

**The Infrastructure of Peace:
Socio-spatial planning in UN Peace Operations**

by

Silvia Danielak

Bachelor of Arts, Maastricht University (2008)
Master of Arts, Institute d'Etudes Politiques de Paris (2011)
Master in Design Studies, Harvard University (2018)

Submitted to the Department of Urban Studies and Planning in partial fulfillment of the
requirements for the degree of

Doctor of Philosophy in Urban and Regional Planning

at the

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

February 2023

© 2023 Silvia Danielak. All rights reserved.

The author hereby grants to MIT permission to reproduce and to distribute publicly paper and
electronic copies of this thesis document in whole or in part in any medium now known or
hereafter created.

Signature of Author: _____

Department of Urban Studies and Planning
27 September 2022

Certified by: _____

Assistant Professor Delia Duong Ba Wendel
Department of Urban Studies and Planning
Dissertation Supervisor

Accepted by: _____

Associate Professor Gabriella Y. Carolini
Department of Urban Studies and Planning
Co-Chair, PhD Committee

**The Infrastructure of Peace:
Socio-spatial planning in UN Peace Operations**

by Silvia Danielak

Submitted to the Department of Urban Studies and Planning
on September 27, 2022
in partial fulfillment of the requirements for the
Degree of Doctor of Philosophy in Urban and Regional Planning

Abstract

My research examines infrastructure building, and the ‘planning for peace’ embedded therein, in the context of United Nations (UN) peace operations. The installation of solar panels, the repair of roads, and the construction of bridges constitutes an important vehicle for conflict transformation and imaginary for the future of a conflict-affected society. Peace operations’ infrastructure projects have a significant, long-term impact on the built environment and ecology in the places of intervention – a logic that is scarcely articulated as part of peace efforts and remains disjoint from the sustainability discourse to which peacebuilding has turned. My dissertation constitutes a multi-disciplinary inquiry, connecting urban studies and peace studies through an approach informed by historical sociology. I offer an urban planning perspective on peace operations, and specifically its infrastructure building. Through three case studies, this dissertation explores the ‘infrastructural imaginaries of peace’ – infrastructure as promise, risk, and legacy – pursued through engineering and planning expertise and practice in the UN missions in Cyprus in the 1960s, in Haiti after the mid-2000s, and in Mali after 2013.

The dissertation’s central argument is that peacekeeping operations conduct a significant socio-spatial (re-)organization in pursuit of peace through infrastructure building. The dissertation’s historical perspective on peacekeeping’s involvement in public works highlights that – contrary to the recent uptick in attention to peacekeepers’ ecological footprint and ‘sustainable’ peace efforts – socio-spatial, urban and environmental aspects have always featured in peace operations, albeit through different paradigms. Furthermore, the recent increased attention on ‘greening’ peacekeeping and ‘positive legacy’ after missions’ closure reveals an uneasy positioning of peace operations’ infrastructure building between the pursuit of positive and negative peace objectives. These objectives are not easily reconcilable and challenge us to rethink the spatial and temporal dimension of peace efforts, and the equity planning that might need to gain more traction in peace operations’ infrastructure projects.

Dissertation Supervisor: Delia Duong Ba Wendel

Title: Assistant Professor of Urban Studies and International Development

Acknowledgments

For accompanying me through this journey, its turns and detours, I would like to thank my advisors and mentors near and far. Delia Duong Ba Wendel for teaching me the critical inquiry and modeling patience and kindness while supporting my project(s) from the very beginning; Gabriella Carolini for the encouragement and guidance in navigating what urban planning could mean and how to bring together various fields of study; and John Gledhill for enthusiastically supporting this dissertation research and expanding my intellectual horizon as I traversed the disciplinary margins of peacekeeping studies. I am also grateful for the sustained support and mentoring from Diane Davis, and am thankful for the additional mentorship from Larry Vale, Jim Wescoat, Michael Hooper, and Bish Sanyal at various stages of my graduate studies. The support of Sandra Wellford in navigating academic life, work, and the rest coherently, has been crucial in making it all work from the first day at M.I.T. to submitting this dissertation.

This research was generously supported by M.I.T., including a MISTI Africa grant, the Rodwin Travel Grant, the CIS Summer Research Grant, and the Priscilla King Gray Public Service fellowship. I would also like to acknowledge the generous support of the US Institute for Peace through the Peace Scholar fellowship, and the International Studies Association's Dissertation completion award. The research moreover benefited intellectually from colleagues' feedback in various conferences and workshops, including the Conflict Dynamics Workshop at Oxford University and the RC21-IJURR Doctoral School with the generous comments by Susan Fainstein and Marisol Garcia.

During the research, I benefited from the precious time, insights and advice from my interviewees that made themselves available amid multiple emergencies that make their workday in a peacekeeping mission or the diplomatic whirlwind at headquarters. A special thanks also to the librarians and archivists that helped me navigate the sources during the pandemic when travel was not an option. I cannot imagine where I would be without my friends whose open homes, shared meals, laughter, and conversation keep me going: Priska Le-Huu, Thomas Holst, Felix Irmer, Deolinda Martins, Emilia Keshimana, Isadora Dannin. In Cambridge, I truly appreciated the spirit of camaraderie and support of my friends across Harvard and M.I.T., my Ph.D. cohort, and the many others with whom I had the fortune of sharing the DUSP halls, including Mark Brennan, Asmaa Elgamal, Carmelo Ignaccolo, Kevin Lee, Daniel Engelberg, Anna Waldman-Brown, Binzhe Wang, Darien Alexander Williams, Sebastian Sandoval Olascoaga, Deni Lopez, Arianna Salazar Miranda, Prassanna Raman, Louise Paul-Delvaux, and Guy Trangoš and Thomas Coggin.

None of this could have happened without my family, my parents who instilled the freedom and love of learning in me, my family-in-law who celebrated every small achievement with me as if it was their own, and of course Adil and Elias. I could not have imagined the Ph.D. journey without the unwavering support at every step of the way and companionship of Adil, and Elias for reminding me daily that peace is worth fighting for his future. I am forever grateful for their love and for putting everything in perspective.

Table of Contents

List of Figures	7
List of Tables	8
Glossary of Terms	9
Chapter 1 Introduction	10
1.1 Peace operations' complex present	13
1.2 Why does infrastructure in peacekeeping matter?	20
1.3 Argument and contribution	27
1.4 Introduction to case studies	35
1.5 Research design and methods	45
1.6 Chapter summaries	55
Chapter 2 The Infrastructural Imaginary of Peace	60
2.1 Studying peace	61
2.2 Infrastructure history, politics and aspiration	68
2.3 A planning sensibility towards infrastructure in peace operations	77
2.4 The 'infrastructural imaginary of peace'	90
Chapter 3 Infrastructure as Promise: Restoring 'Normality' in Cyprus	93
3.1 Intervening in post-colonial civil war	97
3.2 The pursuit of 'normalcy' in discourse	111
3.3 The pursuit of 'normalcy' in practice: planning domains of intervention	113
3.4 The rise of the urban, and ideas about peace	127
3.5 Conclusion	131
Chapter 4 Infrastructure as Risk: Managing Violence in Haiti	134
4.1 Urban risks as peace risks	138
4.2 Community infrastructure as risk mitigation	154
4.3 Introducing the camp as risk	172
4.4 Conclusion	180
Chapter 5 Infrastructure as Legacy: An Environmental Mandate for Peace in Mali	183
5.1 The crafting of legacy	185
5.2 From environmental management to the supercamp	189
5.3 MINUSMA community infrastructure projects	208
5.4 Incomplete legacies	217
5.5 Conclusion	222
Chapter 6 Conclusion 'Infrastructure Planning for Sustainable Peace'	225
6.1 Three infrastructural imaginaries of peace	228
6.2 The time and space of infrastructure	233
6.3 Planning for sustainable peace	242
Bibliography	246

List of Figures

3.1.	UNFICYP presence in Cyprus in June 1965	103
3.2.	A military engineer and member of the British contingent's section of sappers conducted some road improvement works in 1967	105
3.3.	Canadian Signal Corps Linemen Servicing Telephone Lines between the Headquarters of the 1st Battalion, Canadian Guards, in Kyrenia, and Nicosia Zone Headquarters of UNFICYP in Nicosia	106
3.4.	Canadian troops of UNFICYP street patrol in urban environments	107
3.5.	Soldiers of the Danish contingent DANCON VI filled sandbags with sand	108
3.6.	A UNFICYP camp 'Kato Pyrgos' occupied by Irish troops in 1967, on the left, and an observation post by UNFICYP in the Troodos mountains	109
3.7.	The transportation system in Cyprus in the early 1970s	120
3.8.	The port of Famagusta in the 1970s, photo by Yutaga Nagata, UN	121
4.1.	A map produced by MINUSTAH is reproduced in a World Bank publication	153
4.2.	MINUSTAH peacekeepers in heavy armor patrolling a neighborhood's narrow streets as part of an operation to curb crime, and occupying an outpost in a previously cleared and partly-destroyed building	155
4.3.	MINUSTAH engaged in waste removal in the Bel-Air neighborhood of Port-au-Prince, and employed men from the community to build a canal in Port-au-Prince to improve drainage for the upcoming rainy season as part of the Community Violence Reduction project	163
4.4.	CVR connections to SDGs	165
4.5.	Satellite image of MINUSTAH camp located at the banks of a tributary leading to Haiti's longest river, passing the town of Mirebalais in September 2010	175
5.1.	MINUSMA deployment map, May 2021	190
5.2.	MINUSMA main operations base in Bamako and the public mapping of facilities in Bengali by peacekeepers within the camp	192
5.3.	Plan of the wastewater treatment plan for MINUSMA supercamps	195
5.4.	Slide from the UN Pre-deployment training manual	199
5.5.	The UN Global Service Centre shared rare insights into the Unite FRIM dashboard and user interface of its missions' environmental management technology, presenting an example from the UN Interim Security Force for Abyei (Sudan, South Sudan)	201
5.6.	MINUSMA infrastructure projects, including a canal bed construction that serves both the circulation of peacekeepers and the local population in Kidal when roads become impassable during heavy rains, and a water tower with solar-powered pump in the Kidal region "to prevent conflict between communities."	210
5.7.	Location of Quick-Impact Projects in Mali between 2016 and 2020	211

List of Tables

6.1. Summary of analytical framework	230
--------------------------------------	-----

Glossary of Terms

AMISOM	African Union Mission in Somalia (2007 – 2022)
AU	African Union
CAR	Central African Republic
CVR	Community Violence Reduction
DDR	Disarmament, demobilization, reintegration
DRC	Democratic Republic of Congo
FAO	UN Food and Agriculture Organization
MINUSMA	UN Multidimensional Integrated Stabilization Mission in Mali
MINUSCA	UN Multidimensional Integrated Stabilization Mission in the Central African Republic
MONUSCO	UN Stabilization Mission in the Democratic Republic of the Congo
MINUSTAH	UN Stabilisation Mission in Haïti (2004 – 2017)
NATO	North Atlantic Treaty Organization
NGO	Non-governmental Organization
ONUC	UN Operation in the Congo (1960 – 1964)
OROLSI	Office of Rule of Law and Security Institutions
QIP	Quick-impact project
REACT	Rapid Environment and Climate Technical Assistance Facility
SDGs	Sustainable Development Goals
UN	United Nations
UNDP	UN Development Program
UN DFS	UN Department of Field Support (2007 – 2019)
UN DOS	UN Department of Operational Support (since 2019)
UN DPKO	UN Department of Peacekeeping Operations (1992 – 2019)
UN DPO	UN Department of Peace Operations (since 2019)
UNEP	UN Environment Program
UNFICYP	UN Peacekeeping Force in Cyprus (since 1964)
UNHCR	UN High Commissioner for Refugees
UNMIK	UN Interim Administration Mission in Kosovo (since 1999)
UNOPS	UN Office for Project Services
UNSOM	UN Assistance Mission in Somalia (since 2013)
UNSOS	UN Support Office in Somalia (since 2015)
UNTAC	UN Transitional Authority in Cambodia (1992 – 1993)
UNTAET	United Nations Transitional Administration in East Timor (1999 – 2002)

Chapter 1 Introduction

“Infrastructure plays a particularly important role in helping societies transition towards sustainable peace.”¹ Penned by the former UNOPS Executive Director Grete Faremo this statement is indicative not only of today’s primacy of sustainability within peace operations discourse but also the power attributed to infrastructure to achieve it. Indeed, a glimpse at present-day peace operations reveals ever-more ambitious infrastructure projects that, for example in integrating the energy needs of peacekeepers and host community, promise ‘sustainability’ within the peace process. What drives this imaginary, and what does it tell us about the role of infrastructure in the pursuit of peace?

This dissertation traces the use and imagination of infrastructure in peace operations. It writes a ‘history of the present’, documenting how the United Nations as an institution, and its military and civilian personnel in peacekeeping missions, attribute importance to ‘public works’ like roads, water pipes or health centers to achieve peace, as part of an intervention in the built environment. It reveals how peace operations came to identify urban and environmental issues as relevant to peacebuilding. The infrastructure lens that this dissertation proposes centers the spatial dimension of peacebuilding. In doing so, it allows us to see current peace operations at an important junction between peace as sustainable development and peace as the absence of direct violence.

