP_adriatico 1 "Temi e ricerche per la qualificazione dei progetti urbani e territoriali nella città adriatica" PRIN

Castells M (1989) The informational city. Information technology, economic restructuring and the urban-regional process. Blackwell, Oxford

Clèment G (2005) Manifesto of the third landscape. MIT Press forthcoming

Deeside Way A2B2C the Dee. Accessed on 23 July 2018 at http://www.deesideway.org

Domus Journal (2017) Gli spazi di sotto. Accessed on 21 July 2018 at https://www.domusweb.it

Erlacher G, Licka L, Lodermeyer P (2016) Skies of concrete. Park Books

Gehl J (1987) Life between building: using public space. Van Nostrand Reinhold, New York

Holland J (2015) Exploring Britain's lost railways. Collins, Glasgow

Lefebvre H (2004) Rhythmanalysis. Space, time and everyday life. Continuum, New York

Lobefaro D (2006) Un retro fronte in OP_adriatico 1 "Temi e ricerche per la qualificazione dei progetti urbani e territoriali nella città adriatica" PRIN

Lobefaro D (2008) Mettere a Sistema in Hiper Adriatica OP_2 Opere Pubbliche e città adriatica Indirizzi per la qualificazione dei progetti urbani e territoriali PRIN

Lynch KA (1960) The image of the city. MIT Press

Manzione L (2012) *Eutopics descrivere il resto. altri sguardi sulla città.* Accessed on 25 July 2018 at https://eutopics.wordpress.com/2012/05/25/non-luoghi-Figure-dellassenza-Figure-dellincognit/ 2015

Medori S (2011) Aree industriali dismesse: Quale tema di Archtiettura? Conservare, ri-fare, ri-formare: riprogettare la dismissione industriale. PhD thesis, University of Camerino, Ascoli Piceno

(2010) Oxford English dictionary. University Press, Oxford

Railcar. Accessed on 16 July 2018 at http://www.railcar.co.uk

Railways archive. Accessed on 21 July 2018 at http://www.railwaysarchive.co.uk

Rossi A, Eisenman P (1982) The architecture of the city. Graham Foundation for Advanced Studies in the Fine Arts, London. American ed. revised by Aldo Rossi and Peter Eisenman

Rossi PH, Lipsey MW, Freeman HE (1998) Evaluation: a systematic approach. Sage Publications, Thousand Oaks

Rotenberg R (2011) Space, place, site and locality: the study of landscape in cultural anthropology. In: Bell S et al (eds) Exploring the boundaries of landascape architecture. Routledge Edition

Secchi B (1984) Un problema urbano: l'occasione dei vuoti. Casabella 503:18–21

Smith RJ, Hetherington K (2013) Urban rhythms: mobilities, space and interaction in the contemporary city. The Sociological Review, Oxford

Turner T (1995) Greenways, blueways, skyways and other ways to a better London. University of Greenwich, Press, Kent

Turner T (1986) English garden design: history and styles since 1650. Antique Collectors Club, Woodbridge, Suffolk

Turner T (1987) Landscape planning. Hutchinson Education, London

Chapter 15
Fragile Cartographies of Border-Fictioning

Paula McCloskey and Sam Vardy

Abstract Within the contemporary geopolitical condition, there have been calls for alternative imaginaries and realities of the notion of the border. The practice of *border-fictioning*—creating alternate border imaginaries—provides a way to explore the notion of borders otherwise. The Eile Project, located in the Irish borderlands, uses border-fictioning to enact ecosophical urbanism and resist dominant sovereign forms of territoriality.

Keywords Border-fictioning · Territories · Audiovisual cartographies

The Eile Project is an ongoing multimedia visual artwork and research project that explores the contested notion of borders and borderlands through experimental site-specific performances, the production of audiovisual artworks and different forms of engagement. The project's heart attempts to create alternative border imaginaries or *border-fictioning*. These take the form of performed rituals and experiments on the Irish border utilising organic and inorganic objects that work across the human and non-human, the real and the fantastical.

The project is one of several that originated in our art and spatial practice. We investigate the potential of working between and through contemporary art and an expanded notion of spatial practice. This draws on our backgrounds in art, architecture, theory, practice and research. This engagement of these projects takes place in various sites that are viewed as having potential for alternate narratives, relations, subjectivities and practices of activism to emerge as a place of their own. These projects comprise our family (four children and two adults). The Eile Project acknowledges the importance of living with and raising children and various political, theoretical, spatial and artistic activities.

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The exploration focuses on how subjectivity is produced in the contemporary political and cultural context and the massive fundamental crises of capitalism, climate change, technological development and neoliberal governance. This often takes the form of working with the personal and trying to understand subjectivity from lived experience, from the territory itself.

This work emerges from personal experience of migration, family and the broader Irish diaspora across the UK and Europe. This project is sited in Ireland to enact a process of working through concerns, using it as a border ontology, as a device to explore subjectivity, territory and bordering. Art practice explores the politics of global migration and border imperialism through a specific context. The work concerns broader notions of borders and how to move beyond them (Walia 2014).

The Eile Project has involved various visits, performances, events across the Irish and UK borderlands, and art object such as film, drawing, digital photography, text, and soundscape. The project seeks to outline the nature of this practice as an urban one and the alternative cartographies produced within it, which transforms the public and political space of the border, folding the spaces of art, politics and public, interior and exterior and subjective and political.

15.1 Beyond Territories/Beyond Borders

Territory, territoriality and related terms are complex notions that reflect multiple historical processes and contain diverse interpretations. Space, power, identity and knowledge are interrelated and tied to a nation-state's legal notion of sovereignty. Critical studies from Sack (1983), Soja (1971), Paasi (2007), Elden (2013), among others, have developed critical understandings of territory that move beyond the fixed and essential spatial demarcation of sovereign power to those produced through historical, social and political processes. This reveals their political potential. Paasi (2007) also highlights the importance of the symbolic making of territories (as socio-spatial processes) through "discursively constructed elements (like the process of naming), fixed symbols such as flags, statues… moreover, social practices such as military parades, flagging days and education."

However, the assumed inseparability between state power and territorial sovereignty is the most dominant. Agnew (1994) calls the "territorial trap" that shapes collective imaginaries of territory and how its spatiality is read and experienced. Many examples of actors challenge and disrupt this formal state-defined relation and conception of territory for equally diverse reasons, such as social movement, cross-border migration, economic flow, communication and energy networks—all counter fixed and bounded state territories. They are also "related in increasingly complex tangled hierarchies rather than being simply nested one within the other, with different temporalities as well as spatialities…" (Jessop 2000, 324).

Various forms of power of territoriality are spread across the territory unevenly. However, borders and boundaries are acknowledged as more than state-territorial limits that define inside and outside. Instead, they are "increasingly understood as

zones of mixing, blending, blurring and hybridisations where both material and symbolic dimensions, and power relations come together" (Paasi 2003).

Gloria Anzaldúa (1987) emphasised the explicit nature of the diversity of identity and the subjectivity of living in the borderlands in her widely recognised semi-autobiography *Borderlands/La Frontera: The New Mestiza*. She calls this *mestiza*, or border consciousness, that "emerges from a subjectivity structured by multiple determinants—gender, class, sexuality—in competing cultures and racial identities" (Hammad 2013). In this field, a site-specific and pre-figurative spatial art practice is situated to intervene and ask what new imaginaries of territories and borders might be possible. This raises questions for urbanism and spatial discourses.

15.2   On Territories, Borders and the Irish Context

The Eile Project seeks to intervene in the political history and context of violence and struggle that is experienced by many *border people* in Ireland and world-wide. The project reflects that Woodward and Jones (2004, p. 237) posit that new ways of thinking about borders in socio-spatial and ideational terms are needed to acknowledge life's challenges on the border.

This project combines personal experiences and narratives of the border with experimental and aesthetic art practice. These include performances, films, conversations and installations to explore a web of concerns; the focus is the exploration of social-spatial and subjective notions of territories and border/lands and their subsequent political implications for thinking of the spatial and urban.

The Eile Project is conceived as a resistance to hegemonic ideas of sovereign borders and border imperialism. Underlying it is the urgent need for this resistance, the different points of emergence and modes of practice enacting it.

15.3   The Context of the Irish Borderland

Scarlata (2014) writes that, while once all of Ireland was colonised, the establishment of partition in 1921 brought a whole raft of woes for those living on the island of Ireland:

> The coming of the nation that anti-colonialist nationalism establishes as the messianic endpoint of history was accompanied by the installation of a border that left Ireland's six north-eastern counties under British rule. Northern nationalists found themselves on the wrong side of this new border, caught in a unionist state that began curtailing their civil rights. (White 2010, p. 1743)

The non-sectarian civil rights movement that ensued was met with the wrath of the Royal Ulster Constabulary (RUC) in the 1960s. Following the battle of the Bogside in Derry, the British army was called in. Scarlata (2014) laments how initial rallies

to support the Catholics in the province became part of a vast security apparatus in Northern Ireland, which posited nationalists as aliens. Meanwhile, those south of the border were still reeling from the effects of British colonialism, which led to a renewed nationalism being fused with an increasingly privileged Catholic Church and distancing from the North (White 2010).

This was the backdrop for *The Troubles*, a problematic euphemism for the sectarian conflict of the late 1960s that continued until the Good Friday Agreement of 1998. *The Troubles* saw Northern Ireland plunged into a civil war. The brutal conflict was between Republicans, who were primarily Catholic and wanted the northern border territory to become part of a united Ireland, and the unionists, who were Protestant principally and wished to remain within the United Kingdom.

In 1973, when Britain and Ireland joined the European Economic Community (EEC), freedom to move was technically granted; however, in reality, the border became a militarised frontier of checkpoints, watchtowers, threats and fear. Nevertheless, through joint membership in the EU, the multi-party Good Friday Agreement of 1998 managed to bring about significant change, socially, politically and spatially, without detractors.

While the struggles of the past century have not disappeared, the flow between Northern Ireland and the Republic of Ireland has become more fluid. However, this condition is currently under threat. Uncertainty of the terms under which the UK leaves the European Union (EU) once again throws the fate of the Irish border into uncertainty.

The border in Ireland is a complex entanglement of territories, histories, conflicts and boundaries. It sits deep within a long and challenging trajectory of the island's partition and divides communities affecting them daily. It "disrupted identity and caused lasting trauma " (MacDonald 2018). The precise spatial location of the border was established almost by chance; it followed county boundaries and was not negotiated or debated (MacDonald 2018). Over a century of partition, the free movement of people and goods has been at the core of the politics and life of this border condition. Brexit threatens to make this a *hard border*.

Ireland is a tiny island with a long history of diaspora. The Irish Abroad Unit (2017) report explores Ireland's unusual place in the broader pattern of European emigration. It shows large numbers of emigrants relative to the country's total population. The report also explores how Ireland's migratory story is linked to changes to its political and economic status, such as creating Northern Ireland under the Anglo-Irish Treaty of 1921 that ended the Irish War of Independence. Before this, most Irish immigrants moved to the US and, after, to England (The Irish Abroad Unit 2017).

The Irish border is complex and contested in its state-informed imaginaries of space and social relations and its ambiguity, multiplicity and re-making— its resistance and capacity for autonomous, self-written spaces, practices and subjectivities.

15.4 Territorial Fictioning and Becoming-Borders

> The earth is in effect one world, in which empty, uninhabited spaces virtually do not exist. Just as none of us is outside or beyond geography, none of us is completely free from the struggle over geography. That struggle is complex and interesting because it is not only about soldiers and cannons but also about ideas, about forms, about images and imagining. (Said 1994, p. 7).

In the Eile Project, future fictions are created as part of this resistant practice of de-territorialisation and re-territorialisation, imagining other and different futures and creating literal and conceptual spaces for new subjectivities to emerge. The project posits and explores territorial fictioning as a way to move beyond the trap that limits our experiences and imaginaries of the borderlands. Fictioning is already a core part of the spatial and urban logic and imaginary machine; it emphasises the need for what Ayesha Hameed refers to as a "jolt out of the dream state of state-produced fictions" (O'Sullivan Hameed and Gunkel 2017, p. 4).

Given that space and time are seen as fundamentally interconnected (Massey 1994 and Massey 2005), the creation of new worlds involved with fictioning permits the collapsing of past/present/future temporalities and a concurrent collapsing of spatiality. This puts work into the project through embodied, site-specific fictioning performances that suggest alternative futures in and with the territory. These are manipulated digitally to superimpose other bodies and archive film footage from the site and local and cosmic sonic elements.

Fictioning allows a process of splicing, superimposing and making lacunae, which recalls Burroughs' cut-up method (Burroughs 1963). This might cut familiar associations and relations of space, time and subjectivity and suggest other urban socio-spatial conceptualisations. The borderlands require such re-conceptualisations, such as the *strange zones* that Georgio Agamben (2010) describes in the post-urban city, where he outlines in place of the *polis*; the *Metropolis* is where a new paradigm of the specialisation of power "is … invested in the process of depoliticisation, which results in a strange zone where it is impossible to decide what is private and what is public."

Agamben (2010) points towards the paradoxical condition of the metropolis as a *dispositif*, or group of dispositifs.[1] Specifically, this is a "series of processes of subjectivation that result from the relation, the *corpo a corpo*, between individuals and dispositifs" (Agamben 2010). While acknowledging that the dispositifs of the metropolis are largely de-objectifying—and those that relate to the border are particularly so—he asserts that the metropolis is "space where a considerable process of

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[1] Agamben (2009) defines *dispositif* or *apparatus*. "Further expanding the already large class of Foucauldian apparatuses, I shall call an apparatus anything that has in some way the capacity to capture, orient, determine, intercept, model, control, or secure the gestures, behaviours, opinions, or discourses of living beings. Not only, therefore, prisons, madhouses, the panopticon, schools, confession, factories, disciplines, judicial measures, and so forth…but also the pen, writing, literature, philosophy, agriculture, cigarettes, navigation, computers, cellular telephones and—why not—language itself…".

creation of subjectivity is taking place" (Agamben 2010). It is the processes of this subjectivation of which Agamben suggests that not enough is known and that it is beyond the "sociological or economic and social analysis… [but] the ontological level or Spinozian level that puts under question the subjects ability/power to act; i.e. what, in the processes whereby a subject somehow becomes attached to a subjective identity, leads to a change, an increase or decrease in his/her power to act" (Agamben 2010).

A resistant form of fictioning through a spatial art practice seeks to intervene in both the discourses of urbanism and territory. In transformative ways, it aims to intervene in physical, embodied and experiential terms; as Simon O'Sullivan says, fictioning might "impact on the real, change it, in some way" O'Sullivan et al. 2017, p. 5). Rather than comment on the border and territory, the Eile Project seeks to metamorphose the borderland through a Deleuzian process of *becoming a border.*

Analysis of a series of scenes taken from the film "Territories of Eile" serves to disrupt the border through diverse practices of *bordering,* "a vast array of effective and transformative material processes in which social and spatial orders and disorders are constantly reworked" (Woodward and Jones 2004, p. 239).

15.5   Spatial Practices in the Eile Project

As artists and researchers in art and architecture, enacting a spatial art practice of fictioning and bordering enables us to operate beyond institutional practices and worlds. We use art practice within a spatial practice and vice versa. Through the Eile Project and other work, we pose critical questions about ways to intervene ethically and aesthetically in different conditions and through various methods and motivations. This work's question of how to intervene in the borderlands has many aspects beyond how this work frames urban practice.

The project enacts a particular kind of ecological or ecosophical urbanism. The starting point for intervention is the relationship between space, power, personal histories, political narratives, indigenous animals, matter and the earth. Four broad aspects of spatial practice work together in distinct ways.

The first occurs in the territories of the work, through embodied encounters, installations and interventions. These activities have multiple starting points and motivations. In the case of border-fictioning, they specifically enact alternate relational living practices. The term *encounter* is used to describe various forms of action in a place that have specific concepts, actants and desires channelled into it. The term *encounter* also allows consideration, development and adaptation to occur delicately and in various ways. The range of relations enacted with the various actants, such as people and other animals living in the borderland, the territory, policies, histories and stories of the place subsequently opens alternate dialogues about the work's social and political potential or effects. Parallel social work and work with political and participatory aspects of art and architecture provide a basis to critically consider the relations and roles of contemporary art and spatial practice. This eludes socially

engaged art or participatory practice notions while drawing from and acknowledging these complex and essential lineages.

> Something in the world forces us to think. This something is an object not of recognition but of a fundamental encounter. (Deleuze 2004, p. 176)

Deleuze's thinking about encounters provides an expanded stepping-off point stemming from *effect*, another favoured concept. Deleuze explores the concept of effect throughout his oeuvre. *Affect* for Deleuze is not concerned with emotion; it works on a different register or intensity; it is a scale that Brian Massumi refers to as moments of intensity (Massumi 1995). These are the miniscule complexity of happenings that work both organically and inorganically. They transform in their processes, working with and across human and non-human bodies. Simon O'Sullivan (2001) describes Deleuzian effects as extra-discursive and imminent to experience. In their detailed description, Gregg and Seigworth (2010, p. 2) agree with the forces of the encounter and describe how these create ruptures and new alliances:

> With a genuine encounter… (o)ur typical ways of being in the world are challenged, our systems of knowledge disrupted. We are forced to thought. The encounter then operates as a rupture in our habitual modes of being and thus in our habitual subjectivities. It produces a cut, a crack. However, this is not the end of the story, for the rupturing encounter also contains a moment of affirmation, the affirmation of a new world, in fact, a way of seeing and thinking this world differently. This is the creative moment of the encounter that obliges us to think otherwise. Life, when it truly is lived, is a history of these encounters, which will always necessarily occur beyond representation. (O'Sullivan 2007, p. 1).

These encounters also require various forms of collaboration that allude to the earth, animals and actants[2] (Latour 2004, p. 75). Working with individuals and groups to develop tools and concepts to generate new encounters is essential to these projects. For example, the Eile Project involved working with geologists and visitors at the March Arch Geopark using digital scanning tools and radio transmissions to create new trans-border encounters and border-fictions.

Our work also involves the production of audiovisual artworks that constitute alternative cartographies of the border. Here, the folding of temporalities, spaces and subjectivities can be explored and shared. Following Rancière and Corcorun (2010), these foldings may also be brought into the realm of the *sensible* and a state of "matching a *poiesis* or way of doing, with an *aisthesis*, or horizon of effects" (Corcoran 2009, p. 2). Here, the encounters in and as part of the borderland become virtual spaces; they are manipulated, processed, cut-up, reworked and re-interpreted. Finally, they are superimposed with a difference through sound, editing and representation in various settings and institutions such as art galleries, academic symposiums and other spaces.

The project might be an ecosophical venture, spanning as it does our narratives. Paula is the child of a Catholic father and a Protestant mother from Ballyshannon, a border town in Ireland. Born in Dublin, her family moved to England when she

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[2] Latour (2004) defines an *actant* as anything that "…modifies] other actors through a series of…" actions.

Fig. 15.1 Eile's rituals entail an assemblage of practices, matter and territory

was an infant and then as a teenager to Enniskillen in the North. Her narrative is like the narratives of many others, including border people, kin members of different generations and others, other people from the island and those who have long left. It also bears similarities with rivers, mountains and the Cryptic White butterfly.

15.6 Fictioning Cartographies of Fragile Border Imaginaries

> New and suggestive cartographic representations of today's world [are required] […] a departure from the traditional view of a world that consists of a series of more or less homogenous [sic] nation-states separated by clear borders in a continuous spatial flow. (Weizman 2009).

The Territories of Eile audiovisual film and the in-site performances show a digitised version. The images extracted from it constitute fragile cartography of the borderland that folds the temporal, spatial, and subjective. It both enacts and captures different aspects of our bordering practice, a process of de-territorialisation that brings forth new inventive forms of bordering. It achieves this without losing spatial complexity as it creates fragile border imaginaries and other notions of territoriality (Fig. 15.1).

Some of the rituals[3] that Eile carries out in the film took place in Belleek, a small border town significant in the history of the border and the century of struggle over the partition in Ireland. The political and military events in the town are a trajectory

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[3] The notion and use of rituals have a lengthy theoretical development in the Eile Project.

across the century, that continues with intensity.[4] In 1922, the Battle of Pettigo and Belleek was perhaps the most significant confrontation since the Easter Rising of 1916. Archive footage shows Belleek after the withdrawal of British troops in 1924.

The territories implied from the politicised and militarised struggles can be seen in conventional cartographies of the border area. These show the *Pettigo and Belleek triangle*. This geopolitical term describes an extended stretch of land that belongs to a sovereign state within its borders. The territory of this part of Ireland is thus inflected with militaristic language and imagery; it is caught within the territorial trap.

However, the following account of the battle, from an independent media platform, describes a more complex and rhizomatic spatial condition that incorporates bodies (human and non-human, territories, matter, the earth) as well as a political narrative:

> The predominantly unionist village of Pettigo sat astride the Termon River, a narrow water-course dividing the town in two before running south into Lough Erne. The majority of the population lived on the west bank, in Donegal, which also included the "diamond" or town square, the RIC barracks and the all-important train station. Steep hills dotted with woods and several small lakes dominated the countryside to the west and north, where much of the land was uncultivated. A short stone bridge connected the village to its eastern half in Fermanagh; a scatter of houses followed the main road up a small slope until the countryside opened up into hedgerow fields and crops. Before 1922 the village's only real claim to fame stemmed from the regular cattle-markets held in the diamond and its association with the annual Lough Derg pilgrimages.
>
> In contrast, the mainly nationalist market-town of Belleek was built almost entirely on the eastern or Fermanagh side of the wide River Erne, the latter following a cascading course south-east into the northern waters of the lake. This is where most residences, retail outlets, a hotel, a pub and the famed pottery factory were to be found. A bridge of several arches crossed the river at an odd angle giving access to the west bank and Donegal, though the only notable feature here was the elevated Belleek Fort, an 18th-century military building covering the river-crossing from atop an embankment and thick stone walls. It enjoyed good views over the neighbouring countryside and was to be the focus of much of the action in the forthcoming clashes. (Fionn 2015).

The rituals performed there and the functioning of the border enact other cartographies of this place and suggest fragile border imaginaries. Concurrently, the simultaneous loop of the footage from the early twentieth century folds into a layer of social practices, relations, fears and another kind of fragility.

15.7 Bordering Ecologies: Matter/Bodies/Sounds

The cartography of border-fictioning within the Eile Project also involves folding different politically and discursively charged elements—matter, bodies and the sonic. This folding is stretched across the practice outlined earlier and included performances, audiovisual work, engagement with different actors and texts about the work (Fig. 15.2).

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[4] UK Prime Minister Theresa May's visit to the town in July 2018 was controversial.

Fig. 15.2 Entanglements of matter, bodies and territories and organic and inorganic

Eile's rituals incorporate various organic and inorganic forms of matter, with which Eile enacts different practices, encouraging reconsideration of relations to them. The material here is unknown: its origin, chemical makeup and properties. Assuming that Eile's rituals have some significance, their connection to this place is necessary. The introduction of matter as a significant and active *actant* in the assemblage of the borderland—here in the form of a bright, sparkling and purple material—sparks broader questions about relations between humans and non-human.[5] The political implications and potentials of these are posed by Bennet (2010, viii), who asks, "how would political responses to public problems change were we to take the vitality of non-human bodies seriously?". This approach extends through the Eile Project, moving through the borderland and listening to and engaging with different spatio-temporal sites. We explore the Marble Arch and Cavan Geopark subterranean trans-border spaces in a film from the Territories of Eile series.The chthonic spaces valued by Anzaldúa host alternate sonic, temporal and material relationships such as those in the flowstones that are unique to them.

Another encounter in the film shows that Eile has completed her ritual by forming a structure with a historic concrete platform and wall near the border in Belleek. Superimposed onto this fragile structure, two mating Cryptic White butterflies appear. They perform a ritualistic entanglement of bodies, matter and territory. Cryptic White butterflies are native to Ireland and trans-border creatures portrayed in political cartographies as obeying the geopolitical border. This new assemblage

[5] For more on *inhuman*, see Grosz et al. (2017). "An Interview with Elizabeth Grosz: Geopower, Inhumanism and the Biopolitical" in *Theory, Culture & Society*. May 1. 34:2–3:129–146. https://doi.org/10.1177/0263276417689899.

of existing matter, foreign matter and different bodies forms complex new relationships of ecological urbanism and territoriality and is imbued with multiple unknown potentials.

In trans-border practices, Eile's caves, butterflies and rituals operate across temporalities and spatialities. The sonic is also a significant constituent of the assemblages that audio-visual cartographies can harness. In the film, field recordings from the borderlands constitute an active spatial and political process of listening. They prompt questions of where we listen, to whom we hear and what we listen to. The recordings used various microphones to capture the border's sounds through airborne and material waves, amplifying the agency of matter again. Recent sounds recorded by the NASA Cassini probe of Saturn are cut up and interspersed with these recordings, which draws into the ecology of the extra-planetary border elements, speaking of political, economic and military interdependencies, technological missions and extreme forms of territoriality.

The Eile Project enacts an ecosophical spatial practice of border-fictioning that is a resistant practice that strives to pull the borderland out of the territorial trap. It opens up new border imaginaries, subjectivities and relations in response to the way that, as Conley shows when discussing Guattari's work, dominant capitalist and neoliberal forces a loss of the "desire to create new maps of enquiry and to experiment with other ways of being in common in the world at large" (Conley 2013, p. 277). The spatial encounters and audio-visual cartographies produce de-territorialisation and re-territorialisation that hope "to create new strategies for making connections, affecting and being affected" (Woodward and Jones 2005, p. 249), to remake the terrain of border imaginaries in new "existential territories" (Guattari 2008) and to encourage new border becomings.

> So, don't give me your tenets and your laws. Don't give me your lukewarm gods. … I want the freedom to carve and chisel my own face, to staunch the bleeding with ashes, to fashion my own gods out of my entrails. And if going home is denied me then I will have to stand and claim my space, making a new culture – una cultura mestiza – with my own lumber, my own bricks and mortar and my own feminist architecture. (Anzaldúa, 1987, p. 2)

References

Agamben G (2009) "What is an Apparatus?" in What is an Apparatus? And Other Essays. Stanford: Stanford University Press. p 14

Agamben G (2010) "Metropolis." Transcribed and translated by Arianna Bove from Uninomade audio files available on globalproject.info in 2005. Available July 18, 2018. http://www.genera tion-online.org/p/fpagamben4.htm

Agnew J (1994) The territorial trap: the geographical assumptions of international relations theory. Rev Int Political Econ 1(1):53–80

Anzaldúa G (1987) Borderlands/La Frontera: The New Mestiza. Aunt Lute Books, San Francisco, CA

Bennett J (2010) Vibrant matter: a political ecology of things. Duke University Press Books, Durham, NC

Burroughs W (1963) The cut up method. In: The moderns: an anthology of new writing in America. New York, Corinth Books, pp 345–348

Conley VA (2013) The ecological relation. In: Relational architectural ecologies: architecture, nature and subjectivity, New York. Routledge

Corcoran S (2009) "Editor's introduction" In: Dissensus: on politics and aesthetics. New York, Continuum International Publishing

Deleuze G (2004) Difference and repetition. A&C Black, London

Elden S (2013) The birth of territory. University of Chicago Press, Chicago, IL

Fionn AS (2015) "The battle of Pettigo And Belleek, May to June 1922," An Sionnach Fionn. June 7. https://ansionnachfionn.com/2015/06/08/the-battle-of-pettigo-and-belleek-may-to-june-1922/

Gregg M, Seigworth GJ (2010) The affect theory reader. Duke University Press, Durham, NC

Guattari F (2008) The three ecologies. Continuum International Publishing, New York

Hammad LK (2013) "Border identity politics: the New Mestiza in borderlands. Rupkatha J Interdisciplinary Stud Humanities (blog). http://rupkatha.com/border-identity-politics/

Irish Abroad Unit (2017) "Irish Emigration Patterns and Citizens Abroad." July 20. https://www.dfa.ie/media/dfa/alldfawebsitemedia/newspress/publications/ministersbrief-june2017/1--Global-Irish-in-Numbers.pdf

Jessop B (2000) The crisis of the national spatio-temporal fix and the tendential ecological dominance of globalizing capitalism. Int J Urban Reg Res 24(2):323–360. https://doi.org/10.1111/1468-2427.00251

Latour B (2004) Politics of nature: how to bring the sciences into democracy. Harvard University Press, Cambridge, MA

MacDonald D (2018) Hard border: walking through a century of partition. New Island Books, Stillorgan, County Dublin, Republic of Ireland

Massey D (1994) Space, place and gender. Polity Press, Oxford

Massey D (2005) For space. Sage Publications, London

Massumi B (1995) The autonomy of affect. Cult Crit 31:83–109. https://doi.org/10.2307/1354446

O'Sullivan S, Hameed A, Gunkel H (2017) Futures and fictions. Repeater Books, London

O'Sullivan S (2001) The aesthetics of affect: thinking art beyond representation. Angelaki J Theoret Humanit 6(3):125–135. https://doi.org/10.1080/09697250120087987

O'Sullivan S (2007) Art encounters Deleuze and Guattari: thought beyond representation. Palgrave Macmillan, Basingstoke

Paasi A (2003) Boundaries in a globalizing World. In: Handbook of cultural geography. London, Sage Publications Ltd., pp 462–472. https://doi.org/10.4135/9781848608252

Paasi A (2007) Territory. In: A companion to political geography. Wiley-Blackwell, pp 109–122. https://doi.org/10.1002/9780470998946.ch8

Ranciére J, Corcorun (2010) In: DISSENSUS on politics and aesthetics. Continuum International Publishing Group, UK

Sack RD (1983) Human territoriality: a theory. Ann Assoc Am Geogr 73(1):55–74

Said EW (1994) Culture and imperialism. Vintage, London

Scarlata J (2014) Rethinking occupied Ireland, gender and incarceration in contemporary Irish Film, Syracuse University Press, USA

Soja EW (1971) The political organization of space. Association of American Geographers, Washington, DC

Walia H (2014) Undoing border imperialism. AK Press, Oakland, CA

Weizman E (2009) On extraterritoriality. June 3. Public Space. Available: https://www.publicspace.org/multimedia/-/post/on-extraterritoriality

White TJ (2010) The impact of British Colonialism on Irish Catholicism and National identity: repression, reemergence, and divergence. Études Irlandaises 35–1:21–37. https://doi.org/10.4000/etudesirlandaises

Woodward K, Jones JP (2004) On the border with Deleuze and Guattari. In: B/Ordering space. Aldershot, Hants, England and Burlington, VT, Routledge

Woodward, Jones (2005) On the border with Deleuze and Guattari. In: Houtum HV, Kramsch O (eds.) B/ordering space. pp 235–248. Routledge

Chapter 16
Dissonant Living and Building in the No-Man's Land on the Korean Peninsula

Hyun-Tae Jung

Abstract The border between North and South Korea has been a source of considerable uncertainty and volatility since the end of the Korean War during 1950–53. Since then, many conflicts and tensions could have led to a full-scale war on the peninsula. 'The Korean Armistice Agreement' of 1953 created the Korean Demilitarised Zone (DMZ) to minimise direct clashes between the two parties. However, despite its name, the DMZ is the most heavily militarised border globally. This area, designated as the DMZ, is a strip of land crossing the whole Korean Peninsula along the 38th parallel north. It is a narrow line, 250 km long and approximately 4 km wide, serving as a buffer between two countries. In reality, the border's infrastructure is much more extensive than its official area describes—the stalemate between the two parties preconditions any architectural and urban development on the peninsula. The Joint Security Area (JSA) is in the middle of the DMZ, about 800 m wide and roughly circular. The Military Demarcation Line (MDL) bisects South and North Korea. The JSA is a symbol of what has been happening on the peninsula. This paper contends that the border between North and South Korea has remained volatile and unpredictable despite the physical separation of the two parties in late 1976 after a deadly incident in the JSA. The segregation of opposing forces in a particular special area reduced the minor clashes resulting from daily in-person contact. However, this was only a half measure. Peace in the area will be possible only by ending the direct military confrontation between the two parties.

Keyword Korean Peninsula · DMZ · JSA · Violence

Since Donald Trump became president of the United States in January 2017, the tension between the US and North Korea has been in constant flux. Weeks after missile launches by North Korea in February 2017, then Secretary of State Rex Tillerson visited South Korea. They asserted that military action was a possible response to the missile launches. In April, Vice President Mike Pence visited Seoul, calling North Korea the 'most dangerous and urgent threat' to the region. He affirmed,

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'All options are on the table', indicating the possible use of 'overwhelming force' against the North and mobilising a large-scale naval build-up around the peninsula. A North Korean envoy at the United Nations promptly responded with the threat of a nuclear war. This rapid escalation of the war of words casts the world on the possibility of a catastrophic clash of military forces on the Korean Peninsula.

However, the problematic situation quickly abated with a historical event: the summit of two Korean leaders, Moon Jae-in of South Korea and Kim Jong-un of North Korea, at Panmunjom located inside the DMZ on the 27th of April 2018. The leaders of the two Koreas faced each other, standing on either side of a low concrete bumper and soon crossed lines. This event was broadcast live globally, creating a worldwide drama at the two countries' most militarised border. On the 26th of May, the two leaders met at Panmunjom again to save the summit between Trump and Kim Jong-un. Finally, on the 12th of June, Trump and Kim met face-to-face in Singapore. It was the first meeting between the US and North Korean leaders since the Korean War. This historic summit seemingly signalled the beginning of a more peaceful era in the region after several decades of hostilities. However, whilst this event was unfolding in the global media, the world also had a chance to be reminded of the unsettling reality on the peninsula: the enduring face-off of two military powers, North Korea and the US, within a stone's throw of one another.

The omnipresent threat of catastrophe along the border looms over every aspect of daily life, including urban activity in South Korea. Newspapers and TV bombard the public with images and stories of potential sudden attacks from the North. They can be missiles, long-range artillery or a nuclear bomb. After prolonged exposure to these reports, South Koreans appear to have become accustomed to their reactions. However, that does not mean that the doomsday stories do not have any impact. Quite the opposite: South Koreans cannot respond to every scary story but seem to respond selectively. The fear is internalised and almost invisible, impacting daily life. In a broad sense, this essay can be considered an introduction to South Korean architecture and urbanism, which respond to the influence of the perilous condition at the border.

The border here is spatially and politically interconnected with global politics. Reviews of historical incidents within the Joint Security Area (JSA) in the Korean Demilitarised Zone (DMZ) portray the precariousness and interconnectedness of the border, the meaning of spatial division and constant surveillance in the JSA, and, to some degree, within the two countries (Fig. 16.1). In doing so, one will realise the urgency of achieving a more peaceful border area and, eventually, draw a new map leading towards reason and co-existence.

Since the Korean War (1950–53), the peninsula has been one of the most volatile regions in the world. Conflicts and clashes between the two parties along the borderline have been frequent. In some cases, minor conflicts escalated quickly for both sides into preparations for total war. Occasional ballistic missile and nuclear bomb tests by North Korea alarmed its neighbouring countries, such as South Korea and Japan and seriously undermined the peace and safety of the region. There have always been risks of potential catastrophes. When there are any hostile activities of the erratic North Korean regime, tension and anxiety on the border quickly escalated

Fig. 16.1 Image of Gwynne Dyer's online article on the Crisis in the Korean Peninsula published in The Georgia Straight, 25 August 2015

and became almost intolerable. It is particularly true at the so-called 'Truce Village' or Panmunjom, the only official meeting place between the two sides.

The Korean War broke out in June 1950. South Korea and the United Nations force led by the United States fought against North Korea, assisted by the Soviet Union. After three years of devastating battles in all parts of the peninsula, the Korean Armistice was signed at Panmunjom on the 27th of July 1953. The war caused several million casualties and permanently divided the peninsula. As a part of the Armistice Agreement, the demilitarised zone was created. It is a strip of land crossing the entire Korean Peninsula along the 38th parallel north. It is a narrow line, 250 km long and approximately 4 km wide (Fig. 16.2).

Despite its name, it is the most heavily militarised border globally. In the South, the DMZ is 2 km from the Military Demarcation Line—the agreed dividing line on the map. The Civilian Control Zone (CCZ) also reaches between 5 and 10 km and the border area (BA) between 10 and 20 km runs parallel to the DMZ. The overall sizes of the three areas, DMZ, CCZ and BA, are roughly equal to 11% of South Korea's

Fig. 16.2 Demilitarised zone between North and South Korea, *AFP*, 8 November 2017

land area. This vast border region symbolises the Cold War, causing constant tension and sporadic skirmishes.

The Armistice stipulates that the headquarters of the Military Armistice Commission be located at Panmunjom. However, the Commission may relocate its headquarters at another point within the demilitarized zone by agreement of the senior members of both sides of the Commission'.[1] It operates as a joint organisation without a chairperson. All meetings between North Korea and the United Nations Command (UNC) or South Korea happen in Panmunjom. The site is about 800 m wide and roughly circular. The Military Demarcation Line (MDL) bisects South and North Korea.

The initial selection of Panmunjom as a negotiation venue was accidental. Whilst negotiating with the United Nations Command in 1951, North Korea insisted on meeting at Kaesung, a North Korean city; however, on the 7th of October 1951, they agreed with the UNC to choose Panmunjom as a meeting place.[2] The present

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[1] Military Armistice Commission (1953).

[2] Bailey (1992, 75).

JSA is about one kilometre south of the historical place where the Armistice Agreement was signed. At the end of the war, the North realised that the meeting place was about one kilometre north of the MDL and requested to move to another location. Both sides agreed on a new site and constructed new buildings.[3] Under the Armistice Agreement, free access and movement were guaranteed to personnel of both sides in the area. Therefore, the JSA was the only place the two sides were in continuous communication. North Koreans had direct daily physical contact with the US and South Korean military personnel. There were countless brawls and attacks between soldiers during this period, including life-threatening injuries to US military personnel. Nevertheless, no single death was recorded in the JSA between 1953 and 1976.

This muddled cohabitation suddenly ended with the so-called Panmunjom Axe Murder of 1976, and this incident also transformed the spatial arrangement permanently. The incident began over something trivial: a simple poplar tree. It was essential for the UNC to observe the activities of their checkpoints in the JSA to respond to attacks from the North swiftly. UN Checkpoint 3 was close to the so-called 'Bridge of No Return', the only entrance to Panmunjom from North Korea (Fig. 16.3).

Thus, this checkpoint was believed to be particularly vulnerable. The UNC guards pruned the poplar tree that blocked each summer's view between UN Checkpoint 3 and Checkpoint 5. On the 6th of August, four workers from the Korean Service Corps (KSC) and four guards went to cut the tree. North Korean soldiers told the group they would be killed if they tried. The KSC employees cancelled the work and returned to their base.[4]

At about 10:30 am on the 18th of August, five KSC workers, three UNC security officers and a seven-man security force arrived at the tree site again. Captain Arthur G. Bonifas and First Lieutenant Mark T. Barrett led the group. Because of the North Korean threat, the UNC team decided to trim only the branches instead of cutting the tree.[5] Soon after the work party began its task, two North Korean officers and nine North Korean soldiers arrived by truck. One of the officers, Lt. Pak Chul, who was belligerent and viciously tempered, ordered the work to stop. When he was ignored, he sent for reinforcements. Around 11:00 am, ten more North Korean guards arrived by truck, followed by several more from two KPA guards' posts, raising around 30 men.[6]

Lt. Pak put his watch into his pocket after wrapping it in a handkerchief and rolling up his sleeves. He then yelled, 'Kill!' and kicked Capt. Bonifas in the groin. This action began a full-blown attack by the KPA guards on the UNC security force. The KPA guards charged in with clubs, metal pipes, pick handles and axes took from the work party. As a result, Captain Bonifas and Lieutenant Barrett were beaten to death. This fiery melee lasted less than four minutes, leaving two US officers dead, one South Korean officer wounded, and four US and four South Korean guards

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[3] Yi (1986, 49).

[4] Jonsson (2009, 293–294).
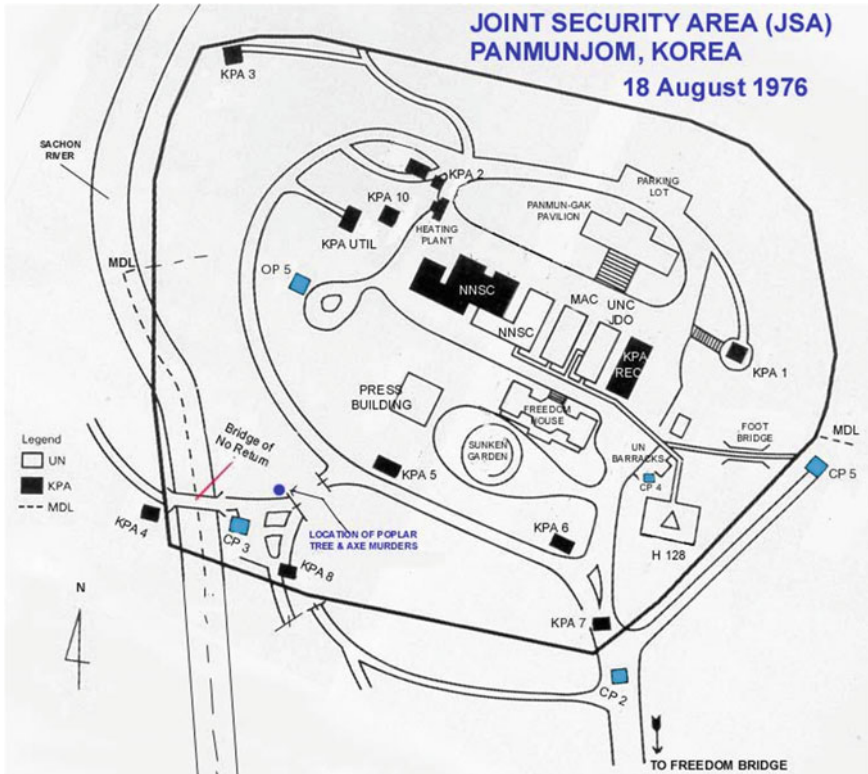
[5] Ibid.

[6] DeLateur (USMC) (1986-1987).

Fig. 16.3 Map of the JSA, ca. 1976 (https://en.wikipedia.org/wiki/Korean_axe_murder_incident#/media/File:Joint_Security_Area_1976_map.jpg)

wounded.[7] Whilst there had been many deaths in the DMZ, these were the first deaths in the JSA since the end of the Korean War.[8]

The Ford administration wanted to respond strongly to North Korean brutality. After being informed of the incident on the morning of the 18th of August 1976, then Secretary of State Henry Kissinger in Washington DC vowed 'retaliatory action'.[9] That afternoon, the first meeting of the Washington Special Actions Group (WSAG) convened at the small White House Situation Room to deal with the crisis. The group's primary purpose was to develop options for the National Security Council (NSC) and President to consider during the crisis. At the meeting, Kissinger, the group's chairperson, and other participants agreed that the incident was a 'deliberate

[7] Ibid.

[8] Ibid.

[9] Telephone Conversation Between Secretary of State Kissinger and the Undersecretary of State for Political Affairs (Phil Habib), Washington, 18 August 1976, 10:05 am, Foreign Relations of the United States, 1969–1976, Volume E-12, Documents on East and Southeast Asia, 1973–1976, Document 28.

provocation'.[10] They concluded that North Korea carried out the brutality as part of their diplomatic efforts to draw international attention to the peninsula's instability and portray American forces as the leading cause of the tension. The members also believed that North Korea intended 'to primarily agitate American public opinion' over the issues of American troops in Korea, particularly 'in the context of the US election campaign'.[11] The incident occurred while Ronald Reagan challenged Gerald Ford for the Republican presidential nomination at the party's national conference in Kansas City, Missouri.

The WSAG Washington Special Actions Group (WSAG) recommended that the president take military action in addition to cutting the poplar tree immediately. These military actions included the deployment of a squadron (10–20 aircraft) of F-4 fighter-bombers from Okinawa, a squadron of F-111 fighter-bombers from Idaho, dispatching the aircraft carrier USS Midway from Yokosuka, Japan, initiating a training mission of B-52 Stratofortress long-range strategic bombers from Guam, and raising the defence alert status to DEFCON 3.[12] Kissinger stated that 'If we do nothing, they will think of us as the paper tiger of Saigon'. He added, 'If we do nothing, there might be another incident and then another'.[13] These comments reflected the desperate efforts of the US government to keep military and diplomatic control of Asia, particularly after the fall of South Vietnam in April 1975. Deputy Defence Secretary William Clements questioned the effectiveness of cutting the poplar tree.[14] As an alternative, Kissinger proposed destroying North Korean barracks outside the JSA. Clement was hesitant because 'The North Koreans would certainly react violently'.[15] At the end of the meeting, Kissinger stressed that 'the purpose of doing something is to show that we are ready to take risks. The trick is to do something from which they will back off'. 'The purpose of this exercise is to overawe them. We are 200 million people, and they are 16 million'.[16] It is apparent that whilst the WSAG intended to show North Korea that it was ready for action. It did not want another ongoing war in Asia. So instead, it presented a spectacular display of military forces around the DMZ and, more specifically, on the JSA.

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[10] However, the Central Intelligence Agency (CIA) did not judge that 'the North had a major attack in mind'. 'WSAG Meeting-Korean Incident, August 18 (1976)', Convenience Files, Box 27, 18 August 1976, Gerald Ford Library (GFL).

[11] Ibid.

[12] Colonel Conrad A. DeLateur (USMC), 'Murder at Panmunjom', 11 and Reed R. Probst, 'Negotiating With the North Koreans: The US Experience at Panmunjom', Carlisle Barracks, PA: US Army War College, 16 May 1977, 16. DEFCON stands for a Defence Readiness Condition. DEFCON 3 indicates a condition midway between peacetime status and full wartime alert.

[13] Comments by Henry Kissinger, 'WSAG Meeting-Korean Incident, 18 August 1976', Convenience Files, Box 27, 19 August 1976, GFL.

[14] Ibid. Clements argues, 'This business of sending in a squad is nonsense. It will just lead to a confrontation and may get many others killed. What for? A tree? One guy with explosives, some plastique, could do the job. He could go in on a bicycle. Why risk a bunch of people for a tree? I don't like it at all. It makes no sense. We should not expect unarmed Americans to go in there and get killed over a tree'.

[15] Ibid.

[16] Ibid.

Fig. 16.4 Operation Paul Bunyan in the JSA, 21 August 1976

At 11:00 am, the 19th of August, a DEFCON increase was declared in South Korea, initiating various military actions by South Korean and US forces. This was the first change in the local DEFCON level based on events in Korea since 1953. All US personnel in the country were recalled from local leave and liberty. Whilst South Korean and US forces concentrated on the logistical and military actions for the plan approved by the President in Kansas City, North Korea promptly responded to the shift with a 'war posture'. However, this was primarily defensive and marked its fear over possible US military retaliation.[17]

On the 21st of August, the operation to cut the tree began at 7 am. It was named Operation Paul Bunyan after the giant lumberjack of American folklore. 16 US Army Engineers were accompanied by a 30-man security platoon and 64 South Korean special force Taekwondo experts. In addition, 23 vehicles brought them into the DMZ, and 27 helicopters provided air support (Fig. 16.4).

As the ground unit moved into the JSA, the formidable B-52 Stratofortress bombers from Guam flew along the DMZ. Simultaneously, USS Midway and her task group of auxiliary vessels arrived in Korean waters with 40 combat aircraft on board.[18] This enormous firepower was much more than necessary to destroy the JSA and its surrounding areas thoroughly. Full-scale war could happen at any time. During the operation, the North Koreans pulled away entirely from the JSA. The US soldiers cut the tree without resistance, removed two North Korean road barriers, and moved out of the JSA by 8:26 am.[19]

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[17] DeLateur (USMC).

[18] Jonsson.

[19] Head et al. (1978, 195).

A few hours after the operation, the senior member of the North Korean MAC team proposed a meeting and brought the leader Kim Il-Sung's reply to the UNC's protest on the 19th of August.[20] Kim's response was ambiguous and diplomatic, but his direct engagement in the situation was unusual. On the 25th of August, the next MAC meeting took place. Here, the UNC senior member, following instructions from Washington, admitted that the expression of 'regret' in Kim's message was not enough but a positive step. Also, the UNC called for punishment of those KPA guards responsible for the murders and insisted on assurances that the safety of UNC personnel in the JSA be preserved. The KPA Senior Member responded that the KPA's position on the issues was already expressed in Kim's message. Then, he proposed the physical separation of UNC and KPA security force personnel within the JSA by adhering to the MDL, which bisects the area.[21]

Despite some criticism in the US Congress, Kissinger and others in Washington DC were satisfied with the tree-cutting operation.[22] Kissinger was happy with Operation Paul Bunyan and its strong impact on the North.[23] The US military in Seoul reported to Kissinger that the North Koreans became more restrained and unusually cautious after the operation. Kissinger stated that he had 'never seen the North

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[20] 'It was a good thing that no big incident occurred at Panmunjom for a long period. However, it is regretful that an incident occurred in the Joint Security Area, Panmunjom this time. An effort must be made so that such incidents may not recur in the future. For this purpose, both sides should make efforts. We urge your side to prevent the provocation. Our side will never provoke first, but take self-defensive measures only when provocation occurs. This is our consistent stand'. Kim Il-Sung, quote in Reed R. Probst, 'Negotiating With the North Koreans: The US Experience at Panmunjom', Carlisle Barracks, PA: US Army War College, 16 May 1977, 10.

[21] 'Appendices—Military Armistice Commission and Secretaries Meetings (1976)', *1976 Annual Historical Report: United Nations Command/US Forces, Korea/Eighth US Army*, 1976.

Below is the North Korean proposal read in a meeting by Assistant Secretary of State Philip Habib. 'WSAG Meeting-Korean Incident, 18 August 1976', Convenience Files, Box 27, 25 August 1976, GFL.

'In order to prevent a conflict between military personnel of both sides and in order that each side insure the security of each personnel in the conference area, Panmunjom, we believe it most reasonable to separate the security personnel of both sides in this area with the MDL between them so that they may perform their guard duty moving in their respective area only. This will make both sides have their guards post only in their respective part of the conference area. And this will prevent military personnel of both sides from both encountering each other and passing by the posts of the other side. Then there will be no conflicts'.

[22] Many criticised the excessive use of military power for the operation. Assistant Secretary of State for East Asian and Pacific Affairs Arthur Hummel admitted that the WSAG were aware of 'critical comments to the effects that we took massive and expensive military moves simply to cut down a tree'. However, he argued it was necessary to deter any more significant military threat from North Korea and to uphold the rights of the UNC in the JSA to help ensure the future safety of its personnel.

Hummel (1976), 389.

[23] 'The North Koreans have clearly been taken aback. Militarily, they have done little more than take defensive precautions against our build-up. In the JSA, they stood by and watched the tree cutting without raising a finger. Kim Il-Sung has sent an apologetic message on the 18 August incident. Their whole attitude in recent meetings in the JSA has been subdued and business-like'. 'Telegram 213541 From the Department of State to the Embassy in the Republic of Korea', 27 August 1976, Central Foreign Policy Files, Record Group 59, National Archives, 28 August 1976.

Koreans so scared'.[24] Facing an overwhelming show of military forces by the US in the middle of the borderline, North Korea tried to avoid any risk of total devastation.

The first proposal of physical separation was offered by the UNC in 1970 and was then picked up by the North Koreans.[25] However, since the UNC had no guard post to the North of the MDL, the KPA was virtually suggesting the unilateral dismantlement of four guard posts located south of the MDL.[26] This was another concession made by the North. Further negotiations on the issue of physical separation proceeded smoothly and quickly. On the 6th of September, the MAC secretaries signed a supplement introducing the new security arrangements for the JSA as agreed upon by both sides.[27] Both North Korea and the United States saw the physical separation in the JSA as a safety measure to prevent physical engagements and, more broadly, possible military clashes between them.

The MDL within the Conference Buildings' site in the JSA was marked by 50 cm wide and 5 cm high cement pavement. This site covers the seven buildings on the MDL and the yard surrounding them and also includes areas 10 m from the building on the western end and 10 m from the building on the eastern end. The rest of the JSA was marked by concrete posts, 10 cm thick and 1 m high, erected at 10 m.[28] Now, 'All military personnel, including the security personnel in the Joint Security Area, shall not go into the area of the other side crossing the Military Demarcation Line in the Joint Security Area'.[29]

The Deputy Assistant to the President for National Security Affairs, William Hyland, reported that the new agreement would 'bring the incident to a close on very favourable terms'. He added that North Korean attempts to enhance their position at the Non-Aligned Conference, then in Colombo, Sri Lanka, ended in an apparent setback to the country's international image and a loss of face in the Far East due to

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[24] WSAG Meeting-Korean Incident, August 18, 1976, Convenience Files, Box 27, 25 August 1976, GFL.

[25] Hummel (1976, 389).

[26] Probst.

[27] 'What was striking was that the accord, which technically supplements the 1953 truce agreement, was so quickly reached and implemented and that the show of force by the United States quietly ceased'. John K. C. Oh, 'South Korea 1976: The Continuing Uncertainties', *Asian Survey*, Vol. 19, No.1, A survey of Asia in 1976, Jan. 1977, 75.

[28] Agreement on Supplement to the 'Agreement on the Military Armistice Commission Headquarters Area, Its Security and Its Construction'. 6 September 1976, 4 in *1976 Annual Historical Report: United Nations Command/US Forces, Korea/Eighth US Army*, 1976. The Agreement also includes some details. 'The marking of the Military Demarcation Line according to the Agreement reached between both sides shall be completed. Both sides shall withdraw their guard posts, security personal, and other facilities from the area of the other side; provided that the telephone and its facilities installed in the office of the Joint Duty Officer of the respective sides are excluded. The guard posts of the Korean People's Army and the Chinese People's Volunteers side located in the United Nations Command side's portion shall be withdrawn'.

[29] 'Agreement on the Military Armistice Commission Headquarters Area, Its Security and Its Construction, as amended, September 6, 1976'.

the resolution of the US response.[30] Nevertheless, the US recognised it as a significant military and diplomatic victory. Soon after the new agreement, the US and South Korean governments issued a joint statement.[31] The chance of physical contact between the two sides, except in the conference building, was virtually eliminated by confining the North and the South into respective areas. This new arrangement was deemed by both parties to be a convincing safeguard against unpredictable physical conflicts in Truce Village.

Operation Paul Bunyan had a risk of severe crisis escalation. It could have triggered a full-blown war at any point. However, the Ford administration carefully responded to the situation. The administration took on the crisis effectively and relatively quietly at an upcoming presidential election. The war in Vietnam had just ended with a humiliating loss a year before, and the US did not want to begin a new war in Asia. Perhaps, the lack of international support for North Korea contributed to the situation, as North Korea failed to win even the support of the Soviet Union and China.[32]

After the poplar tree was gone, the demarcation line became corporeal in the Truce Village. Physical separation and more enhanced mutual surveillance replaced the casual and chaotic interactions between the two parties. With the new arrangement, both sides believed that the chance of a crisis was significantly reduced. As a result, there were almost no incidents in the area for the following eight years. However, on the 23rd of November 1984, this peace suddenly ended with a fierce exchange of fire due to a Russian defector fleeing across the border to the south. When Vasily Matuzok, on a North Korean-sponsored tour in the JSA, bolted for the southern sector, six North Korean guards joined by two dozen more soldiers penetrated about 150 m into southern territory. North Korean soldiers and about 80 South Korean and US soldiers exchanged fire for about 40 min, leaving three North Korean soldiers and one South Korean soldier dead and wounding many on both sides.[33]

Even with the physical separation in 1976, the danger of clashes in the JSA did not disappear. On the contrary, minimising all possible everyday interactions intensified the potential conflicts between the area's two parties. Considering that any little event around the borderlines can trigger a series of chain reactions and lead to a calamity, this change in the JSA did little to create peace in the region. It is apparent that a random yet fatal events can happen around or far away from the borderlines, putting tens of millions of lives in immediate danger in the Korean peninsula and

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[30] 'Memorandum from the Deputy Assistant to the President for National Security Affairs (Hyland) to President Ford', Presidential Country Files for East Asia and the Pacific, Box 10, Korea, 5 September 1976, GFL.

[31] 'The two governments believe that the new arrangement, restricting the movement of military personnel of both sides to their respective portions of the Joint Security Area, eliminating contact in the JSA infringing on personal safety, and removing the North Korean guard posts from the UNC side of the JSA, are realistic and constructive steps which when implemented will better assure the security of personnel of both sides in the Joint Security Area'. 'US and Republic of Korea Welcome New Joint Security Area Arrangement', Press Release 413, 6 September 1976, *The Department of State Bulletin*, Vol. LXXV, No.1944, 27 September 1976, 390.

[32] Koh (1977, 66).

[33] Haberman (1984).

the surrounding regions. Moreover, as seen in the incident of 1976, a small group of people make a critical decision in a small room, whilst millions of people face the threat of imminent catastrophe daily. This is a fundamental condition of urban life in the JSA and, more broadly, in South and North Korea. The segregation of the opposing forces in the JSA might have reduced minor clashes between the North and South. However, without a more permanent solution for stabilisation, such as a Peace Treaty between the stakeholders, the borderline between North and South Korea will remain as a powder keg, and any half-measure will not last long.

References

Bailey SD (1992) The Korean armistice. St. Martin's Press, New York, p 75

DeLateur CCA (USMC), Murder at Panmunjom, 13

DeLateur CCA (USMC) (1986–1987) Murder at Panmunjom: the role of the theatre commander in crisis resolution. In: Twenty-ninth session, Department of State Foreign Service Institute, pp 7–8

Haberman C (1984) 3 Koreans killed as soldiers trade shots in the DMZ. The New York Times, 24 November 1984, 1. US and North Korea trade charges on DMV clash. The New York Times, Sunday, 25 November 1984, 3

Head RG et al (1978) Crisis resolution: presidential decision making in the Mayaguez and Korean confrontations. Westview Press, Boulder, Colorado, p 195

Hummel Jr AW (1976) Department discuss 18 August incident at Panmunjom and Its aftermath. Statement by the Assistant Secretary for East Asian and Pacific Affairs before the congressional subcommittees. The Department of State Bulletin, vol LXXV, no 1944, p 389

Jonsson G (2009) Peace-keeping in the Korean Peninsula: the role of commissions. Korean Institute for National Unification, Seoul, South Korea, pp 293–294

Jonsson G Peace-keeping in the Korean Peninsula, 301. This list only includes American forces. South Korean military was ready, including all fighters and bombers

Koh BC (1977) North Korea 1976: under stress. Asian Surv 17(1):66

Military Armistice Commission (1953) article 25. The Korean War Armistice Agreement

Probst RR Negotiating with the North Koreans, p 11

WSAG Meeting-Korean Incident, August 18, 1976, Convenience Files, Box 27, 25 August 1976, GFL

Yi C-G (1986) Panmunjom. Foreign Languages Publishing House, Pyongyang, Korea, p 49

Chapter 17
Displaced: Vulnerability and Survival Within Segregated Undercaste Micro-Cultures

Moriah J. Snowden

Abstract Humanitarian programmes that offer support and aid to disenfranchised and displaced populations often focus on transient minorities in a state of hyper-vulnerability. Constant relocation of these groups from unsafe environments resulting from humanitarian crises or housing instability leaves a disproportionate segment of this population with inadequate housing or temporary shelter. Despite the best efforts of relief organisations, some disenfranchised and displaced groups view humanitarian outreach as a last resort and opt to meet their needs independently. Too often, these minorities are cast in a pitiable light and regarded as separate from the macro-societies they are part of. In this way, the border that defines these groups result from a state of being rather than a drawn boundary. How marginalised minority populations reject the larger society and sustain themselves outside conventional economic sectors is a subject of long-standing interest. This interest draws upon volunteer experience with habitat for humanity between 2005 and 2009 and first-hand accounts and statistical data of outreach to groups seeking asylum. These efforts are part of an ongoing examination of undercaste micro-communities in Lebanon and the US that are shunned within greater macro-societies.

Keywords Minorities · Transient populations · Marginalisation · Displacement · Vulnerability · Adaptation · Informal economy · Undercaste · Survival

17.1 Introduction

A border of vulnerability and survival exists between undercaste micro-communities[1] and the macro-societies that abide by them. These subset populations are present in

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[1] Undercaste micro-communities refer to collectives of minorities, marginalized and existing on the fringes of the macro-societies. These communities are forged by strong social ties and the utilization of branching informal networks to the extent where participation in formal economies that provide little benefit or are unprocurable is rendered optional.

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many locations. They are ingrained and ever-present, yet they are seldom indeed seen. They are marginalised *and habitually excluded*. They are minorities that skirt the line of normalcy and continuity each day. It is a well-known reality that these impoverished communities are displaced due to either societal pressures or humanitarian crises; often, these forces are combined.

What is less known and less revealed is how these casts aside and forgotten groups can forge their path of protracted existence—a distinctive narrative of survival outside the province of formal economies. This gives credence to the notion that "informality is a legal construct, not an indicator of vulnerability" (Francois and Venkatesh 2016, p. 642). Rather than aid-starved victims, these undercaste micro-communities are self-sufficient factions unto themselves. Their survival is due to their ability to draw upon family, friends and associates and to utilise extensive social networks that allow them to reject outside assistance until they reach a breaking point.

Such breaking points come in many forms and are as numerous as the families and individuals who encounter them. Three types of breaking points are noteworthy for detailed consideration: restriction of movement complicated by legal status limitations, displacement due to natural disasters complicated by economic and bureaucratic issues, and inability to access economic opportunities to sufficiently meet minimal needs. The circumstances of each type of breaking point frequently overlap, and given the realm of hyper-vulnerability,[2] they remain decidedly amorphous.

Like the unique nature of breaking points, each person's experience with hyper-vulnerability is unique. However, their commonality is the origin point—the point at which all available resources have been exhausted. Essential needs are unable to be met, and survival is at risk. Taking three geographic locations, Lebanon, the US territory of Puerto Rico, and the US state of Georgia, as case studies provide an opportunity to examine two preliminary inquiries: how do marginalised micro-communities sustain themselves within negligent macro-societies when breaking points are reached? How do these groups move from the fringe of survival to the unfamiliar territory of reliance?

The informal economy domain defies a global definition; however, they are generally defined as economic activities unreported and unmonitored by authorities. As a result, they are untaxed. This presumes participants know there would be penalties if authorities recognised their activities (Andrews et al. 2011). For the marginalised minority existing as an undercaste micro-community within the greater society, informal practices are less a means of evasion than survival. Although not conducive to maximising earning potential, they can meet daily needs adequately. Survival is girded by economic loops forged by collective social cohesion and communal networks (Fig. 17.1).

The exchange of services and goods is devoid of restrictions such as job availability, certification or governing permissions. This allows these intrinsically cooperative systems to exist and flourish (Fig. 17.2).

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[2] Hyper-vulnerability refers to the marginalized state minorities, utilizing informal economies within their micro-communities, reach after encountering a breaking point.

Fig. 17.1 Two men selling fruit and various products from a personalised wooden frame fitted to the bed of a truck on the side of the road

The establishment and occupation of the informal settlement are characteristically linked with engagement in informal economies. UN-Habitat (2015a; b) provides informal settlements as residential areas with several distinct characteristics. First, inhabitants have no security of tenure vis-à-vis the land or dwellings they inhabit. Second, housing modalities range from squatting to informal rental housing. Third, the neighbourhoods usually lack or are cut off from essential services and city infrastructure. Finally, the housing may not comply with current planning and building regulations and is often situated in geographically and environmentally hazardous areas.[3]

Rarely is there a voluntary recourse to this situation? There are tactics of resistance available to the disenfranchised and poor. However, even when met with relative success, this way of survival, unknowingly or otherwise, provides an insulating barrier between undercaste micro-communities and traditional society. Whilst informal networks are agents of continuity for self-reliant minorities. They are also the "factor reproducing their alienation from the social mainstream" (Francois and Venkatesh 2016, p. 641). Essentially, the more the marginalised can provide for themselves through informal means, the less they wish to be a part of the macro-society that may have been the force that drove them to such a situation in the first place.

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[3] Derived from UN-Habitat (2003), The Challenge of Slums; UN-Habitat (2013), The State of the World Cities Report 2012/13.

Fig. 17.2 Everyday marketing and selling of products to willing buyers within the realm of the informal economy

Informal economies and settlements bear the roles of saviour and saboteur within the academic world. By their autonomy and initiative, these barred populaces are estranged from the host communities and countries that should aid them. This gives way to a disconnect. Sustaining outside conventional economic sectors, marginalised minorities are excluded by the larger society and narrate their own stories of vulnerability, adapting within the manufactured border of survival.

17.2   Case: Syrian Refugees in Lebanon, Unity by Exclusion

Since first induced by the Syrian Civil War in 2011, the protracted[4] Syrian Refugee Crisis has been the subject of extensive debate, research and programme generation worldwide by economic and humanitarian agencies. It is espoused as one of the most significant refugee crises since World War II. Lebanon hosts the region's second-largest population of Syrian refugees, with over one million refugees within its borders. The highest per capita refugee population globally (UNHCR et al. 2017).

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[4] Protracted refugee situations (PRSs) occur when refugees are in exile for five or more years after their initial displacement without immediate prospects for implementing durable solutions (UNHCR 2004, ExCom).

Whilst undoubtedly aided by its proximity to Syria, Lebanon's open-door policy sanctioned this rapid influx of war refugees. It allowed entry into the country without a visa and granted the ability to renew residency "virtually free of charge" (Human Rights Watch 2016). Nonetheless, being neither a signatory of the UN Convention Relating to the Status of Refugees nor its 1967 Protocol, Lebanon denied arriving Syrians the right to establish official refugee camps or construct anything that would suggest even the slightest hint of permanency.

The Lebanese government's reluctance to appropriate adequate temporary or permanent shelter for Syrian refugees stems from a volatile political climate. The country's previous "Palestinian Camp Experience"[5] is critical. This was prompted by the mass exodus of Palestinians in 1948 with the establishment of Israel. As with Syrian refugees, Lebanon welcomed Palestinian refugees into their borders, albeit warily due to the Sunni Muslim presence. It restricted them from building anything implying permanence—different from their Syrian counterparts. However, the Palestinians were allowed to form 12 official camps, giving allowances that paved the way to a 15-year Civil War and the "brutal oppression" by the Lebanese government at its conclusion in 1990 (Sanyal 2014).

The thought of Syrian war refugees being bestowed with the same leniency agitates old wounds regarding security, potential radicalisation, and perpetuity concerns. Moreover, since Palestinian refugees remain in Lebanon today, lives are dictated by stringent movement, building, and economic restrictions, plummeting the group into "ultra-poverty" [ibid]. Another consideration of note is Lebanon's enforcement of its open-door policy under the prevalent assumption that the Syrian Civil War would end as summarily as it began. Proven wrong, the protracted state of the Syrian Refugee Crisis has placed an additional strain on Lebanon's already deficient infrastructure and economy.

The effects of this strain are widespread. Two of the most prejudicial to the Syrian refugee population are restrictions on legal status and movement, which impede prospects of economic cultivation. Implemented on 5 January 2015, the Lebanese government replaced its charitable open-door policy with stricter border entry regulations. A halt followed this on refugee registrations, and the number of registered Syrian refugees dropped from 1.017 million in 2016 to 1.001 million in 2017 (UNHCR et al. 2017). Moreover, the Directorate of General Security, an agency overseeing admission and deportation within Lebanon, enforced exorbitant residency renewal directives. These amendments split Syrian refugees required to renew their residency permits into two groups: those registered with the United Nations High Commissioner for Refugees (UNHCR) and those not registered. Unregistered Syrians were forced to obtain a Lebanese sponsor to remain in the country legally. Regardless of their standing, all Syrians in Lebanon were required to pay a $200 annual fee for renewals and provide identification chapters and documentation on where they resided. The sole exception to these mandates was children under the

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[5] A routine statement by Lebanese governmental, municipal, and local community representatives when opposing the option of hosting Syrian refugees in Lebanon was, "We learned from the Palestinian camp experience." (UN-Habitat et al. 2015, p. 45).

age of 15 who were allowed to renew for free; however, their applications are tied to the head of their households (Human Rights Watch 2016).

Combined with curfews in various municipalities[6] that restricted the movements of Syrians within their respective informal communities, the amended regulations resulted in many refugees losing their legal status. Only 19% of households (2017) reported that General Security granted all members legal residency. This sustained decline from 58% in 2014, 28% in 2015 and 21% in 2016. Sixty-one percent of these households were in informal settlements (UNHCR et al. 2017, p. 13). Overall, 74% of Syrians aged 15 and above who were surveyed in the 2017 Vulnerability Assessment of Syrian Refugees in Lebanon (VASyR) did not possess legal residency status; a large majority of respondents—88%—stated that the $200 annual renewal fee was "the largest barrier" [ibid]. In addition, economic vulnerability amongst Syrian refugees was prevalent, with more than half living in abject poverty.

17.3   Syrian Refugees: Breaking Points

Syrians seeking and securing employment in Lebanon are no recent occurrence. Long before the Syrian Civil War, Syrian migrant workers were commonly welcome participants in the country's labour force, and access to higher wages close to their homeland was attractive. Bilateral agreements between Syria and Lebanon allowed Syrian workers temporary residency for six months. In fact, according to the International Rescue Committee's (IRC) policy brief on the Economic Impacts of Syrian Refugees[7] (2016a), Syrian workers have been part of Lebanon's labour market and have contributed to their economy for decades; approximately 200,000 to 1 million Syrian migrant workers were in Lebanon before the war. However, as refugees in what is presently their host country, Syrians are only legally permitted to work in agriculture, construction and environment sectors (UNHCR et al. 2017, p. 65). Those registered with the United Nations High Commissioner for Refugees (UNHCR) are banned from pursuing employment in Lebanon and must sign a no-work agreement upon application for residency renewal (Human Rights Watch 2016). The penalty for noncompliance is seizure by Lebanese authorities and deportation.

Refugees have been fortunate enough to start and maintain a business, evicted from the municipalities they dwell in, even in the face of the Lebanese Labour Ministry's labour restrictions. The ministry's motive has been to eliminate Syrian enterprises and relieve competition against Lebanese nationals.[8] Actively prohibited

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[6] Lebanese municipalities imposed at least 45 curfews on Syrian refugees in 2014. Human Rights Watch, http://www.hrw.org/news/2014/10/03/lebanon-least-45-local-curfews-imposed-syrian-refugees, accessed 14 June 2018.

[7] IRC Economic Impacts of Syrian Refugees (2016a) https://www.rescue.org/sites/default/files/document/465/ircpolicybriefeconomicimpactsofsyrianrefugees.pdf.

[8] Labour laws evict Syrian refugees across Lebanon and shut their businesses down. The New Arab, https://www.alaraby.co.uk/english/news/2017/4/4/lebanon-displaces-syrian-refugees-forces-them-to-close-businesses, accessed 20 June 2018.
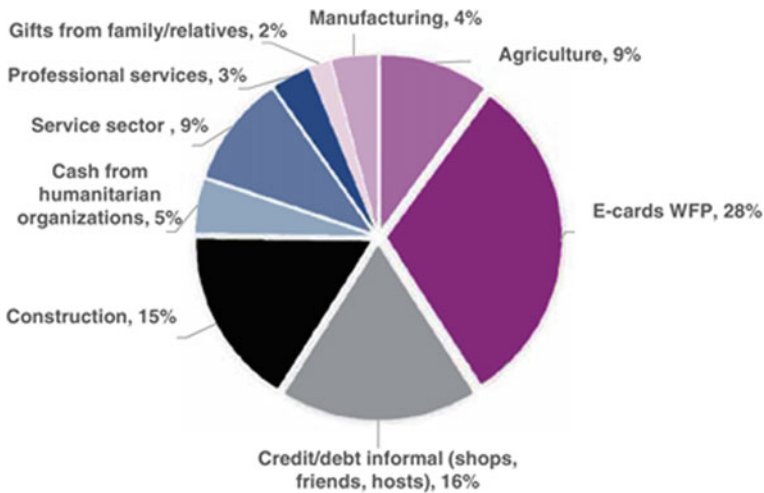
Fig. 17.3 Primary income sources reported by Syrian refugee households. *Source* UNHCR et al. (2017)

from traditional labour markets and economic opportunity, many Syrian refugees have no choice but to seek informal ventures to survive.

Their motivation is clear. *"We don't want…an aid package here and there. We want to work to produce. We want to live a normal life, like other people."* (IRC 2016b). These words, which carry aspirations of self-reliance and normalcy, are from Um Laith,[9] a Syrian refugee and mother. They started their own beekeeping business to support her disabled husband and five children. Through the informal networks that stretch between unofficial tented settlements, residences and refugee-occupied districts throughout Lebanon, Syrians have access to retail, occasional work, manufacturing and varied services, including hotel, restaurant, transport and personal (e.g. hair care, cooking, cleaning, childcare). Unfortunately, these are sectors that are typically unattractive to the majority of Lebanese workers.

Mired in such dire economic straits, Syrian refugees have proven resilient. They are often willing to work longer hours for lower wages, often with no social benefits or workplace protections (International Labour Organisation 2014). Syrian refugees' tenacity towards self-sufficiency is demonstrated by their aversion to permanent dependence on external aid (Fig. 17.3); only 28% of Syrian households in Lebanon rely on World Food Programme (WFP) assistance, and only 16% borrow or rely on credit as a primary source of income (UNHCR et al. 2017). In addition, engagement in informal sectors has allowed Syrian labourers to diversify livelihood survival strategies and gain "economic self-reliance" (Betts et al. 2014, p. 36). Nevertheless, aspirations are not enough in a macro-society that bounds economic inclusion and lacks refugee status and rights legislation.

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[9] Um Laith's name was changed by the IRC for her safety.

Breaking points occur when the highest monthly per capita income of Syrian households in Lebanon (all above US$90) is still lower than the minimum expenditure basket (US$114). However, this barely exceeds the survival minimum expenditure basket (US$87) (UNHCR et al. 2017, p. 72); the United Nations High Commissioner for Refugees (UNHCR) (2017) reported that 75% of Syrian refugee households are unable to meet basic needs.

These households are scattered amongst several different types of living environments. These include residential buildings (73%), non-residential structures (9%) and informal camps (17%) (UNHCR et al. 2017, p. 22). Rent ranges from approximately US$35 for a plot of land in an informal tented settlement to an average of US$219 for residential accommodation (UNHCR et al. 2017, p. 26). These costs are on top of the required $200 annual residency renewal fee.

More than half of Syrian refugees surveyed in a 2017 Vulnerability Assessment of Syrian Refugees Study (VASyR) occupied less than 35 m^2 of living space. Despite such conditions, the average surface area per person has shrunk to 1.4 m^2 from 8.6 to 10.0 m in 2016 (UNHCR et al. 2017, p. 22). A clear indicator of the decreasing stock of affordable shelter [ibid] is that Lebanese landlords are taking advantage of the refugee influx; rent has been estimated to have increased by more than 200% in six-month intervals (International Labour Organisation 2014).

Many war-displaced Syrians have settled in historically impoverished and destitute regions near socially excluded Lebanese communities [ibid]. Housing conditions continue to deteriorate. Syrian refugees primarily take residence within overcrowded shelters with unsuitable conditions. The UNHCR (2017) recorded that 53% of the refugee population residing in dwellings is affected by one or more severe conditions: overcrowding, unsafe structural conditions or desperate need for repair; this increased from 42% in 2016. Approximately one-third (34%) of Syrians live in overcrowded homes, defined by the humanitarian standard of fewer than 4.5 m per person. Overcrowding is common in informal settlements and non-residential structures [ibid].

Ejection and informal Syrian settlements are frequent since they have not been allotted official sanctions for refugee camps. The rationale can range from Lebanese authorities' perceived security threats to tensions within the neighbouring host communities. As a result, Syrian families can be ordered to tear down temporary dwellings, often within a matter of minutes and move to another site.[10] Whether in an informal settlement or residential building, eviction is the most commonly cited reason Syrian households mention for unplanned moves (UNHCR et al. p. 28); 45% of refugees anticipated moving within the following six months compared to only 25% in 2016 [ibid]. In contrast, 22% of those who expected to move within the next six months of the 2017 VASyR survey claimed the change in accommodations was due to their inability to afford rent [ibid].

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[10] Syrian refugees in Lebanon live in fear after Arsal. Al Jazeera, https://www.aljazeera.com/ind epth/features/2017/08/syrian-refugees-lebanon-live-fear-arsal-170826083802752.html, accessed April 15, 2018.

The International Rescue Committee (2016a) posits that a typical response in any host community is to cast refugees as scapegoats for pre-existing social and economic issues. Fear of the potential for another permanent refugee populace to increase pressure on a cumbered infrastructure and disrupt a precariously balanced socio-political system has led Lebanon's government to introduce inequitable labour and residency laws. These deter the integration of Syrian refugees and impair sustainability.

Breaking points inevitably arise from the prejudice of a country filled with impoverished Lebanese nationals who resent Syrian refugees for the aid they are receiving—aid that is little compensation for surviving the exodus of their war-torn homeland. This contrasts with the economic reality that has occurred within this protracted crisis. Syrians have indirectly contributed to Lebanon's economy. The United Nations is estimated to have spent US$800 million on Syrian refugees.[11] Nearly, half of this, or 44%, has been fed directly into Lebanon to procure necessities for Syrian refugees (International Rescue Council 2016a). By enforcing curfews that limit mobility and restricting attainment of legal status, the country of Lebanon merely perpetuates a cycle of demoralised refugees who, hemmed by a systematic border of imposed poverty, cannot return to their homeland and possess no way forward or out of the current situation.

17.4   Case: Puerto Rican IDPs in America, *Citizens* but not *Americans*

On 20 September 2017, Hurricane Maria landed in the Commonwealth of Puerto Rico. A category 4 storm was the most devastating storm to hit the Caribbean Area since San Felipe Segundo 89 years prior. With a catastrophic northwest trajectory, flash flood-inducing rains and a sustained force of 145 mph to peak 155 mph winds, Hurricane Maria categorically rendered the island and its 3.4 million residents with severe conditions. Potable water was impacted (70% compromised), telecommunications decimated (95% of cell towers and 85% of above-ground cables), and electricity service was interrupted (100% for 181 days)[12] (Refugees International 2018). The storm resulted in an estimated death toll of over 4000[13] and billions of dollars in damage not only to Puerto Rican homes (around 70,000 destroyed and 250,000 severely damaged) (Centre for Puerto Rican Studies 2018) and the island's antiquated infrastructure, which was in urgent need of modernisation and repair even before Maria. The island had not even begun to respond to the impact of Hurricane

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[11] See UNHCR and UNDP Impact of Humanitarian Aid on the Lebanese Economy 2015, http://reliefweb.int/sites/reliefweb.int/files/resources/Impact%20of%20Humanitarian%20Aid-UNDP-UNHCR.PDF, p. 5.

[12] After Hurricane Maria, Puerto Rico was in the dark for 181 days, 6 h and 45 min. Washington Post, https://www.washingtonpost.com/graphics/2017/national/puerto-rico-hurricane-recovery/?utm_term=.b4dad52a98de, accessed May 20, 2018.

[13] Hurricane Maria death toll may be more than 4600 in Puerto Rico. CNN, https://www.cnn.com/2018/05/29/us/puerto-rico-hurricane-maria-death-toll/index.html, accessed May 2, 2018.

Irma cut 70% of residential power and 34% of potable water access and damaged thousands of homes just two weeks earlier (Refugees International 2018).

Recovery is predicted to take years. Six months after the storm, 15% of the island's western region residents still had power, and 12% were without drinkable water [ibid]. Under the jurisdiction of the United States of America as one of five of the nation's territories, the fate of millions of Puerto Rican Internally Displaced Persons (IDPs) and the expedient dispersal of humanitarian relief fell to the Federal Emergency Management Agency (FEMA). Unfortunately, the agency demonstrated scrutiny, woeful lack of preparation and dereliction of responsibility in not adopting a significant role in the island's recuperation. The aftermath revealed the fragility of Puerto Rico's infrastructure and its government's inability to handle a catastrophe of this magnitude.[14]

Nine days after Hurricane Maria struck Puerto Rico, FEMA arrived with 10,000 personnel. This contrasts with 30,000 who came to Houston, Texas, after Hurricane Harvey. In Puerto Rico, FEMA distributed 1.6 million meals, 2.8 million litres of water, and roughly 5000 tarps for affected roofs. Again, this contrasts with the figures for Houston: 5.1 million meals, 4.5 million litres of water, and 20,000 tarps. Additionally, in that same nine-day period, the agency authorised $6.2 million in individual assistance compared to $141.8 million in Texas. FEMA deemed ten days was necessary for Texas to receive sanctions for permanent disaster work, whereas Puerto Rico had to wait 43 days. During the same 78-day period, after each hurricane, FEMA approved 39% of federal-aid applications for Texas applicants versus 28% for Puerto Ricans. Three costly weeks were needed by U.S. Northern Command to dispatch 70 helicopters to provide emergency supplies and rescue Hurricane Maria victims versus a mere six days for 73 helicopters for Hurricane Harvey victims.[15]

For the Salvation of Puerto Rico, FEMA utilised a 140-page plan[16] for Category 4 hurricanes, which, used as a high-end Category 4 Maria model, projected the island's complete restoration within 30 days. This was in blatant opposition to FEMA's presumptions of crippled state and local authorities and multiple areas of the island assailed by Category 5 winds. Though the agency accurately predicted challenges such as sweeping road closures and transportation difficulties, FEMA wholly underestimated the extent of Hurricane Maria's damage (Refugees International 2018, pp. 4–6). Despite the conventional paradigms and dangerous predisposition, a $74 billion debt-exhausted Puerto Rico could help itself, leaving Puerto Rican IDPs with the terrible choice of abandoning their homeland for brighter prospects in the continental U.S.; or remaining on what many considered to be an economic

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[14] FEMA's plan underestimated the Puerto Rican hurricane. POLITICO, https://www.politico.com/story/2018/04/15/puerto-rico-hurricane-fema-disaster-523033, accessed May 22, 2018.

[15] How Trump favored Texas over Puerto Rico. POLITICO, https://www.politico.com/story/2018/03/27/donald-trump-fema-hurricane-maria-response-480557, accessed 22 May 2018.

[16] FEMA Region II Hurricane Annex for Puerto Rico & US Virgin Islands (2014) https://cdn.muckrock.com/foia_files/2018/03/20/2018-FEFO-00223_Response_Document.pdf

sinking ship[17]—attempting to rebuild what was lost, despite a governmental agency riddled with opaque bureaucracy in the aid-dispersion process. Hurricane Maria's untold destruction was an unplanned yet necessary factor in bringing Puerto Rico's fractured government, failing infrastructure, and underlying issues generations in the making to light.

17.5 Puerto Rican IDPs: Breaking Points

A poll conducted in September 2017 by Morning Consult[18] with a national sample of 2200 adults revealed that roughly half (54%) of U.S. citizens knew that people born in the Commonwealth of Puerto Rico were U.S. Citizens; a significant number answered *no* (22%) or *didn't know/had no opinion* (24%). Notable variations were discovered when considering age and education: only 37% of polled adults aged 18–29 knew Puerto Ricans held U.S. citizenship, whilst 64% of adults 65 or older knew. Education-wise, 47% without a college degree identified 72% of those with a bachelor's degree and 66% with postgraduate degrees.

Assuredly, the most interesting finding, however, was the question of whether Puerto Rico deserved additional aid from the U.S. due to Hurricane Maria; eight in 10 who were cognizant of Puerto Ricans US-supported aid, whilst four in 10, who were not aware, did not support aid—a possible explanation for the lacklustre media coverage and general disinterest for the island's crisis.[19] It could be argued that the U.S. government purposely alienated Puerto Rico within the U.S. mindset to be regarded as a foreign and inferior land.[20] This was undoubtedly a mentality ostensibly adopted by FEMA with their tepid distribution of federal assistance in reconstructing hundreds of thousands of Puerto Rican homes.

According to the United Nations Office for the Coordination of Humanitarian Affairs (OCHA) (2004) Guiding Principles on Internal Displacement,[21] IDPs "shall enjoy, in full equality, the same rights and freedoms under international and domestic law as do other persons in their country" and "should not be discriminated against."

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[17] Exodus from Puerto Rico grows as the island struggles to rebound from Hurricane Maria. The Washington Post, https://www.washingtonpost.com/national/exodus-from-puerto-rico-grows-as-island-struggles-to-rebound-from-hurricane-maria/2018/03/06/b2fcb996-16c3-11e8-92c9-376b4fe57ff7_story.html?noredirect=on&utm_term=.bc9c51f0c055, accessed 12 May 2018.

[18] Morning Consult National Tracking Poll (2017) https://morningconsult.com/wp-content/uploads/2017/10/170916_crosstabs_pr_v1_KD.pdf

[19] Puerto Rico is on the brink of a humanitarian crisis. Where is the media? The Guardian, https://www.theguardian.com/commentisfree/2017/sep/26/puerto-rico-brink-humanitarian-crisis-media, accessed May 14, 2018.

[20] Puerto Ricans are Americans, but that doesn't matter to the U.S. Huffington Post, https://www.huffingtonpost.com/entry/opinion-agrelo-puerto-rico-citizens_us_5a981fa8e4b0e6a5230595f7, accessed May 14, 2018.

[21] OCHA Guiding Principles on Internal Displacement (2004) http://www.unhcr.org/en-us/43ce1cff2.pdf

The Guiding Principles also assert recognition by all authorities; the chief duty and responsibility of protection and humanitarian aid to IDPs fall within their jurisdiction [ibid]. FEMA reported 458,736 individual assistant applications approved,[22] though not necessarily disbursed, offering resources such as grants for home repairs, low-interest loans, blue roof programmes and other needs assistance (ONA).[23] However, out of nearly 1.2 million Puerto Rican applicants,[24] the figure emerges as grossly insufficient. Beyond Maria victims' lack of telecommunications, inadequate translation of applications and vaguely outlined eligibility requirements (Refugees International 2018, p. 8), more than half of houses in Puerto Rico are informal.[25] This disadvantages inhabitants without land rights, many of whose families have lived there for generations, and the ability to mortgage, lease, or sell. FEMA denied roughly 60% of applications from these informal communities due to the titles or deeds not being in the applicants' names, even if they were in the names of predecessors.[26]

Construction of informal homes began in 1947 with Governor Luis Muñoz Marín's Operation Bootstrap.[27] After fiscal turmoil and rapid shifts in the urban fabric, Puerto Rican squatters left thousands without affordable housing claiming their right to abundant land with the narrative of *rescatadores*, "rescuers of the land." Socially anchored in Puerto Rico, the sheer scale of the island's informal communities was ignored or encouraged by local authorities. As a result, they existed for decades on the fringes of traditional society—a fact not recognised as significant until a catastrophe such as Hurricane Maria.

Claiming flexibility to this island-specific issue, FEMA accepted affidavits from residents unable to prove ownership; however, the result remained the same for many re-applicants of assistance. Rebuffed homeowners, tired of denial letters and bureaucracy providing no weight, decided to take matters into their own hands. They hired private contractors or made individual repairs with found or donated materials from community and non-profit organisations. Even the rare homeowners who could gain approval from FEMA found themselves equally confounded in navigating the agency's obscure parlance. They were often awarded too low to meet repair needs

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[22] Puerto Rico Hurricane Maria (DR-4339). FEMA, https://www.fema.gov/disaster/4339, accessed June 26, 2018.

[23] Housing Resources for Residents of Puerto Rico Displaced by Hurricanes Irma and Maria. FEMA, https://www.fema.gov/news-release/2017/10/30/4339/housing-resources-residents-puerto-rico-displaced-hurricanes-irma-and-maria, accessed May 15, 2018.

[24] Unable to Prove They Own Their Homes, Puerto Ricans Denied FEMA Help. NPR, https://www.npr.org/2018/03/20/595240841/unable-to-prove-they-own-their-homes-puerto-ricans-denied-fema-help, accessed May 15, 2018.

[25] Puerto Rico hurricane recovery worsened by nearly 1 million homes built illegally. Newsweek, http://www.newsweek.com/puerto-rico-housing-hurricane-illegally-806808, accessed May 15, 2018.

[26] After Disaster, San Juan's Poorest Residents are at Risk of Losing Their Lifeline. CPI, http://periodismoinvestigativo.com/2018/05/after-disaster-san-juans-poorest-residents-are-at-risk-of-losing-their-lifeline/, accessed May 15, 2018.

[27] Puerto Rico's Operation Bootstrap. Brown University Library, https://library.brown.edu/create/modernlatinamerica/chapters/chapter-12-strategies-for-economic-developmen/puerto-ricos-operation-bootstrap/, accessed May 15, 2018.

Hispanics of Puerto Rican origin, by birthplace and residence, 2015

	Live on the island	Born on the island	Born on the mainland
		LIVE ON MAINLAND	
Median houshold income	**$18,626**	$33,000	$47,000
Children in poverty	**58%**	45%	30%
Some college or more	**48%**	43%	55%
Median age	**40**	46	22

Fig. 17.4 Economic disparities between Puerto Ricans on the island and U.S. mainland. *Source* Pew Research Centre (2015)

whilst receiving no information about how aid was determined or assess damage (Refugees International 2018). Assisted residents with limited telecommunications access was forced to await a phone call from FEMA and reside in storm-battered mould-infested dwellings, typically without electricity or plumbing and with leaks, until inspectors arrived.

Many hurricane-affected Puerto Ricans, dejected by FEMA's uncoordinated response and the ruptured state of homeland years in decline, chose to migrate to the U.S. mainland (Fig. 17.4). This continued as the island's population fell by over 400,000 since its peak of 3.8 million in 2004 (Pew Research Centre 2015). As a result, an estimated 114,000–213,000 residents left in the aftermath of Hurricane Maria with access to employment opportunities, the main reason for the significant portion who were underemployed or unemployed (Centre for Puerto Rican Studies 2017).

Inevitably, when one-fifth of roughly 40,000 small businesses in Puerto Rico that employed 80% of private-sector workers (556,000) closed, 4% of total jobs were lost.[28] Ten thousand nearly 45,000 small and midsize businesses are unlikely to open again,[29] whilst 80% of the territory's crop values were destroyed ($780 million loss).[30] Even before Maria, Puerto Rico's unemployment rate was over 11% in 2017, more than double the national average of 4.1% in the same year; 45% were living

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[28] Hurricane Maria strikes Puerto Rico after pummeling Caribbean. New York Daily News. http://www.nydailynews.com/news/hurricane-maria-strikes-puerto-rico-pummeling-caribbean-gallery-1.3508527, accessed May 14, 2018.

[29] Puerto Rico's Slow Hurricane Recovery Is Suffocating Small Business. Bloomberg Business week, https://www.bloomberg.com/news/articles/2017-12-07/puerto-rico-s-slow-hurricane-recovery-is-suffocating-small-business, accessed May 14, 2018.

[30] Puerto Rico's Agriculture and Farmers Decimated by Maria. The New York Times, https://www.nytimes.com/2017/09/24/us/puerto-rico-hurricane-maria-agriculture-.html?mcubz=0&_r=0, accessed May 14, 2018.

below the poverty line with lower household incomes than their mainland counterparts (Fig. 17.4) (Pew Research Centre 2015), evading an 11.5% sales tax with participation in informal trades.[31]

With no indication of a rebound, Maria is predicted to cripple the Commonwealth's economic yield by 21% over the next 15 years (Climate Impact Lab 2018). Puerto Rican migration has accelerated with the utilisation of mainland family connections or, begrudgingly, FEMA's Transitional Sheltering Assistance (TSA) programme. Whilst citizenship allows relocation throughout the mainland, many Puerto Rican evacuees—unlike refugees in a new country—arrive without a full grasp of the dominant language, certification equivalents, or notion of where to go. As a result, many end up in squalid shelters instead of FEMA-authorised hotels without proper assistance.

According to the Centre for Investigative Journalism (CPI) (2018), as of January 2018, over 11,000 Puerto Ricans were enrolled in FEMA's shelter programme; Florida was the state with the most significant number of families (1755), followed by Massachusetts (578), New York (208) and Pennsylvania (176). TSA provided evacuees lodging in hotels five to 14 days before requiring them to request an extension even though 78% of Puerto Rican families could not secure permanent residence [ibid]. Finally, while wards of the agency, each family in TSA were required to demonstrate repairs actively being made to their homes in Puerto Rico every 30 days; while renters were required to submit testimony from landlords as well as evidence allotted financial aid was being used to obtain new housing [ibid]. The relocation of temporary shelter assistance was imminent if FEMA determined that homes were liveable after inspection. However, inspectors received no response or obtained evidence that evacuees possessed another residence. Beyond formidable protocol, TSA-enrolled families also had to endure chronic insecurity concerning eviction if arbitrary deadlines terminated the programme. As a result, many families were forced to live from extension to extension.[32] The agency refused to offer extended direct lease housing options to those unwilling to move back to Puerto Rico.

Even for Puerto Rican families relocated outside of the TSA programme, complications arose in attaining employment; pertinent documents were often destroyed or lost during Hurricane Maria, whilst recovered credentials were usually deemed untransferable by mainland employers. Many Puerto Ricans were forced to retake certification examinations in their respective professions for duties they performed

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[31] Puerto Rico's Tax Dodgers Hide in Plain Sight on Every Corner. Bloomberg, https://www.bloomberg.com/news/articles/2017-05-22/puerto-rico-s-tax-dodgers-hide-in-plain-sight-on-every-corner, accessed May 14, 2018.

[32] A FEMA program has sheltered thousands of Puerto Ricans since Hurricane Maria. But now, the evacuees fear its days are numbered. Los Angeles Times, http://www.latimes.com/nation/la-na-hurricane-housing-20180423-story.html, accessed May 16, 2018.

satisfactorily for years.[33] Without avenues available to verify experience, professionals had to bear unclear requirements for licensure deemed by each state's regulatory board. Transparent processes towards gaining correct certification for mainland-born individuals were far more abstruse when appraising those born in a U.S. territory. Puerto Rican migrants contending reciprocity laws must wait for states to adjust their rules and expedite processes. However, they seek jobs far below their skill set to afford language improvement classes and licensure exams. These were issues for those departing the Commonwealth long before any storm-related crisis, yet the rapid Maria exodus exacerbated them.

FEMA published an amendment to Puerto Rico's Major Disaster Declaration with a modicum of media coverage. This required the territory to employ an experimental method for all recovery initiatives. Debt-laden Puerto Rico was obligated to pay for fiscal overages while determining rebuilding funding. This amendment was never introduced in any prior disaster declaration nor employed in Texas after Hurricane Harvey, where FEMA settled all excess costs. For the second-class citizens of the Commonwealth, eligible to be drafted and pay federal taxes but uncovered by the Constitution and unable to vote for their president, the United States continues to demonstrate, through incompetent aid and convoluted double standards, that Puerto Ricans are not only unrecognised but unwelcome. Whether struggling to exist in their homeland buffeted by natural disaster or navigating constant bureaucracy on the mainland, Puerto Rico persists as little more than a segregated burden, gambled off when tragedy strikes.

17.6 Case: Minorities in the State of Georgia, Within and Without

Denise Blackwell[34], an African–American woman of 60 years, has resided in the state of Georgia since 1986; however, she only closed on her first home in September 1992—a feat definitively miraculous concerning her income of barely $22,000 a year ($11/h). Determined and apprehensive, Denise settled into the world of ownership and the reality that if anything breaks in her new home or infirmity or unexpected expense strikes, all responsibility falls solely on her. Seldom celebrated by Americans in vehement pursuit of the *dream*[35] is the treacherous counterpart to homeownership or renting: housing insecurity. Almost expected as a birthright, the right to private property wrought constant sacrifice and bitter uncertainty.

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[33] Puerto Rico Professionals in Limbo: Massachusetts Laws Create Roadblocks to Employment. The Valley Advocate, http://valleyadvocate.com/2018/01/05/puerto-rico-professionals-limbo-massachusetts-laws-create-roadblocks-employment/, accessed May 16, 2018.

[34] Name has been changed by request.

[35] Refers to *the American Dream*, a societal ethos of the United States that embodies the attainment of personal freedoms and material prosperity.
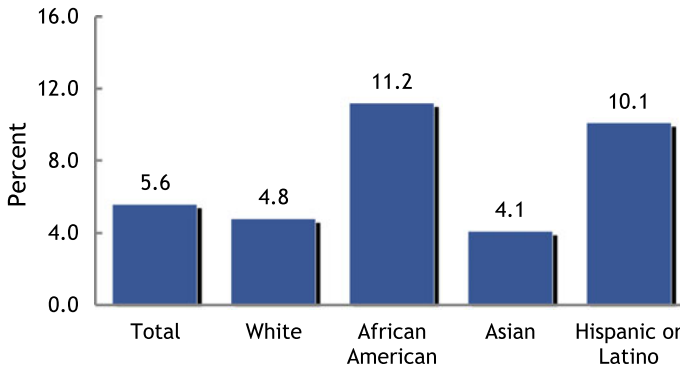
Fig. 17.5 Working-poor rates by race, 2015. *Source* U.S. Bureau of Labour Statistics

Denise Blackwell is merely one of many minorities throughout the United States. They find it nearly impossible to secure employment and receive adequate compensation to meet financial needs once obtained. Habitually behind and doomed to the insidious cycle of "the working poor."[36] African–Americans and Hispanics in the U.S. are twice as likely as Whites and Asians to be part of the undercaste population (Fig. 17.5), with 2015 working-poor rates of 11.2% and 10.1%, respectively (U.S. Bureau of Labour Statistics 2017). Also of note is the finding women's working-poor rates amongst African–Americans are far higher than men's, 13.3% compared to their male counterparts' rate of 8.8% [ibid]. In addition, nearly 19 million low-income U.S. households collectively surrender more than half their wages to housing; over ten million or 57% of the housing insecure are unmarried and without children, and 32% possess some college education or an associate degree.[37]

With income from formal employment barely sufficient for working-poor members to satisfy shelter needs, informal work is often used to supplement limited formal earnings. The informal market holds few prohibitive barriers compared to common prerequisites of education or the age of formal sectors. Working hours also tend to be more flexible in informal markets. Participants can often abstain from reporting earned income for tax purposes and increase available funds (Nightingale and Wandner 2016). Engagement in everyday ventures also bypasses reliance on government assistance—or lack thereof. Francois and Venkatesh (2016) suggest that the poor are innovative and sensible under a legalist view yet completely removed from state backing regarding property rights. Imposed-aid restrictions based on documented formal income and extent of poverty—even if these officially accessed earnings remain unfit in ensuring bare necessities. The disqualified, living with housing insecurity and earning somewhat above government-mandated poverty thresholds, are left to fend for themselves.

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[36] The working poor is individuals employed or seeking employment, 27 weeks in the labour force or more, yet their incomes still fall below the official poverty level.

[37] Housing Insecurity Dashboard. Enterprise Community Partners, http://www.housinginsecurity. org/, accessed July 9, 2018.

17.7   Minorities in the U.S.: Breaking Points

After achieving the purchase of her first home, Denise Blackwell soon contends with months of ceaseless struggle mitigating mortgage payments with low formal earnings, continually decreasing expected expenditures for a single individual down to bare essentials. This is a survival tactic to make her debt-to-income ratio appear lower and balanced in her favour. Nonetheless, despite judicious spending and monthly sacrifice, in the Spring of 1993, Denise's position in the advertising department of a newspaper association, one of two at the time, was terminated. Promoted from an assistant with no salary increase, Denise was let go favouring a White man, even when responsible for more duties. This, regrettably, was only the first instance in a long series of discriminatory and deficient formal employment.

Displaced from full-time work, Denise turned to temporary labour over the next year, fulfilling various odd jobs to continue making mortgage payments and keeping her own house. She even swallowed her bitterness when a CEO implored her to get the newspaper association's advertisement department back on track as a consultant, not in her previous capacity. She is made expendable yet again when the task is complete and her expertise is no longer needed. Securing employment at a small consulting firm, she accepts a backward step in salary for stability and more experience; $21,000 a year covering implied job responsibilities of mail clerk, contract creation support, lead course material producer, and even courier when other employees were lax in their duties. Unfortunately, the firm's freshly elected CEO unrealised a promised $12,000 salary increase. Denise informed her boss that she could no longer work under such conditions and look for opportunities elsewhere. She received calls from her last employer with a global consultancy firm needing guidance for someone she trained.

Left in the aftermath of the nationwide market recession and rampant employee downsizing of 2001, Denise barely survives the first six months of 2002. She depleted her savings and once more performed temporary jobs. The lack of full-time employment compromises survival. Denise falls behind on her mortgage for the first time in a decade. Unable to maintain a solid foundation due to a lack of suitable work and severely underpaid when she can secure it, she has exhausted every available resource. Finally, Denise encounters a breaking point.

She applies for government assistance when she sees no other options, only to discover aid is reserved for the stably employed—a vicious irony is that support is solely afforded to those who already have stability in her jarring new reality. Only in the spring of 2003 is Denise able to find employment at a car wash as a cashier, earning $10 an hour to stand on her feet all day, four days a week, at the age of 47. Because Georgia is a non-union, right-to-work state,[38] Denise does not have lunch breaks. She suffered debilitating back pain and was exhausted upon returning home.

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[38] See: Right-to-work states: Georgia, http://www.nrtw.org/right-to-work-states-georgia/.

Employed in the barest sense of the word, Denise Blackwell is forced to file a Chap. 13 Debt Consolidation[39] to remain in possession of her home and pay her mortgage under a settlement plan that must be realised in three to five years. This repayment plan constitutes an additional $600 a month on top of Denise's other debts and utilities, a total amount she will never have hope of meeting with a monthly net income of only $1200. Moreover, her $500 mortgage payment is still expected. Despondent with the severity of her situation, Denise employs more coping skills; she juggles between halting gas services in the summer and carefully settling utilities in immediate danger of discontinuing, all whilst going back to school for a degree in a desperate bid for higher education will ensure future stability.

This fringe life ended abruptly in the summer of 2005; Denise was forced to dismiss her Chap. 13 filings when she could not pay its settlement and maintain an essential existence after being employed at the car wash for two years. Another breaking point was reached with the revocation of government aid and the absence of additional employment opportunities. She submitted over 300 job applications to various employers and staffing agencies with no results. Financially and emotionally bankrupt, Denise decides to relinquish her home of 15 years and seek a more affordable rental property, years filled with concession and sacrifice in maintaining homeowner status—and still losing everything is too much to bear. Whilst mere possession to some, this crisis birthed the revelation that was forfeiting the epicentre of her life. Her home would be the one loss too devastating to endure after a tumultuous cycle of on and off employment.

Beaten and humiliated by her failure to survive, even within a macro-society thwarting her efforts at every turn, Denise contacts her mother, informing her that she may be moving back. Nevertheless, unfortunately, her mother, after conveying the wish, her daughter had called her sooner and bought Denise's house and incorporated it into her array of property acquisitions. This bittersweet transaction proves the final blow to Denise's anti-reliance as she visits the Department of Human Resources and applies for the Supplemental Nutrition Assistance Programme (SNAP).[40]

In the summer of 2006, Denise lost her cashier position whilst sick, without pay, from the flu. This requires her to wait longer for access to unemployment benefits after being denied them by her employers. Whilst waiting for approval, Denise takes on a roommate; both contributions are her sole lifelines until she secures a job as a graphic designer at a local paper trade association in the fall. Her new employer offers a record $14 an hour; however, it carries the stipulations of sporadic workweeks— 20 to 30 h per week and being on call. This was a compromise Denise only had to withstand a year before losing her position due to budget cuts, having worked only twice in the last three months. Applying for unemployment and being denied by former employers yet again, Denise finds herself falling into a conscious coma

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[39] Chapter 13, http://www.uscourts.gov/services-forms/bankruptcy/bankruptcy-basics/chapter-13-bankruptcy-basics.

[40] For more information, see: https://www.fns.usda.gov/snap/supplemental-nutrition-assistance-program-snap.

battling acute depression and rationalising if she could have done anything differently whilst continuing to apply for new employment.

In the fall of 2010, Denise was hospitalised for an appendectomy adding $32,000 to her already overwhelming debt since she could not afford insurance. Unemployed still, she decides to apply to college; once more, higher education will open more doors. Denise finds work through communal ties between academics, her neighbour's daughter offering an informal opportunity of clothing alterations for a choreography team. Despite a limited budget, this opportunity helped sustain Denise for the next three years. Bonds of trust and obligation are present beyond mere compensation. The formal sector is focalised on "locus capitalism, rational calculation and contractual" (Bonnet and Venkatesh, pp. 644–645). Simultaneously, informal economies thrive on social networks, enhancing intrinsic bonds and promoting solidarity.

It would be three years before Denise re-entered the formal market, landing a part-time position at a national fabric chain that was non-union and offered only minimum wage ($7/h) and offered no benefits. Forced to rely on social ties yet again when car troubles arose, family, friends and even co-workers stepped in to drive Denise to and from work whilst it was repaired. Beset by yet another expense and enduring cuts in 15-h workweeks with each favoured new hire, Denise discovers the latest owners mismanaged their capital and now face insolvency. Her dedication is repaid with dwindling shifts and the accustomed search for new employment as she witnesses co-workers quickly gain opportunities elsewhere with no luck of her own. Submitting yet another unemployment application, Denise survives on $120 a week and SNAP assistance, still utilised ten years later. Surrendering herself to the conventions of job seeking with the grim acknowledgement that prospective employers will see she has not had steady work since 2006, a bias prevalent in a society that does not value even the experience-rich after a certain age.

The fabric store closed in July 2016, leaving Denise floundering economically. By this point, government programmes and her mother's supplements to her informal income were the sole factors keeping her from destitution. Feelings of shame and failure were excruciating as Denise grappled with the hard truth of being 58 and unable to support herself.

Existing from one day to the next, relief came in the fall of 2016. After multiple interviews, drug tests, background checks and 30 days of rigorous yet paid training, Denise obtained full-time employment with an airline they initially had no hope of attaining. She remained employed in the unionised airline that provides two modest raises twice a year and offers attractive benefits. Whilst grateful for work, Denise still contends that her 2017 annual income of $28,000 leaves her struggling to pay her monthly expenses. After owning her last vehicle for 25 years, utilities, insurance and car payments are formidable obstacles to her financial recovery path.

Denise considers her life thus far a learning experience; her sole regret is not obtaining her bachelor's degree sooner despite being 60 years old with $70,000 in student loan debt. Many days leave Denise paralysed, distraught and unknowing if she can remain indoors. Four decades of survival within a micro-society institutionally set against minority women, often leaving her a single pay cheque away from homelessness. Discontent with her lot, Denise Blackwell considers herself a member

of the working poor: All her adult life has been a concentrated effort to stay afloat. Unlike others her age, Denise does not expect retirement knowing that ideal is off the table, unless she experiences a windfall. Her grandest dream for the future is that she has enough money to buy food consistently.

17.8 Concluding Comments

More potent than the prospect of owning an affordable home is habitat for humanity's imperative to help families build it. Self-reliance becomes the gift of access to the empowering ability to craft their destinies with their own hands after surviving environments that only provide dead ends.

One determinant lies between states of hyper-vulnerability and survival: opportunity. The three case studies possess the element of restriction, whether the restriction of rights, mobility, or economic advancement, as a common theme. Consistent and centralised suppression by macro-societies, accompanied by a crippling external force, is required to disrupt self-sufficient loops within undercaste micro-communities. Breaking points are faced only when extrinsic factors outstrip social ties and informal networks. This also proves true when host country restrictions are impossible. Minority factions were then incapacitated to the point of being unable to survive.

None of the case studies bears a simple solution. However, all possess factors that, upon adoption, lenience, and acceptance by macro-societal authorities, would significantly improve the affected minorities' way of life. Numerous non-governmental organisations (NGOs) ruminate best practice techniques to this end: alternate temporary refugee shelter working within the shifting interpretations of permanent housing (see UN-Habitat 2015a, b: 80–83) and renovation of existing settlements in Lebanon, removal of regulatory and financial barriers and realisation of statehood for Puerto Rico and increasing the federal minimum wage and establishing more affordable housing options in the United States. All these options require that limits on legal status, equality, housing and access to liveable income be eradicated.

Whilst there are apparent perpetrators of disparity and segregation towards undercaste micro-communities, it would be remiss not to consider the advantages of integrating synergy practices instead of negligence for macro-societies. Reconciliation and gradual dismantlement of the *border of survival* within-host-sanctioned informal minority networks instead of mere exploitation combined with active participation in promoting micro-community growth and access to formal and informal sectors are necessary. However, if macro-societies penalise undercaste micro-communities and continue to restrict livelihoods, outcomes will be economically detrimental to both sides. Marginalised minorities will continue to seek informal paths and bypass unproductive formal practices. Thus, the disconnect between the two factions will continue and remain unresolved.

References

Andrews D, Sánchez AC, Johansson Å (2011) Towards a better understanding of the informal economy. OECD economics department working papers, No 873. Organisation for Economic Co-operation and Development (OECD) Publishing, Paris

Betts A, Bloom L, Kaplan J, Omata N (2014) Refugee economies: rethinking popular assumptions. The oxford handbook of the social science of poverty. Oxford University Press, Oxford

Centre for investigative journalism. Available 16 May 2018. http://periodismoinvestigativo.com/2018/01/puerto-ricans-displaced-by-hurricane-maria-encountered-intolerable-conditions-in-nyc-shelters/

Center for Puerto Rican Studies (2017) Estimates of post-hurricane Maria Exodus from Puerto Rico. Center for Puerto Rican Studies, Hunter College, City University of New York, New York

Center for Puerto Rican Studies (2018) Puerto Rico post-Maria. Center for Puerto Rican Studies, Hunter College, City University of New York, New York

Climate Impact Lab. Available (May 16, 2018). http://www.impactlab.org/news-insights/the-mind-bending-and-heart-breaking-economics-of-hurricane-maria/

Francois B, Venkatesh S (2016) Poverty and informal economies. The oxford handbook of the social science of poverty. Oxford University Press, Oxford

Human Rights Watch (2016) "I just wanted to be treated like a person": How Lebanon's residency rules facilitate abuse of Syrian refugees. Human Rights Watch, United States

International Labour Organization (ILO) (2014) Assessment of the impact of Syrian refugees in Lebanon and their employment profile. ILO. Available. http://www.ilo.org/wcmsp5/groups/public/---arabstates/---robeirut/documents/publication/wcms_240134.pdf

International Rescue Committee (IRC) (2016a) Economic impact of Syrian refugees: existing research review and key takeaways. IRC. Available: https://www.rescue.org/sites/default/files/document/465/ircpolicybriefeconomicimpactsofsyrianrefugees.pdf

International Rescue Committee (IRC) (2016b) Beyond survival: refugee's pursuit of livelihoods in Jordan and Lebanon. IRC. Available: https://www.rescue.org/sites/default/files/document/1022/beyondsurvival-refugeespursuitoflivelihoodsinjordanandlebanon.pdf

Nightingale DS, Wander SA (2016) Informal and nonstandard employment in the United States: implications for low-income working families, vol 20, no 5. The Urban Institute, Pew Research Centre, pp 99–110. Available: http://pewrsr.ch/2oa3K6L. Last accessed May 12, 2018

Pew Research Center (2015) http://pewrsr.ch/2oa3K6L. Last accessed 12 May 2018

Refugees International (2018) Keeping faith with our fellow Americans: meeting the urgent needs of Hurricane Maria Survivors in Puerto Rico. Refugees International, Washington, DC

Sanyal R (2014) Urbanising refuge: interrogating spaces of displacement. Int J Urban Reg Res 38(2):558–572

United Nations High Commissioner for Refugees (UNHCR), United Nations Children's Fund (UNICEF), and the World Food Programme (2017) Vulnerability assessment of Syrian refugees in Lebanon. UNHCR, UNICEF, and World Food Programme. Available: https://data2.unhcr.org/en/documents/download/61312

United Nations Human Settlements Programme (UN-Habitat) & the Issam Fares Institute for Public Policy and International Affairs (IFI) (2015a) No place to stay? Reflections on the Syrian refugee shelter policy in Lebanon. United Nations Human Settlements Programme, Beirut

United Nations Task Team on Habitat III (2015b) Habitat III issue papers: 22—informal settlements. United Nations Human Settlements Programme, New York

United Nations Office for the Coordination of Humanitarian Affairs (2004) Guiding principles on internal displacement. OCHA. Available: http://www.unhcr.org/en-us/43ce1cff2.pdf

U.S. Bureau of Labour Statistics (2017) Available: https://www.bls.gov/opub/reports/working-poor/2015/home.htm. Last accessed 2018/07/10

Chapter 18
Trailblazer of European Ideal: Frankfurt (Oder)—Słubice: Travel Notes

Check for updates

Chiara Toscani

Abstract Urban and social contexts are directly and indirectly affected by borders. This concept is exemplified by the twin cities of Frankfurt (Oder) and Słubice, located on the border between Germany and Poland along the Oder River. Both cities reflect their unique history of connections, divisions, and, today, reunification. On the one hand, their border still represents the division between a wealthy economy and another less flourishing; on the other hand, it means the gate towards a new economic exchange among Berlin, Frankfurt and other Polish cities that needs to be extended. Taking on this new challenge will require an increase in investments to upgrade their inadequate structures, improve infrastructure connections, and develop new urban plans for public spaces, schools, and affordable housing. The purpose of this first investigation is to gain a better understanding of how borders can affect cities on a variety of levels, as well as to identify a few principles for more effective urban governance that will redefine the roles of public assets and shared spaces within a society of multiple identities, including in this case the river as a symbol of a new ecological perspective.

Keywords Border · Public space · Frankfurt · Oder · Poland · Germany

18.1 Premise and Research Goals

18.1.1 Twin Cities

There are numerous fascinating Twin Cities on the border of many European countries. Several of them are located along rivers that mark their national boundaries, although, in the past, they were considered common resources rather than barriers: Laufen (Germany) and Oberdorf (Austria); Laufenburg (Germany) and Laufenburg (Svizzera); Komarno (Slovakia) and Komarom (Hungary); Narva (Estonia) and Ivangorod (Russia); Irun-Hondarribia (Spain)—Hendaye (France);

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Frankfurt on the Oder (Germany) and Slubice (Poland); Rheienfelden (Germany) and Rheienfelden (Switzerland); Roussr (Bulgaria) and Giurgiu (Romania); Tornio (Sweden) and Apparanda (Finland); Guben (Germani) and Gubin (Poland); Gorlitz (Germany) and Zgorzelec (Poland); Imatra (Finland) and Svetogorsk (Russia). Even though the conflict in Ukraine is exacerbating tensions between Estonia and Russia in cities such as Narva and Ivangorod, the Schengen Agreement still offers an opportunity for other cities to invest in the future, at least within the European Union. A good example of this can be found on the border of France and Spain, marked by the Bidasoa River. Its Pheasants' Island changes nationality every six months, embodying the symbol and spirit of European unity. The Oder River could play a similar role. Just over 70 years ago, its shores established the boundary between East Germany and Poland, transforming the two countries' destinies in a short time. On the contrary, they need to learn how to work more effectively together today.

18.1.2 The Final Object

By exploring the generative potential of boundaries, it is possible to reconceptualize urban projects and their terms of observation in the context of a multi-identity society. The aim is to encourage contemporary spatial and social integration processes, which can no longer be defined through exclusion and division but are designed to embrace their various urban attitudes. The main questions and final goals posed are as follows:

- Will borders at the urban and territorial levels change their shape, consistency, and characteristics?
- What changes and influences will this have on society and its urban space?

18.2 Case of Frankfurt and Słubice

18.2.1 Introduction

It is one hour by train from Berlin to Frankfurt, located not on the Meno River but on the Oder River in Germany. This river delineates the border with neighbouring Poland and its border town, Słubice, located just 15 min walk across a bridge. Although both nations are members of the European Union today, the two nations are still not aligned economically due to the persistent gaps that have not been addressed almost 20 years after Poland joined the EU in 2004. For this reason, this case study illustrates how borders function on all levels: displaying unexpected persistence, exhibiting tangible and intangible dynamics, and enabling a reconfiguration of old or new centres throughout the city.

18.2.2   Historical Background and Political Implications

By analyzing the historical events associated with these two cities, we can gain insight into the significant role the river has played. Frankfurt was founded in the thirteenth century on the west bank of the Oder. Significant monuments, still visible today, were constructed during this period: the Friedenskirche, the Viadrina University and other secular and religious buildings. The lack of iconographic materials from that time makes it difficult to determine the actual extent of its original core. However, according to an engraving by Matthäus Merian made shortly after the Battle of Frankfurt during the Thirty Years' War, Frankfurt (1631) consisted of two urban nuclei: the original core west of the river and a second to the east. Between the fifteenth and sixteenth centuries, this settlement was common in fortified European towns near rivers. The expansion occurred on the opposite bank, forming a smaller fortified nucleus along the main road. In this case, the direction appears to be closely related to the one linking Berlin, Magdeburg, and Pozna'. Additionally, the engraving indicates that, at the time, the river was not a dividing element. On the contrary, the river constituted a significant infrastructure source due to its location opposite and perpendicular to the main road connecting Magdeburg to the west. Furthermore, the combination of the Oder River's outlet into the Baltic Sea and the route between the cities of Magdeburg and Poznań made the city strategically crucial for trading. Although the city has been a part of many empires and nations, including the Kingdom of Poland, the Duchy of Pomerania, the Kingdom of Prussia, and the German Reich, it has always been one unitarian urban settlement.

After the Second World War, with the division of Europe into two political blocks and the redrawing of boundaries within Europe, the Oder River was used for the first time as a political boundary marker. The city of Frankfurt became a part of the German Democratic Republic until the reunification. On the contrary, the eastern portion of the city became Polish. From a suburb of Frankfurt named Dammvorstadt, this new portion was renamed Słubice and has grown autonomously with a young identity.

With the reunification of Germany in 1990 and Poland's entry into the European Union in 2004, the relationship between these countries has again changed, ushering in a new phase.

18.2.3   Economic Aspects

Economic factors have contributed significantly to the complexity of the dynamics between the two cities. There have been two fundamental changes to the economic structure of these two cities: the first is associated with the division of the two cities following the Second World War. The second aspect relates to their entry into the European Union (EU). Nonetheless, the reunification of Germany caused the greatest changes. After this, the central government invested nearly two million DM in Frankfurt to realign the economy of the former DDR with that of the West, with

the result that Frankfurt had a tremendous amount of financial support. However, due to the proximity to the Polish border and the inability to develop an integrated economic strategy, this massive financial contribution indirectly affected and distorted the Polish economy. Following Poland's entry into the European Union (EU), enormous contributions from European Funds reached the Polish side, bridging substantial economic disparities and launching the first common urban policies. As a result, they began collaborating on sports, culture, and training plans to create an affordable and accessible distribution network for city services. Despite this, economic disparities have continued to affect the cities' landscape in 2018. Several differences between Frankfurt and Słubice are observable, including the distribution and typology of shops. For instance, upon walking down Słubice's main street, which connects the town to Frankfurt, one can encounter several Polish hairdressing shops that serve almost exclusively serving German residents, as evidenced by the German signage. This tendency is particularly true when comparing their real estate markets and current urban development plans. Due to lower rents and more affordable housing in the Polish city, the distribution of the population of the two cities has altered, resulting in an overpopulation of students and destitute citizens on the Polish side. In addition, the aggressive distribution of a few commercial services along Kopernika Street seems to be the most prominent and concerning example of this phenomenon. Located near the Polish border, this outdoor mall provides the German city with cheaper commercial facilities such as supermarkets and gas stations. Besides replicating the phenomenon already evident in the city, there is no doubt that the river and its surrounding natural landscape have been adversely exploited, threatening its role as a shared space between the two cities. On the one hand, this illustrates that the Polish urban facilities have already achieved a certain level of integration. On the other hand, it demonstrates how the Polish city has become an affordable suburb of Frankfurt.

18.2.4 Population Composition

In 2013, Frankfurt had a population of 58,000 residents. The data has undergone numerous trends over the past fifty years, which can be summarized into three major phases. Immediately after the DDR ended, the population decreased as many industries were closed, including microelectronics. However, following German unification, a substantial amount of money was allocated to renovate the entire city, resulting in a significant increase in the population, which peaked at over 80,000 residents in 1995. Since this time, Frankfurt's population has declined significantly, primarily composed of university students and elderly families.

In contrast to the German side, there is no detailed documentation regarding the Polish community in Słubice in the past. The population of Słubice has increased by +0.21% per year over the past few years. This data may be interpreted as an effect of immigration flows due to Poland's proximity to the German border and low cost of living.

18.2.5 Urban Structure

The urban structure of Frankfurt does not exhibit any of the compactness of the sixth-century city depicted by Matthäus Merian. Frankfurt's general morphology has evolved in various directions whose origins are difficult to trace. The only recognizable area from a morphological perspective is between the river and Karl-Marx Strasse due to defined boundaries and a regular urban grid. The latter is generated by two main roads, Heilbronner Strasse and Rosa Luxemburg Strasse, which cross the area perpendicularly and connect it to Słubice via the bridge. However, despite this road regularity, the buildings follow the road profile only partially, consisting of open linear or C-shaped blocks. Within this urban fabric, there are only two exceptions: the Europa-Universitat Viadrina building, which occupies an entire block and consists of a courtyard. This building contrasts with the city's centre's urban public space, where the ancient market building is located in Marktplatz. Between these two blocks, the St. Mariekirche church is almost compressed.The second urban element that is readily recognizable consists of smaller residential blocks juxtaposed on each side of the historical park of Anger. This park, along with several other parks, like Lenné park, which resembles the outline of the river bank, separates this area from different parts of the city with irregular urban grids characterized by buildings of varying types and densities. Even though Słubice's urban structure is also comprised of irregular blocks, it appears more compact. It is bounded by a double ring made up of Nadodrzansko road, which runs along the river, and Wojska Polskiege road parallels it. Perpendicular to this system, the Narutonicza urban road connects the city with Frankfurt, crossing the entire urban landscape. The reading would be incomplete without considering the Oder River, which has a value equivalent to the two urban landscapes of Frankfurt and Słubice. When we examine the area near the two cities, we can see that it is almost identical in terms of the extent of the two cities. The river is not only defined by its flow but also by its seamless integration into the surrounding countryside, especially on the Polish side. Reeds, which cover the damp soil, blend in with the woodlands. Even in the most urbanized areas, the riverbank in Slubice is characterized by a tree-lined promenade that lacks urban formalization and descends into the water through beaches and reed beds. In contrast, the German riverbank is characterized by well-designed stone paths and small gardens.

The above description indicates that the morphological interpretation of the city does not adequately capture the vitality experienced when walking from Frankfurt's center to Słubice. It is particularly true in the case of public spaces, which can be found in both cities in various configurations and variations. Consolidated and recognizable public spaces, such as small squares and well-planned parks, in continuity with a European tradition, characterize the German part of the city. Meanwhile, public spaces in Słubice are not represented by traditional figures but rather by informal collective places, such as parking lots and a few small parks without a historical origin or design. It does not imply that they are not significant to the city. On the contrary. Some collaboration activities are developing from these collective places to facilitate social integration within the city and with Frankfurt. The organization

of events with children from both cities in a park in Słubice is an example of such a cooperative initiative, which aims to raise awareness and define an urban project for an integrated public space between the cities. Others involve both cities simultaneously, like the cycle route dedicated to H. von Kleist, connecting different locations from the German side to the Polish one.

18.2.6   Urban and Territorial Infrastructure

The mobility network is a significant factor in quickly transforming the city, including new residences, services, and public spaces. Besides the road network, the area surrounding the two cities is characterized by a few relevant infrastructures, including the rail line between Berlin and Warsaw, the river Oder, and a smaller local transportation network. This last one may seem less appropriate than the first two. However, it is what makes transnational movements work, which then activates those at the territorial level.

In this sense, one of the most symbolic projects of urban integration is the 983 bus since it connects the two cities operating as if they were a single entity. Combined with the ease of driveway crossing, this allows the reversal of some economic and social dynamics, such as the possibility of living on the Polish side and working in Germany or, on the contrary, the possibility chance of reaching Berlin and other German cities for residents of Słubice. The dynamic is evident when considering the stations of the two cities and how they have been used and developed differently over the years, resulting in a kind of subordination of Polish mobility to the German one. In Frankfurt, the station is central to the urban fabric and is connected to other parts of the city by trams and buses. On the contrary, Słubice's station, built according to different geopolitical strategies, is located outside the downtown area, making it partially inaccessible to many forms of urban transportation, inevitably resulting in Polish citizens being directed toward the German side. The example illustrates how both administrations should develop a common strategy for making cross-border movements more efficient based on citizens' needs.

Ultimately, the river, which has lost its commercial function entirely, requires a new vocation. However, despite the difficulties associated with its navigability, the complete activation of the river, including its territorial dimension and various landings, has an obvious potential, which continues to be underestimated.

18.2.7   Cultural and Educational Aspects

By examining the educational system of any age group, we can understand how education spaces can contribute to the two cities' integration in addition to open spaces. Although the goal of achieving an integrated education system is constrained by economic and social imbalances between the two cities, the effort in this direction

has already shown significant success, particularly among the universities located in the two cities.