¹ UNOPS, ‘Infrastructure for Peacebuilding: The Role of Infrastructure in Tackling the Underlying Drivers of Fragility’ (UNOPS, September 2020), 1, https://content.unops.org/publications/Infrastructure_Peacebuilding_EN_Web.pdf.

In 2016, the United Nations (UN) General Assembly and the Security Council both adopted resolutions calling for “sustaining peace”.² Since then, the term has become widely adopted by the UN, governments and think tanks in numerous reports, projects and policies that call for “sustainable peace.” The UN Blue Helmets, in theory a short-termed, humanitarian intervention, suddenly appeared in one sentence with sustainability, just as peace and conflict became one of the sixteen priority areas of the Sustainable Development Goals (SDG). “Sustaining peace” is

goal and a process to build a common vision of a society, ensuring that the needs of all segments of the population are taken into account, which encompasses activities aimed at preventing the outbreak, escalation, continuation and recurrence of conflict, addressing root causes, assisting parties to conflict to end hostilities, ensuring national reconciliation, and moving towards recovery, reconstruction and development, and emphasizing that sustaining peace is a shared task and responsibility that needs to be fulfilled by the government and all other national stakeholders, and should flow through all three pillars of the United Nations’ engagement at all stages of conflict, and in all its dimensions, and needs sustained international attention and assistance.³

Practically, the UN Secretary-General’s *Report on Peacebuilding and Sustaining Peace* from 2018 underscored the UN Peacekeeping’s openness to collaboration with the World Bank, the UN Development Program, and other actors traditionally involved in post-war reconstruction, recovery and development, often through the pursuit of infrastructure projects. One may argue that sustainable peace is little but an omnipresent catchphrase in the latest turn of multilateral development policy. Taken at face value, however, ‘sustainability’ requires UN peacekeepers’ stocktaking of the nature of their lasting impact. Even further, the term draws attention to the environmental and temporal, the spatial and political dimensions of how peace efforts materialize by means of one of the largest military institutions deployed in conflict zones globally.

² A/RES/70/262 and S/RES/2282 (2016).

³ UN Doc, Resolutions A/RES/70/262 and S/RES/2282 (2016).

In an awareness of the multiple scales and domains in which peace efforts take place, policy makers and scholars have sought to better understand the interface of micro and macro dynamics; how international and local actors and efforts interact,⁴ how local peace may influence larger scale, national and international efforts,⁵ and the possibilities for urban and environmental factors to play a role for peacebuilding.⁶ Peace operations are not some abstract institution alone, they instead have a tangible physical presence in the countries they intervene, based on logistics networks, military bases and offices, and infrastructure projects they pursue to be able to circulate, provide services, render services to the community, and maintain their operations. Through that presence and engagement in the host countries' built environment, including their cities, UN peace operations provide and extract resources from local communities. They provide public infrastructure and employment opportunities; they extract ground water, labor and public space, often in places that experience rapid urbanization and, increasingly, risks related to climate change and environmental degradation. Peace operations constitute an economic and political actor locally, a socio-spatial force to be reckoned with.

Driven by a historical and sociological inquiry that traces the path dependency of peacekeeping, my approach traces backwards from the United Nation's contemporary focus on 'sustainable' peacebuilding. Contrary to the typical historical account of UN peacekeeping, I demonstrate that infrastructure, although in different forms, has always been part of peace operations, and infrastructure has always been central to an imaginary of peace. The focus on the history of

⁴ Roger Mac Ginty, 'Hybrid Peace: The Interaction Between Top-Down and Bottom-Up Peace', *Security Dialogue* 41, no. 4 (August 2010): 391–412, <https://doi.org/10.1177/0967010610374312>.

⁵ Séverine Autesserre, 'Going Micro: Emerging and Future Peacekeeping Research', *International Peacekeeping* 21, no. 4 (8 August 2014): 496, <https://doi.org/10.1080/13533312.2014.950884>.

⁶ Anaïs Dresse et al., 'Environmental Peacebuilding: Towards a Theoretical Framework', *Cooperation and Conflict* 54, no. 1 (2019): 99–119, <https://doi.org/10.1177/0010836718808331>; McKenzie F. Johnson, Luz A. Rodríguez, and Manuela Quijano Hoyos, 'Intrastate Environmental Peacebuilding: A Review of the Literature', *World Development* 137 (January 2021): 105150, <https://doi.org/10.1016/j.worlddev.2020.105150>.

peace operations allowed me to reconstruct how urban and environmental concerns have materialized in technical knowledge, technologies and practices before the present moment. The historical research into the deployment of infrastructure reveals how these urban, and later environmental, considerations have shaped the imaginary of peace as much as the design of international interventions, and thus have formed the response to conflict and vulnerability.

My inquiry into the factors that have produced peace operations' turn to urban and environmental issues and related interventions to achieve peace suggests that the current pursuit of 'sustainable' peace is tethered to past experiments with infrastructure as means to address peace operations' 'lasting' development impact. This is closely related to the conception of peace itself, as a long-term and future project that entails more than the absence of violence, but a socio-spatial reorganization of society. This recognition does not come without reservations.

My inquiry of the infrastructural "promise" of peace therefore also points to the ecological dimension of an expanded physical presence, the harm perpetrated by infrastructure and the risks and contradictions it carries for sustainable peace. Here, my socio-spatial planning sensibility to infrastructure draws attention to the interaction between politics and space in peace operations' current and future practice tackling conflict, environmental change, and sustainability concerns all at once.

1.1 Peace operations' complex present

Peace operations remain the UN's primary go-between in places of violent conflict and often stand at the very beginning of communities' long process from war to peace. While in colloquial

language often used interchangeably, ‘peacekeeping’, ‘peacemaking’ and ‘peacebuilding’ have traditionally been distinguished in the international relations (IR) literature by their distinct position on the conflict-to-peace continuum, based on the early conceptualization by the peace scholar Johan Galtung: peacemaking refers to the negotiation/mediation of a peace agreement; peacekeeping refers specifically to the deployment of military forces (for example the UN’s blue helmets); and peacebuilding refers to the long and multifaceted process of rebuilding a society after conflict, including its legal and institutional system, its socio-economic base, and often involves reconciliation and community socio-psychological interventions.⁷

This categorization presupposes a distinct linear progression from conflict to peace which does not reflect the contemporary often-integrated practice of ‘peacekeeping’ and ‘peacebuilding’ vis-a-vis a much more muddled reality of post-war violence and coexisting pockets of peace and of conflict. In recognition of this reality, in this dissertation I refer interchangeably to ‘peacekeeping’ and ‘peace operations’ to denote the UN Security Council-mandated troops, police and civilians that “provide security and the political and peacebuilding support to help countries make the difficult, early transition from conflict to peace”⁸

Peace operations constitute a key institution of international conflict management that can be undertaken by different actors, including regional multinational organizations, military alliances, or even individual states.⁹ The operations are usually consensually introduced by the state parties involved and given a mandate by the UN Security Council. Despite their relatively small budget

⁷ Johan Galtung, ‘Three Realistic Approaches to Peace: Peacekeeping, Peacemaking, Peacebuilding’, *Impact of Science on Society* 26 (January 1976): 103–15.

⁸ ‘What is peacekeeping?’, UN, accessed 23 September 2022, <https://peacekeeping.un.org/en/what-is-peacekeeping>.

⁹ In addition to the United Nations, regional organizations such as (non-exhaustive, in alphabetical order) the AU, CIS, ECCAS, ECOWAS, EU, LAS, NATO, OAS, OSCE, or SADC deploy a significant number of peace operations. Hybrid missions have taken place between the OAS or AU in tandem with the UN, like UNAMID in Darfur.

in comparison to national armies, UN peace operations constitute the largest military peace force actively engaged in conflict zones by troop size, and enjoy a visible presence, financial endowment and equipment through material assets and staff – especially dozens of Civil Affairs officers¹⁰ – that is unmatched by any other peacebuilding actor in conflict areas. As a note of comparison, the UN budget for its peacekeeping missions alone amounted \$ 8 bn in 2015, in contrast to around \$ 4,4 bn for UNDP, which is spread over many more countries.¹¹ Similarly, the budget of the UN’s peacebuilding and political mission is much smaller, accounting only for \$ 548 million in 2021, of an overall combined \$ 5.7 bn mission budget in 2021, which was largely spent on peacekeeping missions.¹²

UN peacekeeping mission follow a very heterogenous, multi-national set-up. Its civilian and administrative parts are staffed by civil servants of UN member states. Its military parts consist in contingents provided by ‘troop-contributing countries’ that usually live and work among themselves. For example: in a country one would find one military base for the Ethiopian contingent, one for the Bangladeshi contingent, and one for the Rwandese contingent, each responsible for a specific geographical zone. The civilian part, organized slightly differently in each mission, features both an ‘operational’ and, what is commonly called, ‘substantive’ wing. The former predominantly focused on the military and operational infrastructure including the bases and the latter managing infrastructure projects for the community.

¹⁰ Niels Nagelhus Schia and John Karlsrud, “‘Where the Rubber Meets the Road’: Friction Sites and Local-Level Peacebuilding in Haiti, Liberia and South Sudan”, *International Peacekeeping* 20, no. 2 (April 2013): 239, <https://doi.org/10.1080/13533312.2013.791581>.

¹¹ Joe Sandler Clarke, ‘Where Does the \$8bn UN Peacekeeping Budget Go?’, *The Guardian*, 6 April 2016, sec. Working in development, <https://www.theguardian.com/global-development-professionals-network/2016/apr/06/where-does-8bn-un-peacekeeping-budget-go>.

¹² UN data for all 24 currently ongoing peacekeeping, peacebuilding and political missions. Source: ‘Expenses Calculator,’ UN, accessed 23 September 2022, <https://open.un.org/un-secretariat-financials/expenses>.

Despite those general parameters of UN peace operations, former UN Under-Secretary-General James O.C. Jonah noted in 2018 that “peacekeeping has come to mean many different things.”¹³ Indeed, peace operations’ continuous presence, in protracted conflicts often for decades, made peacekeepers become involved in a variety of military, humanitarian and development tasks. UN peace operations have gone through an expansion of tasks and mandates since the establishment of the organization, perpetuating UN peace operations as a continuously poorly defined UN instrument that scrapes through from crisis to crisis.¹⁴

Typically, UN peace operations are categorized as belonging to one of three distinct “generations” of peacekeeping whose character was primarily determined by global geopolitics, notably the Cold War, the collapse of the Soviet Union and the rise of post-9/11 transnational terrorism and the response to it.¹⁵ Marrack Goulding, former UN Under-Secretary-General, described the first generation of peacekeeping from the mid-1950s to mid-1970s as the “golden age” of clearly defined mandates of interposition.¹⁶ These early missions sent, typically unarmed, observers to monitor a ceasefire or peace agreement between two states. The first mission in the Congo, and to some degree the subsequent mission in Cyprus, constituted the exception, while

¹³ James O. C. Jonah, ‘A Life in Peacekeeping’, in *The Palgrave Handbook of Peacebuilding in Africa*, ed. Tony Karbo and Kudrat Virk (Cham: Springer International Publishing, 2018), 155, https://doi.org/10.1007/978-3-319-62202-6_9.

¹⁴ Paul F. (Paul Francis) Diehl and Alexandru Balas, *Peace Operations*, Second edition., War and Conflict in the Modern World (Cambridge, England: Polity Press, 2014); David Chandler, *Peacebuilding: The Twenty Years’ Crisis, 1997-2017*, Rethinking Peace and Conflict Studies (Cham: Palgrave Macmillan, 2017).

¹⁵ Oliver P. Richmond, *Maintaining Order, Making Peace* (Houndsmills, Basingstoke, Hampshire ; New York : Palgrave, 2002), <http://archive.org/details/maintainingorder000rich>; Mats Berdal, ‘The Security Council and Peacekeeping’, in *The United Nations Security Council and War: The Evolution of Thought and Practice since 1945*, ed. Vaughan Lowe et al. (Oxford: Oxford University Press, 2008), 175–204, <http://hdl.handle.net/2027/uc1.31822035338649>; Michael W. Doyle and Nicholas Sambanis, ‘Peacekeeping Operations’, in *The Oxford Handbook on the United Nations*, ed. Thomas G. Weiss and Sam Daws (Oxford: Oxford University Press, 2007), 323–48, <http://hdl.handle.net/2027/uc1.31822035215193>; Norrie MacQueen, *The United Nations, Peace Operations and the Cold War*, second (Routledge, 2011), <https://doi.org/10.4324/9781315833415>; Paul F. Diehl and Daniel Druckman, ‘Not the Same Old Way: Trends in Peace Operations’, *Brown Journal of World Affairs* 24, no. 1 (Fall/Winter 2017): 249–60.

¹⁶ Marrack Goulding, ‘The Evolution of United Nations Peacekeeping’, *International Affairs* 69, no. 3 (July 1993): 452, <https://doi.org/10.2307/2622309>.

providing a preview of the potential messiness and complications of peacekeeping in an intra-state conflict that the post-Cold War period would see. In review of that history, Goulding attempted to define peacekeeping in 1993 as

Field operations established by the United Nations, with the consent of the parties concerned, to help control and resolve conflicts between them, under United Nations command and control, at the expense collectively of the member states, and with military and other personnel and equipment provided voluntarily by them, acting impartially between the parties and using force to the minimum extent necessary.¹⁷

As the subsequent years proved, this definition had been more an ambition than a description.