Besides its historical significance, Viadrina University is also critical educational institution and symbol of the city. In 1991, the current university was founded, based on the historical ones that operated between 1506 and 1811, when transferred to Wroclaw.

Today, it hosts the faculties of economics and commerce, law, and culture. Additionally, it has implemented programs specifically aimed at European integration, such as Erasmus. It also has activities aimed at a linguistic exchange, collaborating with Adama Mickiewicza in Poznań and the Collegium Polonicum in Słubice, which serves as a meeting centre to organize conferences, seminars, exhibitions, and disseminating scientific events dedicated to improving and strengthening relations between Poland and Germany. Over 1500 Viadrina's 6452 students are Polish, and approximately 160 faculty members are Polish.

As a result of these projects, Frankfurt and Słubice could become one of the most important cultural centres in Europe. However, to achieve these goals, it will be necessary to construct more robust and dedicated infrastructure, services, affordable housing, and urban spaces.

There is also a vivacity to students' movement in the lower education system. For example, German kindergartens that welcome Polish children are compelled to immediately establish a bilingual teaching staff to prepare the children for a life in the community in the future.

However, these projects are increasing the German share of social spending compared to the Polish, illustrating the unbalanced economic and social dynamics. To function as nearly one city, the perspectives of the two cities will need to be rebalanced in the future.

18.3   Conclusion

18.3.1   Potential Urban Projects

The future scenario of intercultural cities, "places made up of people of different nationalities, origins, languages or religions and beliefs. Cities (…) in which diversity is a positive factor, a resource" (European Commission), is a reality that awaits the development of two essential conditions. These are (i) the establishment of innovative and original urban policies on public space that is distinct from both emergency first instance practices and those of social mixing or disruption of territoriality, and (ii) the consequent review of architectural and urban design strategies and processes. Therefore, in the future, beyond the numerous aspects that will need to be considered, the two cities will need to incorporate the design of new common spaces into their agendas. Research on intercultural pedagogy demonstrates that citizens use open spaces not only to indulge in recreational activities but also to reformulate

identities and restore relationships. It is evident that in this case study, the most exciting projects may involve the river. Adding its green/water spaces to other parks can create new means of living between the two cities. In fact, beyond being a physical border between the two cities, the river also has to be viewed as a living organism and an expression of ecological thinking on an ethical, physical, and spiritual level. As a result, new forms of coexistence among humans, animals, plants and minerals can contribute to moments of interaction and affection. In this perspective of future integration, the river will have to become the local place of connection and development of joint urban projects that activate both shores, not only through a mutual look but also through architectural projects, which take advantage of the level variable of water, the diversity of vegetation, and engage new recreational activities.

18.3.2 Other Research Developments

Frankfurt and Słubice are not the only two cities on the Polish–German border. This research can further develop, comparing other cities between Germany and Poland and the Iron Curtain. Studying these two borders, so different, could give some impressive results.

References

Anderson M (1996) Frontiers, territory and state formation in the modern world. Polity Press, Cambridge

Barthes B (1996) Comment vivre ensemble, simulations romanesques de quelques espaces quotidiens, notes de cours et de seminaries au Collège de France (1976–1977)

Donnan H, Wilson TM (1999) Borders: frontiers of Identity, national and state. Oxford University Press, Oxford

Hannerz U (1996) Transnational connections. Culture, people, places. Routledge, London-New York

Schultz H (2002) Twin towns on the border as laboratories of European integration. Institut für Transformationsstudien Frankfurt

Sergunin A, Joenniemi P (2008) The model of twin cities experience from northern Europe and other articles. Barents Institute, Tromsø, Norwa

Chapter 19
Spatial Transformations in Ceuta, Spain: Effects of a Low-Density Hinterland on a Border Enclave

Guido Cimadomo

Abstract Located in a strategic geopolitical location on the north coast of Africa, the enclave of Ceuta is a highly researched border settlement. This is primarily due to its specificity and the unique tangible border between the European Union (EU) and Africa. As a Spanish city, it is part of the UE; however, it is located on the African continent, and does not have a land connection with Europe. What is less studied is its development as an urban environment, which is necessary to understand the evolution of Ceuta concerning the border. Much of its uniqueness is due to the Kingdom of Morocco's decision not to recognise the eight-kilometre-long border and the lack of urban development and density on the Moroccan side of the border. The border and its six-metre-high barbed wire fence have created a situation where the movement of people and goods has forced the economy to adapt to written and unwritten laws. As a result, the border can be considered a permeable membrane for informal movements and economic activities. At the same time, it serves as a strong barrier that limits the undesired flows originating from south–north migrations. Due to the shortage of land for growth and development within Ceuta, the lack of development on the Moroccan side could be considered an opportunity to resolve social and spatial injustices. To improve community conditions and territorial continuity, centripetal strategies are necessary to densify and enhance the built environment. These must be taken at the locally, where answers to social and community problems are found.

Keywords Urban transformations · Borderland development · Urban planning

19.1 Introduction: The Framework

A border is a 'line of separation and contact between two or more States' (Lacoste 1995). It occurs when there is an apparent discontinuity between political or socio-economic spaces that belong to different countries. The division may not only

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be a territorial discontinuity. It may have cultural, economic, ethnic or religious characteristics that may or may not coincide with common geographical boundaries.

Borderlands, the land immediately surrounding the border on each side of the line of separation, are areas of great complexity. This is due to convergent economic, migratory and geopolitical interests, as the recurrent crisis affects some strategically located territories worldwide. Attention on border studies has been evolving since the '90 s. However, greater attention has been given to developing these phenomena (e.g. border regions and landscapes). With the more recent definition of border–scapes, border regions have become understood as a relational complex; they are seen as vital spaces with multiple dynamics that make a fixed vision outdated. Therefore, focusing on spatiality is critical to understanding the complex relationships around borders (Kuram Rajaram and Grundy-Warr 2007; Brambilla 2014).

The main interest of socio-spatial studies has gradually focused on cities, where human life complexities are expressed and interrelated. Urban centres, with growing populations and concentrations of economic resources, make cities a privileged place to study and understand the challenges and complex dynamics.

A border in an urban context generates conflicts and dualities and exposes the richness of cultures living in permanent contact. For this reason, urban planning, which is understood as the instrument that defines the spaces where these relationships occur, acquires significance. Urban planning is not only the result—it is the conditioning factor of these dynamics (Cimadomo 2015a). Focusing on the spatial aspects does not mean dispensing with social, political and anthropological dimensions of any social group and geographical context, assuming that the origin of the current configurations is complex and closely linked to multiple layers that overlap each other. Considering architecture and planning instruments both to the transformations of the territory and the improvement of its inhabitants' lives, with valuable nuances in border areas, the analysis of the processes in an act in Ceuta becomes more relevant (Cimadomo 2017).

Despite specific historical and social legacies, two forms of intervention in borderland urban planning have been recognised. The first is related to the negative identification of the partitioning element. Pre-existing historical and geographical constrictions generate low-density strips, which create a fracture in the territory and everyday life. Both cross-border communities expand their physical fabric away from the border, relegating the contact zone to functions and services of less interest to the city. The feeling of indifference to the 'other' inhibits opportunities that could alleviate poverty and unemployment, forcing individual citizens to devise independent ways to live with border conditions. One example of this form of development is found on the border between the UK and Spain, derived from the existence of the colony of Gibraltar and its counterpart La Línea de la Concepción (Cimadomo 2015b).

The second form of intervention is based on the mutual advantages that twin cities, each belonging to different nations but with direct physical contact, can develop, despite good or bad relations between nation-states. This condition acknowledges the transformations of urban spaces that originated due to different pressures and asymmetries. The borderland can be reinvented as an area where hybridisation and blending cultures can offer new cultural identities. This does not mean that the many

problems that result from immigration, smuggling and border activities are absent. The Faixa da Fronteira experience in Brazil, a participative programme aimed at strengthening links with Paraguayan citizens, is possibly the most notable example of 'good borders' (Sartori de Almeida Prado 2016). The increasing development of twin cities on the US–Mexican border, often based on complementary activities, is also noted. It permits the complementary flourishing of both independent realities despite the permanent political conflict at the base of the growth (Cimadomo 2017; Nugent 2012).

The specific reality of Ceuta is one of the tensest border enclaves. Local border tension originates from the meeting of two countries with different levels of development and the specificity of an external border of the European Community on the African continent. Turchetti (2018) considers it a geopolitical laboratory where, in addition to experiencing the European Neighbourhood Policy in collaboration with the Maghrebi country, different permeability criteria are shared on the border with three main actors with often conflicting interests. The situation is made tenser with the permanent claim by the Kingdom of Morocco to return the territory of Ceuta and the city of Melilla (Pérez González 2010). Furthermore, a permanent situation of political revindication persists despite Ceuta not being included in the list of recognised colonised territories in 1975 by the United Nations Special Committee for Decolonization, by the United Nations Special Committee for Decolonization. Together with the repeated attempts of migrants from sub-Saharan Africa to reach European settlement, all these factors make Ceuta a unique case study for border analysis.

Following the entry of Spain into the European Union in 1986 and the Schengen Area in 1991, the uniqueness of Ceuta increased because it and the Spanish city of Melilla are the only European enclaves on the African continent. Hence, it became a privileged laboratory to examine specific issues concerning unique border conditions: migrations (Alscher 2005; Anderrson 2012; Anderrson 2014; Cimadomo and Martínez Ponce 2006; Driessen 1992; Pallister-Wilkins 2017; Pijpers and Van Houtum 2005; van Moorsel 2016), human rights (APDHA 2004; Amnesty International 2006), informal economies (Fuentes Lara 2016; 2017), geopolitical effects (Ferrer-Gallardo 2006; Figuereido 2011), and anthropological effects (Moscoso García 2015; Pulido Acosta and Herrera Clavero 2015; González Enríquez 2007; González Enríquez 2008; Koski Karell 2014; Olmedo-Alguacil et al. 2014). From the analysis of Xavier Ferrer-Gallardo (2008), a series of works focusing on the socio-spatial aspects of Ceuta and its territory begin to develop, to which this study provides continuity.

19.2 Historical Background and Theoretical Approach to the Study of Ceuta's Borderland

Ceuta's historic development stems from its role as a Portuguese fortress in North Africa since 1415. It served as a strategic enclave in the Strait of Gibraltar, near the southern coast of the Iberian Peninsula. A bay protected from the winds was a conducive shelter to disembark ships. Its bay, the steep coasts and the narrow isthmus connecting it with the inland made it easy to defend. Portugal became part of the Spanish kingdom in 1580; however, after Portuguese independence in 1640, Ceuta preferred to remain under Spanish rule and was officialised by the Treaty of Lisbon in 1668. Spain focused on maintaining Ceuta as a strong defence rather than expanding into Africa (Fig. 19.1).

Any further territorial expansion into the African continent could not be carried out without displacing the defensive structure from the isthmus, which would have required a more significant effort to defend effectively. Despite its strategic interest, Ceuta's primary function was as a penal colony for long-term prisoners. This function required small, tightly limited and controlled spaces and reduced contact with the civil population as much as possible.

The first substantial modification of the spatial context of the city of Ceuta was made at the end of the African War in 1860, triggered by a Spanish initiative a year
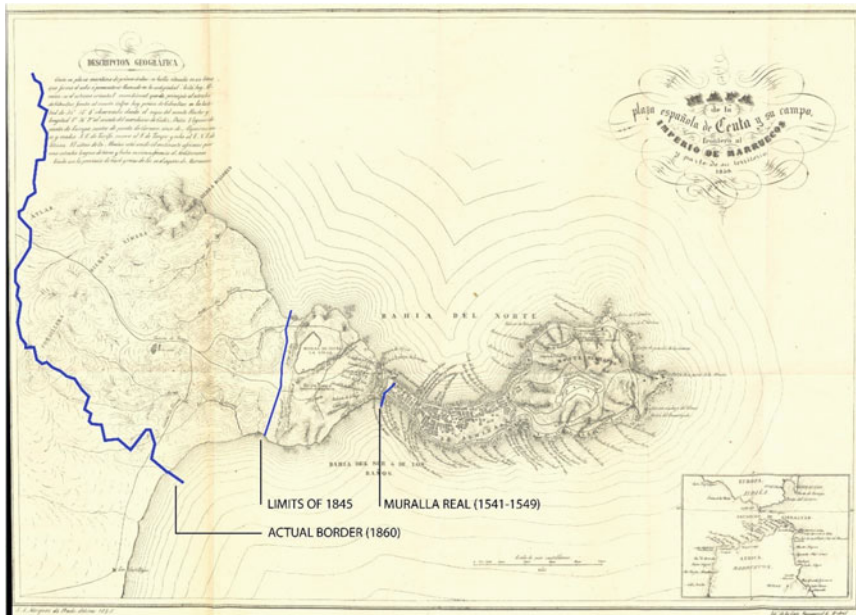
Fig. 19.1 Ceuta in 1856 with borders of different treatises overlayed. Original map by José A. Márquez de Prado. British Library, Public Domain

earlier because of the continuous attacks on the troops stationed there. The Wad-Ras treaty of 1860, which ended the conflict, proscribed compensations to be paid by Morocco to Spain and included the extension of the territories of Ceuta and Melilla to Spain in perpetuity. This is the first definition of the Ceuta territory that left no ambiguities; previous agreements (i.e. the Hispano-Moroccan Treaty of Peace and Friendship of 1767, the Meknès Peace Treaty of 1799 and the Agreement of Limits of 1845) were indefinite, which made interpretation difficult (Reyner 1963). In addition, there were differences between the Spanish and Moroccan versions in these previous agreements that defined the size of the land area ceded to Spain and the transfer formula and depending upon the version and secession was provisional, usufruct or outright ownership. The most fundamental challenge was the interpretation of Muslim law regarding the concept of border, which was understood as an intermediate space of joint, nonexclusive use, which is distinctly different from the idea of a border in Western cultures (Vilar 2003:275).

Ceuta flourished with the Spanish occupation of the north of Morocco after the French-Spanish treaty of 1912. Areas north and south of Morocco were assigned to Spain—the Spanish protectorate—and the rest fell under French administration, while Tangier received a special status. After 1956, when Spain relinquished the Moroccan Protectorate and gained independence, the last stage of the city began. This period has been highlighted by insecurity resulting from the disappearance of trade linked to displaced military troops, the consequent resignation of the private sector to undertake investments, and the chronic lack of consumer demand generated in Ceuta. The failure of the national urban plans, Plan General de Ordenación Urbana (PGOU), is added to all this. In addition, several international events of the latter half of the twentieth century directly influenced the development of Ceuta. These include the closing of the Gibraltar border gate from June 1969 to December 1982, which favoured the commercial development of Ceuta and the closure of the Suez Canal between 1967 and 1975 as a result of the Egyptian–Israeli conflict, which meant a drastic reduction of the maritime traffic that docked at this port.

The integration of Spain into the European Union in 1986 is the last point of inflexion. It was preceded by the promulgation of the first Spanish immigration law one year earlier when a large sector of Ceuta's population was illegal residents. The new immigration law negatively impacted them because its rigidity made it difficult to justify regularising their situation. Although this population was already settled in the Spanish territory, it was the first significant conflict in Ceuta related to migration. From this moment, the significance of the border was reinforced as it became militarized to control migration and commercial movement between the two countries. The situation was made more permanent with the Treatise of Schengen in 1991 and further militarisation of the border in 1995 (Planet Contreras 1998).

Despite Ceuta's importance as a magnet for migrants as a part of Schengenland on the African continent and for the trading of goods thanks to the tax reductions established by the Spanish government, the territorial strip on the Moroccan side of the border is sparsely inhabited (Pérez González 2010). A first geographic analysis recognises how the urban development moves away from the borderline, creating a void close to deterritorialisation for better border control (Haesbaert 2005). The

Kingdom of Morocco had no interest in border control; its recognition of the border would be politically understood as implicit recognition of its existence. Moreover, the strategy applied makes periodic claims for Spain to decolonise the enclaves of Ceuta and Melilla. In many ways, this contradicts the receipt of significant funding within the framework of the European Neighbourhood Policy as compensation for removing migratory pressures from the European border, which is often developed with summary deportations that are in breach of the essential criteria of justice and humanity.

Analysing the border from a transcalar approach demonstrates that, at the macro scale, there are no significant effects or valuable results to point out. There are no urban centres on Moroccan land close to the border. The closest is the town of Fnidaq, about eight kilometres from the Tarajal border crossing. It is historically a sparsely populated area with no development characteristic of the entire territory. The only cities of relevance are Tetuan and Larache, although at a considerable distance. Even the macro port operation of Tanger Med, closer to Ceuta than Tanger itself and thought to be capable of robbing Gibraltar and Algeciras of their port leadership in the area, does not increase employment and development rates that would boost the economy. Spain's economic strength, which is greater than Morocco's, does not increase Spanish companies' interest in expanding activities in the Moroccan territory. The absence of a dense hinterland at the border further limits the dynamics that the asymmetries any border context might promote. No references or testimonies have been found that can support any hypothesis regarding the lack of density on the Moroccan side of the border apart from the historic rural character of the territory combined with a steep topography characterised by mountainous groups that prevail over the plains.

Analysing the microscale, save for legal and humanitarian aspects, there are no spatial features worthy of note. 'Carrier' women, who, thanks to a special Schengen permit granted to residents of the provinces of Tetouan and Nador, can freely enter Ceuta; they have a limited effect on the territory's configuration. The industrial polygon of Tarajal, near the border port with Morocco, which is not a commercial customs checkpoint due to Morocco's attempts to recover rights on the enclave, receives the carrier women or porteadoras' visits to return immediately to Morocco to unload the bundles of goods they carry. They repeat this operation as often as possible until the closing time of the Biutz bridge access, which was built expressly for this illegal but tolerated activity (Buoli 2014; Fuentes Lara 2017). Activities such as this, which Buoli calls informal trade practices, are a planned organisation that takes advantage of a hole in the Schengen agreement. Goods are brought from Ceuta, which has lower taxation than the rest of Spain, to Morocco—with lower macroeconomic indicators—where they are distributed (de No 2008). The only informal aspect relates to the urban spaces where all the related activities are developed. This process has had few effects on the spatial configuration of the border area of Ceuta, except for some conflicts close to the Principe Felipe public school located in this area. The proximity of the school to the border and the area of carriers' activity brings tensions for the long queues and quarrels, traffic jams and delays in picking up students or extreme litter (Testa 2017).

The essential character to analyse is density, a key characteristic of urban and territorial planning. Density acquires greater interest in border environments since it directly relates to the different intervening circulation patterns. The concept of 'arrière-pays,' a geopolitical definition to define a spatial environment where a port acts as a provider and maintains exchange relations (Lacoste 1995), is helpful for this consideration. Comparing different border realities with diverse retro-territories shows that those areas with a greater density achieve higher development rates. This demonstrates the importance of having a counterpart with which to initiate joint projects and commercial exchanges or develop complementary strategies, like in the case of El Paso (USA)-Ciudad Juárez (México), where a symbiosis between production on the Mexican side and logistic distribution on the US side exists (Cimadomo 2015a). This counterpart relationship is relevant despite the government-established limitations, tariffs and controls. The effects of the political, social and economic forces on the territory of Ceuta are multiplied due to the restrictions of its location and its physical separation from the rest of the European continent. These effects are evident within the urban area of Ceuta. Except for a partial analysis of the preparatory phase of the 2006 Plan (Hernández and Sternberg 2013), there has been no analysis of the figures of planning that have delineated the growth and development of the city. In addition, if border policies are established at a national level, and at the local level, social and community problems can be improved to enhance community lives and conditions. An analysis of urban planning developed in the city since 1945 helps explain strategies implemented to solve or improve the borderland condition or take advantage of it.

19.3 Analysis of City Planning

The urban development of Ceuta's borderland follows a pattern that was derived from the historical tendency of substitution and displacement from the core of the isthmus (the historic settlement) towards the area outside the defensive wall that was added to the Crown of Spain after the Hispano-Moroccan Treaty of Peace and Friendship. This area, known as the Moorish field (Campo del Moro or Campo exterior in Spanish), was not occupied permanently by Spain initially and only according to the temporary needs of the colony. Even today, the historical defensive system of the enclave (Muralla de tierra) is a robust divisive element in socio-economical terms. In the first half of the twentieth century, immigrants from Spain and Morocco generally had low purchasing power. Therefore, they found the Moorish field a suitable place to settle, which generated the neighbourhoods of Benzú, Almadraba and Puntilla. The buildings they eventually constructed were of inferior quality; they were often self-built. The displacement of the border through time to protect the new possessions also defined the radial development of the neighbourhoods that occupied the accessible areas. This displacement process generated a phenomenon of expulsion and social inequality, driving the weakest population towards the periphery, a zone with poor infrastructures and services.

The first attempts to structure the city's growth happened between 1927 and 1930. This occurred when the north of Africa reached relative peace and when the European colonial powers found a balance in their interests in the continent. The dictatorship of Primo de Rivera attempted to resolve the difficulties Spain permanently faced in Morocco to calm citizens and the military forces needed to maintain its power. For years, he fostered new investments with railways, highways, ports and buildings to increase trade and attract new companies. As a result, many people who abandoned rural Spain found Ceuta an attractive destination. Among the urban reforms for the enclave, the winning proposal by Gaspar Blein for the Development of the Plan for the Interior Reform and Expansion of Ceuta of 1930 is remarkable. It proposed expanding the city not through satellite zones as in previous approaches but with a new centrality, the Plaza de Marruecos. This square was a public space connected to the old part of the city and the outside, fundamentally Tetouan and Tangiers. Blein's plan has been studied exhaustively by García González and Guerrero López (2016), along with the utopian linear city between Ceuta and Tetuán (Daría Príncipe 2008). However, for reasons of economic nature and ownership of the lands of the 'Campo Exterior,' mostly under the army's control, these proposals failed and were not implemented.

The PGOU of 1945 is perhaps the most significant in the city as the first to be carried out. The plan was by architect Pedro Muguruza Otaño, who served as General Director of Architecture (de Terán 1978, pp. 119–125) and was responsible for developing several urban plans for the cities of the protectorate. Urban planning was seen as a state priority once the Spanish Civil War ended and the Franco dictatorship was established in 1939. The objective of the 1945 plan was based on the need to lay the foundations for the city's future growth. Based on exaggerated population growth forecasts, the plan satisfied predictions with a very dense residential zone for the 'Campo Exterior, ' diversified with the military, industrial and port functions. The forecasts grossly overestimated population growth from 60,000 registered in 1945 to 150,000 by the end of the century (Muguruza Otaño 1945), over twice the 75,694 inhabitants of the 2001 census. A relevant and valuable aspect of the planning was its analysis and identification of problems due to the economic interest in increasing density in the interior zone, even at the expense of compliance with building codes. In addition, the plan looked at the necessary integration of the urban fabric of the enlarged city with the Muralla de Tierra, which lost its meaning of the defensive limit that had characterised it in previous centuries.

No actions were contemplated regarding the outer border, as would be logical to expect for the historical moment and the reduced density, still far from the expanding urban area. The simultaneous control of Spain over the Northern Protectorate of Morocco also removed pressures and border conflicts. The city's connections with the outer territory were based on existing ones, consolidated over the years, and on the rail system connecting Ceuta with Tetouan, which eventually closed in 1956. Overlapping the 1845 boundaries with the city's urban fabric, it is possible to recognise how the city's highest density corresponds to these limits, with the outer field being less densely constructed (Fig. 19.2).
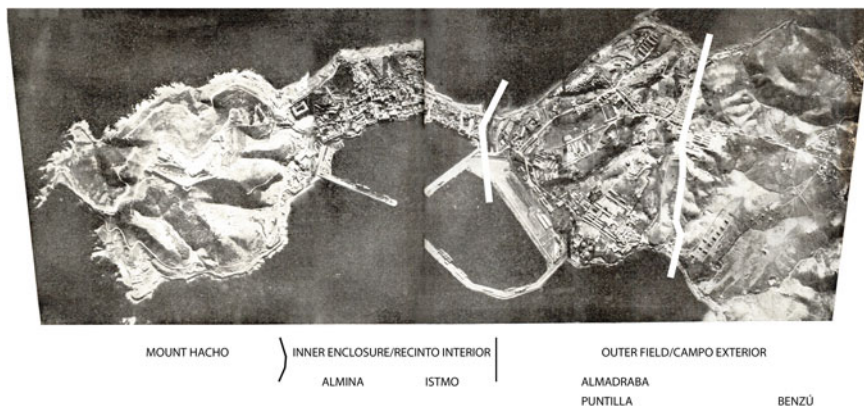
Fig. 19.2 Aerial photography of Ceuta around 1945 identified the main areas and neighbourhoods. From Revista Nacional de Arquitectura 44, 1945. Public Domain

Remnants of the plan, as defined in the technical document, are still recognisable. Three distinct sectors are evident: (1) Mount Hacho, the mythological column of Hercules, a topographically rugged area that ensured preservation as a natural space, focused on tourism and very-low-density uses; (2) the inner enclosure 'Recinto interior,' dedicated to residential and public institutional uses and completely occupied although with meagre quality buildings and in need of new alignments, road connections and renovation; and (3) the 'Campo exterior,' which was of irregular topography and could be used for new settlements with unbuildable topographic areas reserved for green space. This third area, the 'Campo exterior, ' is where the port and military installations were located. It is also the area with the potential for the highest building density and the greatest likelihood of consolidating and improving spontaneous neighbourhoods (Fig. 19.3a). These informal settlements (Benzú, Almadraba, Puntilla, among others) were close to the existing military and industrial facilities, so it is easy to understand their distribution. The plan was completed with the 'Normas Subsidiarias y Complementarias' of 1975, which became obsolete shortly after with the National Land Law of 1975.

After several planning attempts in the 1980s, a new plan authored by Fernando de Terán Troyano and Antonio Pimenta Cilleruelo was implemented in 1992. The period when it was developed corresponds with the enactment of the First Law of Immigration, leading to the first immigration conflicts in the enclave (Planet Contreras 1998). It is interesting to contemplate the guidelines the plan established about the border in this new context. The significance of this planning also lies in that it was drafted when there was uncontrolled growth of informal neighbourhoods, whose conditions worsened with the increasing number of inhabitants due to the chronic lack of public infrastructure. The problems of the existing marginal neighbourhoods of Principe Alfonso and Benzú and those in closer contact with the south and north border ports were the most complex. Even 'La Cabililla,' a small rural outpost of about 20 families who, despite being in Spanish territory, had to cross
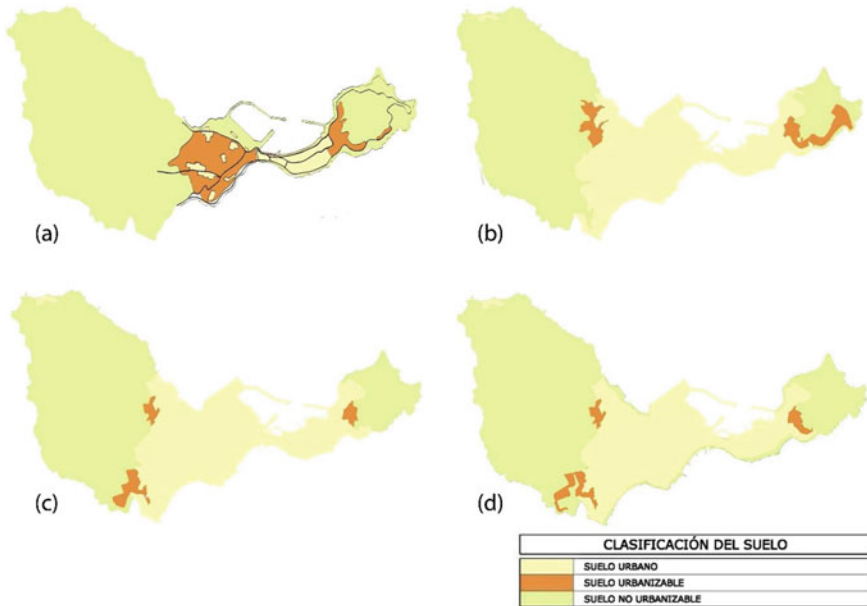
Fig. 19.3 **a** Urban plan of 1945 by Pero Muguruza Otaño. **b** Urban plan of 1992 by Fernando de Terán and Antonio Pimienta. **c** Avance of 2014 by PROINTEC. **d** Avance of 2016. Edition of images from the originals published in the technical documents of Ayuntamiento de Ceuta

the Moroccan border to head towards Ceuta, is identified (Ayuntamiento de Ceuta 1992). Although not explicitly mentioned in the planning document analysis, the area's problems were generally due to its proximity to the border and the resulting circulation patterns. Although the border is a problem of national relevance, it is at the local level that answers can be offered to improve habitability and social wellness. The border is not analysed; however, it affects urban areas and their population at the southern and northern extremes (Fig. 19.3b). This lack of analysis led to limited effects in improving neighbourhoods, as the natural causes of existing marginality are not correctly understood.

In 2014, the preparatory planning phase (Avance) that defines the modifications of the territorial model of Ceuta for the following years was approved. Spanish regulations require this early phase of planning to replace earlier plans. It administratively affects on the policies to implement in the later phases of planning development. In this way, it may be seen as a programmatic document that includes a public consultation phase. The intentions show the willingness to establish strategic axes that allow the development of activities that create more significant opportunities for the city with a transformation that entirely reconsiders territorial planning and improves the consolidated historic centre with its transformation and requalification. It is valuable to highlight some of the points presented in the memory of the document concerning the role of Ceuta in the regional context. The plan's most exciting objective is to establish the city as a protagonist in the territorial rebalancing, seeking 'to offer

itself as an attractive space to live, visit or invest, to citizens of nearby urban regions' (Ayuntamiento de Ceuta 2014:16).

The document does not clarify if it refers to EU territory and European citizens of the southern regions of Spain or the closest regions of Morocco. The model envisages increasing the density of the existing urban fabric and filling the voids left by the numerous military facilities. Although not clearly stated, it may be defined as a centripetal growth strategy that shows a preference for the African region (Ayuntamiento de Ceuta 2014:44, Cimadomo 2015b).

A single strategic operation in the border environment warrants notation: the plan proposes expanding an urban area between the border and the Principe Alfonso neighbourhood, the most conflictive in the city (Rodríguez 2014). The neighbourhood is located north of the customs port of Tarajal and was built close to the fort that historically defended the city. Principe Alfonso experienced a transformation during the second half of the twentieth century when an Islamic population replaced the original settlers. Self-built on a steep hill, it lacks the most basic services expected in a neighbourhood. It has become the heart of informality and segregation, making space for illegal activities and smuggling. Given its position, it is a neighbourhood where migratory and geostrategic policies related to the border could be tested; it offers much future research and examination.

This document went to public consultation. According to the municipality, accepting many inputs from the citizens required a revision of the document, which produced a second initial approval of the Avance plan in April 2016.

A centripetal strategy, based on the internal built environment of the enclave, places less attention on the periphery, in this case, areas closest to the border. This increases the socio-economic marginality of these areas. The differences between the two approved documents (Fig. 19.3c and d) can be seen in redistributing urbanised areas, reducing the one planned in Monte Hacho, and increasing the future development close to the Tarajal border. As of November 2020, the plan is still pending several authorisations to be fully implemented.

The analysis of the different PGOUs of the city of Ceuta shows how the case of Ceuta does not differ from other border realities (Cimadomo 2015a, 2015b). Focusing on the border area, its problems and effects are not thoroughly approached and resolved. Not only is the border area not studied in the preliminary analysis documents and the planning proposals, but the territorial strategies, as stated in the document that was approved in 2014, are centripetal. These tend to increase the density of the consolidated fabric of the city and leave areas along the border as marginal. Significantly, these documents are the basis for the city's future development. However, unlike other cases where these aspects have radically negative connotations, a different reflection is necessary for Ceuta. Ceuta's unique history and development warrant consideration of how each frontier reality is unique and deserves the development of specific solutions.

19.4 Conclusions

Regardless of the relations and claims of two colonial strongholds and the difficulty of aligning these with contemporary policies, planning has not addressed the border element. On the contrary, the limited investment in proximity to the border has exacerbated problems and conflicts. In the case of Ceuta, the historical growth of the city has been radial; occupation of the land furthest from the centre and closest to the border is home to the weakest layers of society. The lack of density in the hinterland in Morocco's territory also has limited growth opportunities.

The city has followed the dynamics established by outdated earlier plans and the effects of colonial relics; they have not resolved past issues. Consequently, they cannot resolve the problems of contemporary urban environments (Odendaal 2016). In recent years, this trend has been somehow reversed: altering previous trends with centripetal interventions to protect the environment and increase low urban density (Fig. 19.4).

Highlighting the humanitarian dimension, the border between Spain, the EU, and Morocco has shown the most significant impact these elements have within the enclave of Ceuta. The absence of urban density in the Moroccan territory means that tensions arising from migratory, economic and socio-political circulation are concentrated only on one side, the autonomous city of Ceuta. Reversing the traditional vision for this environment and considering it an excellent opportunity for the autonomous city through careful planning could solve many of these problems. It is worth remembering that the city's statute of autonomy promulgated in 1995 facilitates urban planning developments that do not require higher entities' supervision. Despite this ability, the difficulty of promoting the continuation of the new planning document of the Avance initially approved (for the second time) in 2016 is evident. A coherent design of the new urban plan's determinations considering the border and the flows it generates could be a detonator to improve socio-economic conditions based on labour, social, economic and cooperative activities, defined under

Fig. 19.4 Aerial photography of Ceuta with outlined neighbourhoods and borders

Ferrer-Gallardo (2011) as a 'territorial continuity.' Ethnic and religious conflicts, particularly between Catholics and Arabs, despite their coexistence and the relative absence of significant disorder (González Enríquez 2007; Moffette 2013), could be solved with improvements in transportation and urban fabric, renovation of basic infrastructure and an increase in the permeability of segregated neighbourhoods like Principe Alfonso. Being all aspects mentioned in the Avance, they are, therefore, already recognised by the municipality and could become a reality of the subsequent plan.

Another distinctive aspect of the Ceuta border is the right of Moroccans to a daily visa to Ceuta. This allows them to transport goods across the border and engage in domestic service and construction. Although technically illegal, these activities are tolerated under the Schengen agreement since they benefit the Ceuta collective and Moroccans. Despite the potential of these unlawful activities to create instability and threaten the life of the city (Gold 2001:171), it would be convenient to address this long-term informality and improve the conditions under which these occur. This would increase security and ensure coexistence and benefits for both parties. In addition, better-controlled conditions would increase the acceptance of border activities that many consider chaotic. Defining adequate spaces to develop these activities, providing resting places and eliminating interference with traditional activities could easily be accomplished within an urban plan. Considering the daily movement and circulation of people and goods and areas of the city affected, it is feasible to separate them, permit coexistence with other activities and avoid conflict.

These policies would indirectly improve the conditions of daily migrants and, consequently, the socio-spatial conditions on the 'other side of the border.' All approaches should be developed through a flexible framework, something challenging to envision in Spanish urban plans. Short-term colonisation and medium-term consolidation strategies following the city-forming protocol would have better implementation results. In addition, it would create a more robust demand and reactivation (Carta et al. 2016). Flexible dynamics and mutant spaces could replace fixed and centralised space ideas and improve density on the Moroccan side of the border. Falk (2000) considers that a pivotal change is to move from a space-centred conception to one based on time, where circulation has a relevant role and decreases the importance of territoriality in defining community identity. This gains a unique value concerning the demographic growth of the Islamic ethnic group. Historical difficulties of Ceuta are mainly on (i) the adoption of urban plans that respond to the contemporary and future necessities of the city, (ii) the approach of solutions to the circulation of flows with short and mid-term strategies and (iii) the improvement in the conditions of safety for the citizens and the development of their activities, which could be an innovative way to solve the problems the border cause in this enclave.

References

Alscher S (2005) Knocking at the doors of "Fortress Europe:" migration and border control in Southern Spain and Eastern Poland. The Center for Comparative Immigration Studies, University of California, San Diego, San Diego, California

Amnesty International (2006) Spain and Morocco: failure to protect the rights of migrants—Ceuta and Melilla one year on. Amnesty International

Andersson R (2014) Hunter and Prey: patrolling Clandestine migration in the Euro-African borderlands. Anthropol Quarterly 87:119–149. https://doi.org/10.1353/anq.2014.0002

Andersson R (2012) A game of risk. Boat migration and the business of bordering Europe. Anthropol Today 28:7–11

Asociación Pro Derechos Humanos de Andalucía/Association for Human Rights of Andalusia (APDHA) (2004) Informe sobre la inmigración clandestina durante el año 2004. Asociación Pro Derechos Humanos de Andalucía, Sevilla, Spain

Ayuntamiento de Ceuta (1992) Plan General de Ordenación Urbana de Ceuta, Spain

Ayuntamiento de Ceuta (2014) Plan General de Ordenación Urbana—Documento de aprobación inicial. http://www.ceuta.es/ceuta/images/servicios/pgou/documentos/aprobacion_inicial/Tomo1/PGOUCCE2012_MEMORIAJUSTIFICATIVA_PROGRAMACIONEJECUCION.pdf

Brambilla C (2014) Shifting Italy/Libya borderscapes at the interface of EU/Africa Borderland: A "Genealogical" outlook from the colonial era to post-colonial scenarios. ACME an Int J Critical Geograph 13:220–245

Buoli A (2014) Beyond the border: exploring cross-scalar socio-spatial dynamics of conflict, resistance and encounter at the Ceuta-Morocco borderscapes. J Reg Stud Reg Sci 1:301–309. https://doi.org/10.1080/21681376.2014.977941

Carta M, Lino B, Ronsivalle D (2016) Re-cyclical Urbanism. Visioni, paradigmi e progetto per la metamorfosi circolare. Listlab, Trento–Barcelona, Spain

Cimadomo G (2015a) Las transformaciones de los espacios fronterizos. Publicia, Saarbrücken, Influencia de las fronteras sobre el territorio

Cimadomo G (2015b) Spatial transformations of European Borderlands. a comparative study of Gorizia–Nova Gorica and Gibraltar–La Línea de la concepción. Fabrications. 25:376–397. https://doi.org/10.1080/10331867.2015.1075463

Cimadomo G (2017) Spatial practices in borderlands: bottom-up experiences and their influence on border communities. ACME an Int J Critical Geograph 16:362–382

Cimadomo G, Martínez Ponce P (2006) Ceuta and Melilla fences: a defensive system. In: Narula M, Sengupta S, Sundaram R, Bagchi J, Sharan A, Lovink G (eds) Sarai Reader 06: Turbulence. Centre for the Study of Developing Societies, Delhi, India, pp 336–341

Darías Príncipe A (2008) Una posible utopia: la ciudad lineal Ceuta-Tetuán. Cuadermos Arte la Universidad de Granada, pp 175–185

Driessen H (1992) On the Spanish-Moroccan frontier: a study in ritual. Berg Publishers, New York and Oxford, Power and Ethnicity

de NO JL (Director) (2008) Cien metros más allá. Chello Multicanal, Elegant Mob Films, Estrategia Audiovisual, RTVE

Falk R (2000) The decline of citizenship in an era of globalisation. Citizsh Stud 4:5–17

Ferrer-Gallardo X (2011) Territorial (Dis)Continuity dynamics between Ceuta and Morocco: conflictual fortification Vis-à-vis co-operative interaction at the EU border in Africa. Tijdschr Econ Soc Geogr 102:24–38. https://doi.org/10.1111/j.1467-9663.2009.00575.x

Ferrer-Gallardo X (2008) The Spanish-Moroccan border complex: processes of geopolitical, functional and symbolic rebordering. Polit Geogr 27:301–321. https://doi.org/10.1016/j.polgeo.2007.12.004

Ferrer-Gallardo X (2006) Theorising the Spanish-Moroccan border reconfiguration: framing a process of geopolitical, functional and symbolic rebordering. Centre for International Borders Research (CIBR), Belfast, Northern Ireland

Figueiredo P (2011) Muros do Mediterrâneo: Notas sobre a construção de barreiras nas fronteiras de Ceuta e Melilla. Cadernos de Estudios Africanos, pp 153–175

Fuentes Lara MC (2017) Ceuta and its Hinterland from the border theory. the case of porteadoras. Revista De Paz y Conflictos 10:165–185

Fuentes Lara MC (2016) Atypical trade in Ceuta's border: the porteadoras case. Revista Internacional De Estudios Migratorios 6:84–107

García González MC, Guerrero López S (2016) Ceuta circa 1930: The construction of a functional City in the North of Africa. In: Nunes Silva C (ed) Urban planning in North Africa. Ashgate Publishing, New York, pp 43–55

Gold P (2001) Europe or Africa? a contemporary study of the Spanish North African enclaves of Ceuta and Melilla. Liverpool University Press, Liverpool

González Enríquez C (2007) Ceuta and Melilla: clouds over the African Spanish towns. Muslim Minorities, Spaniards' fears and Morocco-Spain mutual dependence. J North African Stud 12:219–234. https://doi.org/10.1080/13629380701220469

González Enríquez C (2008) Los frenos al pluralismo cultural en territorios de soberanía discutida: los casos de Ceuta y Melilla. Revista de Estudios Políticos 135–161

González García I (2017) Rejection at the European external borders with Morocco: immigration and human rights at the Ceuta and Melilla fences, 2005–2017. La Revista General de Derecho Europeo, pp 17–57

Haesbaert R (2005) Da desterritorialização à multiterritorialidade. Encontro Geógrafos Da América Latina. 10:6774–6792

Hernández F, Sternberg M (2013) Borderlands of the EU: the Spanish Enclave of Ceuta in Morocco. In: Locating urban conflicts. ethnicity, nationalism and the everyday. Palgrave Macmillan, London, pp 57–75

Koski Karell D (2014) This project we call Spain: Nationality, Autochthony, and Politics in Spain's North African Exclaves

Kuram Rajaram P, Grundy-Warr C (eds) (2007) Borderscapes. Hidden Geographies and Politics at territory's edge. University of Minnesota Press, Minneapolis and London

L'Association Européenne pour la défense des Droits de l'Homme/European Association for the Defence of Human Rights (AEDH): The common position of the AEDH and the Asociación Pro Derechos Humanos de Andalucía / Association for Human Rights of Andalusia (APDHA) on the situation in Ceuta. http://www.aedh.eu/en/common-aedh-and-apdha-position-on-the-situation-in-ceuta/

Lacoste Y (1995) Préambule. In Lacoste Y (ed) Dictionnaire de Geópolitique. Flammarion, Paris, pp 1–35

Moffette D (2013) Muslim ceutíes, migrants, and porteadores: race, security, and tolerance at the Spanish-Moroccan border. The Canadian J Sociol/cahiers Canadiens De Sociologie 38:601–621

Moscoso García F (2015) El árabe ceutí, una lengua minorizada de España. Estudios De Asia y África. 50:395–423

Muguruza Otaño P (1945) Plan General de Ordenación de Ceuta: memoria. Revista nacional de arquitectura IV:281–310

Nugent P (2016) Border towns in comparative perspective. In: Wilson TM, Donnan H (eds) A companion to border studies. Wiley-Blackwell, Chichester, UK (2012)

Odendaal N (2016) Exploring new parameters for the future planning of cities in Africa. Policy Focus 13:18–20

Olmedo-Alguacil M, Ramírez-Rodrigo J, Villaverde-Gutiérrez C, Ruiz-Villaverde A (2014) Quality of life and multiculturalism of elderly people in the city of Ceuta (Spain). Proc—Soc Behav Sci 701–707. https://doi.org/10.1016/j.sbspro.2014.07.005

Pallister-Wilkins P (2017) The tensions of the Ceuta and Melilla border Fences. In: Gaibazzi P, Bellagamba A, Dünnwald S (eds) EurAfrican borders and migration management. political cultures, contested spaces and ordinary lives. Palgrave Macmillan, New York, pp 63–81

Pérez González Á (2010) La reclamación marroquí de Ceuta y Melilla

Pijpers R, Van Houtum H (1998) Towards a gated community. https://www.eurozine.com/towards-a-gated-community/

Planet Contreras A (1998) Melilla y Ceuta: espacios frontera hispano-marroquíes. Ciudad Autónoma de Melilla, Melilla

Pulido Acosta F, Herrera Clavero F (2015) Fear and emotional intelligence in the pluricultural context of Ceuta. Anuario De Psicología/The UB J Psychol 45:249–263

Reyner AS (1963) Morocco's international boundaries: a factual background. J Modern African Stud 1:313–326

Rodríguez J (2014) El corazón del Príncipe. https://elpais.com/elpais/2014/10/23/eps/1414089026_035725.html

Sanchez Iglesias S (2016) EU Citizenship and migration law: reshaping the balance of multi-national communities? the case of Ceuta and Melilla. European J Migration Law 18:259–274. https://doi.org/10.1163/15718166-12342102

Sartori de Almeida Prado H (2016) A cooperação descentralizada e a política para a fronteira no Brasil: o caso das cidades-gêmeas de Ponta Porã e Pedro Juan Caballero. http://repositorio.ufgd.edu.br/jspui/handle/prefix/2915

Testa G (2017) El CEIP Príncipe Felipe, última 'víctima' de la falta de respuestas eficaces al caos del Tarajal. http://www.ceutaldia.com/articulo/educacion/ceip-principe-felipe-ultima-victima-caos-tarajal/20170512075838161031.html

Turchetti A (2018) Corpi, confini, controllo: Ceuta e Melilla, laboratorio geo-politico d'Europa. https://studiquestionecriminale.wordpress.com/2018/06/19/corpi-confini-controllo-ceuta-e-melilla-laboratorio-geo-politico-deuropa/

van Moorsel J (2016) Between physical and mental borders. https://theses.ubn.ru.nl/bitstream/handle/123456789/4976/Moorsel%2C_Jim_van_1.pdf?sequence=1

Vilar JB (2003) La frontera de Ceuta con Marruecos: orígenes y conformación actual. Cuadernos De Historia Contemporánea. 25:273–283

Part V
Praxis of Border Urbanism

Chapter 20
Programmed Spaces: Redefining the Border Condition

Rima Abousleiman

Abstract Borders provide the opportunity to be *junctures of unification* rather than *barriers of separation*. As the meeting place of languages, cultures, and cuisines, the possibilities for positive development are left somewhat open-ended. As they stand today, borders are often desolate expanses of landscape. In contrast, much research has been focused on borders as they exist and suggestions for making them active, an undiscovered typology that remains heavily focused on is a program. Through its infinite methods of application, the program is a way to draw people in, engage with them, and, consequently, activate a once undesirable space. Making borders a destination—a cultural hub combining language, art, music, and food—rather than a threshold to cross over will create an atmosphere that encourages cooperation by providing spatial and placemaking value. Creating a sense of community in this neutral zone will help places foster a tertiary space that is neither here nor there but a perfectly balanced tie. Using the Blue Neutralized Zone as an example, designer Soyoun Kim proposed spaces with specified programs to encourage positive relationships. In this study of one of the most famous borders, the demilitarized zone between North and South Korea is given a friendlier appearance through the simple application of spaces. This creates a more engaging environment for inhabitants of opposite sides to foster connections. Considering the US–Mexico and West Bank borders furthers the theoretical debate about ways to redefine borders.

Keywords Borders · Program · Unification · Blue Neutralized Zone · North and South Korea

20.1 Importance of Borders

Projected Importance

Throughout history, borders have had a negative connotation of separation. They are seldom taken as an opportunity to be junctures of unification. More often, they are

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perceived as barriers to separation. As the meeting place of languages, cultures, and cuisines, the possibilities for positive development are left somewhat open-ended. As they stand today, borders are often desolate expanses of landscape. In comparison, much research has been focused on borders as they exist, and suggestions for making them active, an undiscovered typology that remains heavily focused on, is often a hypothetical program.

Through its infinite methods of application, a program is a way to draw people in, engage with them, and, consequently, activate a once undesirable space. Making borders a destination—a cultural hub combining language, art, music, and food—rather than a menacing threshold to cross over will create an atmosphere that encourages cooperation by providing a spatial and placemaking value. Creating a sense of community in this neutral zone will help places foster a tertiary space that is neither here nor there but a perfectly balanced tie.

As markers of delineation, borders provide the possibility to spread culture, language, ideas, and so forth, to contribute to a more globalized society through mutually beneficial relationships rather than restrict things meant to be shared by confining their spread through arbitrary demarcations. Moreover, as delineations between one government jurisdiction and another's, borders are crucial to maintaining order on manageable scale borders should not be these monoliths unable to be passed. That creates a sense of oppression that can only continue the turmoil that brought the two parties to that point, festering uncontrollably.

20.2   Current Importance

The true intention of a border, to frame states, matters. While borders have been politicized dramatically as part of the nationalist vs globalist agenda, echoing the messages of keeping people out and letting *people in*, their primary purpose is to serve as boundaries of sovereignty. Each state has its government and laws that rule its nation. That being said, borders remain important in allowing each state to apply its supreme rule and reprimand those who disobey accordingly.

20.3   Borders as Public Spaces

US–Mexico Border

In the book "Borderwall as Architecture: A Manifesto for the U.S.–Mexico Boundary" (Rael 2017), a collection of solutions for the U.S./Mexico border are provided (Fig. 20.1). Utilizing creative methods of delineating edges by addressing the needs of the locale, the designers offer solutions that appease both advocates for robust borders and activists against walls. Self-described as "both a protest against the wall and a projection about its future" the options discussed pose opportunities

Fig. 20.1 US–Mexico border (Google Maps street view, accessed May 20, 2021)

Fig. 20.2 A border security force guard at a checkpoint on the India–Bangladesh border in Assam verifies the name of a girl who went to graze her goats on the other side. *Source* Reuters (https://scroll.in/article/865586/on-the-fence-fluid-and-ever-changing-the-indo-bangladesh-border-defies-the-idea-of-a-neat-boundary last accessed 20 May 2021)

for social and economic growth within this third zone that, through over 700 miles of wall, transforms the landscape often associated with division and activates an otherwise desolate area.

Ronald Rael studied border walls worldwide—from the US–Mexico border to India/Bangladesh (Fig. 20.2) and has produced a term titled "The Political Equa-

tor". The Political Equator traces some of the world's most controversial thresholds, including Tijuana–San Diego (Fig. 20.3), the Strait of Gibraltar (Fig. 20.4), and the Israeli–Palestinian border (Fig. 20.5). The term led to the curation of meetings

Fig. 20.3 Students are shown standing on the border field state park and playas de Tijuana to form the words "Unite Por El Mar," (*Photo credit* I Love A Clean San Diego) Feb. 26, 2015. (https://www.kpbs.org/news/2015/feb/26/san-diego-tijuana-kids-send-unite-sea-message/ last accessed 20 May 2021)

Fig. 20.4 The straits of Gibraltar. (*Source* https://tonykulla.wordpress.com/2013/02/ last accessed 20 May 2021)

Fig. 20.5 Fencing along the southern Israeli border with Egypt near the Red Sea resort of Eilat, Middle East Eye. (*Source* AFP) (https://www.middleeasteye.net/fr/news/arab-israeli-shot-killed-border-egypt-660597557, last accessed 20 May 2021)

stationed and Tijuana–San Diego to transform these separate localities of conflict into active public spaces.

The book's more provocative suggestions include the bicycle–pedestrian wall, the hydro wall, the wastewater treatment wall, the solar wall, and the library wall. The library wall references an existing structure located along the US–Canada border (Fig. 20.6), built by one American and one Canadian. The library stacks are located in the middle, allowing the collection to be available by both sides and creating a dialogue through cultural exchange via the wall. The bicycle–pedestrian wall creates a linear park along the border wall, with pockets of green spaces and connections to important locations. By creating a translucent division, light material choice, and security—the quality of life on both sides is superior. A green corridor that runs parallel through each city creates a critical landmark.

20.4 Demilitarized Zone

Using the "Blue Neutralized Zone" (Fig. 20.7) as an example, designer Soyoun Kim proposed spaces with specified programs to encourage positive relationships (Kim and Soyoun 2017). In this study of one of the most famous borders, North and South Korea's demilitarized zone is given a friendlier appearance through architecture's

Fig. 20.6 US–Canada border manifestation. (*Source* https://www.immigroup.com/news/whats-dif ference-between-trv-and-trp, and Washington Post, last accessed 20 May 2021)

simple application. Through pavilions that populate the space between the two states, assigned as neutral land, Kim can envision a peaceful co-existence for the future optimistically. This creates a more engaging environment for inhabitants of opposite sides to foster connections.

The development intends to take the symbols associated with conflict in this region, i.e., infiltration tunnels and propaganda loudspeakers, into these pavilions that turn them into peaceful characters, focusing on embracing the differences between

Fig. 20.7 Blue neutralized zone project. (*Source* Kim and Soyoun 2019 https://kim-soyoun.com/BNZ-Blue-Neutralized-Zone-PROJECT last accessed 20 May 2021)

the North and South instead of magnifying them through a critical lens, and also highlighting their common history and culture—allowing it to be a source connection. With architecture as the vehicle, Kim's development idealizes a future with a more stable political landscape.

The site even includes testimonies from satisfied visitors, going so far as creating a faux website whose tagline boasts "the most neutral place in the world". With in-depth looks at each pavilion, the descriptions focus on the varied programs between all twenty-five spaces ranging from hair salon to safari and club to sacred space—utilizing many symbolic metaphors for the two country's history. To tie the whole thing together, the website boasts a souvenir shop featuring 3D prints of every individual pavilion and postcards containing an image of each.

20.5 Addressing Conditions in the West Bank

Current Conditions

Moving to another agitated conflict in Israel/Palestine, the conditions in which people are expected to live—especially in the Gaza strip—are genuinely shocking (Simmons 2018). In Gaza, the water supply is contaminated by the sewage system. They only have electricity for four hours every day. They are surrounded by blockades—land,

air, and sea by Israel and Egypt. While many of these actions were taken as a precaution to Hamas's projected behaviour once they were in control, they gravely affected the livelihood of the people who call the Strip home. Due to the limited import of goods, and the poverty level of many residents, breakfast on the Strip can consist of boiled water with salt.

20.6 Possible Change: Visions

The Gaza Strip can implement some measures investigated by Rael along the U.S–Mexico border. Geographically, Gaza has an advantage as it is tucked between the land and sea, providing the opportunity to benefit from adding a "third nation", as Rael (Rael 2017) calls these in-between spaces. It adopts systems such as a fish farm in the sea and an agricultural buffer in place of the fence that separates the two states. A water filtration system could also be implemented along the divide, providing those residing in this territory with access to a steady supply of clean water without relying on humanitarian aid to come through. Addressing the Strip's issue with electricity, the solar wall creates a sustained approach to ensuring the Strip has access to electricity for more than four hours per day. Following the war in Gaza in 2014, where most of the occupied territory was destroyed, many of Gaza's buildings and infrastructure were destroyed and yet to be rebuilt. The daily problems that Gaza faces could help shape how the territory should be rebuilt.

References

Kim and Soyoun (2017). The Korean Blue Neutralized Zone. https://kim-soyoun.com/BNZ-Blue-Neutralized-Zone-PROJECT (Last Accessed 20 May 2021)

Rael R (2017) In: Borderwall as architecture. University of California Press, Oakland

Simmons AM (2018) Life in the Gaza Strip—a cauldron of deficit, despair and desperation, Los Angeles Times. http://www.latimes.com/world/middleeast/la-fg-global-gaza-humanitarian-situation-20180206-story.html. Last Accessed 14 July 2018

Chapter 21
Interrogating 'post-Conflict' Regeneration: A New Border in Northern Ireland

Orla McKeever

Abstract Working within the context of 'post-Conflict' Northern Ireland Shirlow (2006), the question of whether repressive constraints relating to conflict exist within the design of civic regeneration projects provides a critical base for analysing and understanding if and how they might manifest within the built environment. Immaterial repressive methods and material elements or signals within the built environment that control, contain and corral these regeneration projects are explored through the analysis of the case-study project An Gaelaras, designed by O'Donnell+Tuomey. Three areas are explored; the representation of the project, the design of the threshold condition, and the post-occupancy use of the building. Through documented site visits, this paper investigates the infiltration of the 'architecture of interface' within the regeneration project An Gaelaras and the creation of new borders within the 'post-Conflict' environment of Northern Ireland.

Keywords Architecture · Northern Ireland · 'post-Conflict' · Regeneration · Threshold · Post-occupancy · Representation · Repressive constraints · Border

21.1 Introduction

This paper is part of research that asks whether repressive design exists within 'post-Conflict' regeneration projects in Northern Ireland. If so, how is it physically manifest in the public realm, and can it be attributed to the most recent conflict (1969–98) in Northern Ireland? The Nolli maps of Rome (1736–48) extended the definition of the public realm to include the publicly accessible interior space of civic buildings. The paper uses this extended definition to examine alternative narratives and portrayals of the public realm in Northern Ireland, moving away from the well-documented explicit

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defensive space towards a search for underlying implicit elements that populate our everyday experience. Explicit defensive space manifestations of segregation in the built environment in Northern Ireland take the form of the 'peace walls', erected in the late 1960s by the state as a temporary solution to managing conflict. There are over one hundred 'peace walls' in Belfast alone, and more are being constructed even though it is more than twenty years after the signing of the Belfast Agreement (1998), the marker for the commencement of the most recent 'post-Conflict' era in Northern Ireland. In addition to the walls, the display of flags and murals manifests explicit localised demarcation in polarised territories. Across Northern Ireland, the areas where 'peace walls' occur are referred to as 'interface' areas. The interface is defined as the conjunction or intersection of two or more territories or social spaces dominated, contested or claimed by some or all members of the differing ethnonational groups.[1] Variation co-exist in layers, 'back to back' housing being the most contentious. Other interface conditions form buffer zones demarcated by roads, light industry, or inertia zones. Interfaces in Belfast are more explicit than those in Derry/Londonderry, the site of the case-study project, as the delineation of the majority of territorial demarcation in Derry/Londonderry follows routes of natural or historical elements, such as the River Foyle and the seventeenth-century city walls. However, as in Belfast, the localised demarcation of polarised territories in Derry/Londonderry is also played out through murals and flags.

A Gaelaras in Derry/Londonderry, by O'Donnell+Tuomey Architects, completed in 2009, Fig. 21.1 provides an excellent case study to examine how repressive elements might be seen to exist in a 'post-Conflict' regeneration project. A Gaelaras is an Irish language Cultural Centre; established primarily to preserve and promote the Irish language in the city and surrounding areas.[2] The architectural brief included performance space, backstage facilities, start-up offices and teaching spaces.[3] The design of An Gaelaras is recognised as exemplary within the field of architecture; it was short-listed for the Sterling Prize in 2013, and the practice O'Donnell+Tuomey was awarded the Royal Gold medal in 2015. Methods used to investigate the case study include a series of site visits, photographic surveys, descriptive texts, and conversations with the project architect and building users. The level of open access afforded to the researcher during site visits was notable.

As a result of the Belfast Agreement, foreign direct investment poured into the region. A significant proportion of the state-funded regeneration relied on an economical solution to achieve peace dividends.[4] The main political parties in Northern Ireland have embraced neo-liberal capitalism as the central modus operandi, above other forms of peace-building, aiming to transform the conflict by generating free-market solutions.[5] Most of the regeneration sought to change the narrative of the

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[1] Jarmon (2004).

[2] The promotion of the Irish language is considered a political issue in Northern Ireland. The passing of an Irish Language Act by the Northern Ireland Executive remains a contentious issue.

[3] O'Regan and Dearey (2010).

[4] Shirlow (2006).

[5] Nagle (2009).

Fig. 21.1 An Gaelaras, Derry/Londonderry, View of North elevation facing the Clarendon Street conservation area, photograph taken by the author

greater region of Northern Ireland and specifically Belfast, from a 'conflict city' to a 'new capitalist city' open for trade.[6] Alongside the regeneration ran a protracted rebranding exercise. Belfast was rebranded as a place for foreign direct investment, regeneration, improved infrastructure and tourism.[7] Brian Kelly referred to the Titanic Centre as 'the most expensive tourist attraction in Europe'.[8] A range of consequences of an extensive capitalist approach to regeneration, such as the Titanic Quarter, included isolation of existing communities, class segregation, lack of provision of social housing, and limited job creation for existing local communities.[9] This economical approach provides a thin veneer of normality, either ignoring, avoiding or subverting deeper social problems.

Some of these deeper problems are critical themes in the work of the lens-based (film and photography) artist and twice Turner Prize nominee Willie Doherty, themes such as the level of stasis and change post-Belfast Agreement. Since 1985 Doherty has located his work within the public realm, often in the North-West, focusing on Derry City, also the location of the case study An Gaelaras. From early in his career, Doherty's work contested two portrayals of the public realm. First is the romanticised representation of landscape by artists such as John Hilliard and, secondly, the sensationalist portrayal of 'the Troubles' throughout the media. In

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[6] O'Dowd and Komarova (2013).

[7] Neill (2006).

[8] Kelly (2012).

[9] Gaffikin et al. (2008). See also: O'Dowd and Komarova (2013).

opposition to these portrayals, Doherty's work focuses on disseminating a different narrative. He referred to the violence as a "banal act that happens over and over again."[10] His work captures the normalisation of conflict in the everyday spaces of the lived city. Through studying his work, one could read a continued effort by Doherty to capture evidence of those banal violent acts that happen repeatedly. His work captures a phenomenological experience of the presence or absence of a ghost-haunted land.[11] The question could be asked, are these acts material? How do they physically manifest within the public realm, and are embedded within our architecture? Elements, not about the well-documented defensive spaces of the peace walls, but a more implicit repressive intervention that continues to creep in and populate the built environment, post-Belfast Agreement. The investigation of An Gaelaras as an architectural case study through three foci: representation, threshold, and post-occupancy, identifies evidence of the infiltration of repressive elements of containment, control and corralling within the regeneration of the built environment.

21.2   Representation

The context for the project and the building use are both culturally and politically rich. Great James Street, where An Gaelaras is located, rises to create a gentle east-facing slope and intersects with north–south streets, creating solid blocks. The west end of the street comprises five-metre-wide Late Georgian and Victorian plots with a mix of residential and commercial uses. The terraces have remained intact on the north side of the street. The rhythm to the south side, where An Gaelaras is located, is interrupted historically by two stand-alone churches and, more recently, with the construction of set-back retail units and a walled stand-alone post-office sorting office. Despite these interruptions, Great James Street maintains a strong building line and eaves height, contributing to a series of solid urban blocks. On the foot of the 1994 ceasefire, this solidity was a relief from the city's more prevalent vacant plots of the once-bombed sites that recorded the physical impact of the most recent conflict.

Great James Street marks the southern edge of the Clarendon Street Conservation Area next to the Bogside, an area that came to world attention in 1969 through the 'Battle of the Bogside', often referred to as the commencement of the most recent conflict. Three years later, the Bogside was the site of the 1972 'Bloody Sunday' atrocities, resulting in thirteen fatalities. The Bogside is also the location of the iconic 'Free Derry' wall. The architect describes the site context as : "It is a restricted site in an established urban context of streets and terraced houses, lying just inside the Clarendon Street Conservation Area."[12] The troubled history is not referred to a key

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[10] Doherty, W. https://studiovisitshow.files.wordpress.com/2013/11/willie-doherty_studio-visit-10-november-2013.mp3. last accessed 2018/07/14.

[11] Long (2017).

[12] O'Regan and Dearey (2010).

component within the client's brief was that the proposed project would imbue a sense of openness, reflecting the nature of the organisation. The architectural intent states, "The design approach was to develop the public interface of the project by extending the pavement into the building".[13] The architect used the Nolli drawing method to map the publicly accessible interior space of An Gaelaras as an extension of the public realm. The representation of the project within the site context plan places the building in the bottom right-hand corner of the drawing Fig. 21.2.

Drawings and models used to describe any project are designed objects in themselves. The context plan reveals what was included or excluded from the design conversation. The site context plan shows the project's location at the edge of the drawing, directing the readers' attention to the entire blocks of the Clarendon Street Conservation Area to the north and west of the project. By placing the building at the edge of the site context plan, the conversation is corralled away from more difficult contextual conditions next to the southern boundary line of the project. That is a conversation about the fabric of the Bogside eroded by violence; many vacant plots still exist.

Furthermore, as David Brett argues, where social housing projects were built during 'the Troubles', they were designed according to militarised containment and surveillance requirements.[14] The solidity of both the southern rear elevation (approximately three metres from the north elevation of the neighbouring house) and the east elevation (about six metres from the adjoining building, a former church) of An Gaelaras is designed as an infill building where the northern entrance elevation is the only external elevation read from the public realm Figs. 21.3, 21.4 and 21.5. The solid elevations are due to boundary conditions and planning restrictions. The architects state, "its inwardness is not an antisocial reaction or a defensive strategy forced by any client requirement or retreat from society."[15]

21.3 Threshold

When looking at the publicly accessible interior space of the building as an extension of the public realm, the threshold becomes an essential moment in the fluidity of space. The architects eloquently designed a building that imbues a sense of openness and free flow yet creates a safe environment for the building users. The north elevation is the one point of access to the project Fig. 21.6. The entrance door is through an arch to a covered recessed area. The architects refer to the covered recess as affording the user time to pause before entering.[16] On entering the recess, the light level drops, taking eyes a second to adjust, and the automated door opens slowly. To the left of

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[13] Ibid.

[14] Brett et al. (2003).

[15] O'Regan and Dearey (2010).

[16] O'Donnell+Tuomey, Strangely Familiar. http://odonnell-tuomey.ie/strangely-familiar-movie/, last accessed 2018/07/13.

Fig. 21.2 An Gaelaras: located in the southeast corner of the site context drawing. Insert drawing by kind permission of O'Donnell+Tuomey

Fig. 21.3 View of the eroded fabric of the Bogside, photograph taken by the author

Fig. 21.4 View of social housing 'designed for militarised containment and surveillance' with the south elevation of An Gaelaras in the background, photograph taken by the author

Fig. 21.5 South elevation of An Gaelaras post–occupancy, designed as an infill site, photograph taken by the author

Fig. 21.6 Threshold condition of An Gaelaras, photograph taken by the author

the recess, a large floor-to-ceiling window stretches towards the street, facilitating an inward view of the shop and reception and an outward view from the reception of the approach route. Views from the first-floor offices also overlook arrival. The use of light levels intertwined with views is reminiscent of the backlit sitting niche in the Moller house, Vienna, by Adolf Loos. The glazed screen of the window extends to become the sliding door of the public entrance, sitting at a right angle to the street and front elevation. Entering, the visitor is immediately confronted by the reception. The reception at the front door takes a different approach from some other public projects by the architects. For example, in the original design of the Irish Film Centre, Dublin (1992), the first point of contact was the ticket desk located at the core of the building within the internalised courtyard. In the Glucksman Gallery, Cork (2005), the reception desk is located on the floor above the entrance. However, views of the approach ramp from the grounds are afforded from this elevated level.

At a Gaelaras, the sequence of spaces is slowly revealed. The extent of the building is not exposed at the point of entry. Instead, a direct route into the courtyard is interrupted by the trapezoidal plan forcing the visitor to twist east and west while stretching deep into the project, slowly revealing the space. Public movement from the atrium vertically through the building is encouraged. However, an about-turn on to the stair approaching from the northern entrance and the subtle change in scale of the circulation space to domestic when moving from the atrium floor onto the stair both establish a hierarchy of space and a shift from public to semi-public space.

The top-lit space in the distance pulls the visitor deeper into the atrium. At this point in the project, views from the upper levels are afforded to the building users from the walkways and stairs. Occupants can view visitors entering the lower atrium, creating a subtle level of passive surveillance. Between the upper and lower levels, the play between viewed and the viewer shifts backwards and forwards, from the visitor pulled unassumingly onto the centre stage of the atrium floor and the occupants on the upper levels with their eyes on the internalised street. These subtle moves provide a safe environment while extending the public realm deep within the plan and maintaining a sense of openness.

Fig. 21.7 Threshold obstacles? 'concrete wall, recess and gate' photographs taken by the author

However, when the project received a special award during the 2010 Architectural Awards of Ireland (AAI) adjudication, Yvonne Farrell expressed, "I am not so sure about its relationship to the street."[17] Although this point is not elaborated within the adjudicators' conversation's published transcript. A scene was set for further questioning.

Contrary to the challenging light conditions, a board-marked concrete wall addresses the street. The project's front window and door are placed within the recess and turned at an angle to the street Fig. 21.6. The provision of natural light in the project was challenging. The north elevation of Great James Street is the only elevation that provides a source of natural light due to site boundary conditions and associated planning restrictions. Deep within the plan, natural light is drawn from above. The north elevation was dissected into three vertical sections, each five metres wide, reflecting the original plot width of the individual terrace on the street. The rotation of the respective vertical sections east and west was perhaps a move to catch additional light from Great James Street. In another project by the architects, the London Photographers' Gallery, the window to the street is used to create connections with the public realm. The architects state, when referring to the ground floor of the project, "The window has a dramatic impact on the relationship of the building to the street: the expansive aperture captures the activities inside for passers-by, as well as pulling the circulation of pedestrians of the street into the space."[18] In the Galbally housing project, also by O'Donnell+Tuomey, a visual connection was created from the domestic kitchen directly to the street, again using the window as a tool to connect to the public realm. Was substituting a ground-floor level window for a concrete wall to the street and the rotation of the door and window within the recess a defensive measure? Was a need for security prioritised over the provision of natural light?

In addition to the concrete wall and recess, a late addition to the project appeared to the front elevation between the street and the recess. An existing substation located to the west of the front elevation was incorporated into the entrance sequence. Metal-work cladding, wrapping around the substation into the recess, forms a gate Fig. 21.7.

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[17] O'Regan and Dearey (2010).

[18] O'Donnell and Tuomey (2014).

The gate is industrial in scale, the width of which is a third of the building's elevation at ground floor level, a historic plot width. In conversation with the project architect,[19] it became evident that this was not part of the original design but an addition on request from the client, an inappropriate addition to the Georgian/Victorian Street.

21.4 Post-occupancy

A potential 'generosity of FREESPACE'[20] is created through views to the south and the east, of the historic seventeenth-century walled city, from the roof terrace. The opportunity for another threshold is created, this time at the scale of the city, similar to views released to the city in London, experienced from the upper level of the London Photographers' Gallery, also designed by O'Donnell+Tuomey. The architects state that the roof terrace "seeks to open up the interior of the plot to daylight, maximising the potential for visual interaction with the street and exploiting views of the city walls".[21] The architects in the Saw Swee Hock, the London School of Economics Student Centre, also use this opening-up strategy Fig. 21.8.

During the design process, the architects facilitated access to the terrace of An Gaelaras from the boardroom on the upper level. However, external terrace works were not further developed as an integral part of the design due to client's budgetary constraints. On completion of the project, the architects were contacted to provide information on balustrade locations. This was provided, and there was no further communication on the topic. On visiting the site, it became evident that the client had executed the occupation of the roof terrace. This saw a resumption of excessive protective barriers and the reintroduction of layered fencing synonymous with the conflict era. Figure 21.9. What materialised on the terrace post-occupancy is a resumption to a heavily contained and controlled environment. However, what is not immediately evident is the relationship between the viewed (object) and the viewer. The orientation of the furniture turns its back to the proposed view of the city walls, and the addition of a green mesh visual barrier over the two layers of the physical obstacles suggests that the gardeners are more concerned with screening themselves from being viewed than viewing. The choice to turn their backs on the city walls and protect themselves from being seen is consistent with the relationship between the building users and the historic walled city, which has been a site of colonial infrastructure and the military watchtowers of the most recent conflict. The military watchtowers located within the walled city were built on the highest promontory, where the naturally elevated topography facilitated views of the local community.

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[19] Meeting with project architect held in the Cork office of O'Donnell+Tuomey Dec. 2017.

[20] Farrell, Y., McNamara, S. "La Biennale Di Venezia 16th International Architecture Exhibition Curated", http://files.cargocollective.com/159426/1.-Press-Release-16.-International-Architecture-Exhibition---La-Biennale-di-Venezia.pdf, last accessed 2018/06/27.

[21] O'Regan and Dearey (2010).

Fig. 21.8 The roof terrace of the Saw Swee Hock, the London School of Economics Student Centre. The photograph was taken by Dennis Gilbert, and used the image with the kind permission of O'Donnell+Tuomey

Fig. 21.9 A generosity of *'FREESPACE'* photographs taken by the author

21.5 Conclusion

The mapping of explicit interfaces throughout Northern Ireland identifies significant man-made, natural or historic structures. In addition to these known barriers, a mutation of the 'architecture of interface' appears within publicly funded 'post-Conflict' regeneration projects. Whether these mutations are due to influences during the design process by the client or state regulatory authorities, new demarcations, boundaries, and barriers are being implicitly embedded within civic infrastructure across the region that remains unacknowledged mainly within 'post-Conflict' discourse. The conditions arising within the elements discussed include avoiding a conversation on dark heritage within the representation of the site context plan, the shoring-up of the threshold condition and the post-occupancy response on the terrace, elements that are not simply defensive design strategies.

Within the context of Northern Ireland, a continued vigilance against the potential creep and infiltration of the 'architecture of interface' into regeneration projects should be observed. The active promotion and ongoing maintenance of shared space throughout the design process and post-occupancy is essential to avoid reversing to a fallback position of segregation and separation.

References

Brett D, Ed. Allen N, Kelly A (2003) In: The cities of Belfast. Four Courts Press, pp 19–26

Jarmon N (2004) Demography, development and disorder: changing patterns of interface areas. Institute for Conflict Research (ICR), Community Relations Council, Belfast. Last Accessed on 10/07/22 https://www.google.com/search?channel=trow5&client=firefox-b-d&q=%3Cdiv+class%3D%22NodiCopyInline%22%3EJarmon+N+%282004%29+Demography%2C+develo pment+and+disorder%3A+changing+patterns+of+interface+areas.+Institute+for+Conflict+Res earch+%28ICR%29%2C+Community+Relations+Council%2C+Belfast%3C%2Fdiv%3E

Kelly B (2012) Neoliberal Belfast: disaster ahead. Irish Marxist Review 1(2):44–59

Long D (2017) A ghost-haunted land. Manchester University Press, Manchester, Contemporary art and post-Troubles Northern Ireland

Nagle J (2009) Sites of social centrality and segregation: Lefebvre in Belfast, a "Divided City." Antipode 41(2):326–347

Neill W (2006) Return to titanic and lost in the maze, the search for representation of post-conflict Belfast. Space and Polity 10(2):109–120

O'Regan J, Dearey N (2010) New Irish Architecture 25, AAI Awards. Gandon Editions, Cork

O'Dowd L, Komarova M (2013) Three narratives in search of a city: researching Belfast's 'post-conflict' transitions. City 14(4):526–546

O'Donnell S, Tuomey J (2014) Space for architecture. Artifice, London

Shirlow P (2006) Belfast: the 'post-Conflict' city. Space and Polity 10(2):99–107

Chapter 22
Cartographic Errors

Richard Murray

Abstract In theory, the United States–Mexico border offers the opportunity to study a division between striated cultures. In reality, it symbolises a border, an amalgam of both cultures. It is within the interior of the United States that cultural conflicts and tension occur, resulting from divided communities. The city of McMinnville, Tennessee, the self-proclaimed tree nursery capital of the world, presents a unique opportunity to examine conflicts and tensions in communities divided by cultural, linguistic, and political boundaries. Since 1990, McMinnville's Hispanic population has more than doubled. This has strained the interaction between white Americans and immigrants upon which the nurseries depend. Using McMinnville as a case study, architecture's role in cultural understanding is examined. This research explores implementing an early learning centre for Hispanic and white children on a proposed tree nursery site by overlaying pedagogical methods, anthropological studies, and architectural typologies. At the intersection of both communities, space facilitates intergenerational and cross-cultural dialogue.

Keywords Cultural borders · USA–Mexico · McMinnville · Tennessee

22.1 Introduction

This is a story about architecture and its role in cross-cultural mediation between the United States and Hispanic immigrants. Along with a study of socio-cultural demographics, methods of intercultural understanding, and teaching pedagogy, this research presents a theoretical proposal for a bilingual early learning centre as one possible solution. The term *Hispanic* combines the US Census's broad, ethnic-nationality-based definition (most Hispanics identify as Mexican) and as part of the complicated relationship between the United States, culture, language, immigrant labour, and race. The story is between the United States and Hispanic immigrants, but it does not occur along the geopolitical US.–Mexico border. The border region

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has become its unique blend of Mexican and American cultures. As Víctor Zúñiga (2007) writes, "The emerging border identities…bring together dissimilar elements, forging new identities in the process" (Zúñiga 2007). It is more accurate to draw borders internally, within communities throughout the United States, where correct cultural divisions occur. Over 1200 miles away from the border, the story begins in the small town of McMinnville, Tennessee.

22.2   Location

McMinnville is located in central Tennessee, a few hours away from the Great Smoky Mountains National Park on the edge of the Cumberland Plateau. It lies at the doorstep of the deep south. It is ideal for the over 100 tree nurseries that its economy depends on within a temperate region. Workers tend to the plants throughout these tree farms by pruning, planting, and harvesting them. The workforce is primarily made up of Hispanic immigrants who first came to McMinnville as part of the thousands of immigrants during the 1990s who sought economic opportunities across the US southwest. According to the US Census Bureau, the Hispanic population in Tennessee increased to 92,763 during 1990–2000 (United States Census Bureau)]. However, as noted by Anita I. Drever in "new neighbours in Dixie: the community impacts of Latino migration to Tennessee", immigrants did not settle proportionally across the state. She wrote, "The impacts of immigration are not spread evenly…but rather concentrated in just a few locales. It is in these places where the transformations wrought by immigration are felt and when the imprints of change are left indelible on the landscape…" (Drever 2006).

   During this same wave of immigration, McMinnville was amongst the small towns that received a dramatic increase in its Hispanic population. Again, the city saw a rise from 2 to 6.5% of the nearly 14,000 residents; from 2000–2016, it is estimated to have increased to 14% [United States Census Bureau, –-)] (see Fig. 22.1). While these percentages may seem small, it is likely that that the actual Hispanic population is 75% higher (Drever 2006). This massive margin of error may be due to immigrants' avoidance of the census-based fear of deportation. It could even be due to common terminology on the census form itself. Regardless, population percentages represent a surface-level understanding of the changes within McMinnville. To best appreciate the significance of the data, it is critical to recognise Tennessee's racial history.

22.3   Social Context

McMinnville sits within the southern United States context, which relied upon the enslavement of African–Americans as recently as 160 years ago. In other words, in a culture that historically treated people of colour with a little dignity, any increase in the population of immigrants of colour would likely increase racial tensions.
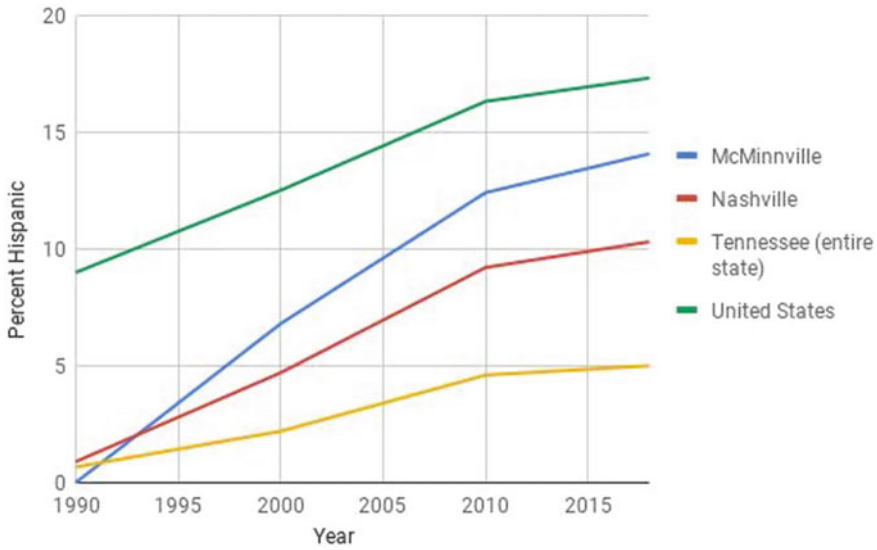
Fig. 22.1 Hispanic population, US Census Bureau

Some tensions are apparent, involving explicit acts of violence. For instance, two of McMinnville's neighbouring towns, Morristown and Monterey, also have large Hispanic immigrant populations. Both communities were the sites of federal government immigration raids or shootings of Hispanic immigrants. Other tensions are more implicit, as they are part of systemic racism, biases, and a lack of intercultural interaction. This indirect xenophobia is evidenced across broader US culture with the election of Donald Trump as president of the United States. Tennessee's population mostly voted for Trump, including McMinnville as part of Warren County (National Public Radio 2016). In addition, President Trump's 2016 election campaign labelled Mexican immigrants criminals and rapists (Blitzer 2018). While it is a broad generalisation that most of McMinnville's non-immigrant residents support anti-immigrant policies, this description is not without evidence. A look at the historical voting pattern of the city and the county to elect republican representatives suggests a division between the cultures of its population (National Public Radio 2016).

Furthermore, as anthropologist Aihwa Ong (1996) writes, "We see that official racial categories are reproduced by everyday American activities of inclusion and exclusion…Racial oppositions are not merely the work of discriminatory laws. However, the everyday product of people's maintenance of their 'comfort level'" (Ong 1996). The common forms of implicit bias, discrimination, and racism range from assuming a person speaks or does not speak English, crossing the street to avoid walking by a person or disproportionally being pulled over by police. The individual migrant and their families witness forms of oppression. As other researchers have found (Delgado-Gaitan et al. 1991), migrants do not always leave the country after the work season ends. Many decide to live in the United States, staying in or near the

towns they migrated to for work. Many brought families and children, and those who arrived individually may start families. Understanding immigrants within the intersection of economy, community, and culture raises the question of how a community welcomes or rejects new arrivals. What role can architecture play in this cross-cultural exchange?

22.4   Intercultural Understanding

Before shaping the physical space, it is critical to assess McMinnville's cultural tolerance or sensitivity. Culture is defined as the learned, shared values, beliefs, and behaviours of a society (Bennet 2004). Cross-cultural understanding recognises that individuals are at different stages in their acceptance of other cultures. This approach is the basis for the developmental model for intercultural sensitivity (DMIS), developed by Dr Milton Bennett (see Fig. 22.2). The system creates a spectrum to understand an individual's reaction to cultural differences and their ability to learn intercultural sensitivity. The situation in McMinnville and similar communities presents a challenge; can a culture or community that depends on immigrants and simultaneously subjects them to racial intolerance begin to learn intercultural sensitivity?

Development Model of Intercultural Sensitivity

Monocultural Mindset			Intercultural Mindset		
Denial	**Defense**	**Minimization**	**Acceptance**	**Adaptation**	**Integration**
Characteristics: Disinterest and avoidance of difference	View the world as "us" vs "them"	View others as basically "like us" or believe others operate on the same basic set of values	Acknowledge and respect cultural difference and see complexities of difference	Ability to "take the perspective" of another to behave differently in other cultures	Sense of self includes the movement in and out of different cultures
Developmental Task: Recognize differences escaping one's notice	To become more tolerant and recognize commonalities among cultures	Learn more about one's own culture and avoid projecting cultural values onto others	Look at the world through the lens of another without losing one's own cultural grounding	Link cognitive abilities to behavior to achieve "natural" behavior in more than one culture	Avoid being a victim of cultural confusion

Fig. 22.2 Developmental model of intercultural sensitivity. Adapted from the work of Dr Milton Bennett

Combining McMinnville's increasing proportion of Hispanic immigrants, strong republican leaning, and historical context as part of the south, McMinnville likely falls within the Denial-Defence-Minimisation of the DMIS spectrum. The tasks for those in a monocultural (ethnocentric) mindset recognise differences, highlight commonalities between cultures, and learn about one's culture without projecting onto the other (Bennet 2004). Specifically, these may involve directly interacting with different cultures, attending cultural events, reading about your own or another's culture, and listening to music from different cultures. Shifting the larger population towards an intercultural mindset (ethnorelative) is crucial for the Hispanic community living in McMinnville. At the very least, intercultural sensitivity promotes tolerance, and at best, it fosters a thriving environment for both communities to learn from each other.

Perhaps, the most commonplace tool for cultural connection is language. English is the most commonly spoken language of the United States, despite over 39 million Spanish speakers living within its borders. Nevertheless, 4.9% of Spanish speakers speak little or no English within McMinnville, above the state average of 1.8% (United States Census Bureau). Moreover, the local school system is ill-equipped to teach Spanish-speaking children effectively. The inability of predominantly Spanish-speaking residents to be accommodated widens social divisions between the Hispanic and white communities across generations (Delgado-Gaitan and Trueba 1991).

One solution is not for all immigrants to speak English and forget their mother tongue but for Hispanic immigrants and their cultures to be celebrated and accepted by non-Hispanic residents. Language is tied to identity and vice versa. Chicana writer and activist Gloria Anzaldúa wrote in Borderlands/La Frontera, "Ethnic identity is twin skin to linguistic identity—I am my language. Until I can take pride in my language, I cannot take pride in myself…until I am free to write bilingually and to switch codes without always having to translate…so long as I have to accommodate the English speakers rather than having them accommodate me, my tongue will be illegitimate" (Anzaldúa 2007). While it is impossible to fully appreciate our cultural differences without knowing each other's languages, it makes shifting from a monocultural mindset towards "acceptance" and "adaptation" much more comfortable. The proposal for a bilingual early learning centre explores the role of architecture as a place for this shift to begin. Through exposure to each other's cultures and languages at an early age and in a shared space, future generations can better understand each other.

22.5 Teaching Pedagogy

The application of moving from a monocultural mindset to an intercultural mindset through the early learning centre hinges upon pedagogy, architectural space, and their intersection with culture. Programmatically, the early learning centre is modelled after the Italian-based Reggio Emilia teaching method. The Reggio Emilia approach emphasises six areas of focus: the environment as a third teacher, multiple languages

of children, depth of exploration, the classroom as a research environment, documentation, and family–school relationships (Santín and Maria 2017). For instance, today's early learning centres teach children the value of digging into a topic they find interesting rather than moving from subject to subject each week. ELCs that successfully respond to these criteria provide a place where children feel a sense of belonging, are connected to the natural environment, are encouraged to learn by exploring, and begin a process of both literacies through symbols, arts, representation, and engagement with others.

22.6 Learning Barriers

Linguistic and cultural minority children face significant challenges. Teachers often mistake a child's behaviour, academic performance, or poor English skills as a lack of learning ability and attribute those traits to every Hispanic child. These stereotypes exacerbate the "trauma of cultural transition" Santín and Maria 2017. This trauma is generational and cannot be solved instantly. Generations of prejudice create a "gradual internalisation of the negative attributes ascribed to them by the power holders. Thus individuals of low status develop low self-esteem, a feeling of incompetence, and a sense of helplessness" Santín and Maria 2017. Because immigrant children see-saw between culture and language, home and school, the classroom must be welcoming spatially and socially.

22.7 Space as a Shared Language

McMinnville's proposed early learning centre translates these programmatic elements into physical spaces of exploration. Throughout the design, hierarchies of spaces create dynamic interactions between the students, the landscape, and the building. It is designed for dialogue at the scale of a child. This dialogue may not always consist of a severe conversation about cultural issues, but rather a dialogue similar to the comfort of conversation amongst friends sitting around a table sharing a meal, a conversation of play and interaction. Moreover, while children often share typical attractions to play and imagination, they are also a product of their culture. Children bring these world lenses into school, home, American, Hispanic, or town culture. Thus, space becomes a shared language that celebrates the different languages of each child and culture.

> No way. The hundred is there.
> The child
> is made of one hundred.
> The child has
> a hundred languages

a hundred hands
a hundred thoughts
a hundred ways of thinking
of playing, of speaking.

Excerpt from "The Hundred Ways" by Loris Malaguzzi (translated by Lella Gandini), founder of the Reggio Emilia Approach.

22.8 Parents

While a child's moments of growth will likely occur at school, parents will be affected by what their children share with them at home. Children will bring stories of connection with other children, a language learned, and landscapes explored. Adults within a monocultural filter may shift closer to an intercultural lens by recognising *the other*. Additionally, as children are picked up from school, parents will begin to interact or see themselves in other parent–child interactions. In this way, the early learning centre provides opportunities for intercultural growth for children and adults.

22.9 Architecture as Mediator

As an effort to connect the critical work done on tree farms to the everyday lives of its students, the early learning centre sits on the site of a proposed tree nursery. Areas border it with higher percentages than the average Hispanic residents (see Fig. 22.3). The early learning centre is the counterpoint to the traditional tree nursery. The tree farm is represented in a rigid grid of plants; the ELC's landscape consists of more naturally scattered trees (see Fig. 22.4). A student at the school plants each of the trees on the school site, never removed. During their time at the early learning centre, students build community by caring for their trees and the trees of others. The ELC's landscape is varied and offers several vantage points of the nearby tree nursery and surrounding neighbourhood. A hill to the southwest of the school served as a place of perspective and was made from soil excavated during the construction of the school. On the north end of the ELC, a community outdoor amphitheatre and greenhouse serve as a place for parents, students, and the public to hold events and grow plants together (see Fig. 22.4).

Upon approach, the early learning centrefolds into the landscape. Entry may be achieved from a gentle staircase or through a courtyard via a ramp (see Fig. 22.5). Both facilitate parent–child interactions. The large hallway acts as a filter of light between the courtyard and the classrooms. The courtyard, shaded by trees and a roof, is a place of respite and play. Sitting in the crushed gravel are poles of various heights to climb, swing, and run around.
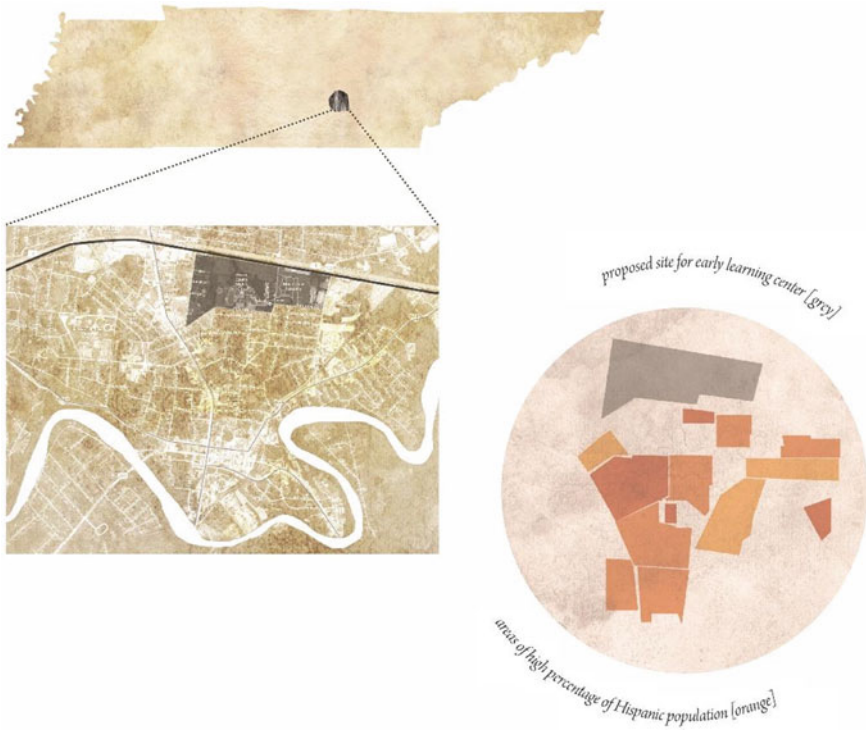
Fig. 22.3 Early learning centre is placed nearby existing Hispanic communities in McMinnville
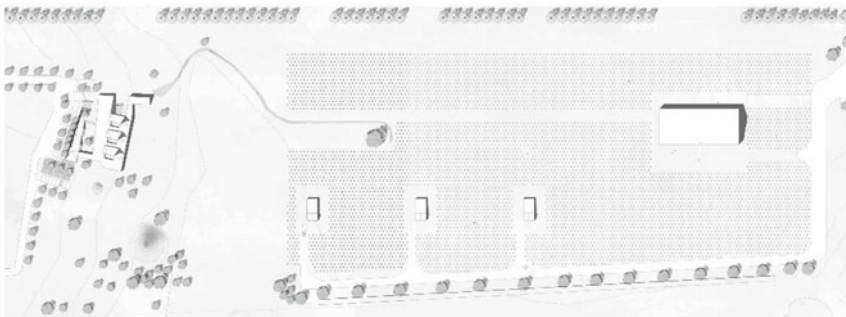
Fig. 22.4 Site plan, left to right: early learning centre, playfield, and tree nursery

The classrooms are a microcosm of the school itself—offering sectional changes of compression and expansion, connections to the landscape, and light (see Fig. 22.6). Their shape is derived from the archetypal American prairie schoolhouse bent and skewed for light (see Fig. 22.7). In addition, each classroom has a smaller courtyard,

Fig. 22.5 Early learning centre plan-site left to right: arrival, courtyard, ELC, and playfield
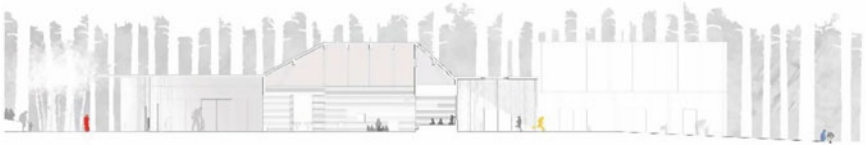
Fig. 22.6 Transverse section through courtyard, hallway, classroom, and playfield. Public greenhouse in the background (right)

Fig. 22.7 Longitudinal section through the classrooms. Tree nursery to the east shown beyond (left)

which provides light and a place for outdoor play. These private exterior spaces also evoke the courtyards found in Mexican homes.

The classroom's outdoor space, play, and lessons may empty into the field over-looking at the nursery (see Fig. 22.6). The oldest and largest tree sits near the tree nursery and the early learning centre. It provides shade for lessons beneath its branches and is the mediator between young trees at the nursery and the children (see Fig. 22.4). These elements echo the Reggio Emilia tenets of multiple languages of expression, the environment as the third teacher, and family–school relationships.

22.10   Conclusion

In summary, cross-cultural dialogue between striated cultures begins at multiple scales and spans generations. The polarisation, highlighted by the 2016 United States presidential election, resulted from deeply rooted divisions within individuals, towns, cities, and across the country. The macro focus of mainstream thought over the US–Mexico border misses the cause-and-effect relationship between the border and small towns like McMinnville, Tennessee. Similarly, while explicit ethnic and racial tensions garner the most attention, they are caused by implicit divisions. Since the 1990s, McMinnville and other small towns across Tennessee have disproportionately received Hispanic immigrants compared to the state capitol. Immigrants face multiple forms of prejudice as newcomers to historically white towns neighbouring the Deep South.

Architecture is unable to address cultural polarisation alone directly. The success of bridging cultural divisions begins with individual recognition of other cultures and is achieved by a collective movement towards awareness and appreciation. The developmental model of intercultural sensitivity identifies an individual's or community's relationship to others. Based on historical context, voting records, and explicit acts of racial violence in neighbouring towns, it is reasonable to consider that most McMinnville's population is within Denial-Defence-Minimisation. The early learning centre aims to remove the invisible acts of violence within a monocultural framed community. The dynamic spaces created by the ELC are shaped by the Reggio Emilia teaching pedagogy, which stresses attention to the environment, family–school relationships, and the many languages children use to learn. The potential for generations to pass through the early learning centre can ensure that children and adults of vastly different backgrounds share language, laughter, and appreciation of their cultures.

References

Anzaldúa G (2007) Borderlands/La frontera, the new mestiza, 3rd edn. Aunt Lute Books, San Francisco, California

Bennet MJ (2004) Becoming interculturally competent. In: Wurzel JS (ed) Toward multiculturalism: a reader in multicultural education. Intercultural Resource Corporation, Newton, MA

Blitzer J (2018) In Rural Tennessee, a big ICE raid makes some conservative voters rethink trump's immigration Agenda, New York Times website. https://www.newyorker.com/news/dispatch/in-rural-tennessee-a-big-ice-raid-makes-some-conservative-voters-rethink-trumps-immigration-agenda. Last accessed 9 July 2018

Delgado-Gaitan C, Trueba H (1991) Crossing cultural borders: education for immigrant families in America, 1st edn. The Falmer Press, Bristol, Pennsylvania

Drever A (2006) New Neighbors in dixie: the community impacts of Latino migration to Tennessee. In: Latinos in the New South: transformations of place. Ashgate Publishing Limited, Burlington, Vermont, pp 19

National Public Radio (2016) Tennessee election 2016, website. https://www.npr.org/2016/11/08/501063791/tennessee-2016-presidential-and-state-election-results. Last accessed 9 July 2018

Ong A (1996) Cultural citizenship as subject-making: immigrants negotiate racial and cultural boundaries in the United States. In: Current Anthropology, vol 37. The University of Chicago Press, Wenner-Gren Foundation for Anthropological Research, pp 737–751

Santín M, Maria F (2017) An essential tool to develop critical thinking in early childhood. J New Approach Educ Res [S.l.] 6:50–56

United States Census Bureau. https://www.census.gov/. Last accessed 8 July 2018

Zúñiga V (2007) The changing face of border culture studies. NACLA website, https://nacla.org/. Last accessed 8 July 2018

Chapter 23
Towards an Appropriate Development Approach for the Halayeb–Shalateen Border Region of Egypt

Yehya M. Serag

Abstract Halayeb–Shalateen is a triangular region in southeast Egypt that borders Sudan. The region falls under Egyptian administration and sovereignty; however, Sudan claims the region. The territorial dispute impacted British colonization that reshaped the relationship between Egypt and Sudan during the last quarter of the nineteenth century and the first half of the twentieth century. Egypt has made several attempts to enforce its sovereignty over the border region with regional urban development. Such development sought to increase the population and transform the region from an underpopulated and underdeveloped region to a moderately populated developing area. However, various external factors and regional challenges have complicated development approaches and compromised outcomes. Analysis of the region's background, context, and development plans provide insights into methods that will determine the success of future efforts to develop the Halayeb–Shalateen region.

Keywords Border regions · Regional development · Population factor · Southeast of Egypt

23.1 Introduction

23.1.1 A Historical Border Dispute

In 2009, the General Organization for Physical Planning (GOPP)[1] initiated an attempt to produce a development plan for a small settlement in the far southern area of

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[1] The General Organization for Physical Planning (GOPP) is an institution under the Ministry of Housing. It is responsible for strategically planning and upgrading existing Egyptian cities and settlements. It is also responsible for preparing the different regional plans in Egypt.

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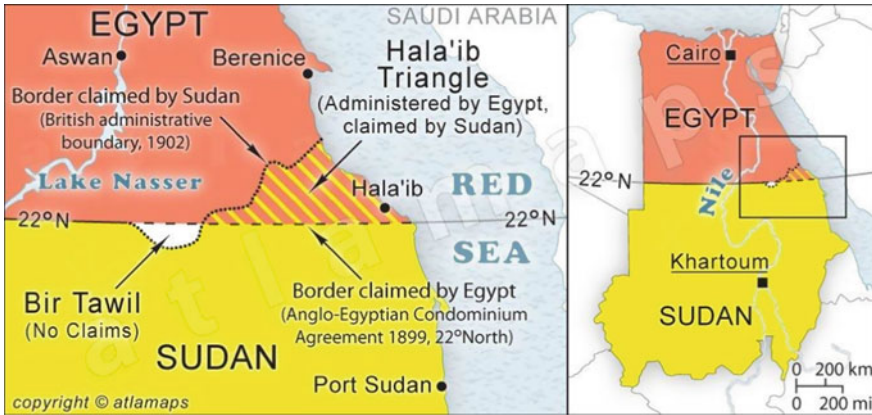
Fig. 23.1 Location of the Halayeb triangle in the border area with Sudan. *Source* globalreseach.ca

Egypt borders Sudan. The location, Ras Hederba, is a few kilometres north of the Egyptian–Sudanese border. Over the last 60 years, the Sudanese government has claimed Halayeb and Shalaeteen, known as the Halayeb triangle, despite Egypt's sovereignty over the region. This dispute can be traced to colonial times when Egypt and Sudan were one region under British colonial rule and one country in the mid-nineteenth century. Following the British colonisation of Egypt in 1882, Britain and Egypt jointly reconquered Sudan in 1899 and set the border between the two countries as the 22° parallel. Britain made further border changes in 1902 transferring the Halayeb triangle to the Egyptian administration (Briney 2017) (Fig. 23.1).

During independence movements in the first half of the twentieth century, border conflicts between the two countries were resolved except for the Halayeb triangle, which continued to cause tension until the 1990s (Serag 2010). In 1998, Egypt and Sudan agreed to a compromise over the Halayeb triangle. In January 2000, Sudan withdrew its presence from the region and ceded control to Egypt. However, during the early 2000s, the president of Sudan renewed claims for control over the Halayeb triangle (Briney 2017). This caused Egyptian authorities to consider urban development in the small settlement of Ras Hederba, which lies close to the border with Sudan; their goal was to ensure a tangible Egyptian presence in the region. This initiative was soon expanded into a full-scale regional development effort.

23.2 Research Aim and Methodology

Regional development approaches proposed in the Halayeb triangle occurred against different political, demographic, and economic challenges. One set of proposals made by a planning team formed by the GOPP in 2009 was to be selected by the authorities for implementation. However, due to the state of instability in the Middle

East, following the Arab Spring of 2011, the region's development decisions were stalled. However, in more recent years, the intention of developing this region was renewed.

Research employed case study-oriented examination and analysis of project documents, and the more recent National Strategic Plan for Urban Development to determine the feasibility of the current official approach. Discussions with the head of the 2009 planning team[2] provided an understanding of planning processes. Furthermore, conversations with a former upper-tier official from the Ministry of Agriculture[3] provided insights into the Ministry's considerations towards agricultural development in the region. In addition, the author was a member of the regional planning consultancy. These provide multiple relevant perspectives on the issues surrounding development.

23.3   A Rushed Intervention

The initial idea of the GOPP was to replan the small settlement of Ras Hederba, which was initially constructed in 1998 to attract further population and help settle the nomadic people in the area. This project was intended to stimulate a demographic footprint and further establish Egypt's sovereignty in the region. However, the renewed claims of Sudan increased pressure to deliver a planning product (Fig. 23.2).

The settlement and the surrounding area were severely underpopulated, with fewer than 500 inhabitants (GOPP 2011). Initially, the planning team rushed to produce several alternate plans to develop the settlement including the nomadic population and people from other locations in Egypt. However, the existing activities in the area were limited in magnitude and diversity, which limited the potential to attract more people to the area (GOPP 2011).

Due to these conditions, the planning team suggested that the GOPP takes the planning initiative to the regional level. They argued that a tangible change in the region's demographic settings required a comprehensive regional development perspective. Such a plan would introduce new economic activities and job opportunities and make better use of available natural resources. In addition, this plan had a greater likelihood of stimulating population growth in the region by drawing on internal migration driven by job seekers. The GOPP approved the plan at the end of 2009, and the comprehensive regional planning process was underway.

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[2] The former head of the planning team is Prof. Dr. Shafak El Wakil, emeritus professor of urban and regional planning—Ain Shams University.

[3] The former official is Dr. AbdelRahman AbdelMaguid, former deputy Minister of the Ministry of Agriculture.

Fig. 23.2 Initial structural plan for the village of Ras Hederba. *Source* Serag (2010)

23.4 The Working Team

The GOPP created a planning team from the first mall settlement phase. The team was headed by a senior urban and regional planning consultant assisted by a regional planning expert. Consultants included urban and regional planning specialists, demographics and social studies, economic studies, geological studies, remote sensing, road networks, renewable energy and power supply, and water resources. In addition, the team was supported by a working group in the field that provided field surveys and infield data gathering in the initial stages of the work. Several characteristics of the Halayeb triangle challenged previous development attempts. While some of these factors were already understood and others anticipated based on previous efforts, many were unknown.

23.5 The Political Dispute and Economic Activities

Disputed sovereignty over the region became critical in the 1990s when Sudan attempted to extract crude oil from the region (Briney 2017). Egypt stopped the initiative, which exacerbated the tension between the two countries. Since the 1990s, no further attempts have been made to utilise any natural resources in the region. Illegal smuggling and human trafficking are common along the border, mainly since the region serves as a transitional zone for people seeking to migrate to Europe from

Sudan and other regions in Africa (Serag 2010). In addition, there are few basic and traditional activities. For example, the nomadic endogenous population raise sheep and engage in cross-border camel trading; the long shorelines of the Red Sea support fishing and boat repair (GOPP 2011). Due to these factors, attempts to expand existing activities or introduce new ones have been limited.

23.6 Socio-cultural Issues

A variety of socio-cultural factors characterise the region (GOPP 2011). One characteristic is underpopulation. The entire region of approximately 20,000 km^2 has an estimated population of fewer than 20,000 people. Most of the population in the region is nomadic or of nomadic background. There are three main tribes: the Ababda, the Basharia, and the Rashaida, and they share a distinct language, *Bega*.

To many, the concept of national citizenship is unclear, so the concept of an international border is irrelevant to them, and people move freely. Because citizenship is not well developed, loyalty is usually given to the side that provides more assistance and services. Although the Egyptian government assisted in the late 1990s (Abdel Hakim 1998), the quality and quantity of the provided services were questionable.

The nomadic background is reflected in many aspects of the culture and lifestyle, which has impacted urban development considerations in many ways. Attempts to introduce modern housing have been unsuccessful because they did not consider traditional patterns and beliefs. For example, the nomadic population avoids living in houses where the toilet is part of the house; they consider the toilet where the devil is and prefer it to be separate. As a result, nomadic populations eschew modern homes for traditional houses with fenced areas for livestock (Fig. 23.3).

23.7 Human Settlements, Infrastructure and Services

There are fewer than 20 settlements in the region; the two largest cities, Halayeb and Shalateen, are separated by 180 km. The closest airport is 290 km from Shalateen, and there is no inter-regional public transportation.

The settlements are all located near the coast and are mainly connected by the regional road. Services provided to these settlements are insufficient in quality and adequacy, especially health care and educational services. In addition, there are stark shortages in water supply, power and sewage networks (GOPP 2011). Ras Hederba, located only 7 km from the border, is an example. Electricity is only available for eight hours daily. Freshwater in tanks is brought in by truck every four days; otherwise, water is obtained from local wells.

Fig. 23.3 Water is brought in tanks four times per week to Ras Hederba. *Source* GOPP (2011)

23.8 Natural Resources

Planning teams conducted an extensive study to identify available resources that can be utilised to initiate economic activities that can develop the region (GOPP 2011):

- Minerals include crude oil, iron, and possible radioactive substances, such as uranium and black sand, which can contain rare earth elements.
- Natural attractions such as the long natural shoreline with coral reefs exist along the Red Sea; other natural areas in the region, such as Elba Mountain and the Valley of the Camels, are scenic natural sites.
- The fishing industry, although nascent, exists along the Red Sea and provides access to significant quantities and varieties of fish; it has the potential to contribute to the region's food security.
- Solar energy is plentiful—the region has approximately 90% sunshine annually—and there is potential for wind energy in certain areas.
- Agriculture, although limited, is potentially feasible; according to the former official of the Ministry of Agriculture, the most reasonable way of supporting agriculture in the region would be through water harvesting, collecting runoff water instead of using it in other applications.[4]

Water resources pose the main challenge. According to the estimates of the remote sensing consultants,[5] underground water resources are estimated to be sufficient for

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[4] This definition is illustrated by the FAO, http://www.fao.org/docrep/u3160e/u3160e03.htm, last accessed July 2018.

[5] Among them is Professor Farouk El Baz, an Egyptian-American space scientist and consultant known for his work with NASA and in remote sensing earth monitoring.

only sustaining the living needs of the population; there is limited potential for use in land reclamation and agricultural activities.

Based on these resources, the planning process relied on the concept of sieve mapping, which was carried out by the planning team.

23.9 The Planning Process

One of the planning team's problems was the scarcity of accurate and current maps. Apart from satellite images that were primarily available through sources such as google.com and the data provided by the field team, no proper survey maps were available. However, the planning teams could access survey maps of North Africa and the Middle East through online archives of the University of Texas. Made almost five decades earlier by the United States Army Corps of Engineers in 1956 and 1964, they showed the locations of the existing settlements, roads, and pathways of that period.

The urban and regional planning consultants worked on a long process of updating and justifying the old maps with satellite images. Their goals were to validate the presence of the settlements shown in the old maps, categorise the inhabited and the deserted settlements at the time of the 2009–2010 project, and validate and categorise the roads and desert pathways indicated on the old maps (Fig. 23.4).

Fig. 23.4 Existing settlements in the region as justified by the planning team on old maps. The blue circles show the three main settlements Shalateen to the north and Abu Ramad and Halayeb to the south. The red circles show smaller or former settlements, while the triangles show border locations. *Source* GOPP (2011)

23.10   Setting Guidelines

Based on the situation studies, the consultants established guidelines to be followed during the preparation of the development perspective for the region:

1. Use identified locations of former and present human settlements connected by the different roads and desert pathways as crucial points—The fact that these locations survived during caravans supported their continued use subject to the availability of water sources, natural resources, and development assets.
2. Develop settlements close to international borders to include activities related to cross-border trade with Sudan—Such elements will transition tense cross-border relationships towards a more cooperative relationship, strengthen national security related to previous political disputes and ensure sovereignty.[6]
3. Increase reliance upon renewable energy resources such as solar and wind power—In several areas of the region, the consultants found a lack of connectivity. As a result, renewable energy sources were proposed to accelerate development.
4. Expand water desalination to supplement groundwater sources and overcome water supply shortages—The locations of natural groundwater wells were identified; in most cases, they were close to deserted and inhabited settlements. The potential to rely on water from ground sources was subject to supply and quality.

Due to the limited water supply, there was little scope for increasing agricultural activity; the potential to meet local populations' needs further limited agriculture's feasibility.

23.11   The Development Perspective

Based on these considerations, the planning team developed a regional development vision. It considered the available assets and resources in the region and identified the possible locations to establish or develop human settlements.

This perspective was formulated to include two main growth poles in the region, Shalateen in the north and Halayeb in the south, with a coastal zone in between them to act as a development axis. The activities along this axis would mainly be related to tourism, services, and marine transportation across the Red Sea. The idea was to replicate, in a measured way, the coastal tourism development of the 1980s and 1990s in key locations within the coastal areas of the Red Sea, such as Mersa Alam (Fakhry 2018). In addition, this plan could realise that proper connectivity and accessibility to the region could be achieved by increasing maritime transportation and constructing an airport to serve the region.

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[6] This was considered in light of successful cross-border cooperation of inter-European networks that improved relationships in Europe compared to traditional nation-states (Bellini and Hilpert 2013).

Smaller development areas were introduced based on existing resources in more remote areas of the region. For example, some areas would have small industrial sites based on available mineral resources; others would be based on safari and desert tourism, and a few would rely on agriculture. In all cases, choices ensured that these locations were accessible by existing roads or roads to be developed based on desert routes identified earlier by the planning team.

Finally, developing and constructing five border settlements were suggested; these would have included international trade markets to regulate the international trade coming from Sudan and better define border areas. This would reduce the chances of future disputes (GOPP 2011).

Economic studies can develop certain activities and industries based on available assets. Therefore, the number of job opportunities that could be generated was calculated. Based on the current population, 61,000 job opportunities would be created within 17 years *ibid* (Fig. 23.5).

However, the population was insufficient to establish an Egyptian presence in the region. As a result, consultants were requested to introduce an element to boost the region's pace and realise a significant population presence.

Fig. 23.5 Regional development plan relied on a coastal tourism area combined with maritime transportation and fishing. This introduced industrial and agricultural development projects according to the location and magnitude of the natural and water resources in the region and safari-based tourism. *Source* GOPP (2011)

23.12   A Theme Park in the South

A suggestion was made to the planning consultants to incorporate a theme park similar to the Walt Disney Company's US and international properties. The reasoning was that a well-known theme park would serve as a flagship in the region and attract tourists from Africa and the Middle East while creating job opportunities. In addition, the rationale continued that a theme park would stimulate spin-off tourism-related projects such as accommodations and services and attract more job seekers to the region.

The consultancy team developed two alternatives based on this suggestion that included a theme park as the main flagship project; one was a critical coastal development, and the other alternative was an inland project in the interior of the Halayeb triangle. The two new alternates did not rule out suggestions made by the first; instead, they retained them as secondary elements in the development plan. Although the specific calculation of the estimated job opportunities to be created based on the theme park concepts and the estimated population were not calculated accurately, they aimed to attract a quarter of a million inhabitants to the region.

23.13   A Frog Leap in Development or an Unrealistic Demand?

Even though these two extra alternates were included in the final report of the regional development vision, it was questioned whether they were viable (Fig. 23.6).

Perhaps, the notion of making such a project in this remote and peripheral area was influenced by other successful cases of constructing theme parks, such as Walt Disney World in Orlando, Florida. The development of the Disney theme park led to the transformation of Orlando from a so-called citrus city in which economic
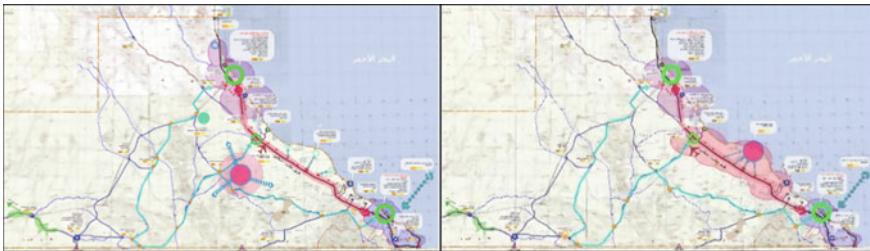
Fig. 23.6 Two regional development proposals for the region after introducing a theme park project to act as the flagship project and the central growth pole in the region. This was to be combined with other economic bases with different growth poles along the coastline. *Source* GOPP (2011)

activities were based on services and agriculture towards a tourist-oriented path-dependent economy that generated 66,000 job opportunities related to the tourism sector (Foglesong 2003).

The main issue that would face initiating such a project was the political instability of the region and the country. The region was subject to a protracted border dispute and political instability, such as the period that followed the January 2011 revolution and continued until 2015. Therefore, the success of starting such a project with an international partner or investor would have been very questionable in 2011. Moreover, the international hesitance to invest in Egypt has continued until recently (Macropolis.net 2014).

In addition, national investment in such a project was unlikely due to the stark economic crises in Egypt and the demand for other priority projects. Therefore, further feasibility and investment studies would have been necessary to consider the option. Even if carried out, it was anticipated that the required numbers of visitors and workers would have been insufficient.

The first proposal for regional development was based on multiple economic models, mainly coastal tourism. This approach was applied previously in different regions in Egypt. However, Egypt's tourism sector was fragile and would be impacted if any violent incident occurred. Moreover, the tourism industry almost halted following the 2011 and 2013 revolutions (Egyptian Streets 2018). Therefore, the planning team attempted to introduce other economic bases, industries, and services to avoid relying entirely on such a fragile sector.

The work on the project was suspended in May 2011 after submitting the final report for the regional development vision. It remained stagnant for almost three years before it was reconsidered in 2014, following the second revolution in June 2013.

23.14 An Overambitious Vision?

In early 2014 the National Strategic Plan for Urban Development was announced by the GOPP. The plan illustrated how different regions in Egypt would be developed over the next 40 years and then 100 years. It showed how the expected population of Egypt, forecasted to reach 152 million inhabitants in 40 years, would be distributed over different regions based on the job opportunities generated by proposed economic bases. For example, the population predicted to inhabit the Halayeb triangle region would reach three million inhabitants who would rely on nearly one million job opportunities (GOPP 1985).

The document included activities similar to the first proposal introduced by the planning consultants. However, there was a striking difference between the estimated 61,000 inhabitants forecast by the planning team and the one million inhabitants proposed in the GOPP's 2014 document (Fig. 23.7).

Fig. 23.7 National Strategic Plan for Urban Development released in 2014 shows the intended population distribution in 2052 vis-a-vis the expected job opportunities to be created. *Source* GOPP (2014)

23.15 Similar Past Development Attempts Were not Successful

Comparison of the intended population under the regional development initiative against the earlier cases of regional development in Egypt during the second half of the twentieth century shows that most attempts to redistribute the population to increase residents in specific locations had failed. An example is the regional development plan set for the Sinai Peninsula in the 1980s and 1990s that sought to increase the population to three million by 2000 (Dames and Moore 1985). This expectation was never realised; the current Sinai population is less than 600,000 inhabitants (CAPMAS 2018). Several attempts to develop the Western Desert of Egypt (The New Valley region) began in the 1960s. This region, approximately one-third of the total land area of Egypt, only reached a total of 250,000 inhabitants, far short of the one million population goal (CAPMAS 2018).

These efforts demonstrate that increasing the population in the region from under 30,000 inhabitants to three million inhabitants was not realistic for various reasons. Among the most critical was the lack of water resources in the region. Therefore, any increase in population would require the issue of water shortage first to be resolved.

23.16 The New Administrative Capital and Other Cities Under Construction

The government plans to build a new administrative capital east of the Greater Cairo Region (GCR) to host five million inhabitants (http://thecapitalcairo.com/ 2016). At the same time, the government's first phase of the new Alamin city is underway. This city is predicted to be home to at least three million inhabitants (Hassan 2017). The government's ability to realise these contrasts with development attempts to increase the population in the Halayeb triangle and invite comparison.

However, there are many significant differences between the new administrative capital and the new Alamin city and efforts to develop the Halayeb triangle. The new administrative capital case is adjacent to the GCR and can draw on its population and significant infrastructure to accelerate development. On the other hand, the new Alamain city is located in a region with substantial infrastructure networks and economic bases that could be utilised. Nevertheless, both cases are still being developed, and their outcomes are unknown.

23.17 Recommendations for Developing the Region

In recent months, the government has constructed projects in the region. For example, two fishing ports were finalised in the region and a desalination plant from seawater (Egypt Independent 2018). Although these small projects and initiatives will help develop the region, further steps are needed to ensure tangible results for development. In addition, political disputes are ongoing. Despite an earlier agreement between Egypt and Sudan that the region belongs to Egypt, a renewed claim and complaint was made by Sudan in 2018 to the United Nations. Due to these factors that increased the border political dispute to post-2011 levels, there is a renewed urge to develop the region (Azikiwe 2018).

Efforts to ensure a tangible Egyptian presence in the Halayeb triangle through development will require consideration of natural resources and other context issues to be successful. Therefore, strategic actions can be prioritised in the following ways:

- Establish border settlements as centres for international trade—Border settlements could benefit both sides by building on the existing trade and promoting the area as a cooperative region rather than a place of dispute.
- Address the water supply issue—Without needed water, the region's capacity will remain limited, and it will not sustain an increase in population. Various reliable water sources that can sustain industries, including agriculture and the associated populations, should be considered and implemented.
- Provide sufficient quality services—An increase in population will require good quality services, ensuring their sense of citizenship.
- Supply sufficient and appropriate resources—Specific resources will be required for different economic activities necessary to increase regional development.

Farmers from other regions with experience should be attracted if agriculture is introduced.

- Establish connectivity and accessibility—An airport to serve the region and roads with adequate transportation modes are required. At the same time, maritime transportation of goods and people to the rest of Egypt can be achieved by constructing more seaports. Marine transportation can also serve tourism with neighbouring countries such as Saudi Arabia, whose ports are four hours across the Red Sea.
- Focus development—The development of several key locations will ensure that reasonable growth poles that can have spin-off effects in the future are successfully established.

Discussion with the head of the former planning team, she explained her views of the 2014 plan and proposals made from 2009–2011. The 2014 development plan for an increase in population to three million inhabitants was overambitious. However, the 2009–2011 development plan was more feasible. A mega project would be adequate to accelerate development rather than serve as the main economic base; dependency on a single sector would jeopardise the regional economy and lead to collapse if the mega project failed.

The development of the Halayeb triangle is of socio-economic and political importance to Egypt. However, it cannot be achieved with current natural resources. As a result, the triangle has overlooked the potentialities of cross-border cooperation, which can achieve mutual benefits for both sides and move beyond the current border tensions to a state of full-scale border cooperation.

References

Abdel Hakim S (1998) General overview on the Halayeb triangle. In: The symposium for setting a comprehensive development vision to the Halayeb triangle. African research and studies centre-Cairo University.

Azikiwe A (2018) Sudan-Egypt relations further strained over territorial dispute. In: The Hala'ib Triangle. https://www.globalresearch.ca/sudan-egypt-relations-further-strained-over-territorial-dispute-the-halaib-triangle/5625724. Accessed 13 July 2018

Bellini N, Hilpert U (2013) Europe's changing geography in perspective. In: Bellini N, Hilpert U (eds) Europe's changing geography: the impact of inter-regional networks. Routledge

Briney A (2017) The Halayeb triangle, historically disputed land between Sudan and Egypt. thoughtco.com, https://www.thoughtco.com/halayeb-triangle-1435449. Last accessed 13 July 2018

CAPMAS (2018) Annual Population census in http://www.capmas.gov.eg/Pages/populationClock.aspx. Last accessed 13 July 2018

Dames and Moore (1985) Sinai development study: phase 1-final report. Ministry of Development, New Communities and Land Reclamation, Cairo

Egyptian streets (2018) Tourism in Egypt set to sour in 2018. https://egyptianstreets.com/2018/03/29/tourism-in-egypt-set-to-soar-in-2018/. Last accessed 12 July 2018

Fakhry S (2018) Destination Mersa Alam. In: Al Ahram weekly. http://weekly.ahram.org.eg/News/17162.aspx. Last accessed 13 July 2018

Foglesong R (2003) Married to the mouse. Yale University Press

GOPP (1985) National strategic plan of urban development and the priority development areas, 2014.

GOPP (2011) Setting the comprehensive development plan for the region of Halayeb—Shalateen report

Hassan A (2017) Al Alamin Al Gedida, first city from the fourth generation (in Arabic), in Youm 7 daily newspaper. https://www.youm7.com/story/2017/10/18/. Last accessed 13 July 2018

http://thecapitalcairo.com/ (2016). Last accessed 13 July 2018

Egypt Independent (2018) Egypt constructs two fishing ports in Halayeb triangle. http://www.egyptindependent.com/egypt-constructs-2-fishing-ports-in-halayeb-triangle/. Last accessed 12 July 2018

Macropolis.net (2014). Foreign direct investment: Egypt remains an attractive FDI destination. https://www.marcopolis.net/foreign-direct-investments-egypt-remains-an-attractive-fdi-destination.htm. Last accessed 12 July 2018

Serag Y (2010) Border settlements in Egypt: between trans-border cooperation and defending the sovereignty of the country. In: Proceedings of the regional studies association annual conference. Pecs, Hungary

Chapter 24
Contested Border Urbanism: Learning from the Cyprus Dispute

Melehat Nil Gülari and Cecilia Zecca

Abstract The narratives of *space*, *place* and *identity* provide a basis to analyse the meanings of borders for Cypriots living in the north and south of the island. The historical background of the conflict in Cyprus introduces mixed villages and traces the importance of walls and borders in the urban fabric of Nicosia, Europe's last divided capital. We analysed narratives of crossing borders when they were opened every day, crossing on Ledra Palace/Lokmacı Street in Nicosia after three decades of closure. Opening this path would transform the dynamics of deep-rooted ethnic divisions and foreground shared cultures that draw on Nancy's concept of inoperative community (Nancy 1991) and Agamben's Coming Community (Agamben 1993). Analysis of two examples against the background of de Certeaus' concepts of everyday life (de Certeau 1984) informs this urban epistemology: Home for Cooperation and a learning centre/café. These two spaces are neutral in the buffer zone/borderland for unified collectivity and "Occupy Buffer Zone Movement" activities, occupying a non-place and transforming into a public square through grassroots activism. Cypriot history is complex and eclectic. It requires anti-essentialist acceptance of its multiple origins to imagine the future of urban territories in Cyprus. The communities of the temporal civic grassroots are particularly intriguing to challenge the top-down urbanism models and understanding of community and being in common. They produce and re-appropriate public space through collective participation, alter the spatial perception, approach the borders, and redefine urban space.

Keywords Collective memory · Contested urbanism · Urban identity · Public sphere · Production of space · Cyprus dispute

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24.1 Introduction

Urbanism provides many encounters between different perspectives to envision a desirable future, often dealing with conflicts. Whether small or big, these conflicts are unavoidable between various parties, and they may evoke new forms of negotiated collaboration.

Whilst prioritising economically and environmentally sustainable development and attractive and safe places, the field of urban design lacks social content due to the presence of top-down approaches and using neo-liberalism and global capitalism instruments (Carmona 2014). Studying contested cities in the context of borders helps address these criticisms. Moreover, it necessitates understanding challenges stemming from ethnic, racial and class issues that are significant in revisiting the theories of urbanism, foregrounding participation, representation, access and identity of grassroots communities over housing and infrastructure issues.

As Relph (1976, p. 147) noted in his seminal book, place and placelessness, quoting:

> A deep human need exists for associations with significant places. If we choose to ignore that need and follow the forces of placelessness to continue unchallenged, then the future can only hold an environment in which places simply do not matter.