Goulding himself saw such change coming with the “revival” of peacekeeping at the end of the Cold War, constituting the beginning of the second generation of peace operations.¹⁸ UN peace operations began to adopt a growing variety of tasks, with a special focus on ‘peacebuilding’.

Through peace operations, the UN began engaging in statebuilding, from ‘disarmament, demobilization, reintegration’ (DDR) and policing to the establishment of the rule of law, election support, or human rights protection. Few missions constituted a transitional UN administration of countries by means of “trusteeship” – the most profound intervention into sovereignty as of yet.¹⁹ Arguably, the nature of peace operations shifted not only in response to geopolitics alone, but in line with a changing paradigm of protection: The objective of peacekeeping evolved from protecting the sovereignty of the state to protecting its people – a key concern of the second generation of peacekeeping.²⁰ Simultaneous to this growing civilian workstream, peacekeeping also became more militarized, as troops were authorized to use

¹⁷ Goulding, 455.

¹⁸ Goulding, 456.

¹⁹ James D. Fearon and David D. Laitin, ‘Neotrusteeship and the Problem of Weak States’, *International Security* 28, no. 4 (2004): 5–43.

²⁰ Victoria K. Holt and Glyn Taylor, *Protecting Civilians in the Context of UN Peacekeeping Operations* (New York: United Nations, 2009).

military force for their own and others' defense,²¹ including for tactical purposes to pursue the mission's mandate.

Mirrored in expansive, and increasingly development-oriented UN Security Council mandates,²² the rise of peacebuilding urged peace operations to aim for lasting conflict settlement in society. In the early 1990s, the United Nations officially adopted the language of peacebuilding as an approach during and after violent conflict, first mentioned by then-UN Secretary-General Boutros Boutros-Ghali in 1992's *An Agenda for Peace*.²³ Peacekeeping generally became seen as a 'technique' within the wider framework of peacebuilding activities that include long-term state-building and development efforts.²⁴ In consequence, according to the UN, the "boundaries between conflict prevention, peacemaking, peacekeeping, peacebuilding and peace enforcement have become increasingly blurred. Peace operations are rarely limited to one type of activity."²⁵

The UN's expansive peace and security agenda of the 1990s met increasingly protracted situations of ongoing post-war violence, displacement, and intersecting environmental disaster, which, eventually, heralded peace operations' third generation. The UN's 2008 Capstone Doctrine signaled the growing readiness to engage in environments where there is no peace to be kept but rather to prepare the grounds for peacebuilding. It designated peacekeepers' role in the stabilization of conflict zones, often prior to a political settlement. It, too, coincided with the

²¹ John Karlsrud, 'The UN at War: Examining the Consequences of Peace-Enforcement Mandates for the UN Peacekeeping Operations in the CAR, the DRC and Mali', *Third World Quarterly* 36, no. 1 (2 January 2015): 40–54, <https://doi.org/10.1080/01436597.2015.976016>.

²² John Gledhill, Richard Caplan, and Maline Meiske, 'Developing Peace: The Evolution of Development Goals and Activities in United Nations Peacekeeping', *Oxford Development Studies* 49, no. 3 (3 July 2021): 201–29, <https://doi.org/10.1080/13600818.2021.1924126>.

²³ As a concept, peacebuilding was introduced by peace scholar Johan Galtung in 1976 as an approach to overcome structural violence, in triangle with peacemaking (mediation, negotiation) and peacekeeping (military dimension).

²⁴ Alternatively, some suggest a transition from peacekeeping to peacebuilding. Cf. Chandler, *Peacebuilding*.

²⁵ 'UN Peacekeeping terminology and definitions,' UN Peacekeeping, accessed 2 May 2021, <https://peacekeeping.un.org/en/terminology>.

creation of the new UN Department of Field Support in 2007, which emphasized the importance of logistics in peace operations to facilitate quick deployment in diverse environments affected by ongoing violent conflict. Under this type of mission, peacekeepers may resort to military enforcement, while engaging in a variety of counter-insurgency, humanitarian, and development tasks to prepare a country for a political settlement – an approach that has received considerable criticism for it “lowers the horizons of peace and peace interventions. It moves us away from the realm of emancipation towards the realm of control,” as Roger Mac Ginty has criticized.²⁶

Focused on the post-Cold War era, scholars of peacekeeping have problematized the expansion of peacekeeping tasks and mandates and the ensuing “crisis” as ‘peacekeeping’ turned ‘peacebuilding.’²⁷ Most importantly, both peacekeeping research as well as policy debates among peacekeeping experts focus on the timelines and complexity of peacekeeping. Today, the paradox of interventions not only consists of increasingly ambitious mandates with decreasing funds and yearly-renewed short-term mandates, but a persistent tension between short-term and long-term involvement and between competing objectives. Moreover, despite the traditional distinct nature of peacekeeping and peacebuilding, the civilian and military dimension increasingly converge. The so-called ‘CIMIC’, or CIVMIL coordination/cooperation²⁸ in the security studies literature, refers to the, frequently criticized but as often encouraged,²⁹ collaboration between military and civilian/humanitarian actors – a tension that reverberates in the logics of peacekeeping’s infrastructure building.

²⁶ Roger Mac Ginty, ‘Against Stabilization’, *Stability: International Journal of Security and Development* 1, no. 1 (1 November 2012): 26, <https://doi.org/10.5334/sta.ab>.

²⁷ Chandler, *Peacebuilding*.

²⁸ UN Department of Peacekeeping Operations (DPKO). "Civil-Military Coordination Policy", September 9, 2002, 2-3. Archived from <https://www.refworld.org/pdfid/451ba7624.pdf>.

²⁹ Thomas G. Weiss, ‘Learning from Military-civilian Interactions in Peace Operations’, *International Peacekeeping* 6, no. 2 (2007): 112–28, <https://doi.org/10.1080/13533319908413774>.

1.2 Why does infrastructure in peacekeeping matter?

In an effort to implant their vision in the zones of intervention, UN peacekeepers have – contrary to (or perhaps, in the frame of a broad interpretation of) their mandate – engaged in community-focused infrastructure projects. Those constructions, advisory and technical projects, and the resulting urban service delivery have taken place in a grey zone between reconstruction and humanitarian aid since the very beginnings of UN peacekeeping. The 1960s missions in Cyprus and in the Congo, albeit rather exceptionally, are an early testament to the multiplicity of projects, ranging from agriculture to civilian aviation, through which peacekeepers engaged. According to US diplomat Harlan Cleveland’s exuberant reflection on the UN’s efforts in the Congo during the first peacekeeping mission:

U.N. technicians brought together from all over the world ... managed the airports, cleaned up the water supply, provided nearly all medical care, staffed most of the schools with teachers, rebuilt the international transportation system, stamped down a dangerous inflation, suppressed much of the smuggling, reestablished trade, and encouraged the return of outside investment.³⁰

Beyond strictly military activities, peacekeepers implement projects like infrastructure rehabilitation, community service delivery, training and employment initiatives. Peacekeepers’ construction of government buildings, electricity, water and sewer systems, and communication technology contribute to statebuilding and the expansion of administrative authority. Projects like operating health clinics, providing education material, energy and waste management, or

³⁰ Cited in Arthur H. House, *The U.N. in the Congo: The Political and Civilian Efforts* (Washington: University Press of America, 1978), 410.

planting trees often seek ‘quick impact’ in mediating the relationship between peacekeepers and local communities, yielding acceptance among the population and offsetting emerging conflicts.³¹ The centrality of infrastructure building within this expansive set of peacekeeping activities shows how wide, and outside the bounds of its original conception, the work of peacekeeping has become – leaving an increasingly large socio-spatial footprint in the places of intervention.

In addition to the humanitarian and development projects, the mission itself leaves a long-term, material imprint in the landscape. As UN missions have come to employ more troops and stay for longer, in a more militarized fashion, the infrastructure to sustain the operation has further grown in importance: The troops require more and larger military bases, often in close proximity to urban areas, and airports catering to aircrafts, helicopters and drones. Large-scale infrastructure projects like the construction of roads, bridges, airports and military camps primarily serve the peacekeepers but can eventually be repurposed for longer-term civilian use. Peacekeepers rely on the logistics infrastructure for shelter, health care, and basic services including water, electricity and waste management. While the design of military bases is based on refined models of efficiency and self-sufficiency, the troops’ presence diverts significant economic, financial and material, and ecological resources from the local community, in addition to imprinting a military socio-spatial logic on their host cities.³²

³¹ UNDPKO, ‘Quick Impacts Projects (Policy)’, 1 October 2017, <http://dag.un.org/handle/11176/400678>; UNDPKO, ‘Quick Impacts Projects (Guidelines)’, 2017, https://unmil.unmissions.org/sites/default/files/new_dpko_qip_guidelines.pdf; E.g. MINUSMA, ‘Quick Impact Projects (QIPs)’, MINUSMA, 3 March 2015, <https://minusma.unmissions.org/en/quick-impact-projects-qips>.

³² Michael Carnahan, Scott Gilmore, and William Durch, ‘New Data on the Economic Impact of UN Peacekeeping.’, *International Peacekeeping* (13533312), 2007, <https://doi.org/info:doi/10.1080/13533310701422943>; Lucile Maertens, ‘From Blue to Green? Environmentalization and Securitization in UN Peacekeeping Practices.’, *International Peacekeeping* 26, no. 3 (June 2019): 302–26; Kathleen M. Jennings and Morten Bøås, ‘Transactions and Interactions: Everyday Life in the Peacekeeping

The recent rise in attention to sustainable peace and parallel environmental scrutiny in peace operations further underlines the long-term ‘development’ and peacebuilding aspirations that peacekeepers attend to through infrastructure building. Driven by a growing awareness of urbanization dynamics, environmental degradation and climate risks during conflict, UN bureaucrats and diplomats have turned their attention to the environmental and infrastructural impact of peacekeeping on the host country’s local communities. During the establishment of MINUSMA in 2013, such concern was codified when the UN Security Council explicitly encouraged, for the first time ever, the UN peace mission to consider its environmental impact.³³ In missions ‘in the field’, a variety of projects and initiatives pursue environmental goals across the domains of energy, waste management, cultural preservation, and climate change mitigation.

After almost a decade of efforts to elevate sustainability in the context of peace operations, physical infrastructure has come to be conceived as object of environmental planning and part of the UN’s toolset to ‘sustain peace’. Among the many imaginaries and ideals attributed to infrastructure, peace itself is central. Yet, a review of the UN’s past peace operations reveals that time and again, infrastructure has been accorded a central place in the pursuit of peace.

Indeed, the recent shift of discourse is preceded by decades of peace operation’s spatial – and infrastructural – interventions, which have remained largely obscure in the peace literature.

Already early UN peacekeeping missions of the 1960s showcase elements of the infrastructure ventures and socio-spatial planning initiatives in which peacekeepers were engaged. With the rise of peacebuilding in the 1990s, infrastructure has become more rooted in the intervention

Economy’, *Journal of Intervention and Statebuilding* 9, no. 3 (3 July 2015): 281–95, <https://doi.org/10.1080/17502977.2015.1070022>; Kathleen M. Jennings, ‘Life in a “Peace-Kept” City: Encounters with the Peacekeeping Economy’, *Journal of Intervention and Statebuilding* 9, no. 3 (3 July 2015): 296–315, <https://doi.org/10.1080/17502977.2015.1054659>.

³³ UN Doc, Resolution S/RES/2100 (2013), 25 April 2013.

logic; sometimes pursued by the military contingents of troop-contributing countries, sometimes in collaboration with other UN entities like UN Office for Project Management (UNOPS) or the UN Secretariat's Department of Field Support, private contractors, or the World Bank. While official UN and policy reports suggest the turn to urban and environmental issues to be a recent one, peacekeepers have been involved in infrastructure projects for much longer. Therefore, focusing on just the recent turn to 'sustainable peace' and the rise of 'quick-impact projects' misses the historical scope of UN peacekeeping's involvement with infrastructure – and, in turn, infrastructure's importance in the practice and idea of peace operations.

In spite of the key role of infrastructure, the intellectual history of UN peace efforts has mostly omitted it. Little light has been shed on the logics that govern peace operations, specifically the other things peacekeepers do (beyond patrols, training, and other military activities), which not only leave a spatial, material imprint, but aim to enhance a society's ability to sustain peace. Given the domineering military and logistics focus, and in spite of a progressively larger number of civil and environmental engineers working in the peacekeeping bureaucracy, it might be of little surprise that infrastructure-building in peace operations has for most of its history been obscured from the missions' overall goals and broader ideas of peace. Traditionally the purview of a consortium of planners, architects, engineers, and logisticians, infrastructure building in the military context has for a long time been reduced to a technical task, leaving less room for engineers and logisticians to exercise their "social imagination"³⁴ and planners and architects to

³⁴ Antoine Picon, 'Urban Infrastructure, Imagination and Politics: From the Networked Metropolis to the Smart City: Urban Infrastructure, Imagination and Politics', *International Journal of Urban and Regional Research* 42, no. 2 (March 2018): 263–75, <https://doi.org/10.1111/1468-2427.12527>.

attend to the social, political and ecological aspects of projects commonly contemplate in the civilian context.