Similarly, Peck (2015, p. 162) states,

> the ongoing work of remaking of urban theory must occur across cases, which means confronting and problematising substantive connectivity, recurrent processes and relational power relations, in addition to documenting difference, in a "contrastive" manner, between cities. It must also occur across scales, positioning the urban scale itself, and working to locate cities not just within lateral grids of difference, in the "planar" dimension, but relational and conjuncture terms as well.

Studies on contested urban space by Brand (2009), Bollens (2012), Gaffikin et al. (2010), and Pullan and Baillie (2013) present the core issues of the Cyprus dispute that spurred worldwide attention. However, the characteristic of the Cyprus case, with its intellectual strength and complexity, deserves further attention.

The historical background of the conflict in Cyprus provides an overview of its mixed villages without borders and the meaning of walls and borders in the urban fabric of Nicosia, Europe's last divided capital. These are best demonstrated by narratives of crossing recently reopened borders on Ledra Palace/Lokmacı Street in Nicosia. Collective memory and architectural identity highlight their role in urban planning, and analysing two civic and grassroots examples provides a basis for urban models and solution trajectories in contested cities.

24.2 A Brief History of Cyprus and The Mixed Villages

Cyprus was once a beacon of Christian–Muslim shared cultures, which is perhaps a romanticised view at present. However, Greek and Turkish Cypriots lived together

peacefully in shared villages for 400 years (from the 1571 Ottoman rule) before breaking the historical ties. The bi-communal villages of united Cyprus evidenced being together and in communal harmony.

The British took over the island in 1878, and according to their census data, in 1891, 43% (346 villages) of Cyprus villages were mixed (Lytras and Psaltis 2011). However, this coexistence began to deteriorate around 1821 with the rise of Greek nationalism and the Greek revolution against the Ottoman Empire in Turkey. Locals supported the change when the Ottoman administration executed the island's Orthodox Church leaders, wrongly suspected of supporting the Greek revolution (ibid).

Further conflicts between Greece and Turkey coincided with WWI, leading to a fall in the percentage of mixed villages to 36% (252) by 1931 (ibid). Intercommunal violence claimed many British, Turkish and Greek Cypriot's lives. Along with a campaign for a separatist area of Turkish Cyprus, mixed villages fell to 18% in 1960. For another decade, Cypriots lived in a nightmare–a tense state of emergency– violence, regular murders, and mysterious disappearances were rampant on the island (Hughes-Wilson 2011). The United Nations established a buffer zone between the two political entities during the 1963 hostilities as a cease-fire zone known as the Green Line.

By 1970, mixed villages had fallen to 10% (Lytras and Psaltis 2011). The military invasion of Turkey in 1974 took place after a coup organised by the military junta government in Greece against the President of the Republic of Cyprus, Makarios. Turkey occupied a third of the island, from the northern shores up to the Green Line, dividing the walled city of Nicosia into two.

For about 18 months, around 185,000 Greek Cypriots had to move to the southern two-thirds of the island, and some 45,000 Turkish Cypriots moved north and settled in the Greek houses (Webster and Timothy 2006). In 1983, the Turkish Cyprus President, Rauf Denktaş, self-declared this territory as a sovereign republic, the Turkish Republic of Northern Cyprus, only officially recognised by Turkey (Kliot and Mansfeld 1997). The border was sealed for both ethnic groups for three decades until 2003.

Pyla is now the only mixed village on the island. Turkish Cypriot and Greek Cypriot coffee shops can coexist on either side of the main square. It is possible to hear both languages spoken in the streets and enjoy the city skyline with an impressive church and the nearby minaret village mosque. The communal harmony in Pyla keeps the hope of a united Cyprus alive, yet it is relatively weak. Table 24.1 demonstrates the number of mixed villages in Cyprus between 1891 and 1970.

Table 24.1 Mixed villages in Cyprus (Lytras and Psaltis 2011)

Year	Mixed villages	GC villages	TC villages	Total villages	% mixed	% GC	% TC
1891	346	342	114	802	43	43	14
1931	252	358	84	694	36	52	12
1960	114	392	117	623	18	63	19
1970	48	444	11	503	10	88	2

24.3   Border

> The city does not exist; what exists are different and distinct forms of urban lives. Massimo
> Cacciari, Italian philosopher (cited in Cacciari 2004).

For more than four decades, Nicosia had been a divided city representing the capital of
the Republic of Cyprus and the Turkish Republic of Northern Cyprus. The medieval
Venetian city walls, as the first borders of Nicosia, serve as a standard historical
reference. Along with the buffer zone, they are the two main spatial entities forming
the urban fabric in Nicosia. On the map, the buffer zone stretches 185 km from west
to east, with a width ranging from 7.4 km in some rural areas to only 3.3 m in the
centre of Nicosia's Walled City. It is hard to sense where the buffer zone ends due to
the space's visual, spatial and functional discontinuity. Moreover, it is now restricted
to any human activity and subject to UN control, emptying the urban fabric at the
city centre.

This political void creates different architecture and urban layout scales and
diverse functions and rhythms in each urban subset in the south and north. Commercial and residential activities have been pushed away from the borderline. The city
has been growing in opposite directions away from each other, keeping borders as
a symbol of the dire political instrument. The expanded city outside the borders of
south Nicosia acts as a contemporary city with its wide pavements, multinational
shops, multi-floor office buildings, car traffic, and circulation. In contrast, close to
the borders, the old part has single or two-storey buildings with a handful of shops
and narrow old streets.

The void of separation, the green line, is an inconsequential wall made of fences,
pilled barrels, gates and filled sandbags. The green line is a variegated fracture that
generated a multi-clustered city and a fragmented city centre idea. Even if traditional
materiality is not always constructed in Nicosia, it is still possible to call the entire
line a "wall" to better describe the concept of political division.

Wall, as a symbol of conflict, is the material manifestation of political boundaries and state power. Walls have multiple meanings, fear, division and separation,
security, protection and order. The wall means protection, security and peace for the
northern side, whereas, for the southern side, the wall is a temporal division, unacceptable and illegitimate (Iliopoulou and Karathanasis 2014; Dikomitis 2005). The
physical appearance of the wall from each side of the buffer zone illustrates different
assertions. Whilst Turkish Cypriot border walls appear more permanent and lasting.
The Greek Cypriot ones seem more temporal, ready to be removed (See Figs. 24.1
and 24.2 for comparison).

The rejection of the border is expressed in different ways and contradictory
manners. Dikomitis (2005) laid out two revealing narratives of border crossing after
the sealed borders were opened again in 2003. The first position is refusal: some Greek
Cypriots refuse to cross the border based on illegitimacy. According to them, crossing
the border recognises the self-declared country in northern Cyprus. However, refusing
to cross acknowledges the very existence of the border and strengthens it.

Fig. 24.1   Wall from the Turkish Cyprus side. *Source* wikimedia.org

Fig. 24.2   Wall from the Greek Cyprus side. *Source* wikimedia.org

On the other hand, shoppers cross the border almost daily to run their errands and shop at the opposite position. They recognise the border yet act as if it does not exist. They practically deny the existence of the border by ignoring it (ibid). Jones (2012) talks about "spaces of refusal." Although to him, people may sometimes accept the existence of state borders, "at other times they continue to think and live in alternative configurations that maintain connections across, through, and around sovereign state territoriality" (p. 697).

The buffer zone and walls were once introduced as a quick solution to reduce conflicts and now perpetuate the dispute of Greek/Turkish Cypriots' communal life, which otherwise exists only in the memory of its people. Halbwachs (1950) suggests "every collective memory unfolds within a spatial framework."

24.4 Collective Memory and Urban Architectural Identity

As memory slowly turns to history, what is temporary has never changed. Therefore, neither Greek nor Turkish developing a unified collective identity is central to a sustainable future and community.

The subjective and distorted interpretation of past events and heterogeneous memories constructed each side's self-validated national narratives. As a result, they accept their own as victims and *others* as guilty/enemies. Cyprus' traumatic memories include communal killings, violence, hatred, confusion and dispute. Halbwachs (1950) indicates that individual memory or consciousness is inseparable from collective memory. The younger generations in Cyprus that did not experience each other's historical conflict in their daily lives are raised to tolerate each other due to the education system, media and political agenda. This culture differs from Israelis and Palestinians, who live side by side. Almost half a century ago, history froze the two communities' perceptions and preconceptions.

In Cyprus, two opposing narratives construct identities for both sides (Karahasan 2005). The official Greek Cypriot narrative focuses on 1955–1960 and 1974, whilst the official Turkish Cypriot narrative focuses on 1963–1967. Karahasan suggests that although these narratives appear opposing and different, they are similar methods and definitions. They are "the two sides of the same coin." This is also visible in the "Museum of National Struggle", built at both the Northern and Southern sides of the wall to illustrate the struggle and remembrance of the harmonious relationship in history. They are the material and symbolic architectures of division and exclusion. The Turkish Cypriot Museum, located in the walled city, was dedicated between 1963 and 1983. It demonstrates the struggle against the Greek Cypriots and the violence in the 1960s, which ended up with the invasion by Turkey in 1974 as well as the independence of Northern Cyprus in 1983 (see Fig. 24.3 Unutmayacağız, We will not forget. The image demonstrates the list of people who have died during the struggle).

The Greek Cypriot Museum of National Struggle, also built within the walled city, focuses on the 1955–1960 period. It illustrates that Greek Cyprus fought the

Fig. 24.3 *Unutmaycağız* (We won't forget), The Museum of National Struggle, Northern Cyprus. *Source* https://cyprusscene.com/2018/07/18/north-cyprus-museum-of-national-struggle-and-tmt/

British for independence. In addition, it highlights the activities of the paramilitary EOKA (National Organisation of Cypriot Struggle) and the movement for enosis or unification with Greece (See Fig. 24.4).

The conflict is fuelled by politicians, the complicated education system and the media on both sides (Papadakis 2008). In addition, antagonistic ideas of place and territory, and selective memories, created fears, choosing certain aspects of the past to perpetuate the division and serve as a political propaganda instrument. "The communal conflict between Greeks and Turks in Cyprus has proved intractable for centuries," stated Henry Kissinger, former US secretary of state (Mallinson 2016, p. xxvii).

Tassos Sotiriou, 76, pointed to the light blue banner flying over a UN observation post. "Why do they have to guarantee anything? We do not need them to be at peace,[…] I feel like a prisoner in the very place where I was born.[…].Back in the day, Cyprus was a paradise; you could not tell who was Muslim, Orthodox, Greek or Turkish"(Tassos Sotiriou Interview 2018).

Cypriots have continuously been reminded that they are two very different nations with different languages, ethnicities, religions, and traditions. Whilst trying to strengthen their identity, the division has transformed the characteristics of Cypriot identity. According to Harry Tzimitras from the Peace Research Institute Oslo Cyprus Centre, "the common shared Cypriot identity is being watered down […] since the Greek Cypriots became more Hellenic, whilst Turkish Cypriots became more "Turk-ified." Naturally, Turkish Cypriots react against Turkification. Goker (2007) suggests that Turkish Cypriots, regardless of their political ideologies, distinguish themselves

Fig. 24.4 Museum of National Struggle, Southern Cyprus. *Source* Wikimedia commons

from the Turkish settlers of Cyprus and find themselves modern, open and European compared to Turkish settlers.

The architectural context is eclectic and another factor that forms identities in Cyprus. Although mass tourism has been destroying the remains of former common Cypriot elements, the historical memory is still significant and serves to identify Cyprus' multi-layered history. Specific stylistic traits belong to Cyprus's specific races, ethnic groups or nations. For example, the domes are Byzantine, with pointed arches Frankish, broad eaves as Ottoman and wide verandas as British colonial.

The multiplicity of these layers and their role in forming Cyprus's architectural identity are more complex than they appear. For example, in the village of Peristerona, there is an eighteenth-century abandoned mosque. The mosque was converted from a Gothic/Lusignan church. It is one of many examples of the conversion of Catholic churches into other functions.

After the Ottoman occupation of Nicosia in 1570, Ayia Sophia was turned into a mosque and continued as essential Cathedral-mosques of the city. Ottoman policy left Orthodox churches for the Greek Cypriots to worship in but converted the Catholic churches of their Latin predecessors into mosques. This gave rise to a distinctive Ottoman Gothic style that characterised major Ottoman city mosques like Ayia Sophia or Aya Sofya (renamed Selimiye Cami in 1954); Haidar Pasha Camisi (St. Catherine's Church, fourteenth century).

24.5   Being in Common

> Nothing is more instructive than the way Spinoza conceives of the common. All bodies, he says, have it in common to express the divine attributes of extension and yet what is common cannot in any case constitute the essence of the single case. Decisive here is the idea of an inessential commonality, a solidarity that in no way concerns an essence. Taking place, the communication of singularities in the attribute of extension, does not unite them in essence but scatters them in existence.

Agamben (1993, pp. 18–19).

The establishment of nation-states has created an official history with a narrative that fails to envisage pluralism. The notion of community as a unified continuous, and enclosed collective deserves to be questioned. This perhaps appears as a romanticised view of the community, seeking to appeal to shared understanding as the foundation for values that idealises modern society as a harmonious, non-conflictual community.

Even if it excludes the unfavourable conditions of Cyprus and other contested cities, complex relations and networks of power should be recognised as an inevitable factor in constituting the notion of community. Grounded upon the thinking of the philosopher Jean-Luc Nancy, in his book, The Inoperative Community (1991), emphasises the importance of not defining the essence of community in the sense of a model. Instead, it is a matter of thinking about the community rather than modelling or remodelling the community. Perhaps, this is one problem in Cyprus that the community has been engineered and re-engineered.

Nancy (1991, p. 22) alludes that community is our human condition, i.e. not a thing to be constructed. He explores an alternative path between myth and nihilism and traditional unitary communities and community absence. His idea of "community without community" (1991, p. 71) suggests that community is a concept that does not guarantee meaning, identity, or belonging; a concept that does not have an essence—that of a unified collectivity. His thinking implies different ethical attitudes in addressing/exposing, and establishing ties with communities. *Anti-totalitarianism*, the "multiplicity of voices", and the "recognition of the other found" in Nancy's thinking could inform the basis of our approach whilst looking at divided communities situated on either side of the green line about urban epistemology. According to Hou and colleagues (2015, p. 3), the urban context results from a complex interaction between "cultural structures, social values, individual and collective actions and observations of the material arrangements."

Two examples of unified collectivity in the buffer zone are analysed. The first is the Home for Cooperation building, an intercommunal education centre and cafe. The second one is Occupy Buffer one Movement and how it transformed a non-place into a shared public place. Home for Cooperation (HC4), a landmark building of peace, is a neutral space yet not trapped in-betweenness. It was constructed in the early 1950s for residential and commercial purposes. However, after being caught in the crossfire in 1974, it was unused for three decades until the Association for Historical Dialogue and Research decided to use the building as an intercommunal educational centre in the buffer zone. In 2009, European Economic Area Grants and

Norway Grants provided funds to support building renovation. It was completed in May 2011 and received the Europa Nostra "Conservation" award. The place allows several people from the south and north to come together in a safe, neutral place for exchange, providing an alternative "third space".

Occupy Buffer zone Movement (OBM) occupied the buffer zone's linear gap and transformed it into a public place, a "square," where people met, sang, drank, ate, slept, discussed, played, argued, and demonstrated. The activities and events organised by OBM in the public sphere allow people to perform their identities. However, they also create communities of collective action in which people who participate do not necessarily share the same values or even social or ethnic identities (Liopoulou and Karathanasis 2014).

These temporal communities are fascinating to challenge our top-down urbanism models. They produce and re-appropriate public space through collective participation, alter our spatial perception and define urban spaces. Moreover, the claimed new common spaces enable people from both south and north to make connections and foster greater empathy to diminish the intensity and scale of the conflict.

The strength of these civic communities draws on the simplicity of everyday practices of playing, eating, speaking and physical presence to resolve conflicts. These practices unfold the process of transforming and deepening our understanding of communities and ourselves. De Certeau sees that the practice of everyday life is the terrain of silent and tactical power production and consumption, highlighting the political dimensions of everyday life. To de Certeau,

> Many everyday practices (talking, reading, moving about, shopping, cooking, etc.) are tactical in character. And so are, more generally, many "ways of operating:" victories of the "weak" over the "strong" (whether the strength be that of powerful people or the violence of things or of an imposed order, etc.), clever tricks, knowing how to get away with things, "hunter's cunning," manoeuvres, polymorphic simulations, joyful discoveries, poetic as well as warlike. […] From the depths of the ocean to the streets of modern megalopolises, there is a continuity and permanence in these tactics. In our societies, as local stabilities break down, it is as if, no longer fixed by a circumscribed community, tactics wander out of orbit, making consumers into immigrants in a system too vast to be their own, too tightly woven for them to escape from it. But, these tactics introduce a Brownian movement into the system. They also show the extent to which intelligence is inseparable from the everyday struggles and pleasures that it articulates. Strategies, in contrast, conceal beneath objective calculations their connection with the power that sustains them from within the stronghold of its own "proper" place or institution. (de Certeau 1984, pp. xix–xx)

By drawing on the *practice of everyday life*, urban designers can imagine the physical presence in the context of the border moving between participation and observation, the guest and host, and set up the conditions of hidden narratives. This would emerge between participants to challenge the ideas around weak and strong political contexts of urban development.

The OBZ movement, in a way, raised the urban epistemology question of who is included in the community. What are the ethical boundaries of inclusion and exclusion of a community, and what contributed to the theory of urban space production and urbanism models? The grassroots movements are indispensable as they force the city to be continuously reassembled and transformed. They are vital as long as they

evoke ambitions and hopes and are inhabited and perceived. These constitute urban structural forces co-shaping the city.

As reflected by Peck (2015, p. 161),

> They are shaking up old explanatory hierarchies and pushing aside stale concepts [...] making space for a much richer plurality of voices, in a way that some have likened to a democratisation of urban theory. In the critical literature, special places have been reserved for insurgent, rogue, subaltern and alt-urbanisms, as a premium has been newly attached to the disputation of generalised theory claims through disruptive or exceptional case studies.

In 1963, the United Nations (UN) and the power elites imposed the buffer zone upon the political landscape. Still today, those groups determine the trajectory of the Cyprus conflict. However, top-down approaches and solutions seem to fail to unite Cyprus. In 2004, a referendum was held on the island for a UN agreement plan (Annan Plan) a week before the accession of the Cyprus Republic to the EU. Whilst 65% of Turkish Cypriots said yes, 76% of the Greek Cypriots said no. Since then, neither the 2014 renewed talks, the joint declaration, nor the 2017 Geneva meetings reunified the island. The solution will not come with another referendum or UN solutions. Indeed, any transition will not be a quick fix; instead, it will be gradual. Nevertheless, an impatient hope is there—Mr Mytides, from Pyla, the only mixed village on the island.

> I'd bet on Cyprus being reunited before 10 years are up. We just won't wait 10 years, we need a solution earlier. That is what we are looking for. (Judith Soteriou, English-born married to a Greek Cypriot interviewed by Dominic Bailey 2004)

Urban planning could adopt a gradual and participatory approach. This resonates in Daniel Libeskind's writing about the transformation of Alexanderplatz in post-unification.

> I believe that the idea of the totality, the finality of the master plan, is misguided. One should advocate a gradual transformation of public space, a metamorphic process, without relying on a hypothetical time in the future when everything will be perfect. (Libeskind 1995).

24.6 Conclusion

Borders create difference and otherness. In contrast, the border maintains individual identity on each side. This is experienced as an in-between state or a space of ambiguity. The separate identities were created to ensure the border's existence and maintenance and, in turn, strengthen the dispute. It is a vicious circle. Differences between groups, such as the Greeks in the east, the Turks in the west, and Christianity and Islam, are emphasised. However, similarities in lifestyle and shared history in mixed villages are often ignored. Unless the antagonistic nature of pluralism is considered, the potential to reconcile all points of view in Cyprus' conflict is unapproachable.

Looking over history for what it has been, recognising the facts and the contemporary without pre-constituted definitions is challenging for a divided bi-communal country. The misconception from war generates fear and shadow even more insuperable of a wall.

The perspectives of Nancy, Agamben and several urban theorists can connect the polarity of thoughts and differences. The Cyprus dispute highlighted identity politics, collective memory and education to homogenise and nationalise the communities and construct models in urban planning. Despite the significance of urban planning as a mechanism to address the conflict, urbanism is a "complex practice that is simultaneous, local, regional and global […] grounded in the imperfect, messy reality of the everyday" (Hou et al. 2015, p. 7).

Nicosia's complexity of urban conditions evidenced the impossibility of a city's unitary vision, form, definition, design and image. Nicosia could serve as a theoretical object to better comprehend urban processes and forms of contemporary urbanism and move beyond the single purposes of a unified city and community. It pushes the focus of urban theory beyond "ordinary" urban development challenges, such as inner-city redevelopment and the provision of affordable housing. Urbanism should follow a gradual and participatory path without constructing a community.

References

Agamben G (1993) The coming community. University of Minnesota Press, Minneapolis

Brand R (2009) Written and unwritten building conventions in a Contested City: the case of Belfast. Urban Stud 46(12):2669–2689. https://doi.org/10.1177/0042098009345538

Bollens SA (2012) City and soul in divided societies. Routledge, London

Cacciari M (2004) La citta. Pazzini Editore, Villa Verrucchio

Carmona (2014) The place-shaping continuum: a theory of urban design process. J Urban Des 19(1):2–36

De Certeau MD (1984) The practice of everyday life. University of California Press, Berkeley, CA

Dikomitis L (2005) Three readings of a border. Anthropol Today 21(5):7–12

Goker AA (2007) Being 'Cypriot' in North London: strategies, experiences and contestations, PhD Thesis, University College London, Department of Anthropology

Gaffikin F, Mceldowney M, Sterrett K (2010) Creating shared public space in the Contested City: the role of urban design. J Urban Des 15(4):493–513. https://doi.org/10.1080/13574809.2010.502338

Halbwachs M (1950) The collective memory. Harper & Row Colophon Books, New York. http://web.mit.edu/allanmc/www/hawlbachsspace.pdf

Hou J, Spencer B, Way T, Yocom K (2015) Now urbanisms. the future city is here. London, Routledge

Hughes-Wilson J (2011) The forgotten war a brief history of the battle for Cyprus 1974. RUSI J 156(5):84–93

Iliopoulou E, Karathanasis P (2014) Towards a radical politics: grassroots urban activism in the walled City of Nicosia. Cyprus Rev 26(1):169

Jones R (2012) Spaces of refusal: rethinking sovereign power and resistance at the border. Ann Assoc Am Geogr 102:685–699

Karahasan H (2005) Different narratives, different stories: the language of narrative and interpretation. J Cypr Stud 11(28–29):115+. Academic OneFile, Accessed 6 Feb 2018

Kliot N, Mansfeld Y (1997) The political landscape of partition: the case of Cyprus. Polit Geogr 16(6):495–521

Libeskind D (1995) Berlin Alexanderplatz: ideologies of design and planning and the fate of public space. J Int Instit 3(1). Retrieved on August 1, 18 from http://hdl.handle.net/2027/spo.4750978.0003.101

Lytras E, Psaltis C (2011) Formerly mixed villages in Cyprus: representations of the past, present and future. AHDR, Nicosia

Mallinson W (2016) Kissinger and the invasion of Cyprus: diplomacy in the Eastern Mediterranean. Cambridge Scholars Publishing, Newcastle Upon Tyne

Nancy J-L (1991) Inoperative community. University of Minnesota Press, Minneapolis, MN

Papadakis Y (2008) Narrative, memory and history in divided Cyprus: a comparison of school books on the history of Cyprus. History Museum 20:128–148

Peck J (2015) Cities beyond compare? Reg Stud J Reg Stud Assoc 49(1–2):160–182. https://doi.org/10.1080/00343404.2014.980801

Pullan W, Baillie B (eds) (2013) Locating urban conflicts—ethnicity, nationalism and the everyday. Palgrave Macmillan, London

Pullan W (2011) Frontier urbanism: the periphery at the centre of contested cities. J Archit 16(1):15–35

Relph E (1976) Place and placelessness. 2008 Edition. Sage, London

Soteriou Judith interview (2004) Mixed villages bets on united future retrieved on 18 Aug 2021, from http://news.bbc.co.uk/1/hi/world/europe/3658353.stm

Sotiriou T (2018) Mixed village in Cyprus buffer zone looks to offer hope. Retrieved on 1 Aug 2018 from https://www.thepeninsulaqatar.com/article/23/01/2018/Mixed-village-in-Cyprus-buffer-zone-looks-to-offer-hope

Webster C, Timothy D (2006) Travelling to the 'Other Side': the occupied zone and greek Cypriot views of crossing the green line. Tour Geogr 8(2):162–181

Part VI
Geo-politics and Social Polarities

Chapter 25
Walk the Line: Stone Walls, Lead Mines and Future Farming

Check for updates

Luke Murray and Lilly Kudic

Abstract Swaledale, an area of the Yorkshire Dales, is renowned for its ancient dry-stone wall agglomerations and prosperous mining history. However, neither its landscape nor its history, *prima facie*, have any relevance within today's society other than tourism. Traversing the path the miners took from Gunnerside to The Old Gang Mine raises the question of whether the landscape can offer insight into past acts, present attitudes and future ambitions. This consideration is especially relevant concerning the United Kingdom's decision to leave the European Union and the significance of the decision for the future of agriculture in the UK. A journey of walking across the landscape to understand it is accompanied by analogue photography, which provides a form of self-immersion into the landscape. Digital technologies such as phones and GPS were not used to minimise distraction and increase reliance on intuition and memory.

Keywords Agriculture · Stone walls · Yorkshire Dales · Mining · Topography

25.1 Introduction

The Yorkshire Dales contain habitats that bridge several levels of human-made and natural environments. At one level, there are dry-stone walls and landscape features synonymous with the English countryside and its historical development; these walls exist across the United Kingdom from Cornwall to Kent, Scotland and Wales. Each has its local design and construction techniques. This landscape within a remote locale of Richmond in the North Dales is home to an extensive and once-flourishing mining industry (54°0.24′01.4″ N, 2°02′27.4″ W).

There is extensive research on the construction methods and typologies of the walls.[1] Active field studies within the Yorkshire landscape complement the process

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[1] Brian Post's *Dry Stone Walls of the United Kingdom (2005)* is a well-illustrated work with extensive research into the construction methods of dry-stone wall construction.

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of retracing the steps taken by past inhabitants, primarily miners and farmers, by recalling memories of the areas significant historical moments.

The area researched has a rich history, one of the most significant historical legislative events were *The Inclosure Act* of the 17th and 18th centuries. Parliamentary inclosure[2] and industrialists' land holdings represented the times' political, social and economic authority. Such historical references are significant because they impacted land use in the area. In addition, they are imbued with meaning in contemporary political agendas that focus on agriculture, trade and border protection, which is particularly critical due to the Common Agricultural Policy (CAP). These issues are an intrinsic part of BREXIT negotiations, the United Kingdom's (UK) departure from the European Union (EU), and its impact on UK agriculture.

Virtual technologies were employed to assimilate the context of Richmondshire and determine contours, local towns and villages and existing footpaths. From this, a location to commence the journey was determined: Gunnerside. This was chosen as an area within one of the townships of Swaledale due to its history and proximity to others, including Artkengarthdale, Grinton, Hurst, Marrick, Muker, Reeth and Melbeck. Once determined as the starting point, technology was abandoned to direct and document the journey; instead, intuition and memory indicated the path to traverse the village and moor to the now-defunct mines. Finally, analogue photography was chosen to document and further explore the landscape instead of a digital format. The map (Fig. 25.1) shows the route traversed from Gunnerside, starting at the Methodist Church, to the Old Gang mines.

25.2 Rationale and Approach

Previous studies have addressed *The Parliamentary Inclosure Act* and its economic and political significance. Whilst many of the stone walls' practical and construction details have been documented, their relevance today appears to have been overlooked; instead, they are taken for granted and seen as things that have always been there. However, the reverse happened to The Old Gang Mine, scheduled under the *Ancient Monuments and Archaeological Areas Act 1979* on 15 January 1979. Historic England (2018) has recorded survey information relating to the mines; however, they have been intentionally and without explanation redacted. As a result, the survey does not mention the stone walls. This obfuscation compelled further first-hand observation.

Recent discussions regarding the UK's exit from the EU have meant that conversations regarding farming and agricultural policy must be reconsidered if the UK wishes to address specific challenges, as Michael Gove (2018) stated during the Oxford Farming Conference 2018. According to Gove (2018), "the world's population is growing at an unprecedented rate, with worldwide migration from rural areas to cities and a growth in the global middle class which is driving more demand for

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[2] The act of amalgamating small landholdings into larger farms resulted in less communal land.
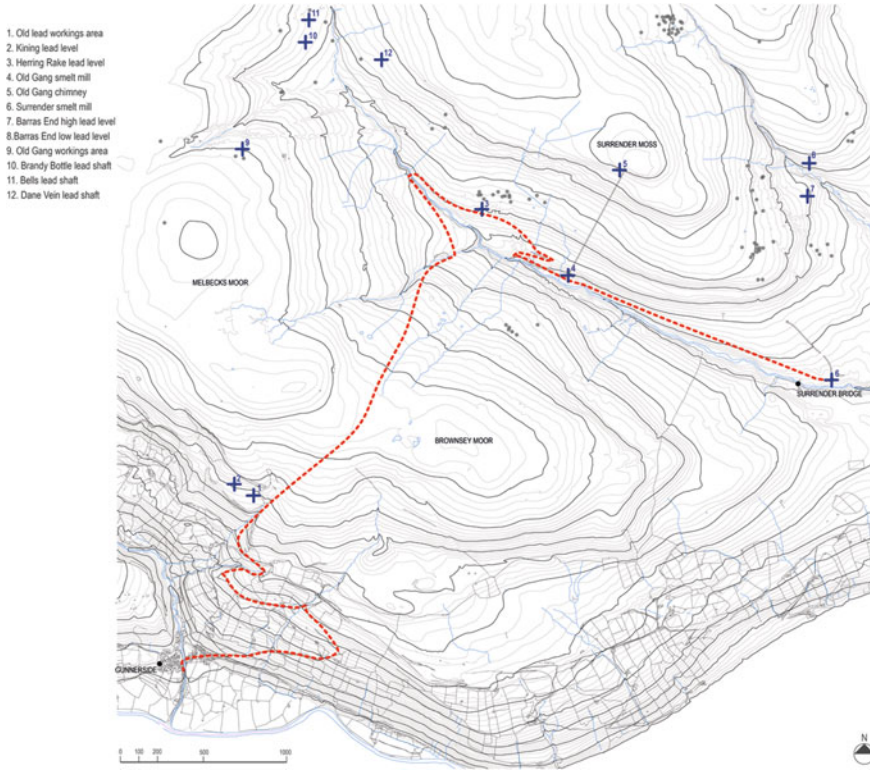
Fig. 25.1 Map of the footpath from Gunnerside, in the south, over to the Old Gang Mines, in the north

more, better quality food."[3] Gove seems to overlook that approximately 500,000 children go hungry daily at school (Pasha-Robinson 2017). In addition, food and drink are the UK's most significant manufacturing sector and one of the fastest-growing through imports and exports (DEFRA 2018). Although many may conclude that the dry-stone walls seem to have an ancillary standing concerning contemporary agricultural affairs, detailed examination supported by first-hand observation indicated that this might not be the case.

25.3 The Walls

There is memory locked deep within the stone walls of this area. It is similar to the memory left behind by a hiker's boot that, with each stride, depresses the long grass beneath. If these chaotic gaps, like deep lesions on the skin, cannot reveal anything

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[3] Globally the middle class is about 42%; the UK's middle class is around 30% (Naim 2017).

Fig. 25.2 Close-up image of one of the thousands of stone walls across the Yorkshire Dales. Photo by the author

about the landscapes' history, perhaps the stone itself compressed over thousands of years of sedimentary processes and then quarried from the Dales (Fig. 25.2) provides insights.

A survey conducted in 1988 revealed over 8,000 km of dry-stone walls across the Yorkshire Dales alone (White 2018). It has also been noted that there is roughly one tonne of stone to every 1 m of the wall. This equates to 8,000,000 tonnes of stone purposed as boundary walls. It is clear why the stone wall is favoured over the hedgerow or fence, as vegetative barriers are more easily damaged by weather and wildlife. In contrast, stone walls are weighty, durable and more permanent. Swaledale is within the largest of the 37 stone wall and stone barn conservation areas in the Yorkshire Dales.

The walls and barns in the area are of great significance. Most were built when the lead mining industry peaked in the nineteenth century (Yorkshire Dales National Park Authority 2015). On average, there is one barn in every enclosed field constructed from the local quarry stone. This equates to over 1000 farm buildings. Many buildings are now defunct, left to crumble and scar the landscape. As ruins slowly return to the natural landscape, they are a fading fragile physical memory of what once was. The Yorkshire Dales National Park Authority (2015) recorded a standard view of residents that these derelict buildings are "eyesores in the landscape and that landscape enhancement could be achieved through restoration."

Gunnerside, or Gunnar's Saetr," *Viking King's summer pasture,* is a small village north of the River Swale and south of mines that used to be home to many miners who worked between Old Gang, Gunnerside Gill and Hungry Hushes. The town's steep hills used to be a large forest area where men would regularly shoot game. Their hunting suggests that the name *Gunnerside* is derived from their activity.

Fig. 25.3 View of Gunnerside from a nearby hill shows the Methodist Chapel, the town's most prominent structure. Photo by the author

Practically, every house in the village once housed mining families. It is documented that in 1840, there were about 1455 inhabitants; more recently, a study by the North Yorkshire County Council (2016) estimates this number to be approximately 280 people. This massive population decline has stunted other developments, such as communication and technology (Philby 2009); the Internet connection is one of the worst in the country and a sour topic for inhabitants.

Beginning the walk outside the Methodist Chapel (Fig. 25.3), built in 1866, is logical. This is not simply the critical physical marker within the village, but because many of its villagers have ended their journeys here.[4] The symbolism is significant; the chapel was recently near closure. This is common as 11 nearby chapels have closed within the past five years. The chapel is built of locally sourced sandstone, typical for other buildings in the village. Unfortunately, its architecture offers no merit beyond the gable's rose window and its stone finial at its apex.

Shortly after passing over Gunnerside Bridge, the path leads past the King's Head Pub, a 400-year-old structure built to house a blacksmith. The building is renowned as a place where beer was illicitly brewed. During the mining heyday of the eighteenth century, it became a coaching inn, which led to its present function as a pub. It is undoubtedly one of the oldest in the town and has witnessed the growth and demise of the mining industry in the area, coming close to closure in 2009. It is renowned for its fair share of folklore; it was the site of a vicious altercation between two local miners. "H. W. Yeoman, a miner, named John Tiplady, was fined 5 *l*., including costs, for a savage and unprovoked assault on a fellow miner, named Wm. Bell, on New Year's Day." (Northern Echo 1874). Sadly, the victim lost sight in one eye, and a

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[4] Gunnerside's detailed burial information is available online: http://www.nydalesmeth.org.uk/churches/circuit-churches/gunnerside.html.

Fig. 25.4 Remains of the dwelling on the hillside of Little Roweth Green. Photo by the author

doctor concluded that this was either due to the accused holding a weapon "or by the defendant's thumbnail." (Ibid.).

Passing through the town, it is evident that most houses were built simultaneously. All share the same tan-coloured sandstone; all are bereft of architectural adornment except a few decorative lintels and window surrounds. Surprisingly, there is a distinct lack of compression walls. Before the last house in the village, a small, gated track veers to the left and ascends Brownsey moor towards the Old Gang mines. The path dissipates rather quickly and becomes a dusty gravel path, interceded with grass sprouts that lead past a ruinous barn adorned with a plaque commemorating the family that lived there and denoting the hearth that existed when the dwelling was occupied (Fig. 25.4). As the gradient increases, so too does the view of the landscape (Fig. 25.5), which reveals the gridded network of stone walls. The view south overlooks the moors at Crackpot, known as the Bloody Vale, where iron armour and battle axes have been excavated, although no record of a battle remains.

Continuing to ascend Little Roweth Green towards White Hill, the path runs along a stone wall that provides a haven from an agitated ram protecting grazing lambs. In the fields, proximity to the wall and the shelter it gives serve as a reminder of how it has served its purpose of separating for ages. These are some of the oldest stone walls in the country–some date back to the Bronze Age, although this is impossible to verify since no records of their construction or information about their builders exist. This hazy legacy rings true for much of the Dales. The walls were constructed for purely functional purposes. Any aesthetic value applied to them has always been in hindsight and with different perspectives afforded by unique sensibilities.

The construction of the walls serves to demonstrate their place in history. Before the walls' construction and the *Parliamentary Inclosure Act*, in 1730–1850, English agriculture depended on common land, typically privately held land that allowed legal access rights. Local communities established maximum income levels that inhabitants could make off the land (Rosenman 2012). In some cases, income limitations

Fig. 25.5 View towards Crackpot and Satron towards the south. Photo by the author

were relaxed, and poorer families could use the land. However, this was not as demo-cratic as it appeared; the decision-makers usually held the most power, positions in councils, and control over who was qualified to cultivate. Individual landowners and capital interests eventually replaced open fields and open farming; common land was effectively dissolved.

Over 5000 acts were passed during enclosure, each dramatically affecting the land use and the physical landscape. New legislation no longer allowed poorer families to farm parts of common or wasteland. Instead, they could only offer their services to the respective landowners, resulting in less profitable and less secure livelihoods. The act also shifted from a largely agrarian society to a more industrial and urban one. With these changes, agriculture workers were overtly subordinate to the landowners and lost the sense of self-determination they previously enjoyed. The farmers' rela-tionship with the landscape also changed. Their motivation to ensure the largest and best harvest to accrue the most significant profit was severely hindered since they no longer directly benefited from their efforts.

The path intersects a variety of landscapes and landforms and a wide range of flora. In places, steeply contoured pastures led to arid landscapes, and ink-hued branches grew horizontally as if pulling out from the earth beneath (Fig. 25.6). As the path continued to rise, views north were limited by the moors' incline and the eastward walls.

The construction of the walls followed standards developed for their effectiveness in keeping trespassers and wild predators out and, equally important, containing livestock and crops. Construction of the walls was specified as "34 inches broad at the bottom and 6 feet high, under a stone not exceeding 4 inches in thickness, which shall be laid upon and cover the tops of the walls in every part" (Raistrick 1988). It isn't easy to comprehend whether or even how these regulations could have

Fig. 25.6 Burnt-out Heather Patch, spreading across the landscape on Brownsey Moor. Photo by the author

been enforced without imagining grey-suited individuals inspecting walls with tape measures and levels and making notes in leather-bound pads of any deviations from the legislation.

The path ended at Mount Pleasant, approximately 500 m above grade. An alternate route continues eastward towards Whin Hall, a recent sale property, with recommendations to access it using "a 4 × 4" (Rightmove 2018) due to the treacherous incline. It also boasts that "there is a mainline railway station at Darlington." (Rightmove 2018) Here, the landscape became much arider, similar to a moonscape and the path leading towards a disused mine. Deep brown and taupe colours consume the green and clear that mining pollutants had infected the landscape (Fig. 25.7.). In this context, a dry, crunchy plant seems to thrive; however, closer inspection reveals burnt heather, dried and cindered from the excessive summer heat.

Fig. 25.7 Moonscape near an old disused lead mine near the top of Brownsey Moor. Photo by the author

The peak of the moors, approximately 650 m above grade, descends towards the Old Gang mines, a site of particular scientific interest and an example of the dichotomy between the landscape's appearance and its actual history. The contemporary rural landscape of Yorkshire primarily holds two purposes, farming and tourism. Together they are the most significant economic contributors to Gunnerside and nearby townships. Nevertheless, the walls remain tranquil and charming human-made reminders of man's meagre attempt to organise the natural sublime.

The walls contain more violent notions, not just delineations of spatial domains, but disempowerment and dispossession, where ideas of individualism succeed those of community. Because of the political constructs of the time, those with parliamentary voices championed the acts. In Giorgio Agamben's work, most landowners demonstrate a Schmittian notion of Exception's State of Exception. Although solid and heavy set, the walls blur the distinction between public–private and state law that existed before the parliamentary decisions. No sovereign made the decisions–over 4000 acts were passed–ulterior motives and special interests generally motivated those in power to give the laws outside democratic voting. They would have understood the state of emergency as a situation where the population stagnates, and the economy dwindles. *The Inclosure Act* enabled the perimeters to be set, and those that did not own land had to exist outside those bounds or offer services to farmland, the private land, on unregulated contracts. Enclosure, therefore, acted as a method to enforce employment, primarily upon individuals who did not want to work. It is an unlikely coincidence that new developments within the mining industry to excavate value from below ground came into being when land boundaries were set. The tragic culmination of these events is illustrated in Oliver Goldsmith's (1950) poem, *The Deserted Village*:

Sunk are thy bowers, in shapeless ruin all,

And the long grass o'ertops the mouldering wall;

And, trembling, shrinking from the spoiler's hand,

Far, far away, thy children leave the land.

Ill fares the land, to hastening ills a prey,

Where wealth accumulates, and men decay:

Princes and lords may flourish, or may fade;

A breath can make them, as a breath has made;

But a bold peasantry, their country's pride,

When once destroyed, can never be supplied.[5]

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[5] The entire poem is available online: https://www.poetryfoundation.org/poems/44292/the-deserted-village.

25.4   The Mines

The path passes along a line of Grouse butts, ready for the hunters who have been shooting from these enclosures since the Vikings held the land in 866. The Ash Pot Gutter, a shallow tributary, runs parallel and leads to the Hard Level Force, a small waterfall that disappears into the Beck. Many of the names given to the terrain offer memory of its mining history: Ash Pot, Notion Gill, Smith Hill and Surrender Bridge allude to its past exploits. These recall the sense of pride that must have existed when the mines were active, and a man had some control over nature.

Moving northwest across a natural and unnamed bridge, the path leads to the other side of the Old Gang Beck along a gravel road that the miners would have traversed daily. A concealed trail off the main track returns east, crosses several bell pits and hushes and leads to the mines.

It is believed that the term "hushes" is an onomatopoeia of the sound the water would make moving down a depression in the landscape. Managing water involves building dams at the top of a hillside, collecting water from rivers, natural rainfall and diverting water. Once complete, the dam was broken, travelling down the hillside and pushing away the topsoil and rocks. This process took place periodically, creating deeper wounds in the landscape that were further cleared manually due to the rugged terrain.

Crossing over one of the large disused hushes, the path leads to the Old Gang Smelt Mill Pillars (Fig. 25.8). Once ample storage space for drying, the peat used as fuel in the mines is now primarily dilapidated. Only the stone pillars remain, resembling something of the magnitude of the Greek Parthenon. The store is above the mill to allow for more excellent ventilation when drying the peat inside, with

Fig. 25.8 Solitary stone wall that once separated areas no longer serves a purpose. Photo by the author

one side open to allow air to flow through. The store contained three years of peat at any time (White 2018) and was approximately 119 m long and 6.4 m wide. It also supported a roof thatched with heather sourced locally from the moors (Figs. 25.9 and 25.10).

Work was incredibly difficult for the miners, who had no choice but to offer their landowners services to supplant small-scale farming when it was not lucrative enough to support their families. Life expectancy for the miners was around 46 years, whereas, in other industries, it was around 61. Many of the miners perished due to

Fig. 25.9 View from the top of one of the hushes shows a human-made valley. Photo by the author

Fig. 25.10 Remaining structure of the Smelt Mill storage barn shows the large stone pillars, approximately 1 m in depth. Photo by the author

poor ventilation in the mines. Lung disease and bronchitis were rife. In addition to the poor working conditions, many had to walk up to six miles daily to and from the mine, often in cold and wet weather.

Miners worked in teams and were often paid varying amounts depending on how much lead they could extract, with many sharing the same property. In 1851, the population of Healaugh was 251 people who lived in 46 properties shared between as many as 12 people. When the mine was at its full capacity, over 1500 people lived in the local townships of Reeth, Gunnerside and Healaugh and worked in the mines. Since the industries' decline, the population of Swaledale has seen a significant out-migration of citizens. Most of this decline occurred between 1861 and 1891, when the population dropped by approximately 48% (Stay in Swaledale 2018). It declined even further between 1891 and 1911 once the mines had all but been decommissioned by another 25.8%. Since then, the population has remained at around 1200 people.

This situation was similar to the decline in farm workers. After the referendum farmers lost between £30,000–50,000 worth of vegetables (Agerholm 2018). The impending abolition of *The Freedom of Movement Directive* may create more barriers than is first apparent.

The Old Gang Beck runs along a solitary stone wall edging the perimeter of the mines and leading to the Old Gang mine complex. Here, a wall no longer than 10 m exists (Fig. 25.11). Moreover, the wall has no apparent start or end, and there is no apparent connection to the enormous wall beyond. Instead, it appears to float on top of a slight incline.

The wall is imbued with contemporary meaning concerning recent political discourse in the UK. In a recent discussion between Russell Brand and Dr Jordan Peterson (2018), Peterson divulges the intricacies of left and right politics as simple black-and-white distinctions. The right side of this wall is much organised and largely intact. The stones are packed tightly, appearing as initially placed, bearing weight and

Fig. 25.11 Remains of the Old Gang Smelt Mill. Photo by the author

serving the wall's original purpose. On the left, the stones of the wall have dispersed. Its stones are chaotically strewn as if the intent was to appear anarchic. What is even more curious is that this breakdown had happened somewhere in the centre of the wall, delineating left and right divisions, with nothing in-between. In many ways, the wall harks the rise of alt-right politics and anarchist tendencies across Europe.

Peterson (2015) portrays the conservatives as those that "run things, the leftist invents them." The conservatives can act together for a specific goal (without right/wrong distinctions) and be uniform and controlled. In contrast, the left may be able to generate ideas; but they have no aptitude to implement them effectively. Such broad-brush perceptions may seem pithy; however, they cause concern and damage our understanding of politics. For example, the BREXIT vote came to fruition mainly due to immigration fears and misunderstandings[6] (Bulman 2017).

Sir George Denys, an esteemed member of the Parliament of England, once owned the mineral rights of The Old Gang Mines. Sir Denys saw an opportunity to resource minerals from the ground and played an active role in mining the minerals. In contrast, many other landowners at the time leased the land to minimise their own risk (Fig. 25.12).

The UK at the time worked differently than the rest of Europe; minerals were regarded as Crown property. In the UK, the passing of *The Inclosure Act* and freehold ownership meant that those who owned the topsoil prima facie owned the rights to anything that might exist underneath. Thus, anything retrieved from the mines was the landowner's property, not of the miners who unearthed it (Fig. 25.13). This explains why work payments to miners fluctuated heavily. Profits from the mines (1830–1860) were around £100,000 (equating to £13,074,665 today) and accumulated to approximately 10% of the nation's entire lead output (Flynn 1999). Already by 1870, the mines had begun their decline in production. The market price had dropped to just over half of what it had been during the past 30 years. Increased imports from Spain, America, Australia and other areas meant the UK could not compete.

World lead production increased by four times between 1870 and 1909, which meant the price of lead halved, and the cost of mining outweighed market sales. By 1860, the UK had produced 50% of the world's supply. However, by 1900 it only accounted for six per cent (Ibid.). Companies that found the returns too low surrendered their leases and abandoned the mines.

Flynn (1999) describes how The Old Gang Mines suffered a similar fate; the last recorded output of lead is recorded to have taken place in 1896 (Ibid.). After this year, the mines were no longer used for sourcing lead. In September 1888, the mine was abandoned entirely and stood today (Fig. 25.14). The loss to international trade markets may hit some producers very hard, especially with removing land subsidies. Simply put, they may not compete with the US and New Zealand. This may be even more difficult if the UK signs free-trade agreements with no import tariffs. Environmental issues in Mr Gove's speech suggest that the government is

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[6] The National Centre for Social Research conducted research and a survey that reveals information about the Brexit vote and people's motivation: http://natcen.ac.uk/media/1319222/natcen_brexplanations-report-final-web2.pdf.

Fig. 25.12 One of the remaining mines extends from the smelt mill to the site of the Old Gang Chimney, a structure on Surrender Moss that once stood 563 m high. Photo by the author

more concerned with protecting animals and the environment than food production (Beattie 2018). Developments in agri-technologies are high on the agenda if the UK is to become more innovative:

> To change the energy mix we all rely on, how to reduce our reliance on plastics, how to derive more protein from plants rather than animals, how to grow to produce, whether hydroponically or by other means, which leaves a lighter imprint on the earth, how to use distributed ledger technology to protect habitats and so much more. (DEFRA 2018)

With this comes the need for more significant funding and more time. Twenty-six per cent of farmers in Britain failed to break even in 2016. The increased cost burden for technology may result in smaller farms losing out to intensive and mega-farm practices (Davies 2017). It isn't easy to see how discussions around technologies such as gene editing, big data, artificial intelligence, and machine learning will contribute to agricultural projects when much of the rural landscape has yet to have a sufficient Internet connection and still is influenced by antiquated planning laws (Beattie 2018). Perhaps, the penchant for heritage should be reconsidered. A more international approach, such as those applied in Japan (Smart 2016), should be implemented to

Fig. 25.13 Chimney still stands within the ruins of the Smelt Mill at Old Gang Mines. This is because many stones have been reclaimed to build in other places over time. Photo by the author

Fig. 25.14 At the journey's end, the surrender Smelt Mill is visible amongst precarious heather patches in the background. Photo by the author

take down what is no longer socially relevant in today's context. Alternatively, on the contrary, perhaps, there is something to be learnt from those walls.

25.5 Conclusion

The walls represent a moment in history that promoted the individual over that of the community regarding enclosure and the industrial mining era. In these periods, poorer families had to work on the land and below it on precarious contracts to make ends meet. In addition, during both periods, wealthy landowners profiteered from the labour of others.

Whilst there are many unanswered questions regarding BREXIT and the future, considerations of the route from Gunnerside to The Old Gang Smelt Mills provide an opportunity to re-examine the significance of the historic stone walls and mines, remnants of industrial history that writhe in the landscape open up their intrinsic magnitude and encourage consideration of parallels with the UK's transition from rural to urban life.

The reduction of tariffs on imports and the reduction of CAP-protected subsidies for farmers will significantly affect the landscape of the UK for years to come. Currently, agriculture equates to less than one per cent of the country's entire GDP; the UK may fall far behind other countries such as China, New Zealand and Norway, where agriculture produces approximately 8.5, 6.5 and 2.5% of their GDP, respectively (Beattie 2018).

It seems that the demise of common land, by way of individual ownership and subordination of those cultivating the land, is not so different to the demise of the lead industry, where national prices were unable to compete with the new, more productive workforces appearing overseas, which eventually lead to the UK losing its place entirely. Perhaps, something can be taken from history and how the mining industry revolutionised communication and how everyday technologies in cities could be appropriated to the rural context without simply feeding wires between the gaps in the walls.

References

Agerholm H (2018) UK crops left to rot after drop in EU farm workers in Britain after Brexit referendum. https://www.independent.co.uk/news/uk/home-news/uk-crops-eu-farm-wor kers-brexit-referendum-rot-manpower-recruitment-numbers-a8194701.html. Last Accessed 12 July 2018

Beattie A (2018) Brexit and agriculture: British farmers to plough new course. https://www.ft.com/content/e33d5f12-f462-11e7-8715-e94187b3017e. Last Accessed 13 July 2018

Bulman M (2017) Brexit: people voted to leave the EU because they feared immigration, major survey finds. https://www.independent.co.uk/news/uk/home-news/brexit-latest-news-leave-eu-immigration-main-reason-european-union-survey-a7811651.html. Last Accessed 13 July 2018

Davies M (2017) Intensive farming in the UK, by Numbers. https://www.thebureauinvestigates.com/stories/2017-07-17/intensive-numbers-of-intensive-farming. Last Accessed 13 July 2018

Department for Environment Food & Rural Affairs (2018) Health and harmony: the future for food, farming and the environment in a Green Brexit. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/684003/future-farming-environment-consult-document.pdf. Last Accessed 13 July 2018

Flynn CG (1999) The decline and end of the lead mining industry in the northern Pennines 1865–1914: a socio-economic comparison between Wensleydale, Swaledale and Teeside, Durham theses, Durham University. http://etheses.dur.ac.uk/4569/1/4569_2033.PDF?UkUDh:CyT. Last Accessed 02 July 2018

Gove M (2018) Farming for the next generation. Available at: https://www.gov.uk/government/speeches/farming-for-the-next-generation. Last Accessed 12 July 2018

Historic England (2018) Lead mines, ore works and smeltmills at Old Gang on Reeth High Moor. https://historicengland.org.uk/listing/the-list/list-entry/1015860. Last Accessed 28 June 2018

Naím M (2017) The uprising of the global middle class: economic progress and increased prosperity do not always buy more political stability. https://www.theatlantic.com/international/archive/2017/08/global-middle-class-discontent/535581/. Last Accessed 02 July 2018

North Yorkshire County Council (2016) 2015 Population estimates Parishes. https://www.northyorks.gov.uk/sites/default/files/fileroot/About%20the%20council/North%20Yorkshire%20statistics/Parish_mid-year_population_estimates_2015.pdf. Last Accessed 28 June 2018

Northern Echo (no date) Old Newspapers. Available at: January 19 1874. https://www.gunnerside.info/Archives/newspapers/law/john_tiplady.html. Last Accessed 12 July 2018

Pasha-Robinson (2017) Help a hungry child: 500,000 children go to school on an empty stomach daily [online]. Available at: https://www.independent.co.uk/helpahungrychild/food-poverty-future-help-a-hungry-child-waste-stop-felix-project-food-insecurity-a8074366.html. Accessed 02 July 2018

Paterson M (2015) 'Set in Stone?' Building a new geography of the dry-stone wall. PhD thesis, University of Glasgow, University Avenue, Glasgow, http://theses.gla.ac.uk/6808/1/2015patersonphd.pdf. Last Accessed 28 June 2018

Peterson JB (2018) Russell Brand & Jordan B Peterson—under the skin #52. https://www.youtube.com/watch?v=r2S58rH0PAw. Last Accessed 12 July 2018

Philby C (2009) The lost villages of Britain: can our rural communities survive in the 21st century? https://www.independent.co.uk/news/uk/this-britain/the-lost-villages-of-britain-can-our-rural-communities-survive-in-the-21st-century-1788478.html. Last Accessed 03 July 2018

Raistrick A (1988) Pennine Walls. Dalesman Publishing Co., Ltd., Yorkshire

Rightmove (2018) 3 bedroom farm house for sale. https://www.rightmove.co.uk/property-for-sale/property-65160421.html. Last Accessed 02 July 2018

Rosenman E (2012) One enclosure acts and the commons. http://www.branchcollective.org/?ps_articles=ellen-rosenman-on-enclosure-acts-and-the-commons. Last Accessed 28 June 2018

Smart R (2016) Tokyo's 50-year itch: why is Sony knocking down its flagship building? https://www.theguardian.com/cities/2016/jun/28/tokyo-sony-flagship-building-olympics-park. Last Accessed 13 July 2018

White R (2018) Hedges and Field Walls, http://www.outofoblivion.org.uk/hedges.asp. Last Accessed 12 July 2018

Yorkshire Dales National Park Authority (2015) Swaledale & Arkengarthdale Barns & Walls Conservation Area Appraisal, Adopted Document. http://www.yorkshiredales.org.uk/__data/assets/pdf_file/0011/699968/2014-12-15_gir-S-and-A-Barns-and-Walls-CA-Appraisal-FINAL.pdf. Last Accessed 28 June 2018

Chapter 26
Borders of Convenience: European Legal Measures and the Migration Crisis

Paul Arnell and Carole Lyons

Abstract The migration crisis has posed fundamental questions for European institutions. Among these are whether the reality of European Union (EU) human rights matches its rhetoric. The answer is a resounding no. The EU's reaction to the crisis has entailed an abdication of responsibility, in part through adopting convenient new external borders. One response to this development has been a jurisdictional extension of human rights protection by the European Court of Human Rights (ECtHR). Thus, the EU's response to the crisis contrasts with the attempts by the ECtHR to re-impose responsibility on European states.

Keywords Borders · European Union · Migrants · Human rights · Jurisdiction

26.1 Introduction

> "Refugees attempting to escape Africa do not claim a right of admission to Europe. They demand only that Europe, the cradle of human-rights idealism and the birthplace of the rule of law, cease closing its doors to people in despair who have fled from arbitrariness and brutality. That is a very modest plea, vindicated by the European Convention on Human Rights: 'We should not close our ears to it.'" (Hirsi Jamaa v Italy, 2012)

In 1998, a resident of Melilla (a Spanish enclave in North Africa) found a child sleeping in his rubbish bin. The 11-year-old lived rough in the city for three years after entering illegally over the border fence between Melilla and Morocco (Davies 2010). From over 20 years ago, this episode is a reminder that the so-called migration crisis engulfing Europe's legal and political discourse is more accurately categorised as a long-standing condition (Borg-Barthet and Lyons 2016). Nevertheless, border breaches in Melilla continue to be one of the lesser-known flashpoints of the European migration impasse.

In late 2017, the European Court of Human Rights (ECtHR) judged Spain to have breached the European Convention on Human Rights (ECHR) in its handling of the

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collective expulsion of those who attempted to cross the border fence from Morocco into Melilla (ND and NT v Spain 2017). Judgments such as this, emanating from Europe's highest human rights court, are a significant dimension of the European legal response to the migration crisis. Spain, Italy, Greece and Malta[1] have all been exposed by the ECtHR as violating European human rights standards in their treatment of migrants over the last ten years. However, this recognition of failings has to be seen against the background of divergences in Europe in the context of the migration upheavals, which first critically impacted Europe in 2015.

On the one hand, the Council of Europe institutions and courts monitor and adjudicate human rights breaches in migration and asylum practices by 47 European states. Nevertheless, the 27-state European Union (EU) has been widely seen as having failed in its lack of adequate, humane response to the migration crisis, both as an entity and individual state action. Moreover, the EU can be said to have contributed to the crisis and, more generally, adopted a global approach that prioritises security, pushback and strengthening the EU's external border.

Litigation in the ECtHR arises from European states' actions related to the crisis and the policies and legal measures adopted by the EU to manage irregular external migration. In Strasbourg, the human rights court has willingly re-invented and reconceptualised the very essence of the border by considering the scope and nature of human rights protection that applies to migrant treatment. The EU, on the other hand, having prioritised border abolition internally, has resorted to increasingly harsher external border measures in continuing efforts to manage external migration.

The migration crisis has exposed and heightened tensions in the conflation of border policy choices and legal approaches. The EU focus on values, human rights and solidarity following a security-based script, which pushes the migration problem away from the EU and effectively creates a de facto EU frontier far beyond its physical borders. In contrast, the European human rights court has used the migration crisis to extend European human rights standards outside European states' territorial borders. The extent to which the concept and reality of borders have pervaded European responses to the migration crisis is a subject that warrants detailed consideration.

26.2   Borders of Convenience and Inconvenience in Europe

Borders and the migration crisis are inextricably linked. In one sense, specific border zones have been a contributing cause of the humanitarian tragedies that have occurred since 2015. For example, border areas such as Calais, Lesbos and Lampedusa (Davies 2013) have become infamous for being flashpoints in the European migration crisis. In another sense, a change in the very nature of borders has affected the crisis. Borders

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[1] See for example *Aden Ahmed v. Malta*, ECHR App. No. 55352/12 (23 July 2013); *Suso Muso v. Malta*, ECHR App. No. 42337/12 (23 July 2013); *Louled Massoud v Malta*, ECHR App. No. 24340/08 (27 July 2010), and *Khlaifia and Others v. Italy* (no. 16483/12) 1 September 2015.

have been strengthened, resurrected, reconceptualised and even moved in response to the 2015 surge in external migration.

The story of the European response to the crisis is centrally one of the failures, divisions and lack of action.[2] The very notion of a fixed border—whether jurisdictional or territorial—has been eroded in the evolution of the recent migration problems in Europe. First, this has occurred in the EU context with the incremental outward shift in EU external border arrangements such as Turkey and Libya (European Council 2018). Managing migrant influxes has been outsourced to non-EU states so that the actual EU external border is not impacted directly as it was in 2015. Second, almost all European states have adopted new border and migration control mechanisms and policies individually. One measure has been to prevent migrants from reaching state borders. The UK's Vulnerable Persons Resettlement Programme 2015 and Hungary's barbed wire border fences (The Guardian 2016) are examples. In addition, many EU states have actively engaged in pushback and collective expulsion strategies to prevent migrants from entering state territories and thus benefiting from the protection offered by state laws and rights. In short, actions by individual EU states and the EU itself may be categorised as the employment of *borders of convenience* and viewed as a generation of new or different borders to deflect the migrant problem away from actual EU borders.

In contrast, the ECtHR has developed new concepts of how a state may treat migrants in a more positive vein. The Strasbourg Court has extended the reach of EU states to allow their human rights responsibility to be engaged outside their borders. In other words, European states have had what might be termed as *inconvenient borders* imposed on them in order to increase human rights protection for migrants. Since the peak of the migration crisis in 2015, the lack of traditional rigid and specific legal and territorial borders has become generally accepted. European attempts to respond to external migratory pressures have led to the erosion of established notions of where borders lie and an acknowledgement that borders will be moved and adjusted if deemed convenient.

26.3   The European Union: The Fall and Rise of Borders

The 1998 Melilla episode foreshadowed the events of 2015 that were of a much larger scale and shook European integration at its core. The mass movement of more than a million refugees and migrants, many of whom were fleeing conflicts in Syria, Afghanistan and Iraq, into European countries in 2015 (Eurostat 2015) generated an extreme level of disruption and disunity in the EU and its member states as they attempted to deal with the arrivals (European Commission 2015). This migration

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[2] The multilateral international response appears to have been more positive. This includes the UN General Assembly's New York Declaration 2016, which *inter alia* committed states to work to agreeing two global compacts in the area, one on refugees and one on migrants, see http://www.refworld.org/docid/57ceb74a4.html. The work is continuing.

scenario was a humanitarian catastrophe of a level unseen in Europe since the 1930s and 1940s (The Guardian 2018). Images from Lesbos, Lampedusa and Calais, among other places, exposed the magnitude of the crisis' human cost. As the EU and its member states struggled with the pressures of a mass movement of displaced people, their treatment of these migrants exposed severe shortcomings in applying European fundamental human rights, humanitarian law and EU neighbourhood policy.