Considering infrastructure building as technocratic, rather than political, ignores its underlying assumption and potential impact. A closer look at infrastructure and logistics in UN peacekeeping points to the politics implicated in, and complicating, the ‘neutral’ humanitarian peacekeepers’ efforts in the places of intervention. Peace operations foster a comprehensive socio-spatial development agenda and participate in the resource allocation in the post-war context. Infrastructure is a key vehicle to access and allocate resources, which might impact conflict, long after the peacekeepers have left. Infrastructure itself, too, is most likely to outlive the peacekeeping presence and the military, humanitarian framework it operates in. In contrast to much of the framing in peace operations, infrastructure therefore leaves a long-term spatial impact, which is not *per se* positive.³⁵ Stipulating infrastructure as apart of “incidental legacies”³⁶ of peace operations, hence, fails to capture the intent and logic with which peace operations engage in the built environment and lead to a range of possible outcomes.

Peace scholarship more broadly, despite today’s much more nuanced understanding of peace and several emerging avenues of research that draw on a range of new theoretical ideas, mostly still disregards the materiality, location, and practice of peace. Detached from the transnational institutional and material circulation of policies and practices, it remains unclear how international, humanitarian and development, military and civilian actors engage with the urban – and rural, for that matter – environment across different scales. Furthermore, specifically in the

³⁵ Cf. Oren Yiftachel, ‘Planning and Social Control: Exploring the Dark Side’, *Journal of Planning Literature* 12, no. 4 (1 May 1998): 395–406, <https://doi.org/10.1177/088541229801200401>.

³⁶ Karin Landgren, ‘Unmeasured Positive Legacies of UN Peace Operations’, *International Peacekeeping* 27, no. 1 (1 January 2020): 65–69, <https://doi.org/10.1080/13533312.2019.1710375>.

peacekeeping context, it remains unclear what ideas about peace, from the absence of violence to “positive peace,”³⁷ are pursued, when and by whom, and how infrastructure plays a role in pursuing one, the other, or both.

The urban and regional planning literature and practice, too, has thus far neglected peacekeeping operations as a genuine socio-spatial actor. Infrastructures as public works are part of the planning repertoire of territorial governance in both rural and urban contexts. They constitute a key mechanism in the allocation of resources and power, and in the development of the modern state.³⁸ Despite their importance, planning analyses have not sufficiently considered the actors and logics that operate in settings of conflict pursuing infrastructure works. This keeps us in the dark about the complexity of infrastructure and the spatiality of peace operation at large, and its impact on cities in conflict in the long-term – *especially* because peacekeepers’ are increasingly present in cities and significantly shape their economies and resource geographies.

Ultimately, infrastructure matters because it provides a window into how peace is operationalized and how it materializes specifically within the built environment. These questions presuppose an understanding of peace that comprises both ‘negative’ and ‘positive’ peace conceptions. My questions are informed by peace understood

as a process not an endpoint; exploring how actors make peace in certain ways and in certain places; and stressing how practices of peace are embedded in power relations. Peace can be a yearning for a radically new and just social order, or a mechanism employed by the powerful to resist exactly such change. Peace might arise through the

³⁷ Johan Galtung, ‘Violence, Peace, and Peace Research’, *Journal of Peace Research* 6, no. 3 (1969): 167–91.

³⁸ James Ferguson, *The Anti-Politics Machine* (Cambridge: Cambridge University Press, 1990); James C Scott, *Seeing like a State: How Certain Schemes to Improve the Human Condition Have Failed* (New Haven, CT: Yale University Press, 1998).

conscious or unconscious actions of both powerful geopolitical actors and everyday folk.³⁹

Such definition aligns with a ‘planning sensibility’ that is concerned about the long-term, social and environmental dimension of spatial interventions.

Peace operations’ continuous engagement with infrastructure suggests that ideas about peace are imbedded in, and pursued through, infrastructure. While mechanisms and mandates of peacekeeping have evolved over the decades from military monitoring to expansive institution-building, the idea of ‘post-war peace’ pursued – and often achieved⁴⁰ – seems to remain the same. Grounded in an inquiry of the idea of peace, I therefore set out to study UN peacekeeping as the institution and set of practices that is often at the beginning of a lengthy process of recovery from violent conflict, exploring the groundwork that is laid early in a country’s stabilization, conflict management and reconciliation process. Specifically, this leads us to ponder the role for practitioners and experts – including planners, architects and engineers – to define peace outcomes, who are usually sidelined in discourses on peace, and left to fulfil a technical – *read*: neutral – role in physically setting-up and maintaining operations.⁴¹

This dissertation therefore examines when, where, and how UN peace operations have engaged in infrastructure construction, and what factors have led peace operations personnel to interpret and expand their mission’s mandate and produced their turn to infrastructure planning.

Relatedly, it also analyzes when UN mission have engaged with, and when they have eschewed,

³⁹ Philippa Williams, Nick Megoran, and Fiona McConnell, ‘Introduction: Geographical Approaches to Peace’, in *Geographies of Peace*, 2015, 2, <https://mit-illiad-oclc-org.libproxy.mit.edu/illiad/illiad.dll?Action=10&Form=75&Value=627587>.

⁴⁰ Michael J. Gilligan and Ernest J. Sergenti, ‘Do UN Interventions Cause Peace? Using Matching to Improve Causal Inference’, *Quarterly Journal of Political Science* 3, no. 2 (28 July 2008): 89–122, <https://doi.org/10.1561/100.00007051>.

⁴¹ Arthur Boutellis and Adam C Smith, ‘Engineering Peace: The Critical Role of Engineers in UN Peacekeeping’ (New York: International Peace Institute, January 2014).

the issue of development, urbanization, environmental protection and, more recently, climate change. This analysis is important to track the origins of the present turn to ‘sustainable’ peace. In turn, how have ‘urban’ and ‘environmental’ concerns, expertise and technologies shaped the practice of peacekeeping? The latter question brings to the fore the actors, expertise and technologies, funding mechanisms and types of projects and policies that have been part of UN-led peace operations over the decades. Together, those elements tell as much about how peace has been conceived as about its pursuit in practice, in the past and present.

1.3 Argument and contribution

My inquiry’s theoretical contribution lies at the intersection of urban and peace studies, while responding to an evidence gap in public policy and the practice of peace efforts. My study of infrastructure planning as part of peace operations reveals institutional and historical logics that shape peacekeeping interventions – and, fundamentally, the idea of peace. Infrastructure, itself, constitutes an imaginary of peace, being attributed the power to foster peace. More specifically, infrastructure appears in various facets and is entrusted with various role in the achievement of peace.

I highlight three ‘infrastructural imaginaries of peace’. In Cyprus, my analysis suggests that the UN’s peacekeeping force UNFICYP engaged urban planning practices to operationalize a modern, urban ‘normalcy’ as peace, and infrastructural provision being its primary medium. When peacekeepers deployed to the island, peace was understood as being impeded by the lack

of connectivity between the two physically separate Turkish and Greek Cypriot populations.⁴² Infrastructure, from highways to housing projects, bore the *promise* of connection, development, and ultimately therefore peace. In the context of the UN intervention in Haiti, MINUSTAH understood the country's instability and lack of peace largely as the consequence of urban gangs,⁴³ which was to be remediated by urban service infrastructure projects. Yet, short of such infrastructural response to urban risk, the peacekeeping infrastructure itself became *risk* – a public health, and eventually peace risk, as it spread the cholera virus from peacekeepers to Haitians. In the present-day UN involvement in Mali, UN policy makers formulate conflict in the region predominantly as a function of climate-induced natural resource scarcity and lack of economic opportunity, reverberating a long-standing scholarly discourse on environmental scarcity,⁴⁴ that MINUSMA can confront with environmental management, renewable energy and water management technology. In turn, infrastructure reifies legacy, the UN's imaginary of peace that centers peacekeepers' ecological footprint and sustainability concerns.

The UN's approach to infrastructure reveals as a way to materialize the intangible nature of peace, and it allows me document how the UN's socio-spatial involvement in conflicts has evolved as product of both technological change and new ways of thinking about peace opportunities. My dissertation showcases how ideas and practices of building peace have been

⁴² Report of the UN High Commissioner for Refugees to the Secretary-General on Humanitarian Assistance in Cyprus, Annex to 'Report of the Secretary-General pursuant to Security Council Resolution 361(1974)' S/11488, 4 September 1974. UN Archives Item S-0903-0002-03-00001 - United Nations Peacekeeping Force in Cyprus (UNFICYP).

⁴³ UN Security Council, 'Report of the Secretary-General on the United Nations Stabilization Mission in Haiti (S/2010/446)', 1 September 2010, <https://undocs.org/pdf?symbol=en/S/2010/446>; UN Security Council, 'Report of the Secretary-General on the United Nations Stabilization Mission in Haiti (S/2011/540)', 25 August 2011, <https://undocs.org/pdf?symbol=en/S/2011/540>.

⁴⁴ 'Building Climate Resilience and Peace, Go Hand in Hand for Africa's Sahel – UN Forum', UN News, 13 November 2018, <https://news.un.org/en/story/2018/11/1025671>; Thomas F. Homer-Dixon, *Environment, Scarcity, and Violence* (Princeton, N.J: Princeton University Press, 1999); Robert D. Kaplan, 'The Coming Anarchy', *The Atlantic*, February 1994, <https://www.theatlantic.com/magazine/archive/1994/02/the-coming-anarchy/304670/>.

envisioned, planned, and executed by one institution through place-specific spatial, urban and environmental paradigms in distinct historical periods.

1.3.1 An 'infrastructure lens'

My first contribution is of theoretical, epistemological nature: Inspired by Science, Technology, and Societies (STS) studies, I employ an *infrastructure lens*. This framework allows me to study the “sociotechnical imaginaries”⁴⁵ – the interface between the infrastructures, the material intervention, and the institutional, social, dynamics – of peace, and the ways that they are realized in the built environment in post-war communities. My case studies allow for a critical look at the planning and technology involved in the infrastructure building and the urban development during UN peace efforts. Envisioned between UN headquarters and the zones of intervention, UNFICYP, MINUSTAH, and MINUSMA suggest the peace infrastructures’ inherently political nature and their embeddedness in conflict and power dynamics.

My study contributes to understanding the imaginary for societal transformation and peaceful futures that people attach to *planning* and *building*, set apart from the modernization discourse that has accompanied urban and planning studies for so long. As an object of analysis, infrastructure in the respective missions reveals peace operations’ shift from ‘the rural’ to ‘the urban’, and its increasing focus on environmental concerns, as both problem and solution in international peacekeeping. The focus on infrastructure allows me to highlight the place-specific

⁴⁵ Sheila Jasanoff and Sang-Hyun Kim, eds., *Dreamscapes of Modernity: Sociotechnical Imaginaries and the Fabrication of Power* (University of Chicago Press, 2015), <https://chicago-universitypressscholarship-com.libproxy.mit.edu/view/10.7208/chicago/9780226276663.001.0001/upso-9780226276496>.

factors that inform peace operations, the processes by which peacekeeping practices change over time and the spatial production that occurs as the result of peacekeeping. The nature of peace operations changes in response to how the barriers to peace are understood – in part through the available technology. Peace as an abstraction, and its pursuit in practice, have been continuously shaped by urban and environmental concerns and solutions. This infrastructure-focused approach contributes to better articulating how peace efforts are shaped by, on the one hand, institutional ‘sociotechnical imaginaries’, and on the other hand, the urban and environmental complexity faced in peace operations that lead to infrastructure projects. Infrastructure building, then, is a key optic through which to theorize peacekeepers’ interaction with the built environment.

The research centers infrastructure in the context of urbanization, “transnational urbanism”⁴⁶ through the (in)direct intervention of foreign powers in cities predominantly of the global South, and the civil-military pursuit of peace through international interventions at large. Infrastructure holds significant potency in shaping cities and rural landscapes in regions emerging from war. Yet, the lack of urban mediation and consensus-building processes in peacekeepers’ infrastructure building suggests the potentially unilateral nature of such infrastructural imaginaries of peace and also exposes a gap between locally based ad hoc problem solving and military strategy, urban planning issues and international post-war reconciliation agendas. Therefore, my research expands on the concepts of “humanitarian” and “military urbanism”, contributing to a body of research on the contested and splintering nature of infrastructure.⁴⁷

⁴⁶ Hans Harms, ‘Cities of the Global South in the Context of Transnational Urbanism and International Development Policies’, in *Transnationalism and Urbanism*, ed. Stefan Krätke, Kathrin Wildner, and Stephan Lanz (New York: Routledge, 2012), 28.

⁴⁷ Stephen Graham and Simon Marvin, *Splintering Urbanism: Networked Infrastructures, Technological Mobilities and the Urban Condition* (London: Routledge, 2001); Wendy Pullan, ‘Spatial Discontinuities: Conflict Infrastructures in Contested Cities’, in *Locating Urban Conflicts: Ethnicity, Nationalism and the Everyday*, ed. Wendy Pullan and Britt Baillie (London: Palgrave Macmillan UK, 2013), 17–36,

1.3.2 A steady developmentalization of peace operations

In contemporary peace operations, there is often no peace to keep. The blue helmets intervene in ongoing violent conflict, and active warfare, prior to a signed peace agreement. Despite their evolving set of responsibilities, the name has stuck and there is no reason to dismiss the quintessential task of keeping peace altogether. Peace and conflict often co-exist and alternate, temporally and spatially. In the spirit of this ambivalence, the UN Department of Peacekeeping Operations' 2003 *Handbook on UN Multidimensional Peacekeeping Operations* draws concrete, practical links to development actors, like the World Bank's Conflict Prevention and Reconstruction Unit. It also supports civilian tasks and the cooperation with the UN Development Program and its continued presence even during war. While this outreach towards development actors can be pinpointed to the beginning of the 21st century, its practice can be traced further back.

Focusing on the role of urban and environmental considerations in peacekeeping reveals the many civil-military interlinks that manifest spatially, and shows the spatial transformation that is envisioned through peacekeeping activities, which, at best, occurs in parallel to the desired societal conflict transformation. The narratives and practices of infrastructure building in peace

https://doi.org/10.1057/9781137316882_2; Dennis Rodgers and Bruce O'Neill, 'Infrastructural Violence: Introduction to the Special Issue', *Ethnography* 13, no. 4 (1 December 2012): 401–12, <https://doi.org/10.1177/1466138111435738>; Silvia Danielak, 'Conflict Urbanism: Reflections on the Role of Conflict and Peacebuilding in Post-Apartheid Johannesburg', *Peacebuilding* 8, no. 4 (2020): 447–59, <https://doi.org/10.1080/21647259.2019.1634867>; Marianne Potvin, 'Humanitarian Urbanism under a Neoliberal Regime: Lessons from Kabul' (International RC21 Conference, Berlin, 2013), <http://www.rc21.org/conferences/berlin2013/RC21-Berlin-Papers/24-1-Potvin-Marianne.pdf>; Karen Büscher, Sophie Komujuni, and Ivan Ashaba, 'Humanitarian Urbanism in a Post-Conflict Aid Town: Aid Agencies and Urbanization in Gulu, Northern Uganda', *Journal of Eastern African Studies* 12, no. 2 (3 April 2018): 348–66, <https://doi.org/10.1080/17531055.2018.1456034>.

operations suggest a steady ‘developmentalization’ of peace operations – underlining that, rather than a technocratic intervention taking place in a humanitarian vacuum, infrastructure building is intentional and political, and has long-term socio-spatial consequences on the post-war landscape.

Here, my research adds to the critical inquiry of peace in relation to development. The liberal peace paradigm, centered around a set of liberal values, suggests that ‘development’ through market-oriented reforms and democratization, also supported through militarized peacekeeping, produce peace. With a focus on physical construction, planning and development, my research picks up some of the tenets of the ‘liberal peace’ and traces its rootedness, but also its flexible interpretation, in peacekeeping practice. Peace operations, planned for the short-term, constitute a long-term practice, with even longer-term consequences that influence institutional, socio-economic and spatial condition, while also curbing direct violence. Peace, in this research, emerges as a multi-scalar, networked and multi-agent phenomenon, in which ideas of peace are produced in different locations and by different actors, but where the actors persistently center socio-spatial and urban development and state-building through infrastructure.

Studying UN Peace Operations as an institution, and their practice of infrastructure building in concert with other multilateral organizations, not only provides a testament to the spatiality of peace efforts but also how peace itself – as idea and practice – is subject to change. My dissertation constitutes part of a larger scholarly body of critical peace research, which conceptualizes peace as an agent-specific, site-specific, and historically contingent practice, rather than a universalist idea.

1.3.3 *The (sustainable) pursuit of (sustainable) 'peace'*

The steady developmentalization through infrastructure building and socio-spatial planning efforts, and the 'urbanizing work' done by peacekeepers, constitutes the institution grappling with its limited positive peace contribution and efforts to expand it. The paradigms that have led to the current infrastructural paradigm of peace expose many of the frictions and mismatches that have accompanied peace operations' socio-spatial endeavors all along, and render them even more pronounced today – because the ambitions are larger and the infrastructure projects are more voluminous.

This dissertation thus reveals the UN's institutional grappling with its own shortcomings, rooted in understanding peace as the absence of violence and its successive attempts to correct for it. The UN international bureaucracy is, by design, driven by its attempts to 'manage', monitor and control, and therefore render its activities and impacts measurable and hence accountable to its member states. It so happens that the absence of violence, negative peace, is much easier, more straightforwardly quantifiable and reportable in the multi-level system of the United Nations with its member states, agencies, programs and local officers. In an attempt to correct for the bias towards negative peace, the UN's history can be looked at through the expansion and increasingly comprehensive understanding of peace, even – or, *especially* – through its 'peacekeeping' instrument, which, as the sole military instrument, is a surprising candidate for such a 'positive peace' endeavor.

Why does all of this matter? It seems that the very local, the project level, is the scale where the UN envisions itself to be able to contribute to positive peace, but local construction, the site, place and infrastructure project as peacebuilding bears its own risks. Such work might allow

marrying negative with positive peace ideals and bridging the bureaucratic tangible ‘good practices’ and measurable outcomes with vague community ideals of greater cohesion, solidarity and empowerment. “Hybrid peace” theory has pointed to the “frictions” that such interactions between local and international actors, between top-down and bottom-up norms and practices, without however explicitly problematizing material, infrastructure interventions during conflict as the physical place for such hybridity.⁴⁸ Practically, infrastructure projects in peace operations carries the promise of development while continuously compromised by security concerns, supply chain hurdles and technological failure, bearing its own possibility of violence.

Ultimately, positive peace would mean a re-consideration of ideas about temporality and the very linear pursuit of peace during those timed, mandated peace operations. The linear conception of building peace, a function of (linear) project management and infrastructure building, inhibits any form of physical engagement that could be considered truly resourceful and sustainable, especially in the post-colonial settings in which the UN intervenes. So, the last argument that this dissertation seeks to make is one about sustainability: when operationalizing peace, it is not the outcome but the practice – of collaborative and non-violent planning – that needs to sustain. Peace operations, often long but nonetheless time-bound, outlive their own presence. Therefore, it requires an early planning for the aftermath of peace operations, a continuous collaboration around infrastructure to guarantee its capacity to adapt, to be maintained, managed and repaired, or dismantled. The pursuit of peace through peace operations

⁴⁸ Annika Björkdahl and Kristine Höglund, ‘Precarious Peacebuilding: Friction in Global–Local Encounters’, *Peacebuilding* 1, no. 3 (September 2013): 289–99, <https://doi.org/10.1080/21647259.2013.813170>; Mac Ginty, ‘Hybrid Peace’; Oliver P Richmond, ‘The Dilemmas of a Hybrid Peace: Negative or Positive?’, *Cooperation and Conflict* 50, no. 1 (March 2015): 50–68, <https://doi.org/10.1177/0010836714537053>.

needs to center equity and community-led planning, even if this means a prolonged coexistence of peace and conflict (which will inevitably arise in such process).

1.4 Introduction to case studies

Given the UN blue helmets' ever-expanding mandate, this dissertation considers the range of actors employed by the UN Department of Peace Operations in peacekeeping missions. Despite the UN blue helmets' particularities, this dissertation aims to make a more general contribution to reflect on peacebuilders intervening in zones of conflict and thus shaping the material and spatial outcomes for populations emerging from that violent experience.

Key historical events provide the parameters of my research and, eventually, structure my dissertation. Anchored in the present and recent turn to sustainability, my analysis draws from the early years of peacekeeping during the Cold War – and first, and rare, involvement in civil war – to trace an evolution that has its roots in the 1960s. Based on an extensive literature review, I selected three peacekeeping missions as representative of key paradigmatic shifts in peacekeeping logics and practices. As a diverse set of case studies, each of the three mandated UN peace operations is representative of the peacekeeping practice of its time, in a specific geographic conflict zone. Each of the missions faced new circumstances and challenges and became host to new practices that allowed me to trace shifts in the operational logic and peacekeeping paradigms. In pursuing a theory-generating, inductive approach, the three missions also constitute “critical” cases that “would be as favorable as possible for the confirmation of the

... thesis”⁴⁹ – and therefore if logics of infrastructure building do not take place in those missions, they are unlikely to be significant to peacekeeping at large.

The three peace operations faced different conditions locally, including the host countries’ geography, state of development and location within the spectrum of the ‘Global South’ – but also the shared experience of civil war in the context of a collective colonial history. As part of that experience, the three missions’ host countries had previously seen the outside-imposed construction of infrastructure for development, modernization, and control. They each then faced post-colonial civil war that took place throughout their respective territories, within multi-ethnic communities. Peacekeepers thus were invited to be *within* their state borders and among local communities. The shared experience of civil war across the three cases, in different historic periods, sets the cases jointly apart from most initial peacekeeping that yielded the guarding of international borders, seeking enclosure and disconnection among populations and armies of different countries.

Other spatial factors, too, have conditioned the interventions: Remoteness necessitated logistical choices different from operations in places considered more ‘central’ to international logistics chains. Just like the island-character of Cyprus and Haiti, the difficult access to Northern Mali, due to the desert terrain, commonplace lack of infrastructure and distance from ‘international hubs,’ features prominently in the mission staff’s discourse. Country-size also matters for the size of the intervention and peacekeeping impact. Large peacekeeping missions, in *per capita* terms, usually take place in smaller countries (both vis-à-vis territory and population size) which makes (infrastructure) interventions more meaningful given a relatively limited budget. Missions

⁴⁹ John H. Goldthorpe et al., *The Affluent Worker in the Class Structure* (CUP Archive, 1969), 31–32.

like UNFICYP in Cyprus and MINUSTAH in Haiti, therefore, stand in sharp contrast to missions in the DRC or even in Mali, where peacekeeping projects are often felt to be little more than a “drop in the bucket.”⁵⁰ A focus on the framing conditions, like population density, local governing systems, resource availability and urbanization rate, including the availability of infrastructure and services, elucidates how missions, and the UN logics of engagement, were shaped by the experience of the intervention on the ground.

The three case studies are generalizable to a limited extent. Despite their diversity, they represent a subset of peace operations, notably those intervening in a civil war, led by the UN. My study therefore excludes UN missions mandated to observe a peace agreement following interstate war, predominant within the first generation of peacekeeping operations. It also excludes the UN’s intermittent experimentation with transitional administration – or “neotrusteeship”⁵¹ – in Kosovo (UNMIK), Timor Leste (UNTAET), or Cambodia (UNTAC). Furthermore, as three UN missions, the sample excludes missions led by regional organizations, like the African Union (AU) or NATO. The AU especially has become an important partner for the UN and leads its own missions often very similar to, or in close coordination with, the UN – like in Somalia.

My study foregrounds both a multidisciplinary as well as place-based inquiry into the idea and practice of pursuing peace. It underlines a multi-scalar, or ‘hybrid’, understanding of place, where ‘the local’ is understood as taking place within international institutions, and at each scale – from New York Headquarters, to a peace operation’s camp in Nicosia, to peacekeeper’s infrastructure projects in a village in Southern Cyprus. In the case studies, I therefore focus on

⁵⁰ Interview with staff member, UN Department of Peace Operations, October 7, 2021.

⁵¹ Fearon and Laitin, ‘Neotrusteeship and the Problem of Weak States’.

the institutional set-up, policies and discourse as well as the activities that took place alongside the military action of the UN mission – that effectively constituted peacekeeping – in a specific historical moment.

While the study's focus lays on the mission organization, its members and experts, ideas and practices – the peace operation of course did not take place in a self-contained, institutional vacuum. Troop-contributing countries, internationally operating NGOs, local government and the population, are active agents in the use and imagination of infrastructure. They interact with and push back against the UN peace operations. Understanding how people live with the infrastructure that has often been imposed on their livelihoods constitutes an important aspect of understanding the role of spatial governance and its materiality towards the peaceful transformation of societies. While this exceeds the scope of this study and its methods, I considered local reactions, opposition, and adoption – appearing in some of my interviews and my archival research in the form of cables and report from the field to headquarters drafted by UN staff, and in exceptional circumstances, local authorities' planning documents. By its very nature, these reports are biased and I treat them as such. They are testimonies of the UN staff and its partners, who are often depending on UN funding. They are peacekeepers' perspectives on their involvement and impact locally. Rather than focusing on the everyday impacts of peace operations, this research considers those local aspects through a thus far neglected perspective on the historical, institutional evolution of practices and knowledge production.

1.4.1 UNFICYP in Cyprus, since 1964

In the first case study, I focus on the beginnings of the longest, and presently still ongoing, UN operation in Cyprus. Launched in 1964, UNFICYP responded to intercommunal fighting between ethnic Turks and Greeks that had erupted in late 1963 in Nicosia in the context of ongoing disagreement about the administration of Cyprus.⁵² The violence quickly escalated as Turkish and Cypriot underground paramilitary forces and the Greek-dominated Cypriot National Guard faced each other, intensifying intercommunal fighting in the following year ahead of the UN intervention. Several hundred Cypriots died, many more were taken hostage and went missing. More than 20,000 Turkish Cypriots were forced to flee from their homes ending up in enclaves on which the government imposed supply blockades.⁵³

UNFICYP is a ‘traditional’ interposing peacekeeping mission of the first generation that has sought to prevent the reoccurrence of violence through inserting itself as an effective buffer between the conflicting parties. Distinct from other missions in the 1960s, UNFICYP was, after ONUC in today’s Democratic Republic of Congo, only the second mission to be deployed in a civil war in order to separate populations, rather than states. This meant that rather than being stationed in the border zone between two adjacent countries, troops were present throughout the Cypriot island, in close proximity to population centers and within communities that were fighting each other. It is in this context that the UN peacekeepers engaged in a variety of community projects of considerable developmental character.