What was first conveniently categorised as a "peripheral glitch" (Caruso 2014) and merely a local issue confined to the Mediterranean extremes of fortress Europe had evolved over several years before reaching a crescendo in 2015. In 2014, Daniela Caruso spoke of the "lost generation" of those who drowned in southern Europe's waters (Caruso 2014). Such losses, however, were eclipsed by the large scale of migrant arrivals in 2015 (European Commission 2018) when an EU-level response became inescapable. That response is still being worked out years later (European Council 2018). In the delayed and protracted efforts to produce a rights-based and coordinated position to the catastrophes at its borders, the EU has been exposed as unable to live up to its core values and human rights. Border management and movability have become central to the EU's evolving migration stance. This is observable through the following phases of the EU border strategy:

- Eradication of internal borders and the creation of "the great border-free zone" the Schengen Agreement
- Reinforcement of internal borders through increasing control of external borders, the Dublin Regulation
- First response reaction to the 2015 crisis, pushing the problem away from EU borders, the EU-Turkey Agreement
- Reconceiving the limits of Europe; bolstering EU external borders with buffer zones in Africa

In 1957, the establishment of the European integration project was predicated upon the furtherance of free movement within the EU and the attendant abolition of internal borders to facilitate such freedom. The global objective was trade facilitation and economic improvement. However, this border-free zone could not function in isolation from the rest of the world or from those millions of people historically and geographically linked to the EU who could gravitate willingly or involuntarily towards Europe. From the 1950s to today, there has been a dichotomy at the heart of European integration, which reached a crisis point in 2015 and which the EU is still attempting to navigate.

The original Schengen Agreement of 1985, which provided for the gradual abolition of internal borders in the then European Economic Community (EEC), was primarily influenced by the demands of a free-moving trading community within the EEC; trade trumped tight territorial control. Having concretised a borderless free trade zone under the Schengen mechanisms, the EU was inexorably led to protecting the latter by coordinating those not entitled to entry. Nevertheless, soft internal borders generated challenging external frontiers as "fortress Europe" was incrementally constructed.

The 1990 Dublin Convention led to an agreement in 2003 on the Dublin Regulation handling of asylum claims. On paper, it was an ideal mechanism for European collaboration on handling asylum seekers. The fall of internal borders essentially gave rise to a border-related restriction for those seeking refuge in Europe; they could only claim asylum at the first point they crossed an EU border. Before the futility of Dublin manifested in 2015, the EU border-free edifice appeared to be functioning, at least from the perspective of the EU, with conveniently managed border crossings by asylum seekers. To complement the procedural agreements on borders, Frontex was established to control the Union's external borders in 2004. In 2013, Eurosur was created to deflect illegal migrants from the EU's external borders. The whole package for *managing* non-EU migrants coming to and moving within the EU was, or certainly seemed to be, a sleek, polished system—a modern bureaucratic success with its organisational efficiency that kept non-Europeans at bay and furthered economic success and progress within.

In 2013, controversial rules were introduced in response to the upheaval resulting from the Arab Spring (Peers 2014). The new legislation allowed EU states to reinstate internal border controls in a failure to control the Schengen area's outer borders by exception to the general rule. This allowed certain states to erect razor fences to impede the flow of migrants from one state to another, thereby localising and exacerbating a suite of problems that would have been better shared and resolved in common.

Since 2015, there has been a radical rupture in the heretofore carefully cultivated border structure. The EU and its member states have resorted to new notions of where *Europe* begins in their attempt to stem illegal entry into EU territory. The Dublin Regulation had envisaged that asylum seekers would cross an EU external border. This proved unacceptable when approximately one million people attempted to do so in 2015. The EU response was to push the limits of the EU away from its actual physical borders. This was first engineered by the EU-Turkey Agreement of 2016, under which the EU effectively paid Turkey to manage those escaping the Syrian conflict, so they did not penetrate EU borders (Amnesty International 2017). More recently, pushbacks and buffer zones have been conceived for several African states so that, once again, the actual EU border is protected from breaches and migrants are managed and controlled far away from European frontiers (European Council 2018). Perceived from this perspective, the EU can be seen to have exploited its power to manipulate and manage borders by creating borders of convenience, which transformed the migration crisis into something other than a European crisis.

The response to the needs of migrants was to reinstate the powers of EU member states, negate the principle of EU solidarity and produce a laissez-faire approach to migration in which whoever builds the highest fence or stops the most asylum claims to be the winner in the short term. As a result, all the carefully crafted, vital load-bearing structures of EU migration and border policy–Schengen, Dublin and Frontex–came crumbling spectacularly in the face of the ongoing crises throughout 2015 and 2016. Unfortunately, the EU has yet to resolve these issues (CMLRev editorial 2015).

26.4   ECtHR Judgments: Inconvenient Borders

A distinct consequence of the migration crisis has been the emergence of a body of case law from the ECtHR that addresses various aspects of European states' responses. These judgments include cases where borders were reconceptualised and cases in which human rights law has been applied transnationally and extraterritorially. This is notable for two main reasons: states have been held accountable for actions outside their borders, and this ill development accords with orthodox understandings of law and borders.

Law is generally constrained by nation-state borders and applied on an intraterritorial basis alone. In exceptional cases, the law is applied across or outside physical borders, and jurisdictional borders become separated from fixed, orthodox physical and cartographical borders. This detachment and movement of borders occur in two ways, transnationally and extraterritorial. Both of these are illustrated by the migrant-related human rights jurisprudence of the ECtHR.

The humanitarian effect of applying human rights law across borders is, of course, more important than its legal exceptionalism. This is simply because the law has held states accountable for responding to the crisis. An adverse judgment of the ECtHR, legally binding under article 46 of the European Convention on Human Rights (ECHR), is one of the most damning statements the law can make of a sovereign state. Being found to have violated an individual's human rights within their jurisdiction, be it one's right to be free from inhuman and degrading treatment under article 3 or the right to family life under article 8, has seriously impacted a state's reputation and standing. Consequently, the ECtHR, a supra-national court of judges from the 47 state parties of the Council of Europe, has been the locale of migration crisis response evaluation on several occasions. Three cases illustrate the separation and movement of borders in distinct ways and, at the same time, tell stories of human lives caught up in Europe's modern shame: MSS v Belgium and Greece, Hirsi Jamaa and Others v Italy, ND and NT v Spain.

MSS v Belgium and Greece decided in 2011 provides an example of a border being moved and the law being applied transnationally. MSS was an Afghan asylum seeker who had left Kabul in 2008 and entered the European Union via Greece in December. In February 2009, he arrived in Belgium and applied for asylum. Following the Dublin Regulation, Belgium authorities ordered him to return to Greece, where his application would be considered; the regulation provides for asylum claims to be processed by the state. Thus, the claimant first enters the EU. The EU intends this to manage the immigrant crisis and, in part, stop entering persons from *shopping* for the most *migrant-friendly* state. Belgium's position in such a case assumes there is no reason to believe that Greece would not adhere to their legal obligations under EU law, the ECHR and the Geneva Convention relating to the Status of Refugees 1951. Although MSS challenged his removal in Belgian courts and failed, he was sent to Greece in June 2009, detained and imprisoned, unfortunately, under conditions of ill-treatment.

In Greece, MSS filed a complaint with the ECtHR against Greece and Belgium for violation of articles 2, 3 and 13. Article 2 protects the right to life, and article 13 guarantees a remedy. In addition, the ECtHR considered reports by EU institutions, the UNHCR (2018) and various NGOs on the conditions of asylum seekers in Greece. These showed evidence of systematic practices that asylum seekers faced upon arrival in Greece; these included overcrowding, limited access to care and dirty conditions.

MSS's complaint was against Belgium as well as Greece. Although conditions in Belgium were not the root of the case, they proved critical to Belgium's liability. MSS's arguments against Belgium centred on the flawed asylum system and conditions in Greece. The ECtHR held that Belgian authorities were wrong to have assumed that, even though Greece was party to the ECHR and an EU member state, Greece would meet its international legal obligations; in short, the ECtHR stated that Belgium should have known that it was possible that MSS's asylum application would not be seriously examined in Greece. In addition, freely ascertainable information indicated that the detention conditions of asylum seekers in Greece were degrading.

Belgium's transfer of MSS to Greece made it liable—an aspect that is more central to this research than the liability of Greece because Belgium's jurisdictional borders had been, in effect, moved; Belgium was found to encompass, in effect, parts of Greece. The legal principle underlying the possible liability of an expelling state was then affirmed: jurisdictional borders are, in effect, movable.

The ECtHR said that it was "well-established case law [that] the expulsion of an asylum seeker by a contracting state may give rise to an issue under article 3…where substantial grounds have been shown for believing that the person concerned faces a real risk of being subjected to inhuman treatment in the receiving country." Accordingly, due to the deficient asylum system and Greece's detention and living conditions, Belgium had violated article 3 by transferring MSS to Greece. As a result, the jurisdictional border of Belgium was moved, and its human rights obligations applied in a transnational sense.

Another example of a state's jurisdictional borders being moved and the law being applied in an extraterritorial location occurred in Hirsi Jamaa and Others v Italy. A May 2009 attempt to cross the Mediterranean from Libya to Italy by 200 people in three vessels was at its root. While en route, the vessels were intercepted by Italian authorities. Occupants of the vessels were transferred to Italian ships; their personal effects and documents were confiscated, and the migrants were returned to Libya. The Italian Minister of the Interior said the operation was carried out according to bilateral agreements with Libya. This "pushback policy effectively combating illegal immigration" (Hirsi Jamaa p. 13).

After returning to Libya, 11 Somali and 13 Eritrean nationals applied to the ECtHR. They complained that they had been exposed to the risk of a violation of article 3 in Libya, Eritrea and Somalia due to being returned by Italy. They also alleged a violation of article 4 of Protocol 4, which provides that collective expulsion is prohibited. Finally, they alleged a violation of their right to an effective remedy under article 13. The ECtHR referred to sources describing Italy's *push back* activities and the situations in Libya, Somalia and Eritrea, including those of

the UNHCR, the Council of Europe's Committee for the Prevention of Torture and Amnesty International.

In applying the law to the facts of the case, the ECtHR first dealt with the issue of jurisdiction, meaning the law's borders. Article 1 of the ECHR obliges parties to secure to everyone within their jurisdiction the rights and freedoms within it; it does not refer to a state's territory. Italy argued that the applicants were outside its jurisdiction because it did not have absolute and exclusive control over them. The ECtHR noted that only in exceptional cases would act that produced effects outside their territories constitute an exercise of jurisdiction within article 1. In other words, Italy's jurisdictional borders and human rights responsibilities transcended its cartographical borders. In coming to this conclusion, the ECtHR referred to the long-established rule, now found in the Law of the Sea Convention, that a flag state has exclusive jurisdiction over its vessels on the high seas; Italy's borders surrounded its vessels.

Regarding the violation of article 3, the applicants argued that they had been exposed to the risk of torture or inhuman treatment in Libya and their respective countries of origin. The ECtHR examined each separately, being called upon to "… assess the situation in the receiving country" (Hirsi Jamaa para 40). As to Libya, it concluded that the required substantial grounds had been shown, and by transferring the applicants to Libya, Italy acted in violation of article 3.

The ECtHR similarly held that the risk of arbitrary repatriation to Eritrea and Somalia violated article 3. This border movement is even more exceptional; Italy's jurisdictional limits extended to its vessels, then to Libya and finally to Eritrea and Somalia. As to the latter, the ECtHR held that the indirect removal of an alien does not annul the responsibility of the state party to ensure that the person would not face a real risk, contrary to article 3. The ECtHR held that the Italian authorities knew, or should have known, that insufficient guarantees protected the applicants from being arbitrarily returned to Eritrea and Somalia. The ECtHR held that removing aliens in the context of interceptions on the high seas constitutes an exercise of jurisdiction that engages the state party's responsibility under article 4 of Protocol 4. Since the removal was collective, it held that there was a breach of that article. Overall, the case of Hirsi Jamaa and Others v Italy illustrates a considerably more pronounced movement of borders than in MSS v Belgium and Greece. Here, Italy's jurisdictional borders extended to the high seas, the original destination of the individuals, Libya and beyond to Eritrea and Somalia—areas all beyond Italy's physical borders.

A final case that affirms the divergence of territorial and jurisdictional borders in the context of the migrant crisis is ND and NT v Spain. This case is neither transnational nor extraterritorial; the circumstances took place at the physical border itself. Again, the ECtHR considered the borders, *push back* and the collective expulsion policy of an EU member state. In this judgment, the border was in North Africa, between Morocco and Melilla, referred to above. The two people concerned, ND and NT, had tried to enter Spain (i.e. its territory in Melilla) in 2014 by climbing over the first of three lines of border fences. They were immediately detained by Spanish forces and returned to Morocco with about 80 others without being allowed

to claim asylum. They argued that their human rights had been violated, including being subjected to a collective expulsion contrary to article 4 of the Protocol.

Spain argued that its actions did not fall under the purview of the Convention as they had occurred outside its jurisdiction by being outside the borders of Melilla. Spain asserted it had no jurisdiction over the applicants as they had only climbed over the first border fence and were, therefore, not within Spanish territory. Thus, Spanish law did not apply to them. However, as in the Hirsi Jamaa case, the ECtHR considered the jurisdictional border separate from the physical border. The Strasbourg judges held that a state's jurisdictional border is founded upon exercising its authority rather than being set by its physical, territorial border. Accordingly, the precise location of the border fences between Morocco and Melilla was deemed irrelevant to establishing Spanish human rights responsibility; once the border guards *pushed back* the people who had climbed over the fence, Spain's jurisdiction and human rights responsibility were engaged. The ECtHR held it was not "…necessary to establish whether or not the border fence erected between Morocco and Spain is located on the latter's territory. [The Court] observes that, as it has found in the past, where there is control over another this is de jure control exercised by the State in question over the individuals concerned… that is to say, effective control by the authorities of that State, whether those authorities are inside the State's territory or on its land borders" (ND and NT para 54).

The three cases of MSS, Hirsi Jamaa and ND, and NT illustrate the different ways the law can be applied when jurisdictional borders are moved. They establish that a state's border is not solely a territorial, physical and cartographical boundary. A state's border also has a moveable aspect when the state exercises authority and control over an individual.

The position taken by the ECtHR means that borders or limits are not predetermined but instead defined according to the circumstances surrounding a state's exercise of its authority. This is a significant advance in a state's responsibility for human rights within Europe and beyond. Moreover, it holds that, in effect, a state's borders move with its agents.

The ECtHR has, in effect, created *borders of inconvenience* for those states that choose to indirectly or directly violate the human rights of persons outside their physical borders. This position stands in stark contrast to developments by both the EU and individual EU states in their continued efforts to *push back* individual migrants and, more generally, to force the entire migration crisis issue as far away from Europe's physical borders as possible (European Council 2018).

26.5 Conclusion

From 2015 onwards, the migration crisis in Europe experienced pronounced turbulence. This led to migration dominating European politics. For example, in the summer of 2018, the Aquarius episode, Soros legislation in Hungary, EU sanctions

against Hungary, Bavaria's stance on migrants and the Italian government's anti-migrant position. The EU special summit on migration on 28 June 2018 occurred against this heightened focus on the European migration problem and attempted to resolve an issue that had divided Europe since 2015.

Although the migration crisis currently has a stranglehold on European politics, the crisis has become less pressing and under control, with far fewer migrants reaching European borders (European Commission 2018). This has been mainly due to the border protection and *push back* measures that both European states and the EU have implemented.

Border management and control have become the dominant concern of the hitherto borderless EU. The migration crisis led to an unravelling of European concepts of human rights, justice and solidarity. EU states struggle to reconcile their primordial dedication to border removal and free movement with mass migration influx and the resultant anti-migrant attitudes. The ECtHR continues to develop a concept of moveable borders, which implicates state responsibility outside territorial limits. In contrast, EU legal and political developments evidence an increasing imperative to manipulate borders to move the migration crisis and migrants far away from the EU.

The stance of the ECtHR is laudable in its progressive recognition that fixed, physical borders are, effectively, an outdated means of determining where state responsibility ends. However, this has to be put into the context of the increasing irregularity in border creation and control within and by the EU. This ranges from internal barbed wire fences and walls to legal arrangements with Turkey to the suggestion of handling centres at Libya's southern borders. There is no longer in place the predictability and certainty usually associated with the notion of a border for the EU. As Daniel Trilling suggests, the European migration crisis is better categorised as the European border crisis (Trilling 2018). European borders' very notion and nature are challenged in the legal responses to the migration crisis. The *inconvenience* of the most significant mass movement of people into Europe since WWII has generated a febrility in the theory and practice of borders in Europe such that border establishment and functioning are now a matter of capricious convenience rather than a subject characterised by the certainties traditionally inherent in the concept of a border.

References

Amnesty International (2017) The EU-Turkey deal—Europe's year of shame, March 2017, at https://www.amnesty.org/en/latest/news/2017/03/the-eu-turkey-deal-europes-year-of-shame/

Borg-Barthet J, Lyons C (2016) The EU migration crisis. Edinburgh Law Review

Caruso D (2014) Lost at sea. German Law J 5:1197

CMLRev (2015) Editorial comments: from eurocrisis to asylum and migration crisis: some legal and institutional considerations about the EU's current struggles. Common Market Law Rev 52 1437

Davies L (2013) Why Lampedusa remains an island of hope for migrants. The Guardian 16 Oct

Davies N (2010) Melilla: Europe's dirty secret. The Guardian, 12 Apr 2010

European Commission Note (2018) Managing migration in all its aspects, June 2018. https://ec.eur
    opa.eu/commission/sites/beta-political/files/euco-migration-booklet-june2018_en.pdf
European Commission (2015) COM 240, "A European agenda on migration", 13 May
    2015, at https://ec.europa.eu/anti-trafficking/sites/antitrafficking/files/communication_on_the_
    european_agenda_on_migration_en.pdf
European Council Conclusions (2018) EOCO 9/18, 28 June, at https://www.consilium.europa.eu/
    en/press/press-releases/2018/06/29/20180628-euco-conclusions-final/
EUROSTAT (2015) Asylum quarterly report (Dec). http://ec.europa.eu/eurostat/statistics-explai
    ned/index.php/Asylum_quarterly_report
The Guardian (2016) Hungarian PM plans more massive fences to keep migrants out,
    26 Aug, at https://www.theguardian.com/world/2016/aug/26/hungarys-pm-plans-more-massive-
    fence-to-keep-out-migrants
The Guardian (2018) The List, 34, 361 men, women and children who have perished trying to
    reach Europe [since 1993], 20 June, at https://www.theguardian.com/world/2018/jun/20/the-list-
    34361-men-women-and-children-who-perished-trying-to-reach-europe-world-refugee-day
Hirsi Jamaa v Italy (2012) 55 EHRR 21
MSS v Belgium and Greece (2011) 53 E.H.R.R. 2
ND and NT v Spain (2017) App. Nos. 8675/15 and 8697/15, 3 Oct
Peers S (2014) Immigration and Asylum. In: Barnard C, Peers S (eds) European Union Law (OUP
    2014), p 781
Trilling D (2018) Lights in the distance: Exile and Refuge at the Borders of Europe. Picador
UNHCR (2018) Mediterranean situation statistics, at: http://data.unhcr.org/mediterranean/country.
    php?id=83

Chapter 27
Indian Slums: The Boundary of Socially Constructed Temporal Borderlands. The Case of Anna Nagar, Wazirpur and Jijamata Nagar Micro-Cities

Samira Albiac and Rosa Cervera

Abstract Slums form boundaries of socially constructed temporal borderlands in twenty-first-century India. After the intense industrialisation that started in the 1960s, the perspective of architects and town planners changed. In addition, beginning in the last ten years of the twentieth century, government policies proved essential in improving India's housing problem for an overpopulated country. Three specific slums provide an understanding of the different scales, the internal structures and the morphologies of the settlements: the slum of Anna Nagar, located next to the airport of Secunderabad; the slum of Wazirpur, situated in a large industrial area of Delhi; and the slum of Jijamata Nagar in Mumbai, whose location is less aggressive for the population. Graphical methods have been used to analyse the slum's internal organisation and the construction of their houses. This demonstrates how the inhabitants of each slum area have made sociological transformations despite limited resources. Their housing is located in temporary borderlands and is subject to forced evacuation by the government.

Keywords India · Slum · High density · Temporal borderland

27.1 Introduction: Reflections on the Slum as a Temporal Borderland

> *"Penetré en un mundo hecho de penumbra y súbitas claridades"* (I penetrated a world made of gloom and sudden clarity)
>
> *Octavio Paz (Vislumbres de la India)*

More than 1000 million[1] people live in informal settlements worldwide. The scale and impact of this precarious situation are difficult to overlook. On an immediate

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[1] Global Report on Human Settlements 2.003, UN HABITAT Un-Habitat 2.008.

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national level, the lack of adequate housing prevents individuals from fully partic-ipating in economic activities that fuel the Gross National Product (GNP) warrants consideration. The long-term impact on health, well-being and development are equally critical at individual and national levels.

Slum formation is an endemic phenomenon that affects a significant number of countries. Each country has its name: *bidonville* in the Francophone world, *barriada* in Peru, a *favela* in Brazil, *chabolas* in Spain and *slum* or *shantytowns (basti)* in India. One of the architecture's ultimate goals is to address shelter and refuge. Viewed from a social perspective, other architectural goals include broader social issues of habitability of shelter, including primary needs of utilities such as electricity and water and services such as health care, community support, transportation and public spaces. These basic needs often go unmet for disadvantaged populations with the most pressing needs.

Discussions about the slum phenomenon commonly focus on precarious legal rights, infrastructure and public services across large geographic areas complicated by borderlands and migration. They also frequently focus on settlements outside municipal or regional regulations as pockets of impenetrable poverty. Thus, they are viewed from the outside despite being in many great metropolises' hearts.

Slums are spontaneous constructions that respond to the immediate need for shelter and the survival of a community. Although, initially, they are temporary constructions that, over time and persistent struggles, these informal settlements become stable and long-lasting micro-cities.

One of the invariant characteristics of slums is that they are built on land that has escaped urban planning legislation. They lack clear property ownership rules, and, as a result, the intervention of municipal or local authorities is subject to many administrative impediments. Informal settlements exist in a legal vacuum, and slum inhabitants are *squatters.* As settlers of abandoned or unregulated land, they are viewed as *hackers* of the city.

India is one of the countries most affected by informal settlements. In a country full of contrasts where many extremes coexist, the most expensive and luxurious housing and the highest degree of poverty are juxtaposed economically, socially and physically. With one of the highest densities of slum populations worldwide, India presents a housing challenge for architects and urban planners.

The Indian government has been committed to new legislation to renovate and improve informal settlements. However, the growth of India is unstoppable, and the enormous magnitude of the issue complicates efforts to find a quick and effective solution to this problem common around the world. Despite many proposals to solve the pressing settlement issue, the government has been incapable of formulating a solution to eradicate these informal settlements. Due to the growth forecasts of the Indian population, institutional plans have been unable to respond to this issue. As a result, the poverty rate constantly increases. Consequently, spontaneous settlements multiply. Eradicating the large pockets of misery also implies an intervention on several fronts, predominantly institutional and financial.

The vision of planners and the government on the habitat of India's disadvantaged population has changed substantially since the 1990s. In 2015, the Indian government announced "Housing for all by 2022", an initiative to provide economic aid to slum dwellers. The plan's main goal was to convert informal homes into formal, legal land with the corresponding social benefits of a planned, controlled, legal urbanism. However, a full consideration of slums requires understanding the local administration's efforts to follow and control the plans dictated by the Indian government (The Hindu Business Line 2015).

> Faced with such an ever-changing and complex situation, many planners have asked if a more flexible direction might be effective.

27.2   Ordering Chaos

Formal cities distribute institutions and responsibilities of the state: they have plans that are organised to maintain social order. There appears to be no such organisation or representation of it. However, this is not entirely true. A social hierarchy exists despite the visual chaos of a slum and the difficulty of grasping its structure and organisation from the outside. The dishevelled appearance of an informal settlement belies the hierarchical order that determines internal social norms of how and where the inhabitants should move. Although the settlement has colonised a territory that may appear arbitrary, chaotic or labyrinthine, it possesses an *order*.

It is often difficult to perceive the order because constructions do not obey a *rational* criterion that can be understood based on modern urbanism. However, it has a constructive basic logic that is autochthonous, elementary and functional. First and foremost, the order organises inhabited space where daily activities occur; in the narrow streets of slums, shops, bazaars, markets, tiny temples and corridors are bursting with life and supporting commercial activity. Opposition to informal cities is that they lack order and organisational structure is too simplified (Odette 2011a, b, c).

27.3   The Slum as an Opportunistic Organism

Paradoxically, the *informal nature* of these settlements, or the fact that they were built without planners, architects or contractors, has resulted in slums akin to a living organism that constantly reinforces and renews itself. They possess the constructive dynamism of an *organic* character. Unfortunately, the need for these settlements to be in a constant state of self-construction/destruction/reconstruction is exacerbated by the quality of construction, lack of planning and climatic and topographical factors throughout India.

Case studies show that these amorphous morphologies present a horizontal development pattern that seems to be never-ending when located parallel to railways or

along airport runways. Families build their homes in urban voids and spontaneously fill any gap in available land. Their houses are adapted to the available space and are built in an improvised manner with waste materials. They settle in non-urbanised land, and the slum dweller occupies a vacant space, conditions it and creates a habitat outside municipal norms and without legal permits. While initially provisional, these homes become permanent with time. For these reasons, slums are unique distinct settlements, and great diversity exists. The specific location determines its ability to live in the future.

27.4 The Slum Has No Built Borders

The infrastructures of the nearby planned city define the borders of the settlements. Since they are created in spaces of exclusion, their boundaries do not have walls or fences; their borders are social. They exist at the limits of built urbanism and within its rejected spaces. As a result, the social marginality of slums of misery is also its frontier.

27.5 Who Lives There? Sociological Transformation of the Slum

Due to the economic impossibility of acquiring a home outside the slums, sociological changes are necessary to improve the infrastructures of illegal settlements. Thus, the traditionally poorer population, which possesses a tremendous social and labour diversity characteristic of modern India, coexists.

   This diversity is also typical of university students, professionals, computer scientists and domestic staff in tourist cities such as Hyderabad, Delhi and Mumbai. They live in the slums on a rental basis. However, paradoxically, despite the economic stability of this booming population of professionals, they cannot buy houses outside the slum due to the high land price in these and other large Indian cities.

   The direct intercommunication between informal and formal cities means greater mobility for the displacement of slum workers. However, this mobility is unidirectional. Although these territories' economic and commercial strength is reciprocal, their social permeability is limited. Due to these factors, their economic activity is bidirectional and social mobility is restricted. Thus, the slum is an airtight territory for formal city inhabitants, a common feature throughout India.

27.6   Case Studies: Anna Nagar in Hyderabad; Wazirpur in Delhi; and Jijamata Nagar in Mumbai

The research focussed on slums in three large metropolises: Hyderabad, Delhi and Mumbai. Each has more than 5 million inhabitants[2] and great commercial activity. The choice of these informal settlements reflects different geographical points across India; each city has high rates of irregular settlements (Fig. 27.1).

- Hyderabad—30% (approximately 2 million people[3]) of Hyderabad's population of 6,809,970 live in the slums in India's fifth-largest city.
- Delhi—47% (approximately 7.6 million people) of Delhi's population of 16,314,838 live in the slums of India's second-most populous city.
- Mumbai—62% (approximately 13.4 million people) of Mumbai's population of 21,690,000 live in the slums in India's largest city.

    Although the three slums in each city are not the biggest nor the best known, they have presented an opportunity to consider several essential factors common to many slum settlements:

- Anna Nagar (Hyderabad) is located in front of the Begumpet airport.
- Wazirpur (Delhi) is located in an industrial area adjacent to the train tracks.
- Jijamata Nagar (Mumbai) is located near three cemeteries.

    Although each is very different, they are constrained by the formal city and have an organic morphology. They are located in *urban vacuums* of diffuse ownership.

    Investigation of the slums considered the following parameters:

- Location
- Relationship with the formal city
- Internal structure
- Housing and materials

    This methodology was used to obtain data and develop hypotheses from the furthest to the most detailed scale (Fig. 27.2).

27.7   Anna Nagar Slum (Hyderabad)

27.7.1   The Site: Occupying Gaps of the Airport

The Anna Nagar slum in Hyderabad is located between two areas that were initially used for military purposes: the airport and the military training camps. Today, this area belongs to the Indian army.

The slum of Anna Nagar is located in Rasoolpura, in Secunderabad, a modern city during the British Empire, linked to this historical period until 1947. It changed in urban appearance due to the rapid industrial development in the 1960s (Ratna

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[2] ICEX 2013, "El mercado inmobiliario en la India".

[3] http://mirror.unhabitat.org/content.asp?cid=730&catid=46&typeid=13
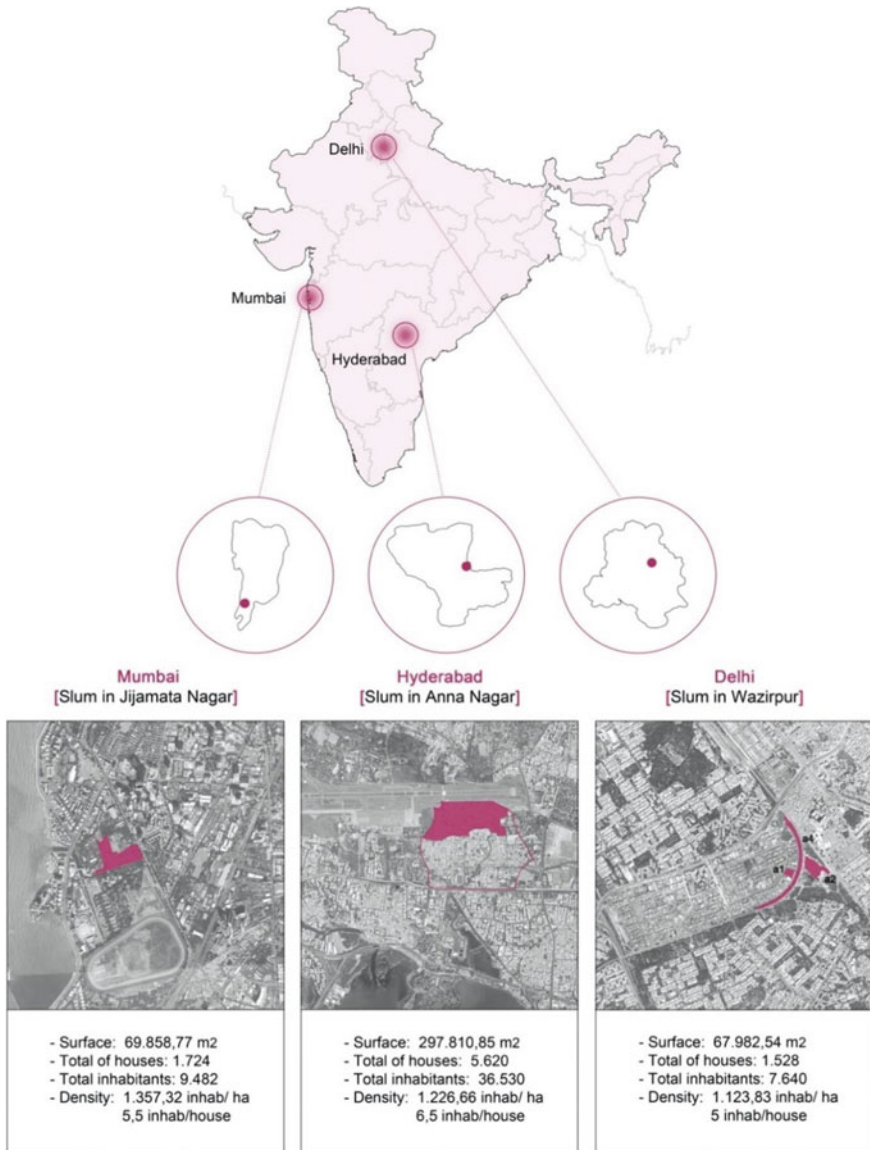
Fig. 27.1 Location of the case studies. [Author's graphic]

Naidu 1978). The area's colonial past provides insights into its formation. It was a sports and recreational area until 1947. This explains Anna Nagar's surroundings in the south and northeast–the Begumpet Hockey Stadium in the south and the Gymkhana Cricket Stadium in the east. These were British installations that survived after India's independence.

HYDERABAD

- Population: 6.809.970
- Slum population: 30%
- Population Ranking in India: 5th
- City density: 10.477 inhab/km2

Slum of Anna Nagar
Secunderabad
HYDERABAD
International airport Rajiv Gandhi

DELHI

- Population: 16.314.838
- Slum population: 47%
- Population Ranking in India: 2nd
- City density: 9.340 inhab/km2

Slum of Wazirpur
Old Delhi
NEW DELHI

MUMBAI

- Population: 21.690.000
- Slum population: 62%
- Population Ranking in India: 1th
- City density: 21.000 inhab/km2

Slum of Jijamata Nagar

Fig. 27.2 City of Hyderabad, Delhi and Mumbai. [Author's graphic]

The Anna Nagar slum is representative of the massive overcrowding caused by the rural exodus in Andhra Pradesh. Various religious buildings also manifest this departure, with at least three communities represented by religious buildings: a Hindu temple, a mosque and a Christian church. India, in this sense, is a melting pot of communities that coexist in the same slum without mixing (Fig. 27.3).

27.7.2   Possible Origins

India's recent past is difficult to understand without knowledge of British military installations built in the large cities. The origin of the Anna Nagar slum may be linked to such British facilities; the first slum dwellers may have been installed in Anna Nagar as a workforce for the military zone and maintenance personnel for the sports areas. The slum grew to occupy the void between the sports facilities and the airport runway of Begumpet to the north.

The location of slums in such high-risk terrain is common in large metropolises such as Hyderabad. Even though the inauguration of a new international airport in Hyderabad in 2008 reduced traffic at the Begumpet airport to military and private use, the Anna Nagar slum residents still suffer from constant noise pollution and a poor environment.

27.7.3   Modifications

Analysis of photographs revealed recent modifications (Fig. 27.4):

In 2000, the slum had its current configuration with an urban void (highlighted) in its centre. The rectangular form suggests that this was a sports area.

By 2003, this void area had reduced in size, and by 2017, it had been overtaken, indicating the growing density.

In 2005, the airport runway was enlarged; however, in 2008, it stopped being used as a commercial airport and was dedicated primarily to military use.

27.7.4   The Hypothesis of Morphological Development of the Slum

Anna Nagar is crossed by a stream that separates the area into two zones. It is likely that the slum relied on the stream as a water source and developed along with it. In its development, the slum developed parallel to the airport runway. The slum dwellers saw this empty territory as a space of opportunity. The current morphology is delimited in the southern part by an area of buildings that may derive from the
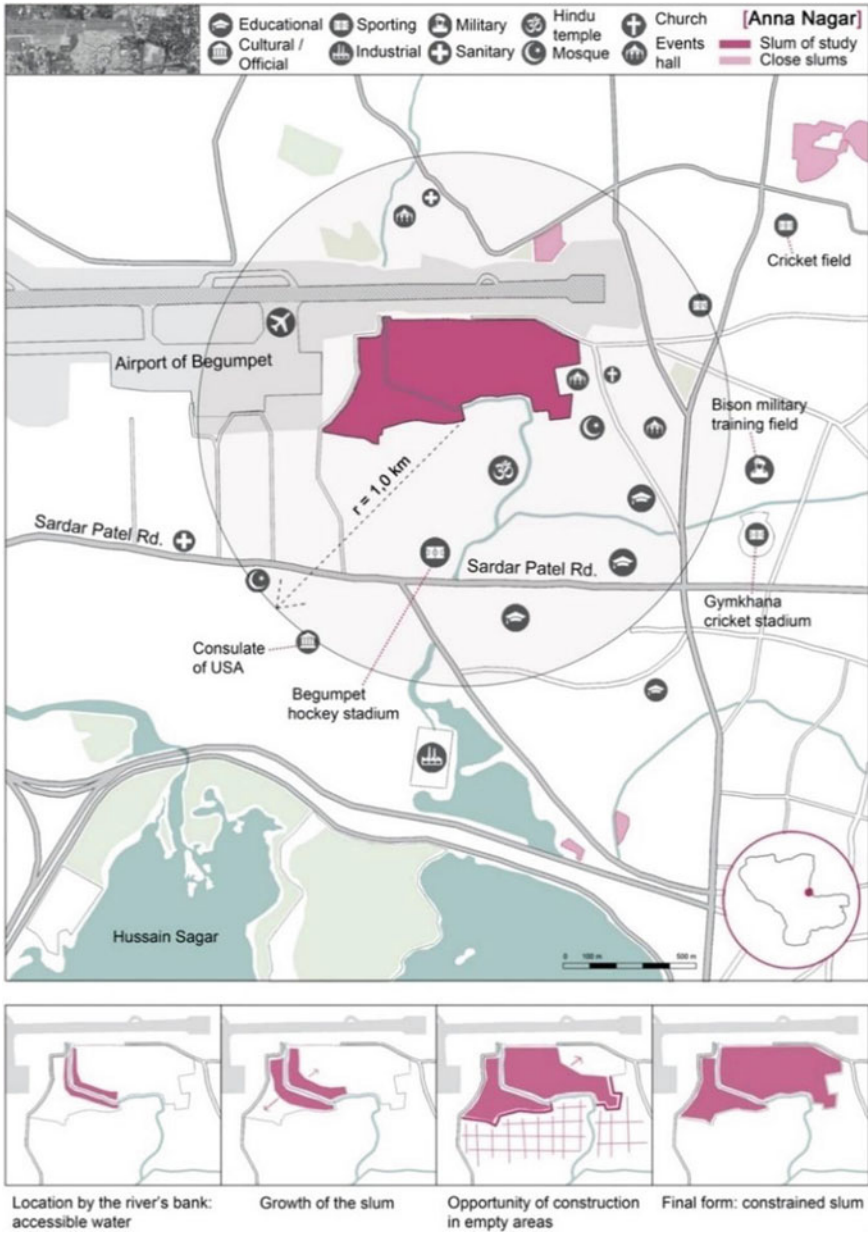
Fig. 27.3 Location map of Hyderabad's slum and hypothesis of its development. [Author's graphic]

Fig. 27.4 Evolution since 2000–2017. Growth and increasing density. *Source* Google Earth

growth of Secunderabad in the 1990s. In the southern part, the slum has no physical boundaries separate from the formal city; only the urban fabric varies (Fig. 27.4).

27.7.5 Structure of the Slum Fabric

The configuration of Anna Nagar is an organised slum with a surprisingly standard layout (Figs. 27.5 and 27.6).

The following schemes compare Anna Nagar's full and empty slots with a nearby formal zone. A radius of 100 m is used to analyse the density differences. The density calculated for the slum is 1226.66 inhabitants/hectare.[4] The reticular arrangement that visually resembles the configuration of a formal city is striking. The streets have variable dimensions up to 1.55 m sides (Fig. 27.7).

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[4] Author's estimate.
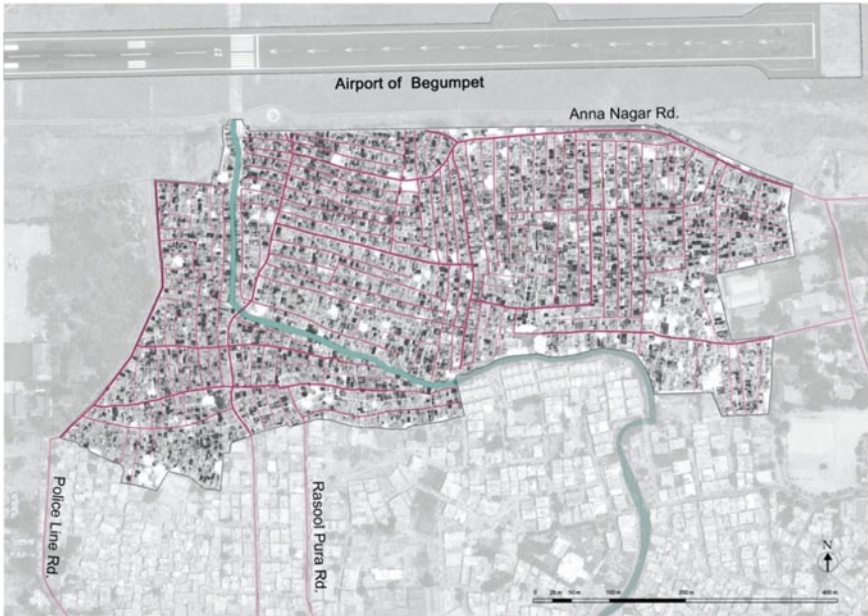
Fig. 27.5 Morphological structure of the slum: analysis. [Author's graphic]

27.7.6 Housing and Materials

Housing responds to a vital need for a family's subsistence. In slum dwellings, self-built houses rely upon common knowledge. There is a relationship between this vernacular knowledge and the industry knowledge provided by the formal city.

Dwellings are built with waste materials and components common to industrial environments: materials such as metal sheets for covers, plastics, bags, tyres, wooden slats, barrels and cans. Heavier objects serve to counteract the flimsy structure. Canvases and bags of pressed plastics are used to waterproof the roof from the monsoon rains. Plastic bottles are often used as skylights (Fig. 27.8).

27.8 Wazirpur Slum (Delhi)

27.8.1 The Site: The Railroad Opportunity

New Delhi was built south of the old urban area. As the capital of the Republic of India, it is the seat of government. New Delhi is the model *par excellence* of a planned city. The urban footprint of the British Empire is perceived throughout the city.
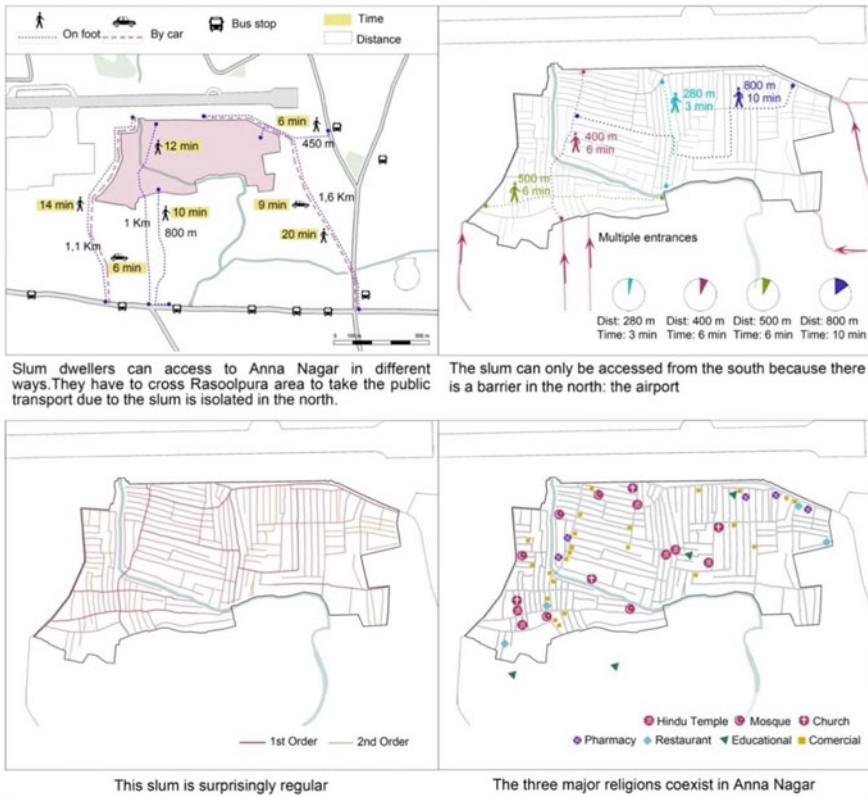
Fig. 27.6 Analysis of Displacements and communications; Accesses and circulation; Internal routes of the slum; Equipment and public services. [Author's graphic]

Wazirpur is one of the 70 districts in Delhi and is in an industrial area. It is a hub of industry due to the railway infrastructure. The slum dwellers found an opportunity to work in the railway's industries and commercial warehouses. Two railway lines converge in a curve, and train speed is reduced. As a consequence, large neighbourhoods have increased. It is located in the communication node that forms Mahatma Gandhi Rd. Highway and the Delhi railway. The analysis focuses on the elliptical-shaped slum area parallel to the railroad tracks (Fig. 27.9).

27.8.2 Strategic Location: Living Next to the Train Tracks

Aerial photos of the slum between 2000 and 2017 (Fig. 27.10) show minimal morphological variation. The only distinguishable changes are the industrial constructions that have grown with economic development.

Fig. 27.7 Density comparison. A detailed plan of the slum: the dimension of the houses and streets. [Author's graphic]
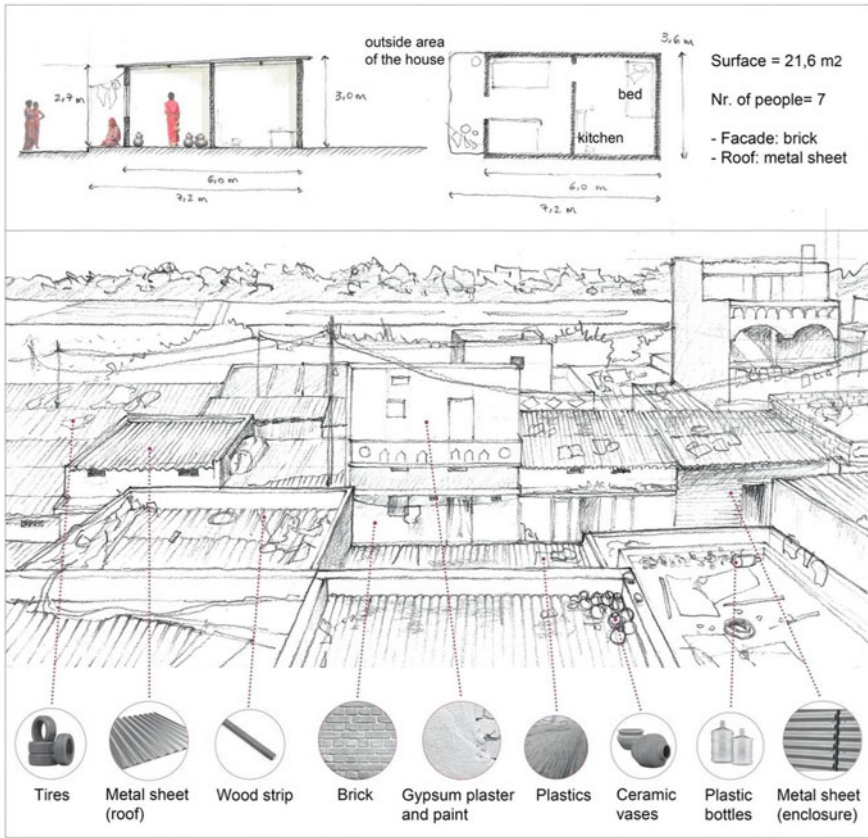
Fig. 27.8 Analysis of housing and materials. Slum in Anna Nagar, Hyderabad. [Author's graphic. Housing data extracted from Yatin Pandya]

As in the case of the Anna Nagar slum near the Hyderabad airport, the Wazirpur slum is located in a place of risk. The Modernisation Plan "Housing for all by 2022" that the government has established proposes that removing these informal settlements entails a severe administrative problem for the national railway company.

27.8.3 The Hypothesis of Morphological Development of the Slum

The origins of the Wazirpur slum are likely the result of three essential factors:

- Work opportunities
- Connection with the rest of the city
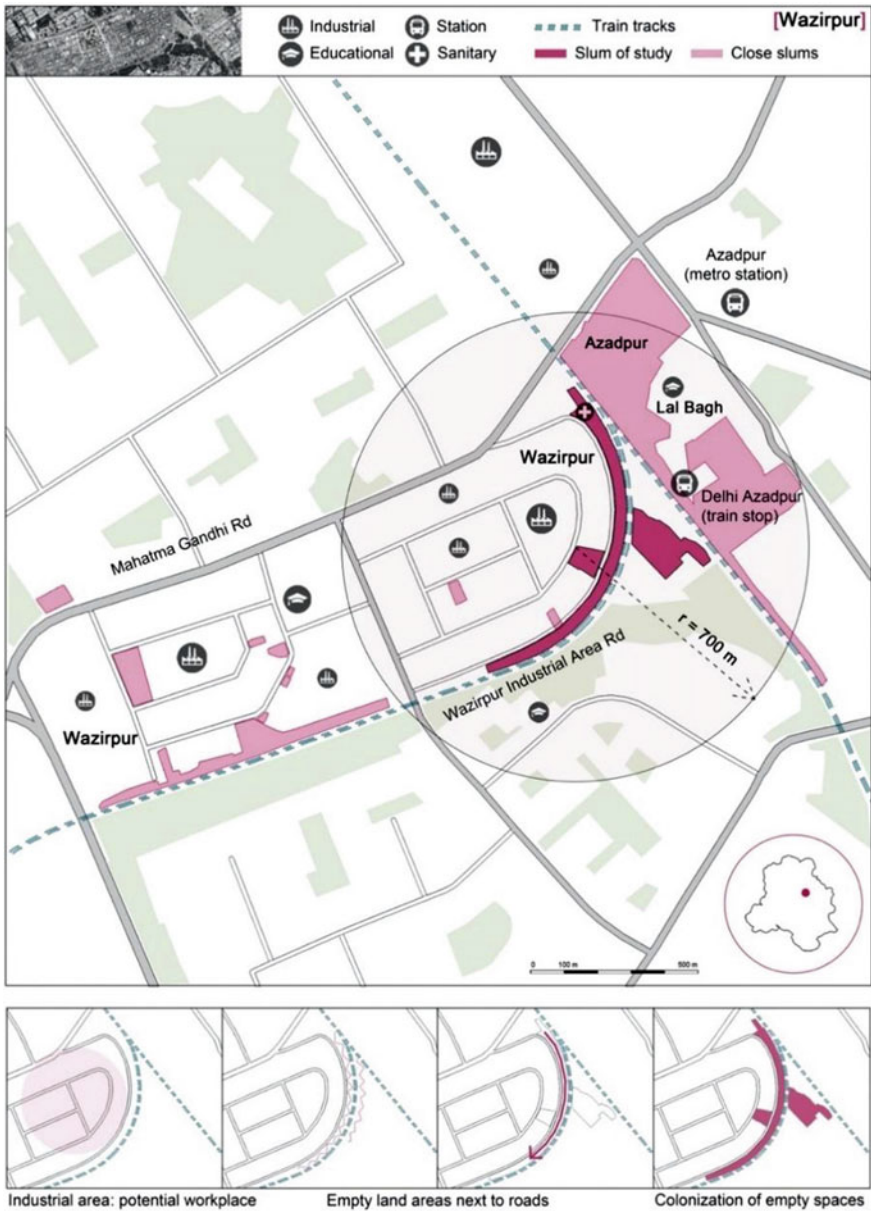
Fig. 27.9 Location map of Delhi's slum and hypothesis of its development. [Author's graphic]

Fig. 27.10 Evolution since 2000–2017. Growth and increasing density. *Source* Google Earth

- Direct access to industrial materials for self-construction of housing or for business purposes.

Due to its narrow and bounded morphology, the growth of the Wazirpur slum found new strategies to *invade* both sides of the ellipse (Fig. 27.10).

27.8.4   Structure of the Slum Fabric

Compared with the planned city's urban fabric, the area is primarily tiny structures with maximum density and land use. However, the lack of public space shows a density higher than the one desirable for a city. As a result, the estimated density of the slum is 1.123,83 inhabitants/hectare (Figs. 27.11 and 27.12).[5]

The main traffic route is Wazirpur Industrial Area Road. Inside the slum, no dimension was measured on the left of the railroad tracks due to the high level of housing overcrowding. However, in the morphology on the right of the tracks, longitudinal streets cross the slum.

The street dimensions reach widths of 0.58 m. However, these do not correspond to the dimensions of public roads. Instead, one could identify the gaps between

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[5] Author's estimate.

Fig. 27.11 Morphological structure of the slum: analysis. [Author's graphic]

building and construction, which serve as solar protection and help buildings avoid the intense impact of the sun (Figs. 27.13 and 27.14).

27.9 Jijamata Nagar's Slum (Mumbai)

27.9.1 The Site: Taking Advantage of the Water

Bombay, known as Mumbai since 1995, is the capital of the western state of Maharashtra. It is located on the coast of the Arabian Sea. Following India's independence in 1947, Mumbai suffered economic stagnation like Delhi and Hyderabad. However, these cities re-emerged in the 1960s when the country's industrialisation required an abundant workforce; however, the migratory avalanche produced more misery because Mumbai could not respond to the enormous demand for housing infrastructure. Paradoxically, industrialisation brought more poverty. Since 1947, Mumbai has experienced significant growth, but it has been "little urbanised".[6] More than half of the inhabitants live in slums.

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[6] Rosa Cervera y Javier G. Pioz: Mumbai reciclado.
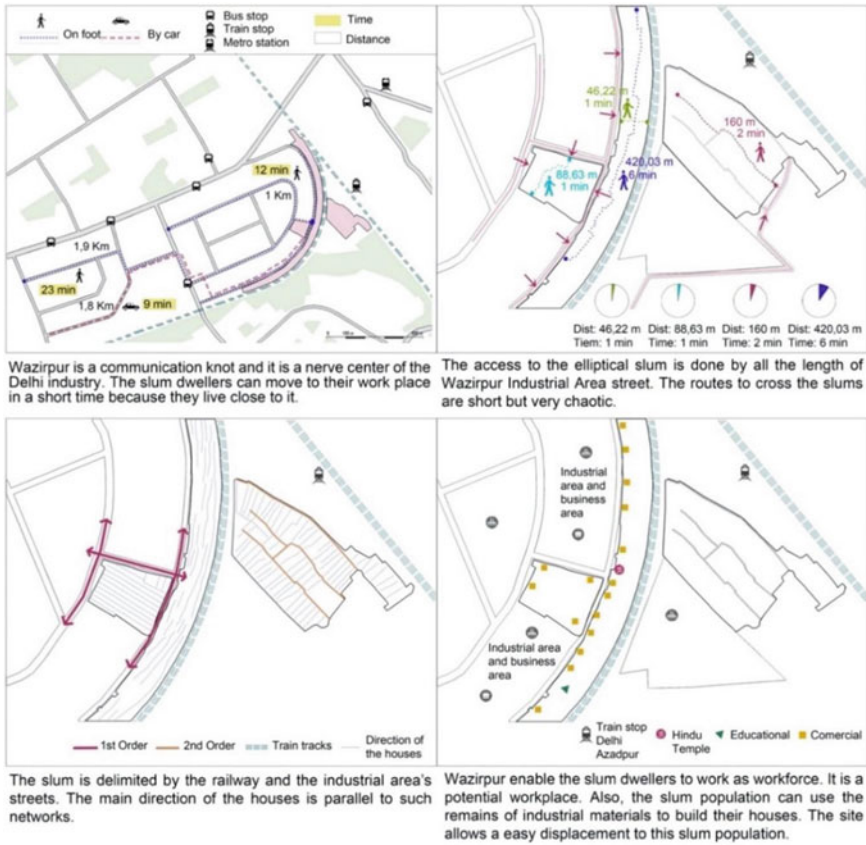
Fig. 27.12 Analysis of: Displacements and communications; Accesses and circulations; Internal routes of the slum; Equipment and public services. [Author's graphic]

While Mumbai is an extraordinarily dynamic city, it is also sedentary in the effectiveness of housing reforms. This is evidenced by the failed Development Plan presented by the Greater Bombay Municipal Corporation in 2015.

Jijamata Nagar is on both sides of a water channel enclosing a Jewish, Christian and Muslim cemetery. This location is sociologically significant due to the representation of three religions in the same area. To the south of the slum is a large sports area, the Mahalakshmi hippodrome, dating from colonial times and providing evidence that Worli was a residential area since the nineteenth century.

Once again, an informal settlement was established in an inhospitable location. Nevertheless, this neighbourhood is one of the Rehabilitation of Marginal Districts initiative projects, which is undoubtedly the best of three case studies (Fig. 27.15).

Fig. 27.13 Density comparison. A detailed plan of the slum, dimensions of the houses and streets. [Author's graphic]
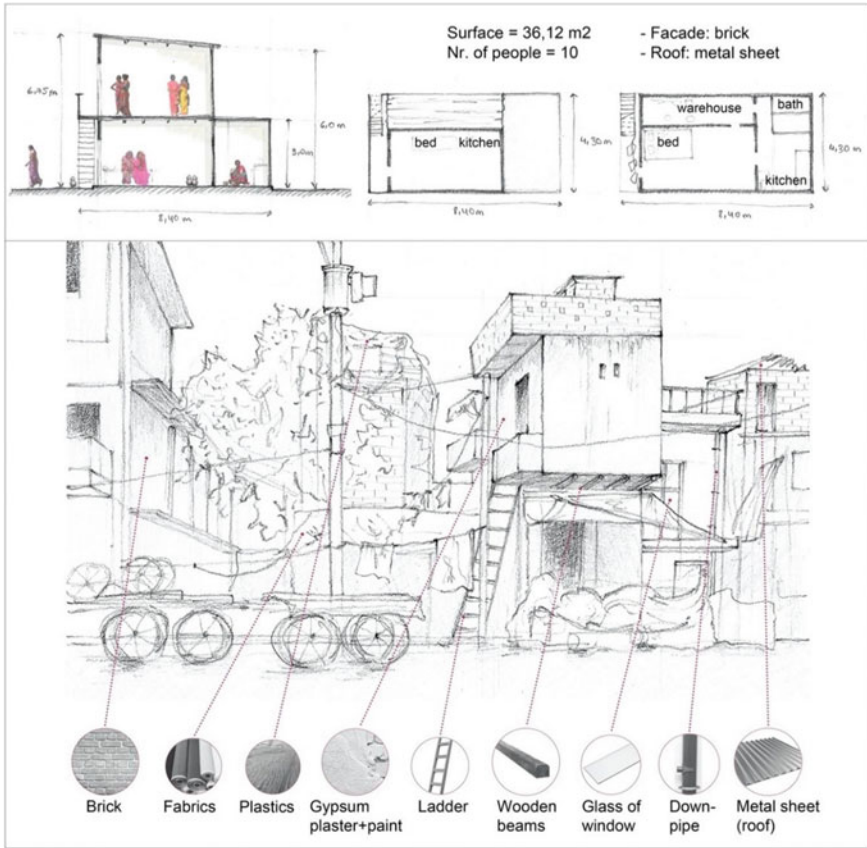
Fig. 27.14 Analysis of housing and materials. Slum in Wazirpur, Delhi. [Author's graphic. Housing data extracted from Yatin Pandya]

27.9.2 *Origin of the Jijamata Nagar Slum and Hypothesis of its Morphological Development*

In 2000, Jijamata Nagar had already achieved its current configuration. However, no significant change in its morphology is appreciated at large. This indicates that it is a consolidated settlement. In the book "Recycled Mumbai" (Cervera and Pioz 2012), it is considered that Jijamata Nagar has existed for more than forty years. It presents an irregular organisation with a well-defined hierarchy of streets.

The settlement runs parallel to the river, which serves as a water source. It extends to the north but is limited by already occupied plots. Its morphology provides evidence of the organic and dynamic nature of slums (Fig. 27.16).
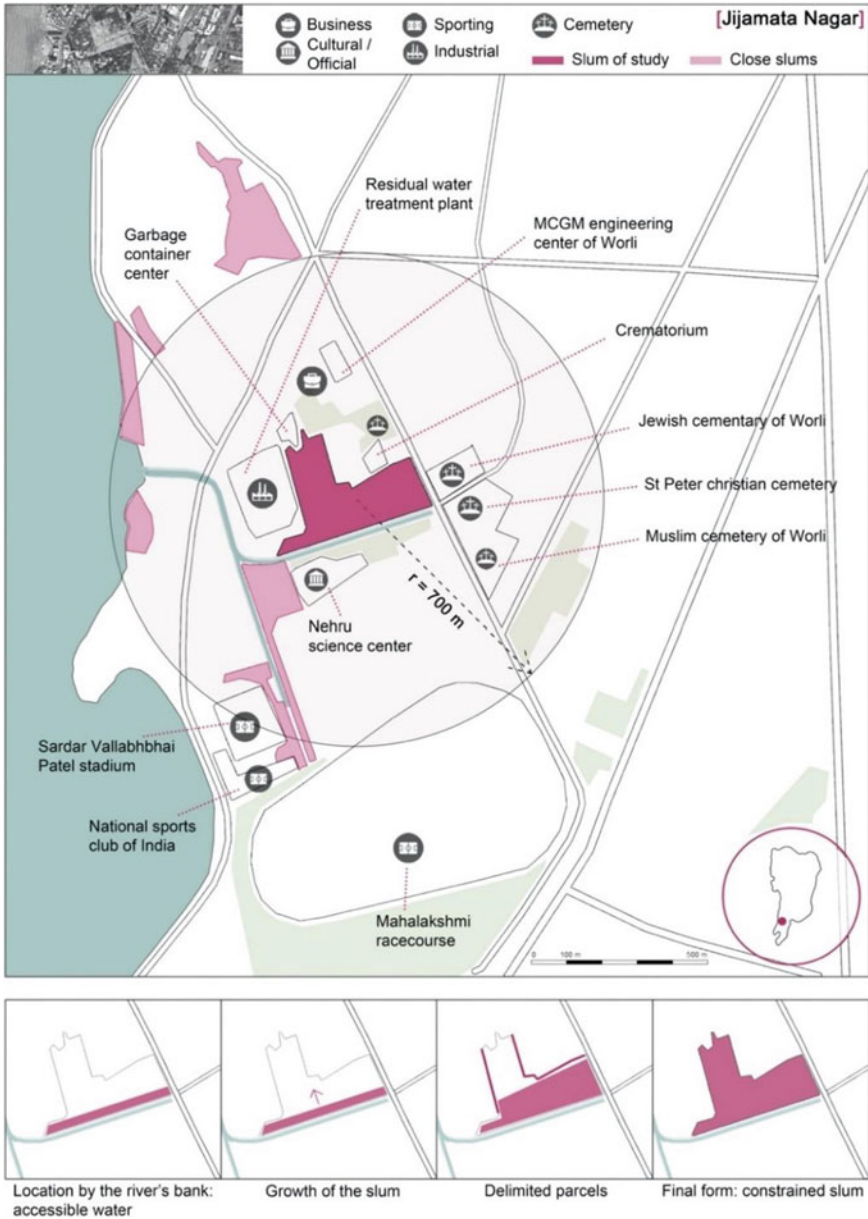
Fig. 27.15 Location map of Mumbai's slum and hypothesis of its development. [Author's graphic]

Fig. 27.16 Evolution since 2000–2017. Growth and increasing density. *Source* Google Earth

27.9.3   Conflicts Over Land Speculation

In August 2010, Jijamata Nagar was considered one of the slums of the government's plan for 70% redevelopment of informal lands/slum areas. Two large construction companies,[7] DB Realty and Lokhandwala Infrastructure, were contracted to convert these informal lands into residential areas. However, some discrepancies arose in the slum of Jijamata Nagar divided its population into two categories. These speculations increased the price of land in Jijamata Nagar. As a result, prices rose from 15,000 rupees (194.90 euros) to 25,000 rupees (324.84 euros) per m2. India's minimum wage of 3170.79 rupees (41.2 euros) per month helps put these costs into perspective (Bharucha, 2014).

Each construction company offered a sum of money to obtain property titles or the poorest residents' consent. In some cases, residents did not want to leave the slum despite the potential to be rehoused in government housing. However, there remains an unresolved legal gap preventing the realisation of these plans.

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[7] "Time of India" 11 de febrero de 2015.

Fig. 27.17 Morphological structure of the slum: analysis. [Author's graphic]

27.9.4 Structure of the Urban Fabric

The density of the slum is 1.357,32 inhabitants/hectare.[8] The microstructure of the urban fabric and the extremely narrow streets show the difference between the regular density and the fabric of the formal city (Figs. 27.17, 27.18 and 27.19).

27.9.5 Housing and Materials

Currently, economically active professionals cannot afford a room in the formal city due to high prices. Instead, they find rooms for rent within the slum. As of 2011, the homes of some neighbourhoods, such as Jijamata Nagar, had permission to increase the height of their homes[9]. If current proposals are approved, building more than two storeys will be possible.

Pankaj Joshi, executive director of the Urban Design Research Institute, expressed his views. "I am not opposed to the extension of height. When the rich can stay in higher buildings, why can not the poor? However, then, the right services must be

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[8] Authors' estimate.

[9] http://www.mid-day.com/articles/bmc-to-increase-legal-height-of-slums-to-18-feet-before-civic-polls/16750178

Benefits of the location:
- Good site with direct and immediate access to public transport.
- It seems self-sufficient and partly hermetic.

There is a single direct access from Dr. E. Moses Marg Street to the slum. It is well connected with the formal city. The inhabitant takes only 5 minutes to cross from one end to the other the main artery of the slum.

The main street, that we have denominated of first order, crosses longitudinally the slum. Those of secondary order are its perpendiculars that extend transversely. In the third order it is included the most irregular but clearly recognizable routes. The covers reveal a possible predominant direction of the houses.

The main street concentrates all the commercial and poductive life. We highlight at both ends of the slum public baths. It is interpreted that Jijamata Nagar is a self-contained microcosm with enough infrastructures for daily development.

Fig. 27.18 Analysis of Displacements and communications; Accesses and circulations; Internal routes of the slum; Equipment and public services. [Author's graphic]

provided. Houses such as bathrooms inside the house, adequate open spaces and air and sunlight should be available" (Fig. 27.20).

27.9.6 Graphical Comparison

See Fig. 27.21.
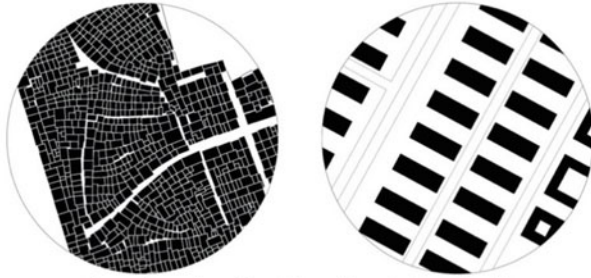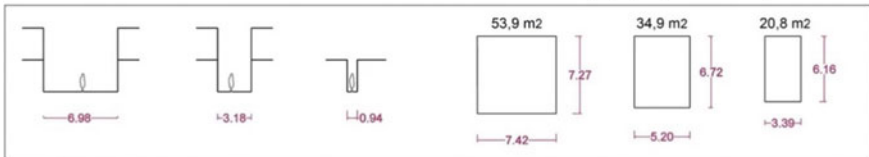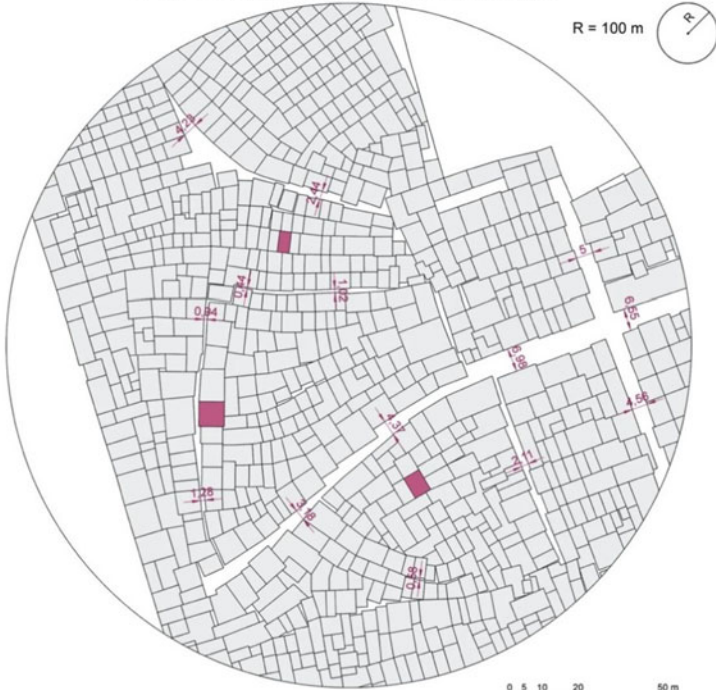
Fig. 27.19 Density comparison. A detailed plan of the slum, the dimension of the houses and streets. [Author's graphic]
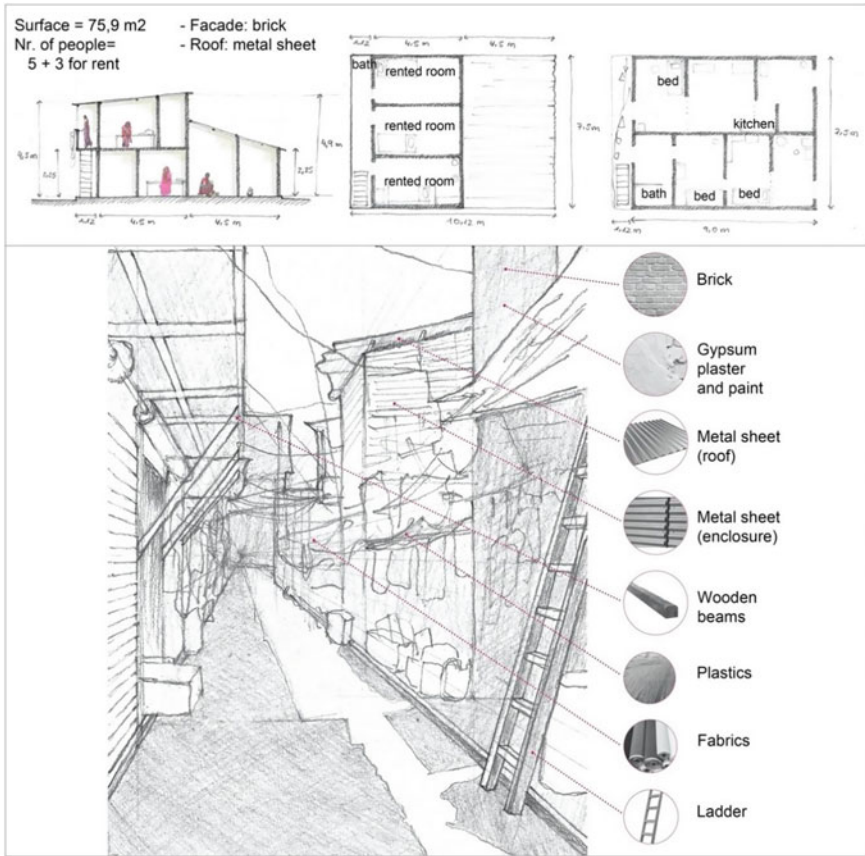
Fig. 27.20 Analysis of housing and materials. Slum in Jijamata Nagar, Mumbai. [Author's graphic. Housing data extracted from Yatin Pandya]

27.10   Conclusions

Understanding informality follows other regulatory codes that escape the rational conception of informal settlement. Therefore, this issue cannot be approached with a condescending look; it must be treated with an egalitarian attitude.

The slum is a counter-model that functions as an intelligent microcosm and develops autonomously at the margins of the law—the absence of legal ownership results in the removal of the social benefits that the planned city provides. For practical purposes, the slum dweller lives outside the city. However, shops, businesses, schools, places of worship and accommodation within the slum allow it to function as an organised society in a chaotic space that helps its livelihood.

The settlements studied show that the inhabitant of the slum "lives in the margin, but not on the sidelines", as Salomé Houllier points out. This phenomenon can no

Slum in Hyderabad
Anna Nagar

It is a consolidated settlement whose future depends on the air traffic regulations of Begumpet

Slum in Delhi
Wazirpur

It is a settlement that can not have a future in the Indian Government Plans: Possibly this slum will be demolished and its inhabitants relocated

Slum in Mumbai
Jijamata Nagar

It is a consolidated settlement that will last and be improved with the Indian Government Plans that are in progress

Fig. 27.21 Graphic comparison of the three case studies. [Author's graphic]

longer be seen with the same eyes as in 1960 since it has become more visible. The interrelation of permeability between the *exterior/interior* of the settlement is due to the sociological change of the inhabitants of the slum on the one hand and to the need of the state to benefit from the human potential of the slums on the other. As stated in the book "Recycled Mumbai" (Cervera and Pioz 2012), 60% of the city's generated economy derives from the inhabitants of the Indian settlement itself.

The sociological transformation within the slum allows a more flexible and more positive view of the future of slums in the coming decades. The rate of industrial growth and the rise of R&D technology in the metropolises such as Delhi, Mumbai, Hyderabad and other cities demonstrate that the caste system, which was strongly hermetic for centuries, has substantially changed. The increasing presence and strength of the untouchables[10] are unstoppable trends.

Ram Nath Kovind, the current president of the Indian Republic, is a case in point and provides insight into the importance of reform. He belongs to the Dalit, an untouchable community and the lowest ranking within the caste system hierarchy. "We need to constantly think about whether the country's development reaches the last person in the line or the most backward community".

The graphical analysis of the case studies demonstrates that it is difficult to understand and classify slums, and that assumption can be misleading. It is impossible to classify something transitory and raise whether constantly mutating and evolving are corrected. While the answer appears to be yes, the very concept of slum indicates that it is a territory impacted by grave factors and that its existence can be modified at any given moment.

The case studies demonstrate the difficulty of controlling informal cities and settlements. The consideration of each slum through a thorough theoretical and graphical

[10] Huffpost. 25 de Julio 2017.

analysis shows the unique qualities, characteristics and development. It also shows the complex relationship each has with its formal city.

The term *phenomenon* is closer to the valuable sociological urbanism that can provide different solutions to the challenges of each case. Similarly, *informal city* is a euphemism that provides greater significance to irregular settlements than *slums*. It is more appropriate to each settlement's scale, population and economic relationships to its formal counterpart.

References

Bharucha N (2014) Fighting developers turn friends for Worli SRA project that is likely to fetch Rs 8000 Crore. The Time of India, 17 Dec 2014. https://timesofindia.indiatimes.com/city/mumbai/fighting-developers-turn-friends-for-worli-sra-project-that-is-likely-to-fetch-rs-8000-crore/articleshow/45540077.cms. Accessed 14 Nov 2021

Cervera R, Pioz J (2012) Mumbai Reciclado. Universidad Alcalá de Henares, University of Alcala, Spain https://www.abc.es/internacional/abci-descarrilamiento-deja-menos-10-muertos-y-150-heridos-india-201708191626_noticia.html. 02 July 2018

Huffpost 92017. 25 de Julio

ICEX (2013) "El mercado inmobiliario en la India"

Ratna Naidu (1978) A study of slums in Hyderabad-Secunderabad. Indian J Social Work XXXIX(3)

Odette L (2011a) Comment appréhender les slums indiens? Normes sociale et scientifique. L'Information géographique, vol 75, pp 37–52

Odette L (2011b) Les villes invisibles. L'information Géographique 65–3:219–233

Odette L (2011c) Comment appréhender les slums indiens? Normes sociale et scientifique. L'Information géographique, vol 75, pp 37–52

Presidente de la India intocable. https://www.huffingtonpost.es/2017/07/25/el-nuevo-presidente-de-india-pertenece-a-los-intocables-la-ca_a_23046746/. 02 July 2018

The Hindu Business Line (2015) Un descarrilamiento deja al menos 23 muertos y 150 heridos en India

Chapter 28
A Neighbourhood of Fragmentation

Iris Altenberger

Abstract Once isolated as a bordered neighbourhood, the Raploch Council housing estate in Stirling, Scotland, has been regenerated through a gentrification policy that encouraged increased owner-occupied housing in an area previously dominated by social housing. As a result, new norms and values were reflected in the visual environment and architecture by creating new buildings and moving new residents into the area. To investigate these issues, an auto-driven photo-elicitation method was used. Area residents, both established and new, were given single-use cameras and asked to take photos of the places and spaces that illustrated the changing nature of the Raploch. Guidance to the participants was limited to allow their perspectives to emerge and to reduce the researcher's effect. Simultaneously, this method considered Foucauldian power relationships as the participants guided the discourse through their images. The interviews that followed focused on the participants' photos. It became clear that social boundaries between established and new residents resulted in an "*us* and *them*" discourse. These social differences were reinforced by the physical barrier of a road between each group's areas. In addition, the participants were acutely aware of another border—the different architectural styles of each area. Established residents considered the architectural style of the other group as *out-of-place,* and newer residents viewed the housing of the established residents as *old* with an underlying discourse of needing redevelopment by the new residents.

Keywords Social housing · Gentrification · Auto-drive photo-elicitation method · Raploch · Stirling · Scotland

28.1 Introduction

The urban space is read, interpreted, and created by influential stakeholders, inhabitants, and visitors. The discourse between these parties is embedded in the physical structures and contextualised in a particular place's social and historical context. This

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becomes pertinent when considering the neighbourhood, Raploch, which is unique. Although Raploch is located in the periphery of Stirling, it is distinctly separate from the city. Its connection with Stirling, a place of great historical significance in Scotland, is reinforced by the towering mediaeval castle on a hill overlooking at the neighbourhood. Stirling, a university town, is located in central Scotland and within commuting distance of Glasgow, with Raploch adjacent to the motorway.

These unique features made the regeneration project of a public–private partnership economically attractive, primarily as the project was conceptualised before the 2008 economic crash within a housing boom. On the other hand, as a public body, the council was interested in creating social change as Raploch was within the most deprived 5% of residential areas on the index of multiple deprivations[1] in Scotland (SIMD 2022).

Public sector involvement has long been a feature in this area, with council housing built since the 1920s in various stages. However, even these early developments were criticised when the housing qualities were recognised as the slums of the future due to lower quality building specifications and relatively smaller accommodations compared with other developments of the time. However, long before the council's involvement, historical 16th-century sources had attributed negative characteristics to the area. These included low wool quality, deprivation and high crime rates. Furthermore, after the Irish potato famine, it was described as an Irish village with Irish immigrants moving to the area. The increase in the Roman Catholic population reinforced differences and separateness. This territorial stigmatisation was supported by moving the population in clearances from the slums around the castle to the council housing development starting in the 1920s (Waquant et al. 2014).

Over time, these factors led inhabitants to leave the area, which led to an increase in the number of vacant properties. In response, the council introduced a policy in the 1980s that encouraged a fast-track system of letting housing. Unfortunately, this resulted in a transient community using the area to base criminal activities, such as drug dens and housing benefit fraud. This further stigmatised the area, and it became what is described in a broader social and media context as a sink estate characterised by its notoriety; as one of the new residents of the research project explained from her childhood impressions of the area:

> "...you never went there you were not allowed to go down there when you were little you were not allowed to, you know? We did not drive through their cause there is no reason to drive through there to get anywhere it is just a housing estate you never went down that area, and you were not if you know if you accidentally walk down that way you got a bit freaked out, had to you know you run the other direction." (a new resident in their 20s)

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[1] The Scottish Index of Multiple Deprivation (SIMD) identifies small area concentrations of multiple deprivations across all of Scotland in a consistent way. It allows effective targeting of policies and funding where the aim is to wholly or partly tackle or take account of area concentrations of multiple deprivations. SIMD ranks small areas (called data zones) from the most deprived (ranked 1) to least deprived (ranked 6,976). People using SIMD will often focus on the data zones below a certain rank, for example, the 5%, 10%, 15% or 20% most deprived data zones in Scotland (Scottish Government 2019) https://www2.gov.scot/Topics/Statistics/SIMD.

These characteristics, combined with economic factors, led to the inception of a regeneration programme in 2007. As part of the redevelopment, council housing was demolished and replaced by newly built owner-occupied and social housing. In addition, a new school facility that incorporated Roman Catholic and non-denominational schools, special needs schools, and community centres was built. The demolition took place on one side of the Drip Road, the main road leading through the area, reinforcing a physical boundary between the newly built and the traditional housing estate. Previous research, as well as a participant in this study, highlighted that even before the regeneration Drip Road was considered a boundary:

> "...the Drip Road that road splits the Raploch in two. So it was just the other side, and people on this side would call our side the other side!" (an established resident in their 20s).

Therefore this road served as a boundary and enabled the population of different sections to differentiate themselves by focusing on other territorial names from the stigmatising discourse of Raploch and its territorial stigma. In addition to the physical changes, introducing new forms of architecture into the area and social changes brought a new social group of owner-occupier homeowners.

28.2   Methodology

The research project utilised auto-driven photo-elicitation to explore these social and built fabric changes. Established residents and new owner-occupiers were asked to take photographs of their neighbourhood. Only limited instructions guided them. These photos became the starting point of the subsequent interview, offsetting the Foucauldian power relationship. Rather than the researcher, the participants became the experts on their neighbourhood and its developments. This empowering process was particularly pertinent in areas with high deprivation and territorial stigmatisation. It allowed the community to be heard and seen. Within the findings, it became apparent that the photos not only portrayed the social world, but they also served to "betray the choices made by the person holding the camera" (Black 2009: 474). Additionally, semi-structured interviews were conducted with key informants, which involved professionals who worked with the community. This group was consulted to understand the community and its complexity better.

28.3   A Divided and Fragmented Community

From both oral and visual data, Raploch emerged as a place of division, segregation and fragmentation. These fragmentations lay along various fault lines that resulted from historical and social contexts, changes in the physical development of new buildings, and owner-occupiers moving into newly built houses. The participants often

referred to these disparities by focusing on the built environment and its architecture, cloaking the underlying discourse of divisions and fragmentation.

28.4 Buildings as a Discourse of Segregation and Fragmentation

Barthes (1997) views the urban space as part of the communication of the city "the city is a discourse, and this discourse is truly a language; the city speaks to its inhabitants, we speak to our city, the city where we are, simply by living in it, by wandering through it by looking at it" (Barthes 1997: 168). This perception is echoed by Dovey (1999: 1), who sees it "as a form of discourse, built form constructs and frames meanings"; hence he considers it as an expression of society which carries multi-layered meanings, thus "places tell us stories; we read them as spatial text" (Dovey 1999: 1).

As an urban place, Raploch is read and interpreted by its inhabitants. However, this interpretation differed between the participants who had just become homeowners and the established residents. Even though both groups juxtaposed changes in the built environment, their descriptions were fundamentally different. The former focused on the old and new, considering the new architecture out of place. This reflected a difference in understanding the place of Raploch and underpinned a sense of separation between these two groups.

28.5 New and Old—New Residents

The new residents considered the new buildings positive, whilst they viewed the old historical buildings negatively. This became apparent when a new resident described her photos of both sides of Drip Road (referring to Figs. 28.1 and 28.2):

> "...this is again the opposite side of the street and these flats here it does not show quite as much as what I have seen yet these are really run-down."
>
> "...this corner everything is just new. It is just really well it is just houses and flats and the fact that it is got this nice pavement...it is just very new. I just quite like it."

As the participants pointed out, this discourse was especially significant in the proximity between the new and the old Raploch on either side of the road. The new residents wanted to differentiate themselves from the old run-down territorial, stigmatised area of poverty and crime by focusing on the difference between the old and the new Raploch. This highlights their otherness to the outside world.

The built environment council housing is a visual reminder of Raploch, something Wacquant, Slater and Bores Pereira (2014) refer to as "blemished of place" associated with a sink estate. The old Raploch architecture represents, for new residents,

Fig. 28.1 Run-down area
(participant)

Fig. 28.2 Newly developed area (participant)

a cultural phenomenon, as Eco (1997) describes. Both areas are primarily residential, however, the architecture of the houses is fundamentally different in terms of design, which is interpreted within a social context. Thus, the social context includes the historical stigmatisation of Raploch per se as a stigmatised place and the generally negative perception of council housing. This perception is influenced by factors such as damaging media representation, positive portrayal of homeownership, and

perception of council housing as a last resort for the economically excluded, especially in an area with limited sales of council housing (Cole and Furbey 1994; Forrest and Murie 1991; Malpass 2005).

For the new residents, this is particularly pertinent, as homes and neighbourhoods are considered identity markers. This is especially as property owners have bought into the new Raploch and its associated place identity as a place of regeneration rather than the old, territorially stigmatised Raploch. Simultaneously, this highlights that both places, old and new Raploch, are not understood as a single entity. Instead, the new residents interpret each place in context with the other. Therefore, as a place, the new Raploch is understood as the old Raploch, and vice versa.

28.6 *Out-of-Place* and *In-Place* Architecture

Conversely, the established residents had a very ambivalent perception of the newly built environment. Whilst they found the new houses and flats aesthetically pleasing, they also thought it was out of place in Raploch. Several established participants compared the architecture of the latest buildings in Raploch with buildings abroad.

> "I do not know, these flats put me in mind of flats you get in the likes of Spain and the hot countries, you know when you go into an apartment because the ones around the corner they have wee verandas that they can come out and sit on." (an established residence in their 50s)

Similarly, another established resident considered the architecture out of place:

> "...set of flats just right down...across from the school and I am not too keen on them. I think it is the layout of them, it is like...its like being in Benidorm!" (an established resident in their 50s)

This perception of *out-of-place* architecture resonates with various theorists who argue that post-modern architecture has limited reference to the local. In this case, many participants discussed that neither balconies nor flat roofs are an architectural feature within the Scottish context. In architectural terms, the regeneration process of repackaging the area entailed aspects of what Dovy (1999) referred to as "power over." In the repackaging of Raploch, it became evident that established residents noted a *foreign* architecture rather than a sense of blending and merging with Raploch. There was also an underlying notion and fear that through the regeneration and the construction of new buildings, the character of the neighbourhood was fundamentally altered and became an unknown foreign territory to the established community. *Out-of-place* represented the established community's reinterpretation of Raploch as a place. Therefore the established community realigned their place perception with the redeveloped physical place Raploch.

This sense of *foreign* architecture also needed to be seen in that housing for the working classes is primarily a utilitarian aspect of life, a place to live. Whereas for the middle classes, it is seen as a consumer good that reflects identity (Allen 2008; Zukin 1993; Bourdieu 1990). These changes in the built environment can also be understood in terms of displacement, which Davidson and Lee (2009) saw as a physical

displacement with old residents moving out and as changing the place to exemplify security and home. Thus, transforming a working-class place into a new middle-class community is indirect displacement. Again this resonates with gentrification. In this case, it can be described as "new-build gentrification" (Davidson and Lee 2009). The sense was that the new buildings in Raploch were aesthetically pleasing. Simultaneously, being *out-of-place* resonates with Hamnett and Whitelegg (2007: 122), who have argued that in a similar context, changes in the built environment "may well be accompanied by growing feelings of relative deprivation; on the part of existing residents." Consequently, it could be argued that the *out-of-place* architecture is a physical representation of wealth and, therefore, highlights the relative deprivation of the old Raploch, which explains its rejection by the established community.

When considering architecture as *in-place* or *out-of-place*, several established participants compared and contrasted the built environment of newly built and established housing areas. This aspect becomes particularly apparent in the comments of an established resident (in the 40s) when he referred to photos of the newly built flats,

> "...ah but I think they look out the place there if it was a brand new scheme brand new area and all the houses were like they are and there was a gap before you get the normal house and you would say fair enough, but them being right across from there looks out of place. It always looks it is run-down they have any thought to try and blend it into the rest of the area; that's my opinion anyway." (an established resident in their 40s)

He did not only consider the physicality of the built environment in Fig. 28.3, but the cleanliness around Raploch Campus, a building frequently photographed, stating,

Fig. 28.3 Raploch Campus (participant)

"I said I think as a stand-alone it looks quite nice and it looks clean and organised, and so does the campus. The campus looks very well maintained cause something there is one paper nae rubbish or anything, so it is so mean it is very clean, and everything looks very functional, and I do not think it brings anything new to the area I still think like the sandstone buildings are far nicer than these wooden and concrete monstrosities, but eh if it was just the campus and nae flats I would not think too much about it, but the clash between the two is quite jarring especially it is on one side it is like left side good and right side bad you know..." (an established resident in their 40s)

These comments also highlight that such comparing and contrasting was a value judgement, the left side good and the right side bad. This value judgement was physically expressed for the established residents not only by the architecture, the decision not to build average houses, and the cleanliness around the campus. This *out-of-place* notion of the established working-class residents can be understood within Bourdieu's (1987) concept of *habitus*.

The planners and architects incorporated their middle-class *habitus* into the architecture through their sense of aesthetics and overt intent to attract middle-class people to buy these new buildings in Raploch. This, in turn, gives their own different *habitus* and repels the long-established working-class residents. These new buildings physically legitimise the new residents' *habitus* by discrediting the culture of the established communities. This architecture can be seen in the context of what Bourdieu (1990; 1984) described as *"symbolic violence",* whereby a sense of intrusion and rejection is expressed through the design of a redefined built environment that does not incorporate *normal houses*. Consequently, such *symbolic violence* can be considered a criticism of the established working-class community and its taste and lifestyle. This expresses a sense that the *old* Raploch is still in need of regeneration.

This was seen as a further threat to the established community. *Symbolic violence* is arguably enacted in the established community by being *gifted* by elements such as the campus. For Bourdieu (1992: 23) such giving was also "*a way of possessing: it is a way of binding another whilst shrouding the bond in a gesture of generosity.*" The underlying discourse is that regeneration demands a reciprocal act from the established community, the need to change.

Considering the Raploch Campus and the established residents' perception of it, it is pertinent to consider another building mentioned by the same group of participants as architecturally different (Fig. 28.4) and not fitting in. Nevertheless, the established resident described it as fitting in very well:

"I just think its a nice looking building it just seems to tie in really well with the area, and it looks historical even given its age kind of as I said 1930s there...there about and obviously has a bit of history and has always been planted there ehm it kind of fits in with the rest of the place." (established resident 40s)

This is further evidence that the sense of a building fitting or seeming *out-of-place* is understood in terms of physical differences and social contexts, such as the regeneration process and the historical background.

The interrelationship between *in-place* and *out-of-place* and social context becomes apparent by the absence of photos and the lack of discussion of buildings by both new and established residents. One such building is St. Mark's Parish

Fig. 28.4 Distinct character (participant)

Church, situated in a prominent location on Drip Road. Another is a 1960s modernist building that is significantly different in the architectural style typical to the area.

Conversely, being *out-of-place* or *in-place* is, to a great extent, socially contextualised rather than merely the result of architectural form. Without minimising the significance of buildings, their form, materials, and their position in a place display social power relationships. The importance of architectural expression becomes particularly pertinent when it does not consider the social-cultural context, as seen in Fig. 28.5 and discussed in the subsequent section. This highlights another fragmentation within the community: religion and religious sensibilities. This warranted consideration, although as other participants took photos of the Roman Catholic Church and the Church Hall, it could be argued that it had limited impact.

28.7 Religious Fragmentation

Raploch has a long history of being religiously mixed with two significant religions: the Church of Scotland and Roman Catholics. The most recent census in 2011 stated that 23.5% of the population in the area considered themselves members of the Church of Scotland and 23.0% Roman Catholics (Scotland's census 2022). This is a relatively high proportion in a Scottish context, as Roman Catholicism is a minority religion in the general population. This stems from Irish immigration during various intervals, particularly after the Irish potato famine. It is essential to remember that fundamental power inequalities between majority Protestant and minority Roman Catholic groups led to historical discrimination, sectarianism, and

poverty (Dimeo and Finn 1998). The historical existence of sectarianism in Scotland has been attributed to Protestant and Roman Catholic Irish immigrants that brought rivalries between them in Ireland and Scotland (Rosie 2004; Bruce et al. 2004). At the same time, Robertson et al. (2008a: 94) suggest "that religious rivalry has been displaced by football, or that the two have become so intertwined as to be inseparable" with the two Glasgow football teams reflecting the two sides, Celtic being associated with Roman Catholicism and Rangers with Protestantism. A previous study found that religious identity had been historically significant, though it had lost relevance in the area, and sectarian tensions have subsided (Robertson et al. 2008a).

Nevertheless, whilst considering the building shown in Fig. 28.5, which participants frequently discussed, it became apparent that religious fragmentation was still a consideration to the participants:

> "the reason why I do not like this one is because of the colour I just cannot understand why they painted it green it is green ehm not that I do not think the Raploch is particularly bothered about ehs peoples whether people are Protestant or Roman Catholic" (an established resident in their 40s)

Similarly, a key informant wondered how the community would react to the green wall of the newly built house, as green is associated with the Celtic football club. Conversely, blue is associated with the Rangers Football Club and has a Protestant-Unionist identity (Bruce et al. 2004). Hence these colours are linked to a particular tribal identity, allowing associations to develop a marker of separation that could lead to conflict. He reiterated a historical incident when the council had painted metal fences in Raploch according to council tenants' wishes, either green or blue. As a result, houses were targeted depending on the colour of their fence:

Fig. 28.5 Religiously distinct community (participant)

"...to begin with they asked them what colour they wanted and you would go to the street there, and it was green and blue-green and blue all the way down, and it was causing numerous problems because if you were a sectarian person, you would just go and look at the window and see oh there is a greenhouse and I just go round egg them or graffiti on their house making people really easy targets." (a key informant)

Even though this building may be seen as aesthetically pleasing, in a different cultural context within Raploch, it was a physical representation of various discourses that were loaded with tensions (Rapoport 1982). This building may be seen within post-modern architecture, often detached culturally from its surroundings. The interpretation of this building is influenced historically by Irish immigration and a community that supports two opposing religiously defined football teams. As various theorists suggest, it could be argued that the primary aim was to attract capital in a globalised world (Zukin 1993; Harvey 1989). By being detached from the cultural context, the colour and, consequently, the building could have further encouraged the discourse of *out-of-place* architecture, which the established community frequently voiced.

Both residents and the critical participant voiced misunderstanding and disbelief about the choice of the colour green. Furthermore, they expressed concern about the consequences this choice would have. This is illustrated in a key informants' comment in which he expresses the concern that Protestant sectarian slogans would soon appear on the wall:

"...big green wall obviously you have to remind that there are still sectarian issues in the Raploch because many people different side of the line ....ehm we are kind of waiting to see basically we can see out of our window because we are down at the end of the building and we are just waiting to see the slogans start appearing UDP and everything suddenly appearing a big green wall seems a bit tempting for certain people..." (an established resident in their 40s)

The large green wall was understood as a symbolic provocation to the Protestants and Rangers fans through its association with Roman Catholicism and the Celtic Football Club. Consequently, participants were concerned and thought this would lead to a reaction to redress the significance and power expressed through the wall's sheer size and prominent location, which could be perceived as belittling the Protestant Rangers fans. Consequently, there was a strong sense that the wall could encourage a protest in the form of religiously motivated sectarian graffiti (Cresswell 1996).

28.8 Photos as a Separate Entity

The photos conveyed the separation of the two communities on either side of Drip Road. Within this context, it was significant to understand the participants' social context and whether they were established or new residents in Raploch.

When taking a photo, the photographer's position provided insight into where they positioned themselves in terms of Raploch as a place. This was especially evident

Fig. 28.6 Photo of historical council housing (participant)

in terms of the respective *other side* of the community. In this context, the photo in Fig. 28.6 may also be seen as an expression of the *lifeworlds* of participants, and a reflection of the experience of being in the place *Raploch* and the places entered and those to be avoided. Thus, even though photos can be seen primarily in a semiotic tradition, they also provide glimpses of the experience of being in a place within a phenomenological tradition (Lefebvre 1991; Markus 1993).

28.9 New Residents

All the new residents took photos of the historic council housing estate within the Raploch. These were taken primarily from a peripheral position or at a distance by standing either on the other side of Drip Road or the pavement rather than entering the estates themselves. Figure 28.6 shows a photo taken by a new resident.

Avoiding entering an area resonates with Newman's (1972) observation of symbolic barriers, which can be as subtle as a changing ground surface such as Drip Road. These barriers can result in a person's reluctance to cross. Simultaneously, this barrier can be a consequence of the social memory of Raploch as a stigmatised territory, a "sink estate" associated with poverty, drugs and crime. This memory creates fear and a perception that the new residents will avoid the area as a territory. It could also be argued that because new residents did not take photographs within

Fig. 28.7 Photo of historical council housing (participant)

the heart of the historical council housing estate, they did not consider it part of the new residents' Raploch.

Only one of the new residents entered the area; however, she did this by car, whereas others took photos whilst walking. It could be argued that the vehicle, with its sense of security provided by the enclosure, allowed her to cross the Drip Road boundary (Fig. 28.7).

28.10   Established Residents

Established residents choose to take photos of the new houses from a distance or the periphery, as illustrated in images Figs. 28.8 and 28.9 with a view from the newly created Village Square.

Photos by established and new residents reveal aspects of l*ooking in* rather than entering the other community's sphere. Both felt uncomfortable taking a picture of the *other community*, which could be due to respect for the other's space and privacy and equally due to their lack of familiarity with the other's area. This resonates with the social construction of place where each section of society, through socialisation, comes to *know their place* within a physical and a metaphysical context. Considering Bourdieu (1987), the Raploch can be understood as two *fields* or social worlds, the established Raploch and the new Raploch. Each community avoids the other's field because of their social and cultural capital, reflected in their *habitus*.

Fig. 28.8 (participant)

Fig. 28.9 (participant)

28.11   Conclusion

The new and the established residents' interpretation of Raploch and its incorpora-
tion of the regenerated and historical council housing areas differed fundamentally.
Both established and new residents observed the same phenomena of difference and

segregation; however, they described it differently. The former focuses on the *out-of-place* discourse and the latter on *new* and *old*. The established residents tended to reject the new buildings, not on aesthetic grounds but because they were *out-of-place* in their area. The established residents' reaction to these new buildings could be seen as a response to *symbolic violence*, devaluing their built environment and creating a sense of indebtedness (Bourdieu 1992).

The new residents conversely wanted to differentiate themselves from Raploch's stigmatised council housing by highlighting that they lived in the newly built Raploch. This was especially evident as they had bought into the area as owner-occupiers. At the same time, the new residents considered that the *old* Raploch still needed regeneration. Again, this highlighted a sense of moral ownership of the area.

This different interpretation of the physical environment provides insight into the social relationships between communities and their understanding of a broader social context. The buildings become the physical expression of the underlying social discourse. This became apparent in the residents' perception of the building with a green feature wall as a religious and football symbol. It became a physical manifestation of the Celtic-Rangers and Roman Catholic-Protestant tension.

The sense of segregation and difference between the established residents and the new owners was reinforced by the physical barrier of Drip Road that separated the newly built development from the pre-regeneration area. This separation also became apparent when considering the photos as a single entity where neither community entered the other's realm.

References

Allen C (2008) Housing market renewal and social class formation. Routledge, Oxford

Barthes R (1997) Semiology and the urban. In: Leich N (ed) Rethinking architecture: a reader in cultural theory. Routledge, Padstow, pp 166–180

Black L (2009) Portrayal and betrayal: Bourdieu, photography and sociological life. Sociol Rev 57(3):472–490

BOURDIEU, P. (1984) Distinction: A social critique of the Judgement of Taste. London: Routledge.

Bourdieu P (1987) What makes social class? on the theoretical and practical existence of groups. Berkeley J Sociol 32:1–18

Bourdieu P (1990) In other words: essay towards a reflexive sociology. Polity Press, Cambridge

Bourdieu P (1992) Language and symbolic power. Polity Press, Cambridge

Bruce S, Glendinning T, Paterson I, Rosie M (2004) Sectarianism in Scotland. Edinburgh University Press, Edinburgh

Cole I, Furbey R (1994) The eclipse of council housing. Routledge, London

Cresswell T (1996) In place/out of place: geography, ideology, and transgression. University of Minnesota Press, Minneapolis

Davidson M, Lee L (2009) New-build gentrification: its histories, trajectories, and critical geographies. Popul Space Place 16(5):395–411

Dimeo, P. and Finn, G.P.T. (1998) 'Scottish racism, Scottish identities. The case of Partick Thistle', in Brown, A. Fanatics: Power, Identity and Fandom in Football. London: Routledge, pp. 124-138.

Dovey K (1999) Framing places: mediating power in built form. Routledge, New York

Eco U (1997) Function and sign: the semiotics of architecture. In: Leach N (ed) Rethinking architecture a reader in cultural theory. Routledge, New York, pp 173–193

Forrest R, Murie A (1991) Selling the welfare state the privatisation of public housing. Routledge, London

Hamnett C, Whitelegg A (2007) From industrial to post-industrial uses: the loft conversion market in London. Environ Plan A 39(1):106–124

Harvey, D. (1989) The Conditions of Postmodernity. Oxford: Blackwell.

Lefebvre, H. (1991) The production of space. Oxford: Blackwell

Malpass P (2005) Housing & and the Welfare State. The development of housing policy in Britain. Palgrave Macmillan, Houndmills

Markus T (1993) Buildings and power: freedom and control in the origin of modern building types. London, Routledge

Newman O (1972) Defensible Space, crime prevention through urban design. New York, Macmillan

Rapoport A (1982) The meaning of the built environment. Sage Publication, London

Robertson D, Smyth J, Mcintosh I (2008a) Neighborhood identity people, time and place. Josef Rowntree Foundation, York

Waquant L, Slater T, Pereira VB (2014) Territorial stigmatisation in action. Environ Plann A 46:1270–1280

Zukin S (1993) Landscapes of power: from Detroit to Disney World. University of California Press, Berkeley

Chapter 29
Edge Town/Che Fang

Check for
updates

Austin Williams

Abstract Economic development and accompanying urbanisation and social changes are occurring at an astounding pace in China. On the fringes of Suzhou and Jiangsu Province, these changes have created borders of differential growth patterns within the province that have had a significant social impact. For example, an urban housing redevelopment project was suddenly halted in one town close to Suzhou's industrialised area. Abrupt termination of the local authority's development work resulted in the community's division into three distinct areas—an edge town of Che Fang. Some residents whose homes had been demolished were given new houses. Others whose homes had been demolished were not offered replacement housing. At the same time, other residents who were scheduled to receive new and better housing were left isolated in their existing poor-quality homes. Interviews with a range of people living on the edge of this urban development provide insights into their experiences, their observations, and their thoughts about the future in the edge town condition of Che Fang.

Keywords Edge town · Social change · Industrialisation · Housing · Suzhou · Jiangsu Province · China

29.1 Introduction

Suzhou has been a significant urban centre since the early 6th Century BC. During many years of the Warring States period (514–475 BC), Suzhou was the Wu kingdom's capital and a dominant power along the Beijing-Hangzhou Grand Canal. As a result, Suzhou rose to become a wealthy trading centre. Due to its strategic position, it developed as an urban centre during the Sui Dynasty (581–618 AD) and the Tang Dynasty (618–907 AD) as its residents engaged in both industry and commerce with the shipment of goods and trade along the ancient Silk Route.

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Today, Suzhou's much-expanded city continues to be well-located along a high-speed rail line 100 km (62 mi) west of Shanghai—now a mere 25 min away. The combined Yangtse River Delta region comprises Shanghai, Suzhou, Wuxi, Nanjing, and Ningbo, having a higher GDP than Italy, the ninth-largest national global economy.

Marco Polo, who is reputed to have visited the city in 1271, wrote that "Soochow (Suzhou) is a very great and noble city" (Polo 2016). Such folklore demonstrates that Suzhou has long been well-regarded for its civilised and educated citizens. This is still reflected in the oft-repeated description of the city as "the cradle of Wu culture." Indeed, a famous maxim prevails to day: "above, there is heaven; below, there is Suzhou and Hangzhou" (referring to Suzhou's neighbouring city along the Grand Canal). However, in Xu Yingnong's detailed assessment of the city, its symbolic morphology is described as more than just a representation of heaven on earth; Suzhou itself is "a replica of the cosmos at the very axis of the universe" (Xu 2000).

Suzhou has not always led such a charmed life as mythology might suggest. While the vicissitudes of Suzhou's development are complex and provide rich insights into Chinese history, it has lost and regained influence over millennia. Across the Ming Dynasty (1368–1644) and the Qing Dynasty (1644–1912), Suzhou reached the height of its prosperity. However, it has also had its share of travails as large swathes of the region were devastated during rebellions with much loss of life. During the brutalities visited on the city during the Taiping period of the Qing Dynasty, for example, the wealthy Suzhou 'gentry' fled to Shanghai, leaving the city to the peasants. This urban flight of Suzhou's urban elites, "the abandonment of the urban core," as UK researcher Kirsty Mattinson (2018) puts it, often left "the rural" as the agents of historical continuity.

US Sinologist Mote (1973) described Chinese cities' historical, physical, and socio-political realities 50 years ago and noted that China's "urban–rural continuum" is opposed to the urban–rural dichotomy prevalent in Western city discourse. This is partly ascribed to the longevity of imperial China's "pseudo-feudal" rule (Gang 2002) compared to Western-style free-market capitalism. The patrician nature of Chinese authority across historical periods–imperial, communist, state-socialist—is precise. Central authority is claimed to be the arbiter of social stability: a type of self-belief resembling the single-minded dominion of the British Empire, for example. Historically, Chinese rulers have tended to legitimise their ideological dominance by explaining it as a god-ordained or legislative right (Killon 2006). Some commentators have gone so far as to suggest that the Communist Party rules by accepting the basic assumptions behind this imperialist thought (He 2013). Thus, the harmonious stability of the nation continues to be premised on the unchallengeable continuity of a paternalistic Party.

The Chinese city reflects the ruling party's political structure, and political decisions impact the least robust margins of the city. Writers such as Xu (2000), describe how the hierarchical, pre-twentieth-century, Imperial administrative system expressed itself in urban design through cosmological symbolism. Xuefei Ren, in the 1970s, described the Maoist period's anti-urban agenda, which pursued industrialisation and collectivisation without significant urban residential development or social

improvement in city centres. Hong Kong academic Wong (2014) notes that from the 1950s to the 1970s, no new buildings were completed on Shanghai's "bund," the leading warehouse and shipping dock along the Huangpu River. Post-Mao, economic liberalisation brought changes to the city, but the boundaries between the growing city and the threatened village often received less consideration.

29.2   Urban–Rural Tension

There has long been tension between change and tradition in China. This is often represented as the dichotomy between urban development and rural poverty, between metropolitan aspirations and the rural nature of its labouring classes. For instance, China's infatuation with self-sufficient food security, which continues to this day, often places the heroic peasant on centre stage even though China increasingly relies upon industrialised production rather than small-scale independent farm producers (Grain 2015). The myth continues, even more so post-Covid. President Xi Jinping himself was sent down to the countryside in his youth for seven years to live among the peasantry and carry out hard manual labour such as digging toilets; this was a period in which, he says that he "learned the peasants' honest and practical ways and their spirit of hard work" (Gore 2014).

Anti-urbanism's pro-peasant rhetoric was embedded in Mao's policies and historical literary and artistic references (Kleemeier 1981). In her magnum opus, All Under Heaven, Jeanne-Marie Gescher writes that in the 1920s, the city "was less a citadel of omniscience, and more corruption of the honest, hardworking, long-suffering farming man" (Gescher 2015). However, even today, there is a tendency for pro-rural hyperbole to search for a balance between urban and rural regeneration (Wang and Tan 2018). Pritzker Prize-laureate architect Wang Shu explained: "To live in the countryside with nature has always been an important theme in Chinese culture … regarded as cultural seeds, a source of intellectuals for the larger cities" (Dong 2015).

In reality, the dynamic, rapid urbanisation of the Chinese nation jars uncomfortably with the countryside in both political and spatial terms. As the urban edge of cities expands seemingly ever-outwards, the rural peasant farm worker is absorbed into its amoebic embrace. Moreover, it is challenging to reconcile whether the growth in the urban population is due to the push or pull of the city's unremitting encroachment, whether people are voluntarily drawn to the city or merely want to escape agricultural parochialism and destitution.

Similar events occurred in the Enclosure Acts and the Highland Clearances (1750–1860), where peasant farmers were forcibly removed from the land. As a result, many relocated to the burgeoning cities of Industrial Revolution England. In this period of British history, many poor people "voluntarily" relocated to urban centres to seek a better life. Although political and socio-historical differences are significant, similar dynamics exist in China.

29.3   Suzhou Changes

The earliest representation of the city of Suzhou is on the Pingjiang Tu, a city map carved in stone in 1229 AD. As Chen (2012) points out, Chinese maps were not drawn to scale until the twentieth century, but the depiction bears a remarkable likeness to the layout of the modern city centre. Although the difference in scale directly compares the historical map in the present-day city, the city centre is a reasonably accurate reflection of the original city, albeit modernised and bastardised in parts. It is a relatively compact cultural centre in a city of canals, bridges and classical gardens. Due to its UNESCO World Heritage status, the city's municipal government has consciously maintained this ancient city core (Gusu); it now represents the cultural preservation of a traditional planning form from antiquity (Pang 2006).

Like many Chinese cities, Suzhou has seen an explosion in urban development over the last two decades. While the city core has been retained, the larger city has sprawled outwards and added two eastern and western development wings during the previous 20 years. The expansion has increased Suzhou's commercial, manufacturing and industrial power. Toward the west is the Suzhou New District, managed by New High-Tech Industrial Company, between the city and Lake Tai. The People's Daily (2001) notes, "In 1996, an International Business Incubator was established in the new district as a personnel training base and a cradle for new firms… to help small and medium-sized startups." This area included an expansive eco-leisure industry around the lakeshore that has flourished with considerable foreign investment. In the early 1990s, ambitious projects were set in train to create a vast new Singapore-Suzhou Industrial Park (SSIP) to the city centre's east. This SSIP project was established with Singaporean investment as a new enterprise and social development business model for China.

Since economic expansion under Deng Xiaoping's leadership in the late 1970s, Chinese cities have witnessed significant economic and spatial shifts away from socialist patterns (Ma 2002). The collapse of the Soviet Union nudged China into an aggressive economic restructuring to avoid a popular revolt. This affected the country economically and politically with broader knock-on effects. Its development proposals, including urban planning, had to be hastily reformed as China was forced to establish a meaningful planning system independent of direct Soviet influence after 1989 (Yeh and Wu 1999) (Fig. 29.1).

Deng Xiaoping began his famous 1992 southern tour of China by introducing economic reforms to transform the region and the nation. This economic restructuring explored Special Economic Zones in Shenzhen and experimented with various lease, land-reform and partnering arrangements. One involved Singapore, the one-party capitalist city-state that was admired as a unique Asian model for how it had transformed itself "from a chaotic 'basket case of urbanisation gone wrong' to the centre stage of a global city" (Centre of Livable Cities 2016). This was the kickstart for a variety of large and small-scale urban transformations that followed.

In 1994 a Chinese government change of use certificate was issued permitting two square kilometres of farmland to the north-east of Suzhou to be transformed
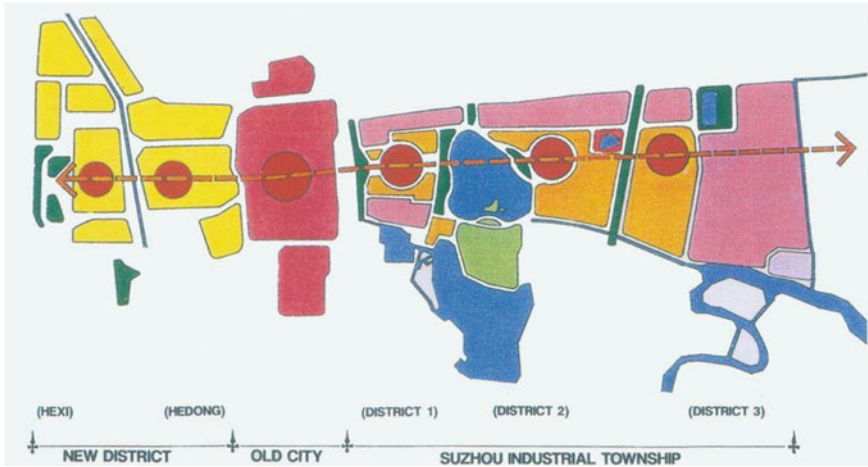
Fig. 29.1 Suzhou's axial expansion, Suzhou centre (red) with Suzhou New Town to the west (yellow) and SIP to the east (pink). Image courtesy SIP Administrative Committee

from agricultural use to an industrial park (Liangyu 2018). Funded by Singaporean and Chinese state money, this land area was cleared of farmers and farmsteads and transformed into a developing industrial zone. Since then, it has been evolving into a giant industrial park and morphing "into a modern city with a high-tech industrial park at its core (now covering) an area of 278 sq. km" (Liang 2011). Deng Xiaoping had initially stated that "We can inspire ourselves using the Singaporean social model and then do better" (Pereira 2003). Eventually, Singaporean influence was reduced, and China became the major interest partner. Thus, the SSIP or Singapore-Suzhou Industrial Park became "SIP" or Suzhou Industrial Park. It boasts four international schools, 25,000 companies (around 100 are Fortune 500 companies), a Higher Education Town comprising 17 universities and research institutes, and about 150,000 students.

Michael Marmé (2018) noted that Suzhou has "not only required commoditisation at the centre; it also demanded it in the ever-expanding—and more tightly integrated—peripheries." Indeed, like many Chinese cities, its expansion has resulted in urban fringe villages (*Chengbiancun*) described by Lang et al. (2016). as an "informal settlement with low-quality housing, and lack of planning regulation adjacent to or merged into urban boundaries." The *hukou* system of internal passports dominates the socio-political inequities between urban and peri-urban or rural–urban fringe conditions. They are fully described in China's Urban Revolution (Williams 2017). Therefore, this chapter will restrict its remit to how some locals have responded to their situation.

Evidence was gathered in a short documentary, "Edge Town /Che Fang", directed by Hao Jiang in 2017 and shortlisted in the UK's Arts & Humanities Research Council's People on the Move Award. This documentary tells the story of the social

changes in Suzhou Industrial Park's fringes, an area bounded to the east by an eight-lane highway separating the development zone from the more impoverished communities of locals, farmers and migrant workers who service the new town. The film focuses on a village section in Che Feng, located close to Suzhou's boundary, that was transformed until work suddenly stopped.

Overlooking the Che Feng community are the high-rise pencil blocks along the edge of the SIP. These are some of the many thousands of relocation housing provided by the city and state to cater for displaced locals, many of whose houses have been demolished to make way for the city's growth.

Long-term residents keen to benefit from demolishing their decrepit housing stock have agreed to demolish their homes for the benefit of new housing they might receive in compensation. It is often a pragmatic rather than a difficult decision for many, especially as it is well known that in the early stages of the development of the SIP, there was a policy of resettling farmers with an "innovative 'one-for-three relocation housing policy.'" This provided farmers with three units of urban housing in exchange for one unit of their farm residence; farmers could keep one unit for themselves, provide one unit to their family, and one unit for additional income (James 2014). Demolition was the only way for farmers with limited economic opportunities to achieve their family's financial security. There is no room for sentimentality.

The villagers in the documentary provide a snapshot of the locals who had awaited demolition on the promise that they would be compensated handsomely for their inconvenience. The demolition had been promised to relieve this impoverished area's aesthetic blight and free up additional development land for the city fringe to march onward. In 2015, Sino commentator Shepard (2015) wrote:

> "In the past three decades, China has almost completely demolished and rebuilt itself…between 2005 and 2010 alone, China dismantled more than 16 per cent of its housing stock. That is more than 1,850 km^2 of floor space—enough to blanket Greater London. According to the Ministry of Housing & Urban-Rural Development, almost every structure built before 1999, roughly half of the current housing supply, is set to meet the sledgehammer at some point over the next 20 years."

It is common practice, after all, that the floating population of displaced and marginalised communities are often mere cogs in the strategic wheels of the broader national economy.

However, the promised demolition of Che Feng proceeded for only a short time. The cancellation of the authority's development plans resulted in some residents whose houses had been demolished successfully claiming replacement housing as compensation. Another group of residents' houses were demolished; however, they could not obtain replacement housing and be left to live in partially-demolished homes or squat in empty derelict structures. The third groups' poor housing survived the wrecking ball. The sudden shift in development priorities left the community divided into three distinct areas: the compensated, the troubled and the business-as-usual. Thus, many locals, including farmers and migrant labourers, were effectively trapped and forced to supplement their meagre existence by growing food on random patches of vacant, derelict, overgrown land.

The residents featured in the film were interviewed to determine their memories and future thoughts. Unsurprisingly, the residents who received new housing-the winners in the process-see the past as something to forget because the future is relatively bright. Those left in their original homes, the losers, see no future and long for the certainty of the past. Many hold onto the promise of demolition and the economic benefits and improvements to their lives that it might one day bring.

A security man with no family and no security of employment said, "If I had a better place, it would be crazy for me to live here, right?" Nevertheless, he has no choice but to live in a dangerously unstable shell of an early Qing Dynasty house, where he is frightened of the possibility of its structural collapse. "This is a dangerous house, especially in the wind and the rain." Another interviewee says that she has given her best years to Suzhou. Even though she wants to move back to her hometown of Chengdu for "a comfortable existence," she is prepared to exist until she gets a pay-off. "I wanted to leave here a long time ago, but now I should wait for the demolition." She believes that demolition will bring her a pension, which she believes is her due, her right. "I live day-by-day," she says, "and wait for the demolition."

Another resident, a winner in the eyes of many, confirms that for her and her family, the future is bright, and the past is something to forget. "We have a much better life now… the improvements are obvious," she says. She speaks of her compensation package of "several hundreds of thousands of RMB" (equivalent to about £20,000) and a 200m2 apartment currently under construction. As she walks around the building site, looking up to her flat in a brand-new tower block development, she admits that she was awarded several properties after demolition. "I can't complain," she says. "With my new properties, everything is fine."

29.4 Conclusion

Drawing on Michael Marme's detailed historical research on Suzhou, Mattinson (2018) notes that in the past, "the privileged, 'those occupying positions above the common people' enjoyed considerable influence, so inequality has long sat alongside migration; as a feature of the city." In the contemporary context, there is iniquity built into the system. At the end of the twentieth century, James R. Ferguson (1999) writes that contemporary Suzhou "has the appearance of a community able to endure hardship as well as enjoy success." As with much of China, non-elite Chinese are accustomed to what is commonly referred to as *eating bitterness*, the hardship of poverty and the disappointment of their unrealised potential. All too frequently, this is the mantra of urban migrants, who are residents in a city and yet denied, in whole or in part, free and equal access to their city's resources.

In her book Eating Bitterness: Stories from the Frontlines of China's Great Urban Migration, Michelle Loyalka (2013) describes migrant workers as "people in transition in a nation in transition … stuck somewhere between their point of origin and

their intended destination." Viewed with Western eyes without the benefit of historical distance, China's modern urban transformation is a brute reality played out in real-time rather than in some distant history.

It is a commonly quoted axiom in China that "500 million people have been lifted out of poverty" (Dollar 2007) and that "400 new cities will be built over the next 20 years" (Dollar 2007). While many may challenge the accuracy of these claims, it is true that China is improving, developing, and growing. The material progress of Suzhou is evident in economic and political terms. However, it is also apparent that progress is not and has not been a simple, fatalistic, linear continuum. There are many human stories: casualties on the way.

Over a century ago, when Britain was going through its dilemmas of development, author Ford Madox Ford (Hueffer) noted that "one would, quite literally, never get any forwarder if one stayed to inquire to the end of every tragic-comedy of which, on one's road, one caught a glimpse" (Ford 1995). The sometimes brutal reality of historical progress is that moving forward may have a significant human impact, particularly in rapid, top-down development. This example demonstrates that many people, at various levels, have turned a blind eye to the downsides of progress to focus on the prize of more significant social, economic, and material improvements. This issue raises the question of the putative civil development of any country. Maybe now is such a moment.

References

Centre for liveable cities (2016). Urban redevelopment: from urban squalor to global city, Singapore, p 99

Chen F (2012) Interpreting urban micromorphology in China: case studies from Suzhou. Urban Morphol 16(2):132–148

Dollar D (2007) Poverty, inequality and social disparities during China's economic reform. World Bank policy research working paper 4253, June 2007

Dong Y (2015) Wencun village, China, by Wang Shu and Lu Wenyu's amateur architecture studio. Architectural Rev 17(November)

Ferguson RJ (1999) Suzhou: a cultural and economic centre of Southern China. Culture Mandala: Bull Centre East-West Cult Econ Stud 3(2), Article 8. Available at: http://epublications.bond.edu.au/cm/vol3/iss2/8. Accessed 4 Jan 2019

Ford MF (1995) The soul of London. Everyman, London, p 43

Gang D (2002) The premodern Chinese economy: structural equilibrium and capitalist sterility. Routledge, London, pp 350

Gescher J-M (2015) All under heaven: China's dreams of order. Kaduba House, pp 348–349

Gore LLP (2014) Son of yellow earth (Xi Jinping). In: Chinese politics illustrated: the cultural, social, and historical context, p 10

Grain (2015) Corporations replace peasants as the "vanguard" of China's new food security agenda. Grain 3 November. http://www.fao.org/family-farming/detail/en/c/415792/. Accessed 30 Dec 2018

He T (2013) Feudalism makes a comeback in China, The Atlantic. 22 August 2013. https://www.theatlantic.com/china/archive/2013/08/feudalism-makes-a-comeback-in-china/278945/. Accessed 29 Dec 2018

James H (2014) Epitomising liveable and sustainable cities: the Suzhou story. 2014 Lee Kuan Yew World City Prize, 2014. https://www.leekuanyewworldcityprize.com.sg/media/feature-articles/the-suzhou-story. Accessed 29 Dec 2018

Killon UA (2006) Modern Chinese journey to the West: economic globalization and dualism. Nova Publishers, New York

Kleemeier CJ (1981) A study of the modern Chinese novel, Gao Yubao and its author Gao Yubao. Masters Thesis, Department of Asian Studies, Vancouver: University of British Columbia. https://open.library.ubc.ca/cIRcle/collections/ubctheses/831/items/1.0095390. Accessed 29 Dec 2018

Lang W, Chen T, Li X (2016) A new style of urbanisation in China: Transformation of urban-rural communities. Habitat Int 55:1–9

Liang S (2011) Physical planning strategies of national high-technology industrial development zones in China. Publicly Accessible Penn Dissertations p 989

Liangyu (ed) (2018) Spotlight: I feel relieved China-Singapore Suzhou Industrial Park has prospered. Xinhua, 31 October 2018. http://www.xinhuanet.com/english/2018-10/31/c_137572563.htm. Accessed 29 Dec 2019

Loyalka M (2013) Eating bitterness: stories from the frontlines of China's Great Urban migration. University of California Press, USA

Ma L (2002) Urban transformation in China, 1949–2000: a review and research agenda. Environ Plann A Econ Space 34(9):1545–1569

Marmé M (2018) From Suzhou To Shanghai: A Tale Of Two Systems. Journal of Chinese History. 2(1):79–107

Mattinson K (2018) XJTLU PhD candidate. Interview with A Williams (10 Dec 2018)

Mote FW (1973) A millennium of Chinese urban history: form, time, and space concepts in Soochow. Rice Univ Stud 59(4):35–65

Pang WK (2006) Urban morphology of traditional Chinese cities in the context of modernisation—a case study of Suzhou. In: 42nd ISoCaRP Congress 2006

People's Daily (2001) Suzhou promotes high-tech, February 05. http://en.people.cn/english/200102/05/eng20010205_61581.html. Accessed 29 Dec 2018

Preira AA (2003) State collaboration and development strategies in China: the case of the China–Singapore Suzhou industrial park (1992–2002), Routledge Curzon, London

Shepard W (2015) Half the houses will be demolished within 20 years: on the disposable cities of China. City Metric, 21 October. https://www.citymetric.com/skylines/half-houses-will-be-demolished-within-20-years-disposable-cities-china-1470. Accessed 2 Jan 2019

Polo, M (2016) The description of the World. Hackett Publishing, p 6

Wang R, Tan R (2018) Rural renewal of China in the context of rural-urban integration: governance fit and performance differences. Sustainability 10(2):1–22. https://ideas.repec.org/a/gam/jsusta/v10y2018i2p393-d129961.html. Accessed 29 Dec 2018

Williams A (2017) China's urban revolution: understanding Chinese Eco-cities. Bloomsbury Academic

Wong (2014) Shanghai, China's capital of modernity. Thesis, University of Birmingham, p 126

Xu Y (2000) The Chinese city in space and time: the development of urban form in Suzhou. University of Hawai'i Press, Honolulu, p 32

Yeh G, Wu F (1999) The transformation of the urban planning system in China from a centrally-planned to transitional economy. Prog Plan 51:190

Part VII
Border Typologies Investigated

Chapter 30
Border Discourse: Pedagogical Perspective in Architecture and Urbanism

Quazi Mahtab Zaman

Abstract Borders exist in various forms and strengths worldwide. They indicate the extent of a nation's geographical territories and geopolitical controls. However, the notion and interpretation of borders are mostly viewed as an indicator of incompatibility and ideological differences in the socio-economic, political, and religious conditions on either side of a border. Borders are created in response to these economic, political, and social polarities and shaped by hard borders at one extreme and soft borders at the other, often appearing as 'in between' in a blurred delimitation. Characteristically, lines on a map, in reality, are the political or legal markers suggesting the historical struggle of power dominance with the propensities for expanding or shrinking the authority by border re-configuration. This power struggle originates from religious ideologies, ethnicity, economic strength, and other hosts of resource inequality. Borders customarily incite competition and influence trade relations and financial contests, leading to neighbouring nations' growth or instability. In addition, they can be sources of conflict and discontentment, particularly in many parts of the world where conflicting political or religious views exacerbate disputes in land ownership and generate fragmented and temporal architectural formation at borderlands and affect life qualities. These typologies expose various spatial configurations, fragmented geospatial borderlands, polarisations of power and politics, disruptive trade relations, and spur vulnerability-induced (natural and artificial) migrations. The debate here is, can border issues be defined through architectural and urbanism discourse? This chapter exhibits a range of analyses on border typologies based on a series of pedagogical debates in Masters of Architecture discourse at the Scott Sutherland School of Architecture and Built Environment, Robert Gordon University, in 2008. The exercise exemplifies the prospects of discussing border issues in the built environment discourse by examining numerous border phenomena. Unfortunately, the discussion of borders is seldom addressed in the design discipline. The exploration in this section attempted research on various relationships using the border as a metaphor for socio-economic and political tools. Examples are drawn from the Chinese trade to ethnicity, the information age, and

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liminal boundary. The views in these short studies postulate a prospect for further analysis. It also underscores the significance of the interface between border issues and the built environment.