⁵² Dan Lindley, ‘Historical, Tactical, and Strategic Lessons from the Partition of Cyprus’, *International Studies Perspectives* 8, no. 2 (1 May 2007): 224–41, <https://doi.org/10.1111/j.1528-3585.2007.00282.x>.

⁵³ ‘Profile of Internal Displacement: Cyprus’ (Geneva: Norwegian Refugee Council/Global IDP Project, 27 April 2005), 27, [https://web.archive.org/web/20071218054957/http://www.internal-displacement.org/8025708F004BE3B1/\(httpInfoFiles\)/F17FD28BEBBF6287802570BA00563EDE/\\$file/Cyprus+-April+2005+\(2\).pdf](https://web.archive.org/web/20071218054957/http://www.internal-displacement.org/8025708F004BE3B1/(httpInfoFiles)/F17FD28BEBBF6287802570BA00563EDE/$file/Cyprus+-April+2005+(2).pdf).

Relevant to this research, UNFICYP's activities demonstrate a high degree of involvement in infrastructure and civil affairs that went beyond the circumscribed task of peacekeepers as observers of a ceasefire: Under the mandate of re-establishing 'normalcy' – however ill-defined this concept was – UNFICYP troops facilitated economic activities, substituted the state's administrative function, and provided humanitarian aid. The peacekeepers were involved in a variety of infrastructure projects. The mission set up communication and power infrastructure that served the troops and connected the various military bases with each other. Separately, the mission conducted projects for the local community. Operating in a group with other UN development actors like UNDP, the peacekeepers were involved in most dimensions of urban services, including water and electricity, postage and communication, health and education.⁵⁴

Today, UNFICYP matters because not only does it constitute the longest, continuous UN peacekeeping mission, but its early engagement in development affairs suggest a peacebuilding and development approach through infrastructure much before it has been formulated as such. This is why my analysis of UNFICYP focuses on the mission's first decade, after the eruption of violence between the Greek and Turkish Cypriot communities. At the time, the two ethnic groups lived fairly integrated and spread throughout the island, thus determining the geography of intervention for peacekeepers across the entire territory and in major population centers. In 1974, the peacekeeping mission would be radically transformed after the Greek *coup d'état* and invasion of the island's North by Turkey – eventually setting up the two separate entities that Cyprus is today.⁵⁵ In response to the heavy fighting around Nicosia, notably its airport, the UN

⁵⁴ Various mission communications, UN Archives 'Item S-0903-0002-02-00001 United Nations Peacekeeping Force in Cyprus (UNFICYP)'; 'Item S-0903-0002-03-00001 - United Nations Peacekeeping Force in Cyprus (UNFICYP)'.

⁵⁵ Jan Asmussen, 'United Nations Peacekeeping Force in Cyprus (UNFICYP)', in *The Oxford Handbook of United Nations Peacekeeping Operations*, ed. Joachim A. Koops et al. (Oxford University Press, 2015), Cf., <https://doi.org/10.1093/oxfordhb/9780199686049.013.24>.

instated a protection area which formed the basis for today's buffer zone, a demilitarized no-man's-land guarded by the peacekeepers. De facto, UNFICYP became a much more exemplary mission of the first generation after 1974, albeit remaining committed to intercommunal trust-building.

1.4.2 MINUSTAH in Haiti, 2004-2017

The second case study discusses the UN peace operations in Haiti, the UN's first stabilization mission, to demonstrate how the turn to protecting civilians manifested spatially in various facets of urban governance and the infrastructure that supported it. MINUSTAH, active from 2004 to 2017, was the first mission to frame and target gangs in urban 'slums' as 'battle spaces' and peace problem.⁵⁶ It was, however, not the first UN mission to Haiti. Between 1993 and 1996, in a context of continuous political instability and violence, the UN Mission in Haiti (UNMIH) had already been deployed to the country. After decades of dictatorial rule, the democratic government of Jean-Bertrand Aristide was ousted by the military, first in 1991 and then again in 2004, during his third presidency. Throughout the 1990s and early 2000s, Haiti kept experiencing armed fighting that continuously challenged government authority. Following the 2004 coup d'état, armed groups occupied Haiti's major cities, starting from Gonaïves and quickly moving to the capital Port-au-Prince. A mix of political violence and crime terrorized the population.

⁵⁶ Lou Pingeot, 'United Nations Peace Operations as International Practices: Revisiting the UN Mission's Armed Raids against Gangs in Haiti', *European Journal of International Security* 3, no. 3 (October 2018): 364–81, <https://doi.org/10.1017/eis.2018.4>; A. Walter Dorn, 'Intelligence-Led Peacekeeping: The United Nations Stabilization Mission in Haiti (MINUSTAH), 2006–07', *Intelligence and National Security* 24, no. 6 (December 2009): 805–35, <https://doi.org/10.1080/02684520903320410>.

In Haiti, the UN was faced with an unforeseen diversity of urban conflict and risk that the mission chose to engage in, including natural hazards that affected urban environments in an amplified manner. MINUSTAH therefore relied on a set of communications, spatial and surveillance technologies that helped to define the realm of operations and the engagement within urban space, and ultimately the ‘peace’ to be pursued. Representative of peace operations in the post-Cold war era, MINUSTAH was mandated to be involved in a civil war with an expanded mandate to protect civilians and contribute to peacebuilding. It targeted not only civil war at a national level, but defined urban violence and crime – in slum areas, and specifically within the Haitian capital – as the main barrier to peace in the country. The urban focus, new set of priorities and tasks were accompanied by new organizational units within the peacekeeping mission. Institutionally, MINUSTAH constituted not only the first so-called ‘stabilization’ mission, but also the first ‘integrated’ mission where the peacekeeping operation was closely coordinated with the UN country team under a ‘Development Assistance Framework’ for Haiti.

The unprecedented urban focus – with a priority of ‘community violence reduction’ rather than the traditional ‘demobilization, disarmament, reintegration’ approach made peacekeepers engage in urban warfare and a ‘robust’ approach towards gang members. It included raids, house-to-house fighting, and arrests. This new arena of intervention came with significant technological and institutional innovation: the use of urban drones, non-lethal weapons (in addition to standard lethal weapons), and the institutionalization of intelligence gathering, later standardized throughout all subsequent missions. The urban violence approach married anti-gang urban warfare with targeted community ‘development’ and urban design interventions. First introduced by the Brahimi report in 2000 and resonating with US military counter-insurgency tactics, infrastructure projects in the form of Quick-Impact Projects (QIPs) were formulated primarily as

urban community projects. Those interventions sought to increase employment and improve urban services, and ‘beautify’ the slums of Port-au-Prince. The approach mirrored practices of ‘urban acupuncture’ through selected, neighborhood interventions, following the armed raids.

Before the 2010 earthquake, and exclusively thereafter, MINUSTAH pursued a clear urban humanitarian and development focus. While the early years’ focus on urban violence resonated with a developmental approach, the post-earthquake phase was dominated by reconstruction and humanitarian facilitation. MINUSTAH’s engineering capacity, organization and expertise made it acutely suited for post-disaster recovery, while also bringing the military expertise – and urban expertise – from especially Latin American troop-contributing countries to Haiti. Throughout the mission’s lifespan, the peacekeeping infrastructure remained divorced from the peace objectives, culminating in the cholera epidemic that came to mark both a shift in peacekeeping practice as well as a sudden focus on peacekeepers’ impact and spatial embeddedness in the places they serve.

MINUSTAH, I propose, needs to be considered as an extreme parenthesis within an emerging urban logic of operations displayed from Bosnia to South Sudan. With the rise of civil war interventions, peacekeepers increasingly operated in the context of, and strategically instrumentalized, (urban) settlements. From ‘safe areas’ in Bosnia by UNPROFOR to ‘zones of protection’ in South Sudan on the grounds of UNMISS bases, various missions have engaged in spatial governance, situated in the context of towns. Spatial and urban technology allowed for such zoning, and facilitated the activities that peacekeepers engaged in – from riot control, to disaster recovery, to basic service delivery, demonstrating a distinct logic of understanding and shaping space.

1.4.3 MINUSMA in Mali, since 2013

The third case study focuses on MINUSMA, the peace operations launched in 2013 in Mali, part of a set of contemporary ‘multidimensional’ stabilization missions in the Central African Republic (MINUSCA) and the Democratic Republic of Congo (MONUSCO). In creating MINUSMA, the UN Security Council reacted to an insurgency organized by populations in Mali’s north in 2012, threatening the takeover of Mali’s major urban centers and toppling the central government. Driven by Jihadi shari'a rule, violence, and the interruption of social-economic life and state services, further aggravated by already existing food insecurity due to recent drought, 400,000 Malians fled the region.⁵⁷

As part of a new generation of missions, MINUSMA was the first to be explicitly mandated to consider its ecological footprint. It was mandated to support Mali’s Comprehensive Peace Agreement. The importance of urban centers and infrastructure development, identified by the parties to the Agreement and laid out in great detail in the text, made the mission attuned to those issues, too. Given Mali’s vast territory, peacekeeping technology and peacekeeping objectives have been framed along notions of mobility, access and connectivity, which is achieved through military innovation, geospatial analysis tools, as well as infrastructure projects.

MINUSMA reveals the peacekeeping involvement with, and significance of, infrastructure in two distinct ways. On the one hand, public work projects constitute a key instrument to engage

⁵⁷ Baz Lecocq et al., ‘One Hippopotamus and Eight Blind Analysts: A Multivocal Analysis of the 2012 Political Crisis in the Divided Republic of Mali’, *Review of African Political Economy* 40, no. 137 (1 September 2013): 343–57, <https://doi.org/10.1080/03056244.2013.799063>; Jaimie Bleck and Kristin Michelitch, ‘The 2012 Crisis in Mali: Ongoing Empirical State Failure’, *African Affairs* 114, no. 457 (1 October 2015): 598–623, <https://doi.org/10.1093/afraf/adv038>.

with the civilian population, especially along a rising ecological and ‘smart’ dimension. On the other hand, MINUSMA’s operational infrastructure signifies an important break with previous missions. MINUSMA’s ‘supercamps’ constitute a new scale and level of complexity that dwarfs the UN’s previous footprint. The mission has also put more effort into the design of its UN military bases and surrounding infrastructure, especially with a focus on environmentally friendly and energy efficient technology. As part of the UN’s global campaign of “Greening the Blue”, recent projects in Mali have included wind turbines and photovoltaic panels in Bamako as part of a broader effort towards “from renewable energy to peacebuilding”.⁵⁸ With similar projects now underway in missions elsewhere, from South Sudan to the DRC,⁵⁹ MINUSMA constitutes nonetheless the first and most explicitly mandated mission to link environmental and urban peace objectives, pursued through a range of infrastructure intervention and technological innovation.

1.5 Research design and methods

The premise of historical sociology is that sociological, and I will add socio-spatial, phenomena are changing over time, and therefore can be studied historically to reveal new insights about the present and perhaps future. Such Foucauldian “history of the present” – “using history as a

⁵⁸ Dirk Druet and Rida Lyammouri, ‘From Renewable Energy to Peacebuilding in Mali’ (Washington, D.C.: Stimson Center, June 2021).

⁵⁹ UN Field Support, ‘Environmental Good Practice,’ November 2017, https://operationalsupport.un.org/sites/default/files/171117_good_practice_11x17.pdf.

means of critical engagement with the present”⁶⁰ – allowed me to process-trace how ideas and practices of infrastructure have been linked to ideas about peace, and how peace is being actualized by the members of peacekeeping missions and their affiliated UN bureaucrats, leading to today’s ever more complex and ambitious projects. To build theory, I was interested in discovering patterns and pinpointing mechanisms of institutional path dependency through a historical analysis of peace operations. An urban planning lens not only elevated the interdisciplinary dimension of this research and interest in practice, but provided the spatial mode of inquiry.

A historical sociology approach to the study of peace operations allowed me to study the present peacekeeping practices and trace the urban, environmental, and social considerations that have led to it. The three case studies represent particular paradigmatic shifts in peace operations’ involvement with their environment. They highlight how peacekeeping discourse and practices have evolved in relation to specific places, key events and technologies.⁶¹ As a reflection of the transnational and rooted knowledge production in peace operations, however, the three cases do not stand alone but are embedded in wider movement of changing ideas and practices. Each case study is embedded in a comparative perspective, through which I seek to underline the cross-fertilization of missions taking place in parallel or quick succession, often spanning the productive careers of many of the experts and UN bureaucrats involved in them. My study thus neglects the local impact of peace operations in favor of understanding its institutional

⁶⁰ David Garland, ‘What Is a “History of the Present”? On Foucault’s Genealogies and Their Critical Preconditions’, *Punishment & Society* 16, no. 4 (2014): 367; Cf. Michel Foucault, *Discipline and Punish*, trans. A. Sheridan (New York: Random House, 1977).

⁶¹ The approach to ‘practices’ and ‘discourse’ is inspired by Pingeot, ‘United Nations Peace Operations as International Practices’; Emanuel Adler and Vincent Pouliot, ‘International Practices’, *International Theory* 3, no. 1 (2011): 1–36; Reiner Keller, *Doing Discourse Research: An Introduction for Social Scientists* (London: SAGE Publications, 2013).

formation. Over time, this approach allowed me to draw some broader conclusions about the logics driving peace operations and shifts in practice – from an elite, institutional perspective – that have shaped specific periods and transitions in peacekeeping.

As I studied infrastructure building in the context of the transnational institution of UN peace operations, I was particularly interested in the circulation of expertise and practices within the bureaucracy. I considered the entry of outside expertise, through individual career choices, educational background of UN staff and the employment of consultants, and the interaction between UN headquarters and field offices. Norms and discourse are produced across different locations, and the exchange of experiences, expertise and technologies shaping infrastructure building reflects the circulation of ideas and practices compounded in “policy mobilities.”

Together with an STS-sensibility, this focus allowed me to trace the inter-institutional, transnational and trans-scalar production, usage and circulation of policies, programs, tools and technologies for peace operations.

Practically, I relied on documentary and interview evidence to register the infrastructure and development projects, and the ideas, hopes and goals – and challenges and failures – associated with them.

1.5.1 Archives as imperfect institutional memories

The documents collected in the archives are the evidence base for the thinking and practice associated with UN peacekeeping. They report on projects and bring to life the discourse around them. For UN civil servants, diplomats and military personnel, the many strategies, policies,

guidelines and handbooks, are the tools to distribute ideas, circulate them between headquarters and ‘the field’, and produce a sense of identity for the organization and its staff.

I drew from a variety of sources, including most prominently from the United Nations archives. I reviewed reports and correspondences of the UN Secretariat and of the missions, cables and official communications, speeches, publication such as the UN Peace Operations’ annual ‘Year in Review’, budgets, risk assessments and procurement files, that cover the variety of interactions between headquarters and field, between different entities and those given to the public. As part of the archival research, I also conducted a systematic review of mission ‘newspapers’, available since 1964 from UNFICYP, and intermittently from MINUSMA and MINUSTAH, for their granular documentation of mission activities. Those documents, as well as memoirs written by peacekeepers and UN bureaucrats, link the political to the ‘everyday’, and contextualize mission activities with previous experiences and parallel events.

The archives are partially available in digitized format online, and some are available on-site in the archives in New York. Many documents for UNFICYP have not been transferred to headquarters and remain in Cyprus with the mission under a restrictive access regime.⁶² Selected documents from the more recent missions, especially for MINUSTAH and MINUSMA, still remain embargoed according to UN regulations, although some classified documents have become public in the legal pursuit of the UN on its responsibility in Haiti’s cholera outbreak. In addition, at the time of this research, access to international institutions’ physical archives remained extremely limited given the long pandemic-induced closure, the backlog of researchers signed up for visits exceeded the long-time restricted capacity of on-site archival study.⁶³

⁶² Exchange with UNFICYP Information Systems Officer responsible for mission data management, July 2021.

⁶³ Information obtained from communication with UN archivist, June 2021.

I circumvented those access limitations through a strategy pursuing dispersed archival sources to complement the digitized UN archive. I drew from the archives of the Ford Foundation that funded projects at UN headquarters on peacekeeping, the UN/Yale University's oral history collection, the World Bank archives, the UN Career Records Project in the Bodleian Special Collections at Oxford University and, for contextual information on Haiti, from WikiLeaks as well as the IIED Haiti Community Planning Archive. I was also given internal documents, reports and data files by my interlocutors at UN headquarters and in missions. In addition, the published memoirs of participants in peacekeeping missions and of UN staff have provided insight into the very personalized experience of international politics, also revealing individual biases and selective narrative in the understanding of events. Taken together, those sources allowed me to trace the evolution of peacekeeping and, in parallel, socio-spatial planning practice and discourse through UN interventions.

Drawing from formal and informal archives, the latter most relevant to the current peacekeeping operations, naturally introduces biases and limitations to my research. The institutional records and digital repositories of publications allowed me to trace the 'facts' of infrastructure planning, and also provided insights into the narratives of peace and development through spatial and infrastructural interventions. Yet, I remain aware of the system(s) of classification and organization of knowledge, including UN-imposed embargoes, that structure my findings and evidence base, and the potential omissions and power structures it may replicate, including the under-representation of voices of the people that have been served by the UN missions.⁶⁴ I

⁶⁴ Ann Laura Stoler, 'Colonial Archives and the Arts of Governance', *Archival Science* 2, no. 1–2 (March 2002): 87–109, <https://doi.org/10.1007/BF02435632>.

therefore relied on secondary literature for alternative accounts to complement the primary research, and – whenever possible – verify information through other sources.

1.5.2 Interviews: Personal sense-making and humanizing bureaucracy

Complementary to the archival data sources, I conducted interviews with experts recently involved in peace operations and infrastructure development in the conflict context to underscore the present dimension of this study and its relevance for the future of peace operations. I selected the participants based on their exposure to UN policy making and experience in peacekeeping missions. The civil servants' assumptions and the internal workings of internationally operating development, humanitarian and governance networks mattered greatly because they shape policy outcomes.⁶⁵ They determine whether peace infrastructures ought to operate for development and modernization, urbanization, disaster risk reduction, or climate adaptation, foster sustainability goals in the long-term or mediate relation between peacekeepers and local population in the short-term. I recruited participants through snowball sampling, which has been suggested to often be the only way of accessing deeply politicized or hierarchical organizations.⁶⁶ To avoid biases, I designed a “panel of knowledgeable informants”⁶⁷ that would ensure representation of different organizational units within the UN secretariat (Department of Peace Operations, Department of Operational Support), thematic areas (environment, engineering, civil affairs), and geographic location (New York, Geneva, Brussels, field offices in Port-au-Prince, Bamako, etc.).

⁶⁵ Séverine Autesserre, ‘International Peacebuilding and Local Success: Assumptions and Effectiveness’, *International Studies Review* 19, no. 1 (March 2017): 114–32, <https://doi.org/10.1093/isr/viw054>.

⁶⁶ Melani Cammett, ‘Political Ethnography In Deeply Divided Societies’, *Qualitative Methods*, accessed 4 May 2022, https://www.academia.edu/301421/Political_Ethnography_In_Deeply_Divided_Societies.

⁶⁷ Robert Stuart Weiss, *Learning from Strangers: The Art and Method of Qualitative Interview Studies* (New York: Free Press, 1994), 17.

I pursued a variety of leads through friends and acquaintances, former colleagues, and ‘cold calls’, relying on subsequent referral chains. I paused interviews as referral chains started to overlap, and themes and response patterns started to repeat themselves across interviews.

Specifically, I conducted 52 key informant interviews between 2020 and 2021. Of those interviews, 33 interviewees were current and former members of UN peacekeeping missions and UN civil servants who reflected on the use and discourse of infrastructure development in relation to peace efforts. I specifically sought out UN staff involved in infrastructure projects, environmental programming and management, community violence reduction and other aspects of civil affairs in peace operations, who have been involved in implementing the mandate through projects at the local level.⁶⁸ Most of my interviewees had both headquarters and field experience, and many had been involved in field support, operation management and procurement. They were either affiliated with the UN Secretariat (13), in UN missions (11), or practitioners in the UN system, notably at UNDP, UNEP, and UN-Habitat (9). Interlocutors in those institutions closely work with colleagues in the UN Secretariat, pursue significant peacebuilding portfolios in their development agendas, and are critical in infrastructure interventions.⁶⁹ Many of my interviewees had served in various institutions throughout their career and through secondments between different institutions.⁷⁰ Given the contemporary nature of the Mali-focused case study, 9 of my interviewees were MINUSMA staff at the time of interview. I also expanded the sample to include 19 interviews with representatives of local and

⁶⁸ Schia and Karlsrud, ““Where the Rubber Meets the Road””, 235f.

⁶⁹ Jim Whitman, *Peacekeeping and the UN Agencies* (Psychology Press, 1999); Alcira Kreimer et al., *The World Bank’s Experience with Post-Conflict Reconstruction* (The World Bank, 1998), <https://doi.org/10.1596/0-8213-4290-8>; World Bank, *Building Safer Cities: The Future of Disaster Risk*, ed. Alcira Kreimer, Margaret Arnold, and Anne Carlin (The World Bank, 2003), <https://doi.org/10.1596/0-8213-5497-3>.

⁷⁰ In the case of an interviewee’s secondment, usually from a UN program to the Secretariat, I attributed her affiliation to the current place of work.

international NGOs and bilateral aid agencies operating in Mali, who often work side-by-side or directly with MINUSMA in order to develop a sense of the reception and perception of MINUSMA's activities.

In-depth interviews allowed for insights into the bureaucracy, everyday practices and events shaping peacekeeping at headquarters and in the field. I conducted the interviews, usually in English or French, in a semi-structured way⁷¹ to allow for sufficient flexibility to learn about the institutional conceptualization and operationalization of peacebuilding through, and in parallel to, urban infrastructure projects, the interlocutors' background and expertise. Given the international nature and high mobility of the majority of those experts who are located across different locations, as well as pandemic-induced restricted travel and meeting options, the interviews typically lasted around 60 minutes and were conducted online via videocall or phone. While aware of the methodological limitations and opportunities of this approach,⁷² the experience of the pandemic greatly fueled my interlocutors' readiness and ease to engage virtually, which facilitated this research.

I conducted follow-up interviews and exchanged emails with several of the interviewees for further clarification, discuss new developments, and to clear quotations. As part of my interview protocol, I sought my interviewees' informed consent at the beginning of the interview to which they had previously agreed via email. While I received permission to record most of the

⁷¹ Weiss, *Learning from Strangers*.

⁷² David Matthew Glassmeyer and Rebecca-Anne Dibbs, 'Researching From a Distance: Using Live Web Conferencing to Mediate Data Collection', *International Journal of Qualitative Methods* 11, no. 3 (September 2012): 292; David R. Johnson, Christopher P. Scheitle, and Elaine Howard Ecklund, 'Beyond the In-Person Interview? How Interview Quality Varies Across In-Person, Telephone, and Skype Interviews', *Social Science Computer Review*, 11 December 2019, 089443931989361, <https://doi.org/10.1177/0894439319893612>; Valeria Lo Iacono, Paul Symonds, and David H.K. Brown, 'Skype as a Tool for Qualitative Research Interviews', *Sociological Research Online* 21, no. 2 (May 2016): 103–17, <https://doi.org/10.5153/sro.3952>.

conversations, the majority of my interviewees voiced hesitations to be directly quoted in the research, given the precarity, personal and political risks linked to public criticism or information construed out of context. I therefore cite most of my informants in an anonymized version, with pre-approved quotes by the interviewees. Aware that evidence presented in interviews, especially relating to past events, bares its own challenges, I sought to manage interviewees' recall error, deception, and biases, through various strategies.⁷³ I repeated questions differently worded during an interview, asked follow-up clarification questions to the interviewee during and after the interview, and sought to triangulate information.

1.5.3 Triangulating: further sources of knowledge and context

Throughout my research, I recognized that my own practical experience prior to embarking on this dissertation research shaped my approach and understanding of the language and practice of peacebuilding – so much that I had to unlearn and render given concepts strange again. At the same time, I was able to rely on my contextual knowledge and personal contacts that would open doors for interviews and my participation in professional conferences and workshops. I was also able to use the technical language of my interviewees, adapting vocabulary in order to allow for a conversation to start, because mentioning “infrastructure” or “urban planning” – even in an introductory outreach email – would usually yield a reserved response like “I don’t think I can help you” and “we don’t do that” and would require significant convincing efforts from my side to secure an interview.

⁷³ Mario L. Small and Jenna M. Cook, ‘Using Interviews to Understand Why: Challenges and Strategies in the Study of Motivated Action’, *Sociological Methods & Research*, 17 March 2021, 004912412199555, <https://doi.org/10.1177/0049124121995552>.

Similar to evidence from institutional ethnography, I was able to rely on insights gained through practical experience in both past and present as a counterpoint to the curated interviews and archives. As a former consultant for UNDP in 2012, I specifically drew on my year-long involvement in the organization's conceptual development and implementation of 'infrastructures for peace' at both headquarters in New York, then UNDP's Bureau for Crisis Prevention and Recovery, as well as in the UNDP country office in Kyrgyzstan while working with the office's Peace and Development Advisor. Then, during the dissertation research between 2018-2022, I participated in conferences and events where many of my interviewees participated, allowing me to observe them, take notes of the conversations, and at times engage with them (again) in discussion.

In addition, I reverted to cartographic and photographic material. Spatial and visual analysis allowed me to develop a sense of the natural and built environment in the places of UN intervention, but also to understand how the UN communicated and made sense of its geography of intervention. The latter was both particularly challenging and eye-opening given the dearth of available geo-coded or mapped data on peace operations' presence and spatial impact. The geolocation of QIPs had only been collected recently, and due to some technical issues and interruption of data collection, an incomplete dataset for some 900 QIPs in peace operations between 2017-19 could be shared with me.⁷⁴ The relatively low importance – based on a small Cartographic Unit – reflects the little awareness for the importance of peacekeeping's spatial dimension, and weak ambition to track and follow up on spatial interventions, which in itself was an important finding. Just as the participant observation, the spatial analysis, maps and

⁷⁴ Ironically, this happened after the UN's new Peace and Security Data Hub (<https://psdata.un.org/>) had already been launched in response to the UN Secretary-General's Data Strategy 2020-2022, with the aim to provide more, including geolocated, data on peace and security matters.

photographs allowed me to triangulate information from interviews and policy reports and at times provided the counter-narrative to the archival documents and history officially presented.