Keywords Borders · Typologies · Borderland · European Union · Chinese global economic order · Shifting border · Social border · Ethnic border · Chinese trade · World economy · Globalisation · Ethnic enclave · Chinatown · Genius loci · Placemaking · Barriers · Social segregation · Disability · Liminal border · Cyber world · Cyberspace

30.1 Border Typology as Discourse

Borders are intrinsically political and an instrument of multiple local and global factors. Borders as territorial markers are associated with the desire and yearning for control, the mayhem of craving to safeguard a nation's sovereignty power, and the necessity to seize or illegitimate occupation and incite conflict. Geopolitical markers characterise these actions. Amongst these markers, landlocked conditions (e.g. Kazakhstan, Nepal, Bolivia, Switzerland, Austria, and Mongolia) may impede nations' struggle for inter-regional cooperation and aspirations to reach out to the world for trade and tourism. Moreover, borders can lead to overpowering economic relations and delimiting transactions, ironically disadvantaging marginalised countries. The nature of boundary conditions physically evidences these inter-regional relationships. Inner cities suffer from these relationships measured by the penurious built environment, economic precariousness, and resource distribution affecting social conditions.

Borders in the European Union (EU) often have a non-hostile dominance over the neighbouring borders due to the everyday understanding of the inter-border confidence in one union and its common currency that neutralises the inter-regional sense of contest.

A different perspective: passport control at airports illustrates close encounters within 'a blurring nationalities'—all travellers using the airport are considered the same human being with the same neutral intention of using the airport for transit or destination. There are high-tech provisions for one-to-one surveillance of their movement in a 'non-place' (Augé 2009) condition. It may appear to be for the transient passerby a strict territory with specific border conditions; it occurs in a non-space of the public domain in a building (e.g. airport terminal). In such cases, it is a place of 'global crossroads'. Often, a hostile borderland sits within a prime location in a country, where humans and goods pass by routinely with the transaction of information, movements and interests. Every surveillance and control over the planned destinations gets scrutinised every second without ignoring the reasons for using the transit as a series of encounters (Fig. 30.1).
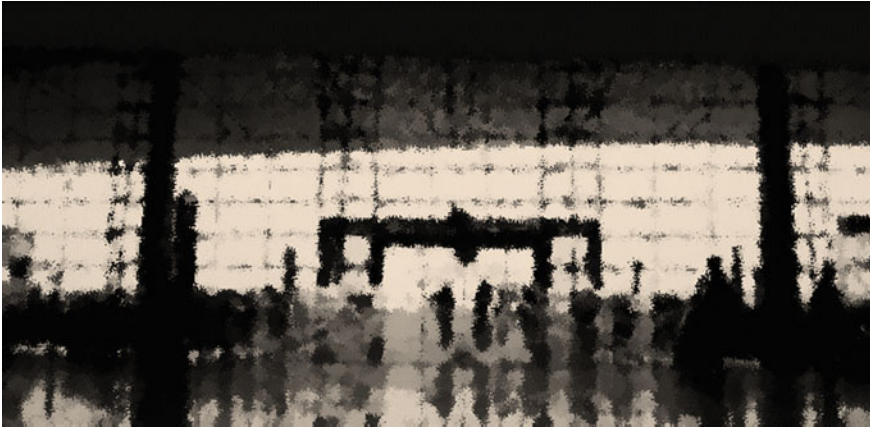
Fig. 30.1 Liminal narratives of the airport

30.2 European Transformative Border: The Hard-Soft Dilemma

Open borders allow free movement between countries without border controls, such as Northern Ireland, the Republic of Ireland, the EU, and Scandinavian countries. These borders are characteristically seen on the map as latent geopolitical lines. However, these borders are displayed in borderlands in some instances as buffer zones. For example, most EU borders at the intersection of two neighbouring states or countries are physically demarcated by mere signage without physical control (Fig. 30.2).

Norway, a non-EU country, shares a thousand-mile frontier with Sweden (Fig. 30.2). It is the longest land border for both countries and the longest within the EU. Being a non-EU state, Norway is economically connected with the EU and is a member of the European Economic Area (EEA), maintaining trade benefits. Despite this relationship, border crossings between the two countries retain blurring customs checks—a manifestation of the unsavoury nature of this tariff-free physical relationship (Fig. 30.3).

There are 93 international borders; some are very recent, and some have long histories. Whilst old borders may disappear as nations unite (e.g. the European Union and former Soviet Russia), new borders may be drawn to demarcate new geopolitical arrangements (e.g. BREXIT, or in other words, the withdrawal of the United Kingdom from the EU). These changes are due to geopolitical, ethnic origin, religious, and economic conditions that nations are associated with historically.

Some border conditions may rest on linguistic and cultural differences. For example, India and Pakistan emerged in 1947 after '1601–1997' of British rule on the South and South-East Asian countries (Fig. 30.3). The formation of East and West Pakistan overlooked significant regional differences that included geographical

Fig. 30.2 Retentive international boundary: the Norway–Sweden border is a 1630 km (1010 mi) long land border, the longest for Norway and Sweden

distance—India separated them by 1600 km (1000 miles). Despite religious similarities, the languages of each region were critical–people in East Pakistan spoke Bengali,[1] whilst West dominantly Urdu.[2] Underscored by cultural and historical differences, linguistics finally led to the independence of East Pakistan in 1971 as Bangladesh.

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[1] Bangla language originated in 3500 B.C. from the Indo-European language family, which later traversed into the Indo-Aryan languages—Sanskrit, which eventually evolved into the many dialects spoken in the sub-continent.

[2] Urdu originated in north India around Delhi in about the twelfth century, based and influenced by the hybrid form of Arabic and Persian, as well as Turkish.
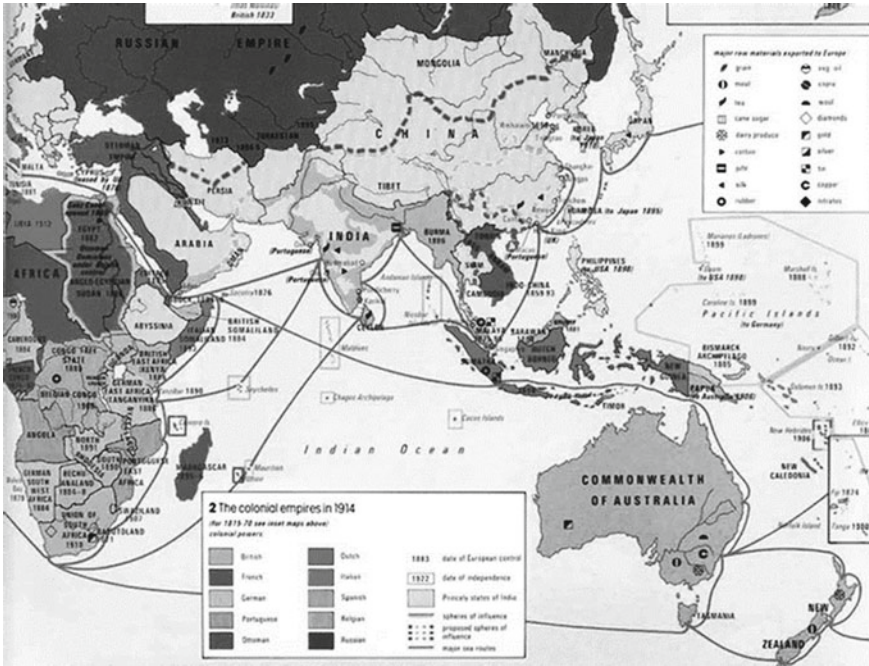
Fig. 30.3   Colonial routes and emerging borders by decolonisation

The Sweden-Norway border and the Mexico-US border are two extremes. The Mexico-US border symbolises a brutal estrangement of the two nations. Although in contrast, the border and relationship between Norway and Sweden and the parallel political and economic status they enjoy, the economy of Mexico is significantly weaker than the economy of the US. This makes the border a line of political precariousness, which the US manages as an impediment and barrier (Fig. 30.4).

Interestingly, nature can influence borders, generating different geospatial dynamics from those made purely for political reasons. For example, areas with severe political or religious unrest have hard borders that often give a hostile environment (Gaza Strip in Palestine and Israel). According to the TRT World, which published its online article on 27 September 2019,[3] Israel's indistinct borders and its policies in the Middle East act as the territory's rapaciousness—which is the main obstacle in resolving the everlasting Palestine-Israel conflict. Moreover, geopolitical borders often restrict people and deter economic development. Forming subcultures based on religion, such as West Bengal and Bangladesh, originated from the action described as 'The Partition of Bengal' in 1947. This action derived from the 'Partition of India', planned to divide the British Indian province of Bengal based on the Radcliffe Line between the Dominion of India and the Dominion of Pakistan. As

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[3] Sources: The ambiguity of fast-changing Israeli borders, explained (trtworld.com).

Fig. 30.4 Example of a blurring border is the boundary between Norway (*Norge*) and Sweden (*Sverige*). *Graphics credit* Andrew Pacitti 2008

a result, the Hindu-majority West Bengal became a state of India, and the Muslim-majority East Bengal (now Bangladesh) became a province of Pakistan. On the other hand, hard borders may be necessary relative to an area's geopolitical nature, resources, and inter-political tautness (South and North Korea). Analysing the characteristics and settings that arise from diverse border typologies worldwide is a rich area for examination from architecture and urbanism discourse. It offers unique insights into the border, often less visible but representing various built environmental conditions shaped by cultures.

Today, globalisation has continued to blur these boundaries as countries, regions, and urban areas become interconnected and interdependent with consumer goods' production and consumption, shared information, and media culture. Political enforcement has often meticulously constrained the emergence and social use of cyberculture. Chinese cyber policing and control of internet sovereignty create social segregation and distrust in information sharing (Figs. 30.5 and 30.6).
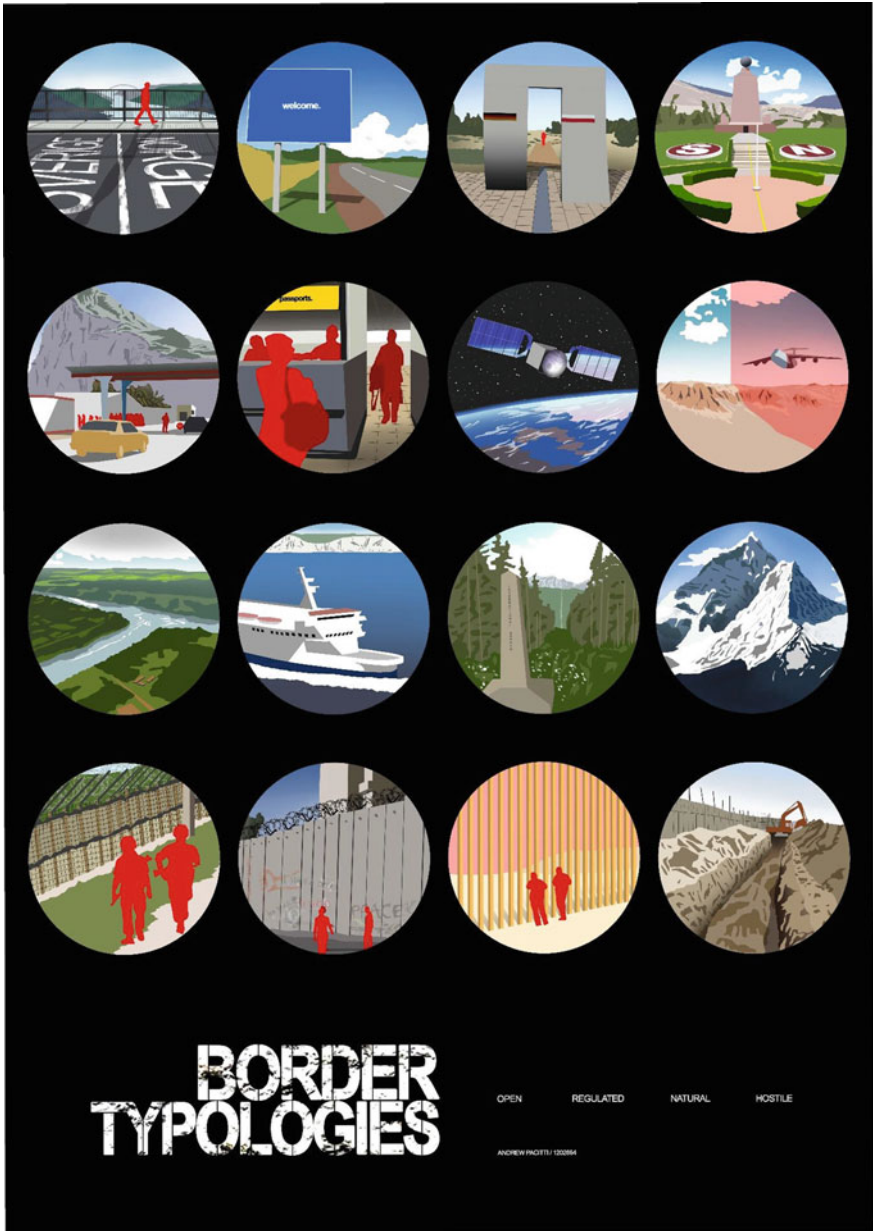
Fig. 30.5 Examples of significant border typologies. *Graphics credit* Andrew Pacitti 2018
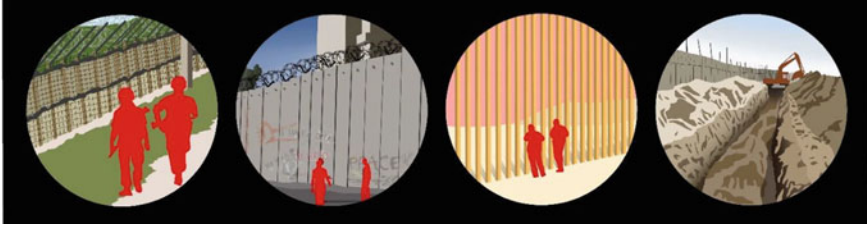
Fig. 30.6 US-Mexico border demonstrates several topical typologies. *Graphics credit* Pacitti 2008

30.3   Chinese Expanding Trade Borders: Immersion into the World Economy

The beginning of the industrial revolution and the rise of modernism are manifest in the one-world transaction of goods and services and the birth of globalisation. However, the nature of global boundaries has recently been challenged politically, geographically, and culturally due to developments and advancements affecting the interrelationship between resources, production, and consumption.

The beginnings of Chinese transformative urbanism and industrialisation were triggered by globalisation. Chinese agricultural production gradually shifted to make way for manufacturing industries. Today's Chinese market catchment covers most world consumers, reaching out to most consumer goods. Nevertheless, China imports patents from many countries worldwide for its manufacturing industries—a give-and-take binary relationship between China and the rest of the world operate.

As countries and urban areas in China developed, with international watchdog on humanitarian issues structured by the communism dynamics, the definition of the closed market transformed radically, and global consumerism now depends on the production lines of China. As a result, China is now the centre of the international economic order that manages global consumers of finished products. On the other hand, China depends on raw materials worldwide. This network of consumer-producer relationships has blurred the trading boundary worldwide.

30.4   The Global Transaction of Chinese Trades

Changes in labour costs, production line capacity, and low-labour costs have benefitted Asian transnational companies, particularly in China, as they triggered the transformation of the global economy (Fig. 30.7).

China's adoption of economic policy dates back to the 1950s. The Great Leap Forward (Harrison and Palumbo 2019) was Mao Zedong's attempt to industrialise China's peasant economy into global manufacturing industries hastily. As a result, an almost overnight industry change occurred from agriculture to technology. In 1980, Shenzhen was designated as China's first special economic zone, a trial for the

Fig. 30.7 China's economic growth has been enabled by a shift in land allocation from agriculture to manufacturing and production. Africa facilitates agriculture production for China due to cheaper labour and land, whilst China is keen on clinging to the production line. *Graphics credit* Patrick Sim 2018

country's reform. This was followed by rapid urbanisation, known as instant cities. A number of the world's largest companies relocated to Chinese cities, which accelerated manufacturing and production. Urban areas continued to grow and expand in the Pearl River Delta. Blurring boundaries between major cities effectively created mega-metropolis, such as Pudong in Shanghai (Lau and Zaman 2000).

In 2012, China overtook the United States to become the largest trading nation; it boasts six of its ten largest container ports, with Shanghai as a key example (Figs. 30.8, 30.9, 30.10, 30.11 and 30.12).

China has established strong connections to the rest of the world through the trade of goods and resources, which has allowed the very impermeable country into a borderless nation. Hence, the '*Made in China*' label is a semiotic narrative. In
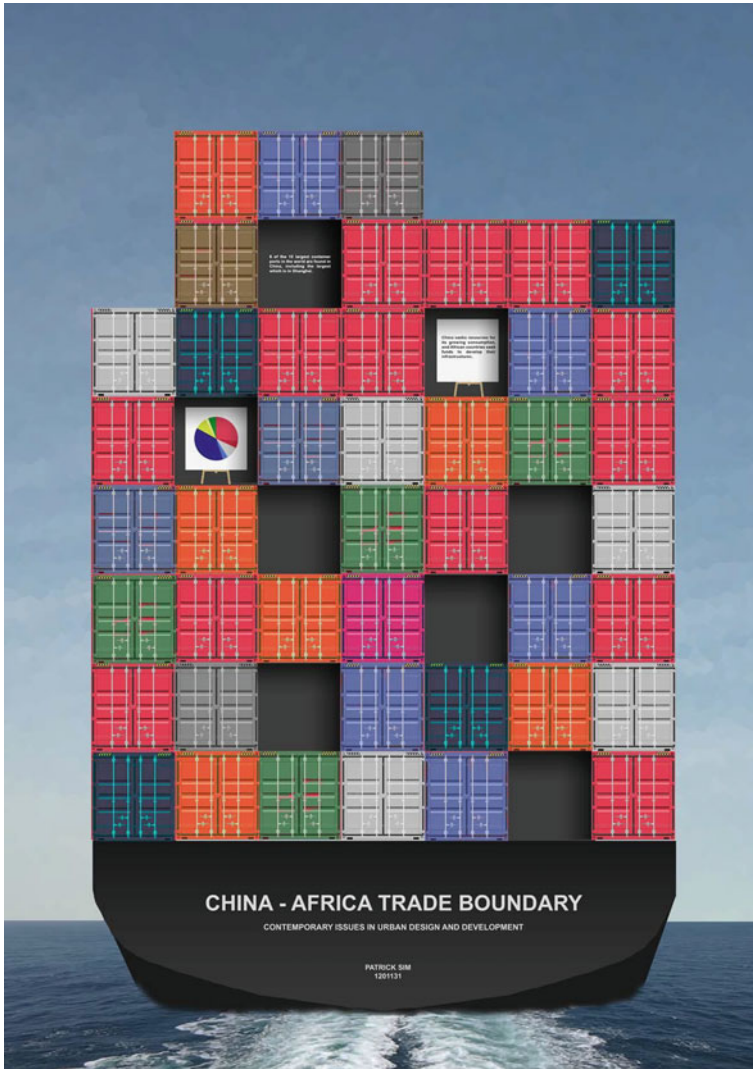
Fig. 30.8 China's trade with Africa in 2016. *Graphics credit* Patrick Sim 2018
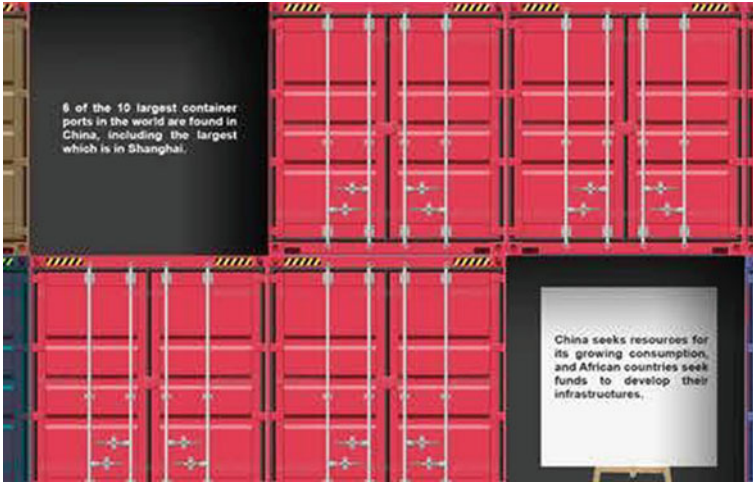
Fig. 30.9 China-Africa trade dependencies in 2016. *Graphics credit* Patrick Sim 2018

Fig. 30.10 China's 2016 trade with the USA and South America (Sim 2018)
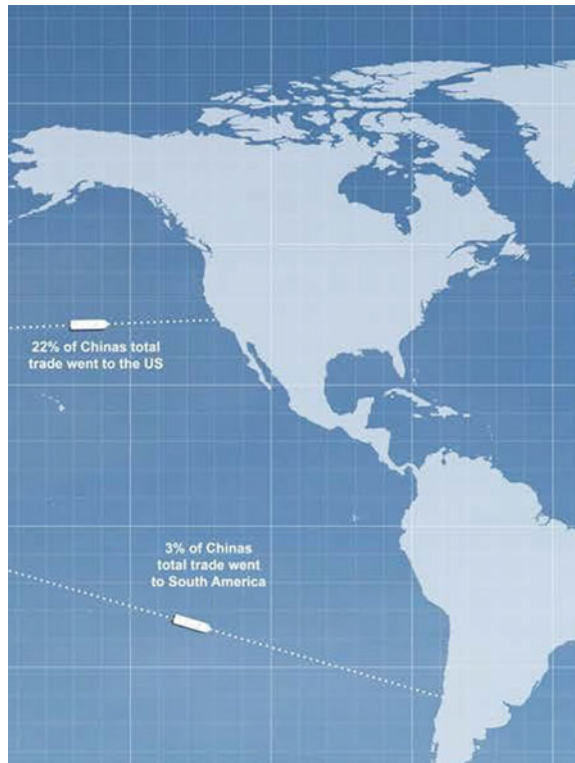
Fig. 30.11 China's trading with Europe in 2016. *Graphics credit* Patrick Sim 2018

addition, statistics demonstrate how the world is connected to China through trade; the following summarises China's exports to each region in 2016:

Percentage of China's trade by regional destination:

48% to Asia; 22% to the US; 21% to Europe; 4% to Africa; 3% to South America

2% to Australasia

Percentage of China's trade by type of goods (Figs. 30.13, 30.14 and 30.15):

43.0% machines (computers, phones, and broadcasting equipment); 12.0% textiles (knit sweaters and women's and men's suits); 7.3% metals (steel bars, iron structural elements, and metal mountings); 7.0% miscellaneous (light fixtures, furniture, models, and stuffed
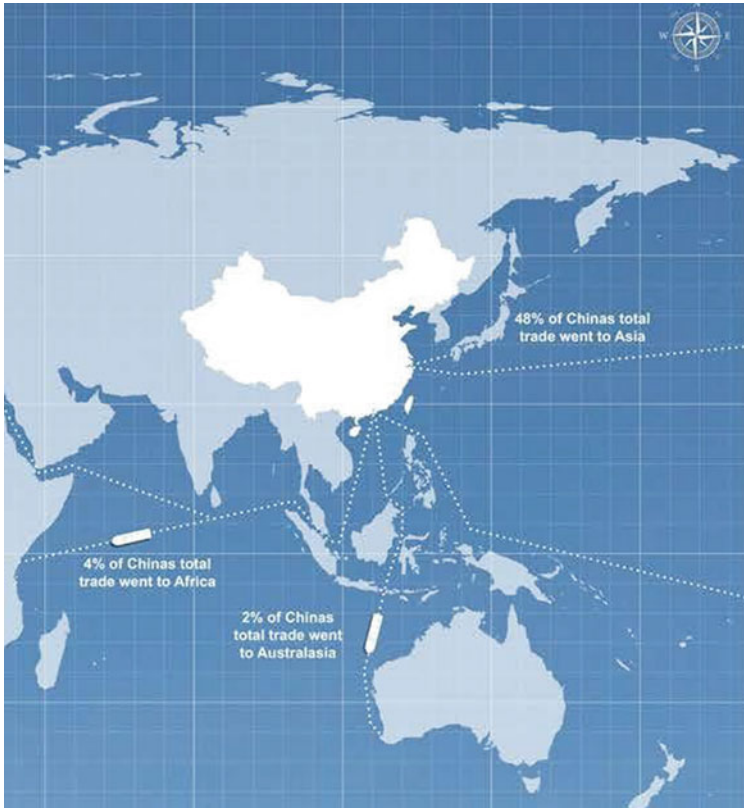
Fig. 30.12 China's trade with Africa and Australia in 2016. *Graphics credit* Patrick Sim 2018

animal toys); 4.6% chemical products (heterocyclic nitrogen compounds); 4.5% transportation (vehicle parts and passenger and cargo ships); 3.9% plastic and rubber products (rubber tyres and plastic housewares)

3.6% instruments (LCDs, medical instruments, and thermostats); 2.9% footwear and headwear (rubber footwear and knitted hats); 11.2% other

China relies on the world to supply 49% of its raw materials, sustaining the production of its finished goods. The following outlines the sources and types of imports:

Percentage of China's resource imports on a regional basis:

22% from Europe; 13% from the US; 8% from South America; 6% from Australasia; 2% from Africa

Percentage of China's imports by type of goods (Figs. 30.16 and 30.17):

26.0% machines (integrated circuits, phones, and semiconductor devices); 21.0% mineral products (crude petroleum, iron ore, and copper ore); 7.6% chemical products (packaged medicaments and cyclic hydrocarbons); 7.3% transportation (cars, vehicle parts, planes,
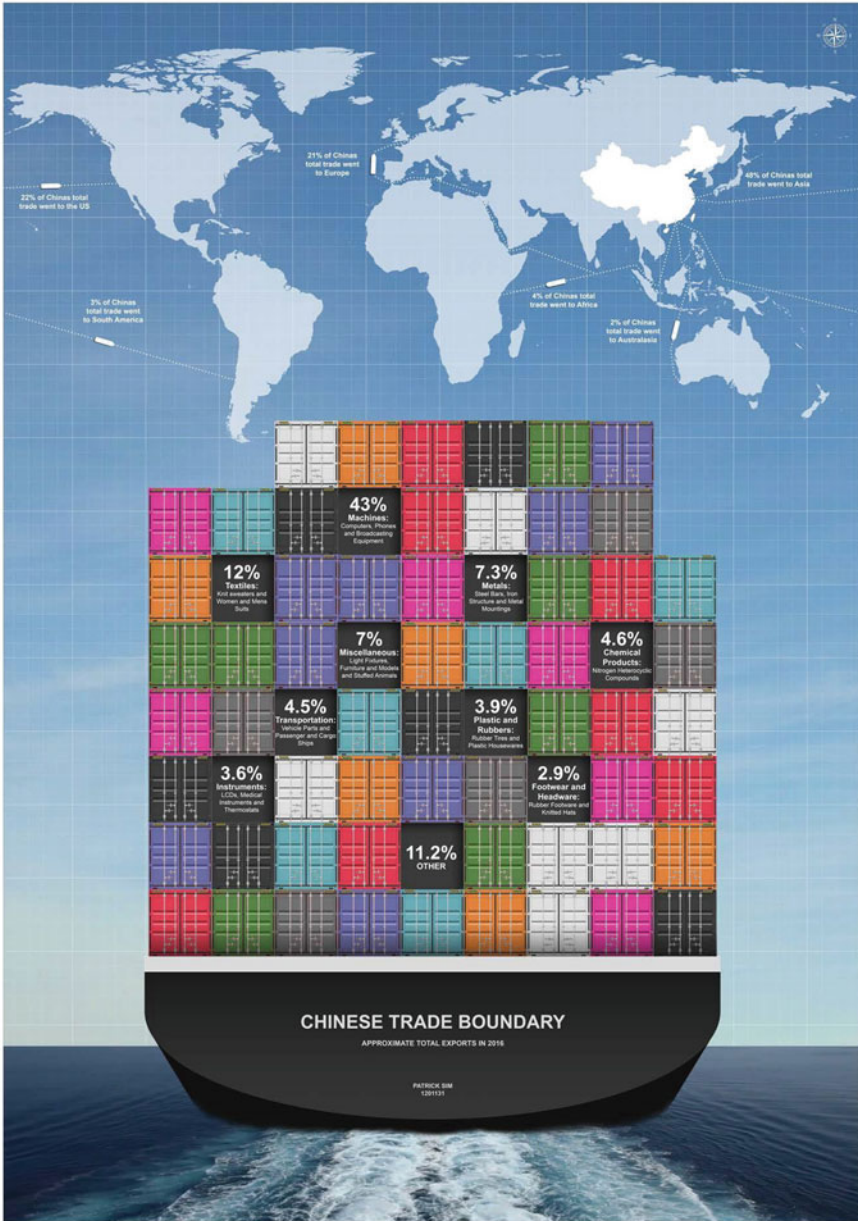
Fig. 30.13 China's trade boundaries in 2016. *Graphics credit* Patrick Sim 2018
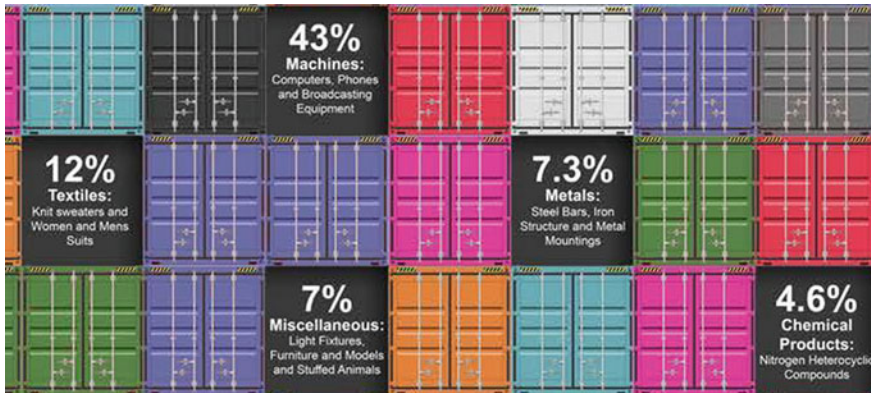
Fig. 30.14 China's trading categories in 2016. *Graphics credit* Patrick Sim 2018

Fig. 30.15 China's trading categories in 2016. *Graphics credit* Patrick Sim 2018

helicopters, and spacecraft); 6.1% instruments (LCDs, chemical analysis instruments, and medical instruments); 5.9% precious metals (gold, diamonds, and platinum); 5.5% metals (refined copper, scrap copper, and ferroalloys); 4.9% plastic and rubbers (ethylene polymers, polyacetals, and raw plastic sheets); 4.9% vegetable products (soybeans, rice, and fruits); 11.6% other

China's worldwide supremacy in consumer goods is a function of globalisation and production responsibility, which has been achieved due to the low cost of its labour and other factors. The invisible geopolitical boundaries that separated China from the rest of the world have been blurred despite differences in human rights, political ideologies, and other social characteristics.
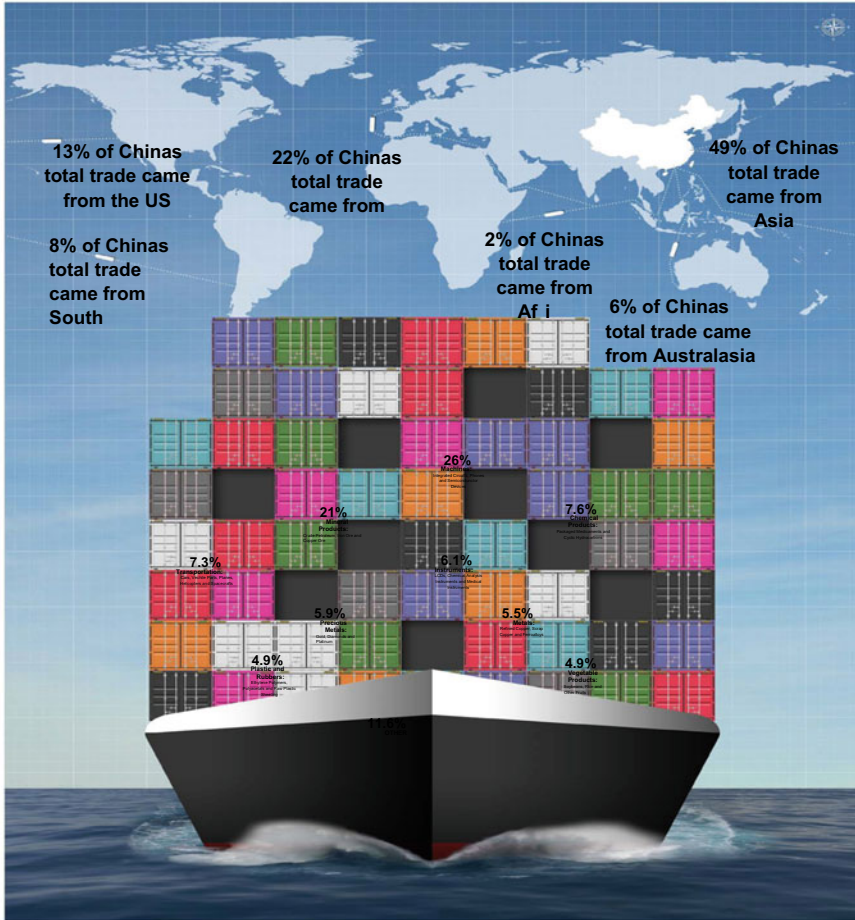
Fig. 30.16 China's trading categories in 2016. *Graphics credit* Patrick Sim 2018

30.5 The Rhetoric of Ethnicity and Borderlands of Chinatowns

Chinatowns are historical symbols of an ethnic border. Each becomes a city within a city. They have embraced any neighbourhood for exotic foods and goods and celebrate within distinct convivial guest cultures as a unique oriental imprint of genius loci in major cities worldwide. Their growth of ethnic borders within foreign host cities showcases their ethnicity as exotic public places contributing to their cultural prominence as peacemakers.
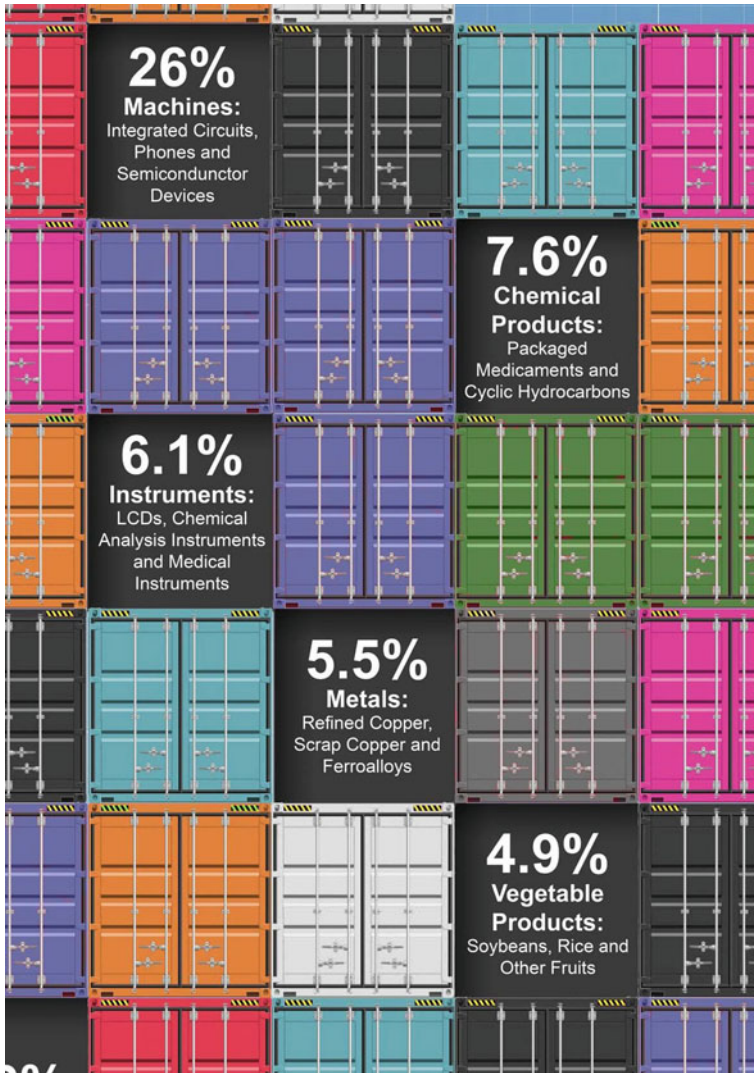
Fig. 30.17 Trading flow to China from the rest of the world in 2016. *Graphics credit* Patrick Sim 2018

30.6 Emergence of Chinatowns

Chinatowns demonstrate an orderly transformation by infiltrating the culture of their host cities in a symbiotic fashion. As a result, this hybrid culture displays a convivial festivity of Chineseness that exposes a taste of ethnicity 'the émigré' (Bell 2017) celebrates and experienced by others and occupies a place between refugee and migrant, often looking for a better life in a new home away from the origin. Although

the word émigré has political connotations, usually that of self-imposed exile from home, displayed instead in more celebrated architectural attributes.

Outsiders perceive Chinatown as an exotic tourist centre due to the unique goods, cuisine, and culture through the glamour of ethnic ways of displays and food services. On the other hand, many recognise Chinatowns as 'city within a city' as a generator of curiosity or strangeness; it is viewed as global historical incursions that seek to establish an authentic ethnic enclave. The formation of these enclaves has a history that dates back to the mid-nineteenth century when millions of Chinese migrated to the West. The tendency to congregate into defined locales is an example of distinctive global heterotopias (McDonogh 2013).

Research on Chinatowns suggests idiosyncratic cultural domains with specific spatial attributes; they are exclusive areas open to the larger public realm in which they exist (Barabantseva 2016). Most literature on Chinatowns documents the rhetoric of ethnic enclaves. Such literature commonly recognises Chinatowns as a generator of ethnicity in non-Chinese urban areas. San Francisco (Yung 2006), New York (Tchen 2001), Chicago (Siu and Tchen 1987), Melbourne and Sydney (Anderson 1990), Vancouver (Anderson 1991), and London (Luk 2008) (see Fig. 30.1) are some of the cities that are home to Chinatowns that display their existence as 'ethnic borderlands'.

Chinatowns traditionally spur a cellular transformation from micro-intervention in a modest land lot but progressively transform into a mega-neighbourhood by ethnic snowball formation (see Fig. 30.2). They progress by changing the urban fabric and western typologies, sometimes cosmetic, into a hybrid caricature of Chinese symbols and manifestations. Leading research on Chinatowns has focussed on the static spatial constructions of Chinese migrant groups and how they have brought authentic yet transformative national images that offer a new genre that juxtaposes foreign-local symbolic features and contexts (Barabantseva 2016). In these cases, the border between Chinatown and the neighbourhood enclave is gentle but perforated; it is a fragmented and unfinished edge that allows real estate growth and triggers a sense of consumerism (Fig. 30.18).

30.7   Eluding Social Segregation in Society

Visible and non-visible barriers prevent people from integrating into society. The border created is historically and contemporary and is often socially manufactured.

Traditionally, social segregation between the disabled and non-disabled is evident in many ways. For example, statistics show that 40% of people perceive disability as a social burden, and 60% say that they cannot mingle with disabled people because they are unaware of how to act around them (Disability Sport 2014). This prejudice is also persistent in the workplace. One-third of people in the private sector believe their workplace does not welcome people with a disability; this portion is 45% in the public sector (Papworth Trust 2018).

The source of this perception could be a lack of knowledge about people with disabilities. It is suggested that over 50% of people surveyed believed that disability
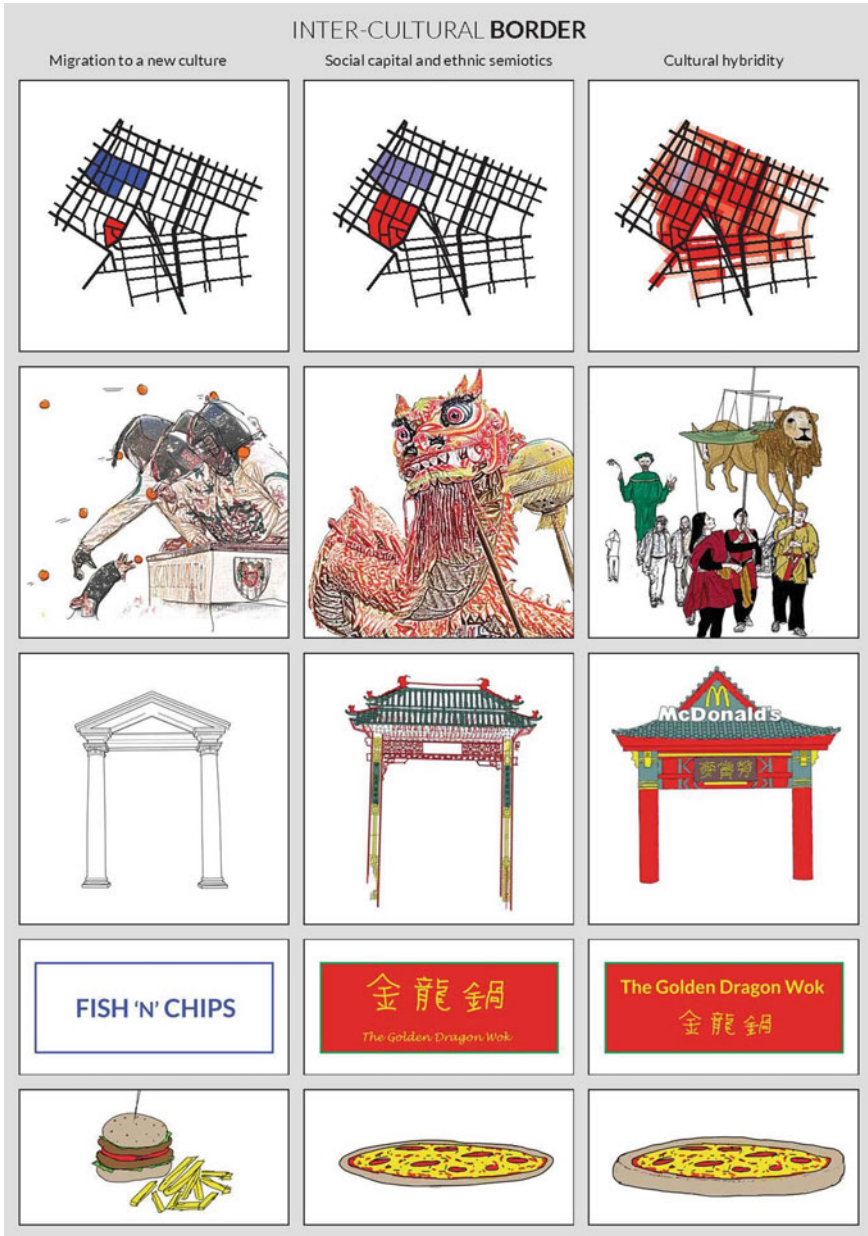
Fig. 30.18 Chinatowns transform elements of western typologies. Often this transformation is cosmetic with hybrid caricatures of Chinese symbols within the urban enclave. *Photo credit* Matthew Holmes 2018

meant a physical impairment. This is untrue. For example, 16% of people with disabilities have a mental disability, and under 8% use a wheelchair (Papworth Trust 2018). This lack of knowledge could also be due to the lack of contact between the two populations; nearly half (43%) of the British public do not know anyone with a disability.

This was evident during the Paralympics; 75% of non-disabled people believed that they felt optimistic about the role of people with disabilities in UK society since the Paralympic Games. The survey also found that 76% of people with disabilities also agreed with the Paralympics' positive outlook.

Another aspect to take into consideration is psychological design. '*The experience of environments depends on one's existential-phenomenological stance to it, the organisation of materiality, as well as one's sensual experience of it'* (Freund 2001). It is essential to understand that individuals' perceptions can shape their self-worth. This can be communicated through social and spatial awareness (Holt 2010).

The continual characterisation heightens the individual's alterity that they are disabled (Fig. 30.1). Often, they are treated first and foremost as being disabled. When social boundaries regarding disabilities have been defined, and little is done to transgress these fixed borders, the individual is stigmatised for the rest of their life. If individuals are treated differently, they will believe they are different (Goodley and Runswick Cole 2014), and gradually, a personal border begins to grow.

The dilemma of inclusion and division in the public sphere is critical for social exclusion. This often results in individuals feeling unwelcome in public spaces, creating a further division in society; this '*effectively keeps disabled people in their place on the periphery of mainstream society'* (Hansen 2002 by Goodley and Runswick Cole 2014).

30.8   Urban Conditions and Social Barriers

The city centre of Aberdeen in Scotland provided a case to illustrate the social barriers in urban conditions demonstrating spatial boundaries that create physical or psychological barriers between people with and without disabilities. As a result, specific individuals may be excluded from fully experiencing urban functions. These barriers also affect retail and civic placemaking.

Union Terrace Gardens is one of the few green spaces in Aberdeen's city centre. However, the only access is stairs (Figs. 30.19 and 30.20a), which makes it socially ostracising to experience the public realm.

Aberdeen residents find that the shortcuts and side paths apart from the main streets and thoroughfares help develop a stronger personal connection to the city and feel a part of it. However, most of these are not accessible to individuals with mobility restrictions. This restricts the ease of movement through the city (Fig. 30.19). In addition, those secondary routes that are accessible and open alternate routes are often closed at a particular time. This time-constrained restriction reinforces divisions in public.
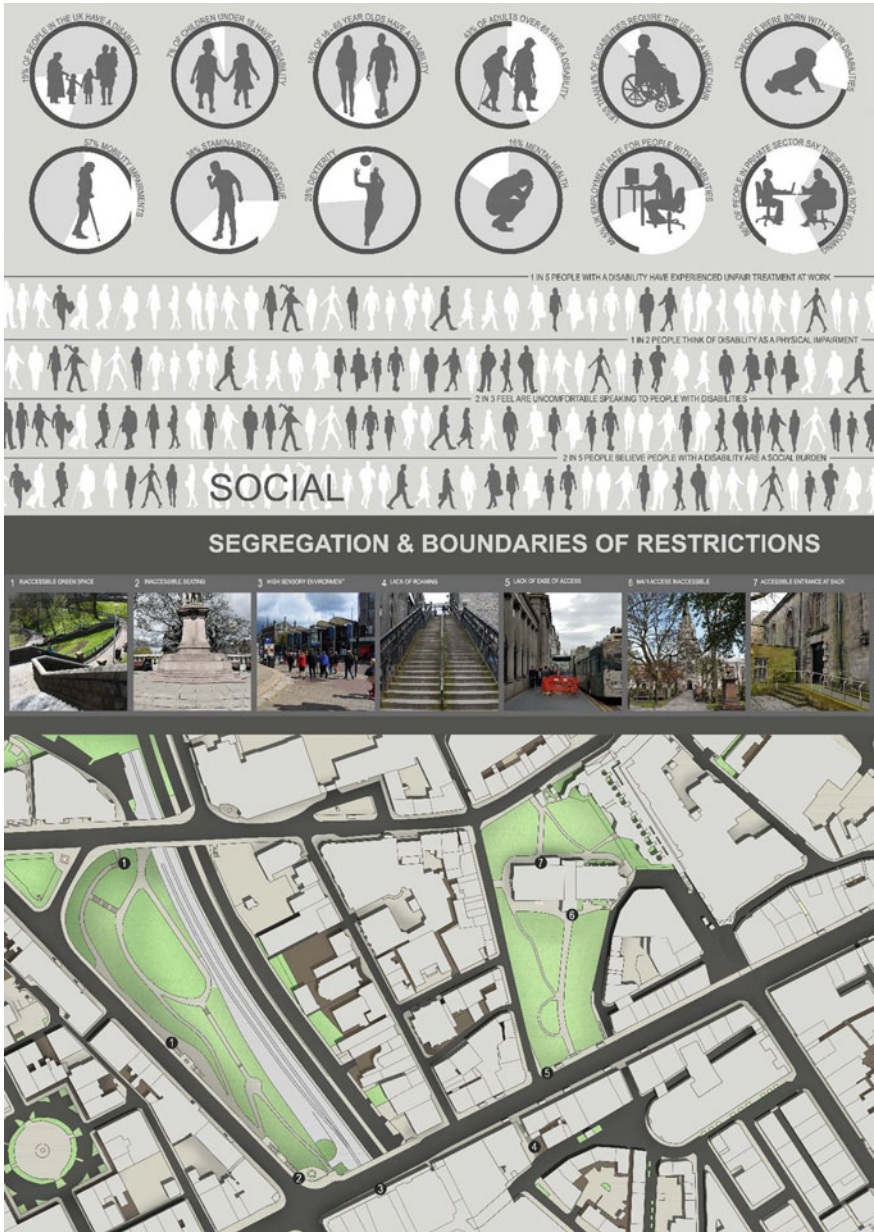
Fig. 30.19 Cities such as Aberdeen can be hectic and overwhelming with many colours, signs, and movements. These characteristics can be overwhelming to people with mental disabilities such as Autism. However, this can be counteracted with spaces that allow individuals to retreat from a high-sensory environment. *Graphics credit* Julie Neilson 2018

Fig. 30.20 a–d Union Terrace Gardens and other public realms in Aberdeen provide examples of how access to an important urban area is restricted to large portions of the population with mobility impairments. *Photo credit* Julie Nelson 2018

Figure 30.20b, c are examples that highlight physical barriers. For example, people with mobility impairments encounter obstruction by the conditions and construction of routes. In addition, although a ramp has been provided, it has been placed in an incorrect location (Figs. 30.21 and 30.22).

Cities and their public realm are public goods, and access should be available to all regardless of physical barriers. Cities fail to create placemaking when the

Fig. 30.21 Wide range of social borders are created by race, health, disability, mobility issues. *Photo credit* Julie Nelson 2018
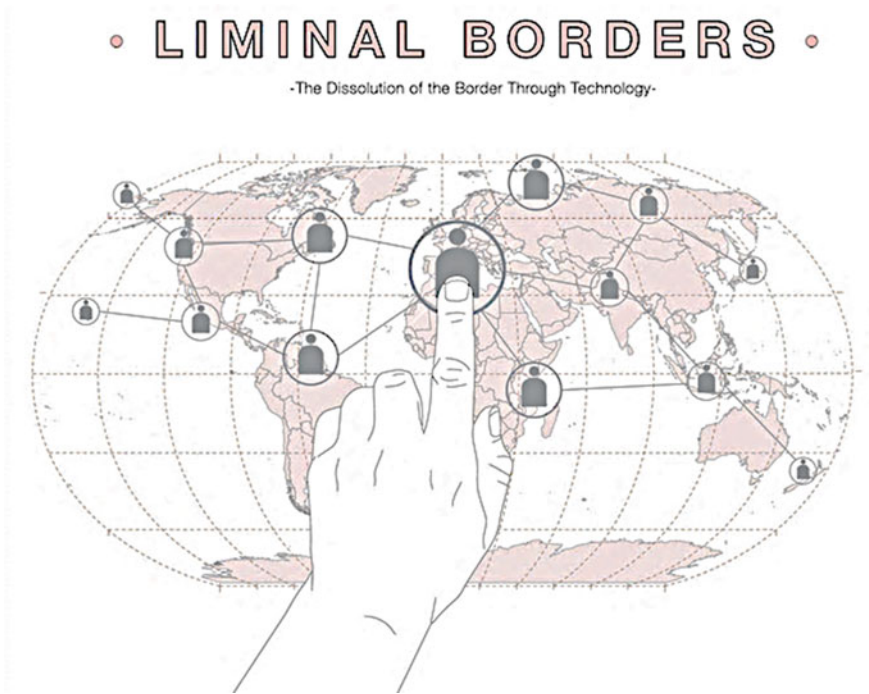
Fig. 30.22 Liminal border in the new information age. *Graphics credit* Andrew Kirwan 2018

urban conditions disengage a more significant part of society due to the erroneous urban features to navigate and experience. Visible or invisible boundaries are socially manufactured and result from a lack of design sensitivity and planning (Fig. 30.20d). Creative designs are part of the placemaking that can create broader engagement with society—removing the physical boundaries created by wrong planning interventions.

30.9 Borderless Society and the Liminal Border: Dissolution of the Border through Technology

In anthropology, *liminality* evolves from the Latin work *līmen*, a threshold.[4] In spatial terms, liminality sits in a non-spatial limbo, in a somewhat hidden or unsettled realm. Participants in liminality stand at a threshold[5] between their preceding self-account of identity, moment, and context. The self is confronted by a new condition that separates it from now and the unknown future.

In research, cyberspace has created a '*here* but *distant limbo*'. The geographical space gets diluted in virtual space in interconnected dyadic cyberspace, combining the virtual and physical reality (Madge and O'Connor 2005). According to these authors, cyberspace and geographical space can be considered cyber/space. Cyber/space denotes the intersecting and simultaneous juxtaposition of the virtually genuine existence. The word *intersection* is transferred to the term *border* to contextualise the separations and bring this to the subject of the liminal border. The liminal border in the cyber world is the tussle between the real and the virtual concerning one's physical state of perception.

30.10 Liminal Border Analysis

Liminal space and associated virtual borders can be described as the time between what was and the next manifested in society's digital representation. It is a place of transition, waiting, and not knowing the distance. The conventional border idea has become increasingly ambiguous in a world driven by technology. People can connect, share ideas, and share new cultures from any point on the planet from any walk of life. Users make the physical being dissolute by immersing in the cyber world of information and eliminating the boundary between here and the distant. In more topical scrutiny, Fourny (2013) finds liminality is used to establish how conditions of *otherness* progress in a multifaceted interaction of *power, place, and social and spatial norms.*

It has offered new and exciting possibilities for global connectivity, removing the knowledge borders. For example, the COVID-19 pandemic demonstrated connectedness as the only substitution for physical work. Connectivity from every corner of the world is possible in lockdown. Figures 30.23 and 30.24, for instance, make us a digital nomad, an emerging hypothesis, where countries as geopolitical boundaries have dissolved into cyber world culture. This has been made possible by the advent of widespread and integrated cloud computing.

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[4] *Oxford English Dictionary*. Ed. J. A. Simpson and E. S. C. Weiner. 2nd ed. Oxford: Clarendon Press, 1989. OED Online Oxford 23, 2007.

[5] *Nordic Work with Traumatised Refugees: Do We Really Care*, edited by Gwynyth Overland, Eugene Guribye, Birgit (2014).
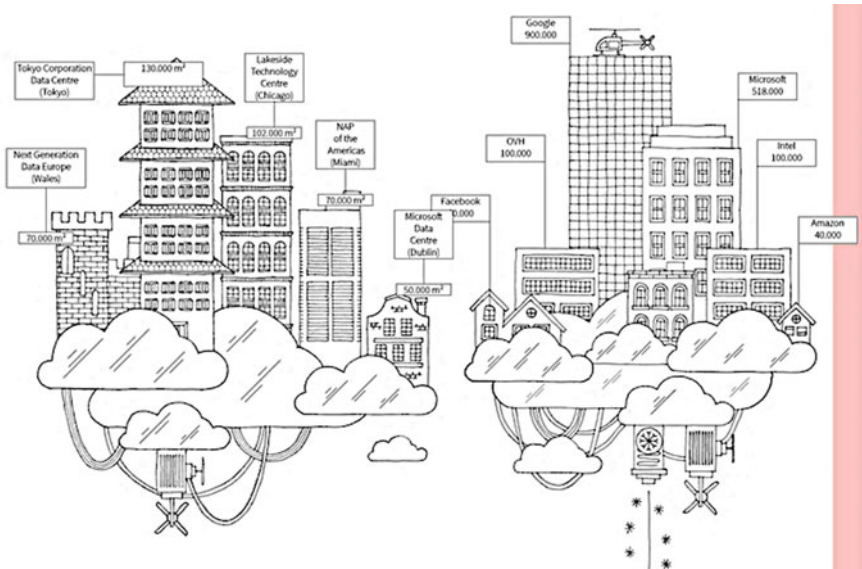
Fig. 30.23 Cloud is the interface where everyone intermingles without being materially present. *Graphics credit* Andrew Kirwan 2018
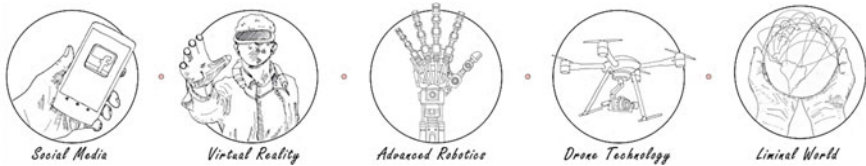
Fig. 30.24 Various applications in a virtual world. *Graphics credit* Andrew Kirwan 2018

A graphic illustration of the essence of liminality and the emerging cyberculture represents the physical presence of cloud computing (Fig. 30.25). It also shows the notion of the cloud in virtual realms and transcends the idea of confined knowledge and digital resources in a non-defined boundary. The physical aspect of cloud computing is depicted in the interlace of invisible data bits. These are juxtaposed alongside the second category and illustrate how technology has influenced lives and practices. Information technologies dissolve the ideas of physical borders and approach a borderless world.
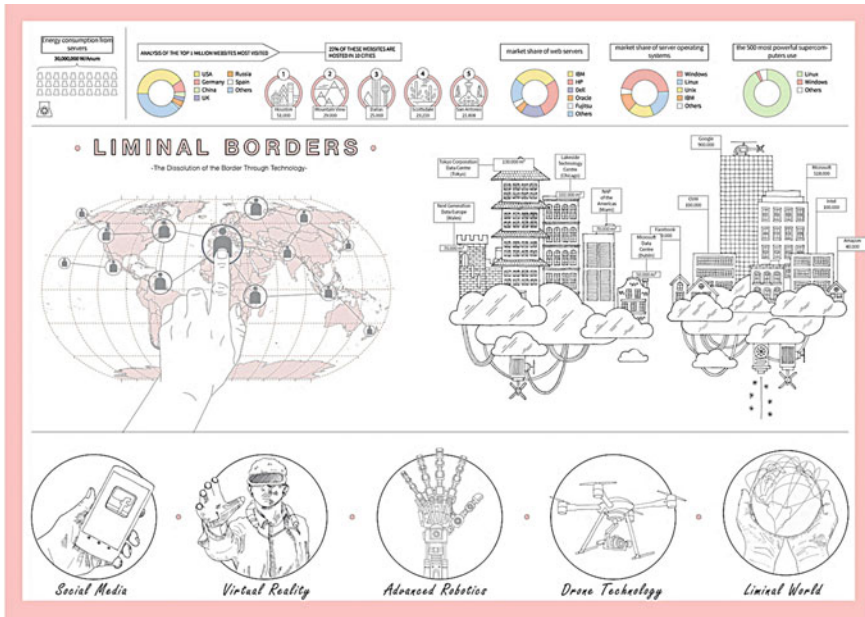
Fig. 30.25 Borderless society: liminal border and various tools for connectivity. *Graphics credit* Andrew Kirwan 2018

References

Anderson KJ (1990) Chinatown re-oriented: a critical analysis of recent redevelopment schemes in a Melbourne and Sydney enclave. Aust Geogr Stud 28(2):137–154

Augé M (2009) Non-places: an introduction to supermodernity. Verso Books, London

Barabantseva E (2016) Seeing beyond an 'ethnic enclave': the time/space of Manchester Chinatown. Identities 23(1):99–115

Bell L (2017) Strangers arrive: émigrés and the arts in New Zealand, 1930–1980. Auckland University Press, Auckland, New Zealand

Disabilitysport.org.uk. (2014) Facts and figures about disabled people in the UK. (Online). Available at: http://www.disabilitysport.org.uk/facts-and-Figures-about-disabled-people-in-the-uk.html. Accessed 30 Apr 2018

Fourny M (2013) The border as liminal space: a proposal for analysing the emergence of a concept of the mobile border in the context of the Alps. J Alpine Res 101(1):271–286

Freund P (2001) Bodies, disability and spaces: the social model and disabling spatial organisations. Disabil Soc 16(5):689–706

Goodley D, Runswick Cole K (2014) Critical psychologies of disability: boundaries, borders and bodies in the lives of disabled children. Emot Behav Diffic 20(1)51–63

Hansen N (2002) On approval: the geography of disabled women and work. Paper given at the new directions in disability seminar series, Centre for Disability Studies, University of Leeds, Leeds, 10 Apr 2002. https://disability-studies.leeds.ac.uk/wp-content/uploads/sites/40/library/Hanson-On-Approval.pdf. Accessed 21 Apr 2018

Harrison V, Palumbo D (2019) China anniversary: How the country became the world's 'economic miracle', BBC News. Available from China anniversary: How the country became the world's 'economic miracle'—BBC News

Holt L (2010) Young people's embodied social capital and performing disability. Children's Geographies 8(1):25–37

Luk W-K (2008) Chinatown in Britain: diffusions and concentrations of the British new wave Chinese immigration. Cambria Press, Amherst, MA

Madge C, O'Connor H (2005) Mothers in the making? exploring liminality in cyber/space. Trans Inst Br Geogr 30(1)

McDonogh GW (2013) Chinatowns: heterotopic space, urban conflict, and global meanings. Número 18(2):96–111

Overland G, Guribye E, Lie B (ed) (2014) Nordic Work with traumatised refugees: Do We Really Care. Cambridge Scholar Publishing

Simpson JA, Weiner ESC (eds) (2007) Oxford English dictionary, 2nd edn. Oxford. Clarendon Press, OED Online Oxford

Siu PCP, Tchen JKW (1987) The Chinese laundryman: a study of social isolation. New York University Press, New York

Tchen JKW (2001) New York before Chinatown: orientalism and the shaping of American culture, 1776–1882. John Hopkins University Press, Baltimore, MD

Yung J (2006) San Francisco's Chinatown. Arcadia Publishing, San Francisco, CA

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