1.5.4 Data analysis: detecting narratives of infrastructure

Following an emergent coding scheme, I annotated archival documents and transcribed interview protocols using thematic coding. For the interviews, I followed Braun and Clarke's six phases of thematic analysis that lay out the process from early familiarization with the data through transcription and annotation through the definition of themes and writing.⁷⁵ In addition, I read secondary material for the historical overview and contextualization of events as well as the policy reports. Between the interviews and written sources, I sought to track discourse to practice situated within a "discursive field,"⁷⁶ from transnational peacebuilding networks to the design of urban and environmental interventions and the implementation of peacebuilding.

1.6 Chapter summaries

This dissertation pursues two linked lines of inquiry, running through the subsequent chapters.

First, it traces, historically and conceptually, the meaning and function of infrastructure in

⁷⁵ Virginia Braun and Victoria Clarke, 'Using Thematic Analysis in Psychology', *Qualitative Research in Psychology* 3, no. 2 (January 2006): 77–101, <https://doi.org/10.1191/1478088706qp063oa>.

⁷⁶ Robert Muggah and Keith Krause, 'A True Measure of Success - The Discourse and Practice of Human Security in Haiti', *Whitehead Journal of Diplomacy and International Relations* 7, no. 2 (2006): 129–42 The authors demonstrate this link at the example of the concept of human security in the context of development policies for Haiti.

peacekeeping operations and as a device in the pursuit of peace. Second, it examines UN peace operations as spatial and urban actors that intend to shape socio-spatial dynamics in the places in which they intervene, well beyond their mandated presence on the ground. Here, I examine what sustainability means and how a planning lens, centering both space and time/duration in the context of peacebuilding, can shift this understanding. While the following chapters are organized chronologically, they also each reveal a specific infrastructural imaginary of peace: infrastructure as promise, as risk, and as legacy.

These three paradigms – infrastructure as promise, infrastructure as risk, and infrastructure as legacy – can be situated historically, which becomes evident in the progression that the subsequent chapters trace. The three paradigms, however, also coexist. Each of the case studies therefore elucidates a different dimension to infrastructure that may well operate concurrently or consecutively for the same infrastructure project, the bridge, UN office building, or solar panel farm. The infrastructure paradigms matter, because they link the physical projects to the ideas of peace to be pursued by those interventions. Infrastructure building is one way through which to observe how the pursuit of peace is operationalized, therefore allowing us to trace the evolving ideas of peace and how they are imagined to link to practice.

Chapter 2 provides the conceptual framework of ‘infrastructural imaginaries of peace.’ For that, it introduces peace studies and the theory and history of infrastructure studies, situating the latter at the intersection of urban, socio-spatial planning and conflict studies. I argue that infrastructure constitutes not only a material intervention as ‘public works’ but also a set of practices and expertise that is linked to sociotechnical imaginaries, and is therefore subject to power and politics. Recognizing this connection is relevant to interventions in conflict settings because they wield such power, and critically shape local conflict dynamics and peace processes through their

infrastructure outputs. This perspective on infrastructure, a deviation from the often technical and neutral framing of infrastructure, has received surprisingly little consideration in the study of peace operations. Referencing STS studies as well as the recent turn of peace and conflict studies towards the post-liberal, local and material, allows me to highlight infrastructure as a productive lens to the study of the history and current nature of peace efforts pursued by the United Nations.

Chapter 3 locates the beginning of the UN peacekeeping's involvement with infrastructure planning during the Cyprus civil war. It highlights the multifaceted nature of infrastructure and urban planning for humanitarian and development efforts pursued by UNFICYP – covered under a little-defined mandate of re-establishing 'normalcy' on the island. The analysis of historical data also reveals how the peacekeeping infrastructure and presence was intertwined with community projects that involved the UN mission in agriculture, housing, service delivery or land administration. These findings propose a revisionist approach to the 'apolitical' and 'disengaged observer' nature of peacekeeping missions during the Cold War, to highlight the centrality of infrastructures – and the promise it bears – to understanding peace efforts and their logics in the early years of the United Nations.

Chapter 4 presents the UN peacekeeping mission in Haiti as a pivotal case that breaks with the previous 'promise' of infrastructure. I explore the meaning of risk in the context of post-Cold War peace operations, the focus on urban centers, and the rise of peacebuilding. Specifically, the chapter addresses how risk was constructed and infrastructure became the response to mitigate, especially urban violence and poverty as risk for international peace and security. Furthermore, peacekeepers relied on infrastructure in their unparalleled involvement in disaster risk reduction and reconstruction in the face of natural hazards, including the 2010 earthquake. Eventually, I show in this chapter, MINUSTAH constituted the turning point for UN peacekeeping at large,

when the cholera epidemic unleashed by peacekeepers drew attention to the peacekeeping infrastructure, the mission's physical embeddedness within the country of intervention and its people, and the potential infrastructural violence that arises from peacekeepers' presence.

Chapter 5 turns to the recent UN peacekeeping mission in Mali to demonstrate the rise of attention to infrastructure in the latest 'environmental peacebuilding' and sustainability discourse. MINUSMA was the first mission to be mandated to monitor its environmental footprint, drawing formal attention to the material impact of peacekeeping on the place of intervention as part of peace efforts, and instating the environmental management of the camps. A second part of this chapter discusses the pursuit of the sustainability agenda through a new generation of community infrastructure projects that prioritize urban and ecological interventions. Rather than stand-alone, some of those projects integrate the peacekeeping infrastructure with community infrastructure, in a consistently challenged effort to 'sustain peace' towards long-run developmental outcomes.

Chapter 6 concludes with some theoretical implications for urban and peace studies. It provides a summary of how infrastructural logics of peace shape our understanding of the design and practice of peacekeeping across different time periods and geographies. It considers peacekeepers as urban planners involved in the socio-spatial reorganization of spaces in conflict, through short-and medium-term service provision, long-term infrastructural organization of resources, and the very impact of their own infrastructure. The chapter suggests the 'infrastructural imaginaries of peace' as productive framework to uncover the socio-spatial nature of peacekeeping and the very place- and time-specific understanding and practice of peace. On a more speculative note, I review the time and space implications of infrastructure in the peacekeeping context, and their conceptual links to sustainability. In turning to an equity

planning approach for 'local peacekeeping', this chapter seeks to propose some practical implications for those involved in the daunting efforts to build sustainable peace.

Chapter 2 **The Infrastructural Imaginary of Peace**

This chapter provides the theoretical framework for this research. It surveys the literature at the intersection of peace and urban planning studies, informed by Science, Technology and Society (STS) studies, as they relate to infrastructure, and specifically to the context of peacekeeping. I begin with an overview of definitions of peace to show how the understanding of peace has evolved towards a conception that is multifaceted, spatial and time-bound. Understanding that peace means different things to different people and organizations in different places and at different moments of time is the backdrop to this research. It opens up the inquiry of how peace is imagined and pursued in different peace operations across the more than seventy years of UN peacekeeping interventions. The second part of this chapter turns to key concepts in STS studies and urban planning that provide the tools for my critical study of infrastructure, their meaning and deployment to build peace.

The last section, then, proposes a theoretical framework: The infrastructure approach to study peace operations. It sets up infrastructure as instrument and object of study of interest to peace scholars because infrastructure materializes how the international peacebuilders imagine pursuing peace, where and how peacebuilding ought to take place. As a material intervention, infrastructure projects also create realities on the ground that have effective impact on the conflict dynamics. I argue therefore that the focus on infrastructure reveals a different set of qualities of peace efforts that allow us to problematize the temporal and spatial dimension at which peace operations are imagined and at which they are actualized in conflict zones, highlighting the politics and imaginaries that drive the international peacebuilding apparatus.

2.1 Studying peace

Critical voices might say that ‘peace’ and ‘peacekeeping’ are, despite their linguistic proximity, very distantly related, akin to studying war and conflict, rather than peace.⁷⁷ In part, this is due to how peacekeeping has been studied, usually within conflict and security studies that focus on incidents of violence as a measurement, rather than the study of peace. In order to broaden the perspective from which to investigate peace operations, while crediting them with a real impact on communities’ conflict transformation,⁷⁸ this section will begin with a review of the scholarship of peace and its evolution toward the critical and spatial.

2.1.1 Ideas of peace

Peace is an elusive concept. Scholars have been debating what peace looks like, how to know it ‘is there’ and how to ‘do it’, for a long time. An important distinction was introduced early on by peace scholar Johan Galtung to discern the difference between the absence of physical or direct violence, which he termed “negative peace,” and the absence of structural violence, which he

⁷⁷ This debate has recently been picked up by several authors, including: John Gledhill and Jonathan Bright, ‘Studying Peace and Studying Conflict: Complementary or Competing Projects?’, *Journal of Global Security Studies* 4, no. 2 (1 April 2019): 259–66, <https://doi.org/10.1093/jogss/ogz001>; Christian Davenport, Erik Melander, and Patrick M. Regan, *The Peace Continuum: What It Is and How to Study It* (Oxford University Press, 2018); Paul F. Diehl, ‘Exploring Peace: Looking Beyond War and Negative Peace’, *International Studies Quarterly* 60, no. 1 (March 2016): 1–10, <https://doi.org/10.1093/isq/sqw005>; Patrick M. Regan, ‘Bringing Peace Back in: Presidential Address to the Peace Science Society, 2013’, *Conflict Management and Peace Science* 31, no. 4 (1 September 2014): 345–56, <https://doi.org/10.1177/0738894214530852>.

⁷⁸ Barbara F. Walter, Lise Morje Howard, and V. Page Fortna, ‘The Extraordinary Relationship between Peacekeeping and Peace’, *British Journal of Political Science* 51, no. 4 (October 2021): 1705–22, <https://doi.org/10.1017/S000712342000023X>.

defined as “positive peace.”⁷⁹ Positive peace is understood as an aspirational state of social justice, where not only physical, interpersonal violence but also structural forms of oppression and injustice are absent. In positive peace, reconciliation and healing take place. Positive peace has also been termed “structural peace” by Randall Amster to emphasize its ecological dimension.⁸⁰ It

entails the reconciliation of self-interest and other interest, valuing our differences as strengths but rejecting the divisiveness of dichotomies like us/them and nature/culture. It prioritizes qualities such as resilience and reciprocity in our dealings with one another and the environment, and utilizes these attributes as the basis for establishing healthy societal processes for resolving conflicts and building durable relationships over time.⁸¹

The distinction between positive and negative peace, and direct and structural violence, are helpful to explore the meaning of peace in the context of physical infrastructure, to which this chapter will return later.

To understand how positive peace has been operationalized in the post-Cold War period, scholars and policy makers have repeatedly pointed to what is commonly referred to as ‘liberal peace.’ Liberal peace – based on a triumphalist and universalist conviction of Western democracy and open market capitalism with the fall of the Soviet Union⁸² – pursues statebuilding and development as its primary object. Outside interventions aim at the formation of the state and can, according to this approach, uphold or reinstate liberal principles of rule of law, (human) rights and democracy.⁸³ Peacebuilding that operates on those norms is characterized by its all-encompassing and sophisticated nature that pursues a double agenda of

⁷⁹ Galtung, ‘Violence, Peace, and Peace Research’.

⁸⁰ Randall Amster, *Peace Ecology* (Boulder: Paradigm Publishers, 2015), chap. 1.

⁸¹ Amster, 44.

⁸² Francis Fukuyama, ‘The End of History?’, *The National Interest*, no. 16 (1989): 3–18; Samuel P Huntington, ‘Democracy’s Third Wave’, *Journal of Democracy* 2, no. 2 (1991): 12–34, <https://doi.org/10.1353/jod.1991.0016>.

⁸³ Oliver Richmond, *Failed Statebuilding: Intervention, the State, and the Dynamics of Peace Formation* (Yale University Press, 2014), 103ff., <https://www.jstor.org/stable/j.ctt13x1thc>.

democratization and marketization in countries emerging from war.⁸⁴ Since the early 1990s, the liberal peace model has been informed by an increasingly close joint consideration of security and development; a “political humanitarianism that lays emphasis on such things as conflict resolution and prevention, reconstructing of social networks, strengthening civil and representative institutions, promoting the rule of law, and security sector reform in the context of a functioning market economy.”⁸⁵ As I will discuss in later chapters, the close links between economic development, a functioning state bureaucracy, and peace have been constructed for a long time, long before the end of the Cold War.

Since the early 2000s, the liberal peace concept and its practice through ‘liberal peacebuilding’ have raised a variety of theoretical and practical criticisms. A practice-oriented pushback points to the limited – if not lack of – success of achieving ‘peace’ in the broad, distinctly liberal terms. Liberal peacebuilding has been described as positively multi-dimensional, but also donor-driven, and “more confident of its own legitimacy and less concerned about local partners’ particularities.”⁸⁶ Theoretically, reflecting the critiques of development and modernization theory, peacebuilding has been denounced as ontologically Eurocentric and neo-colonial.⁸⁷ Scholars have also pointed to the “methodological nationalism” and black-boxing that peace studies perpetuates within the liberal paradigm.

⁸⁴ Roland Paris, *At War's End: Building Peace after Civil Conflict* (Cambridge: Cambridge University Press, 2004), <https://lib.mit.edu/record/cat00916a/mit.001264688>.

⁸⁵ Mark Duffield, *Global Governance and the New Wars The Merging of Development and Security* (London: Zed Books, 2001), 11.

⁸⁶ Richmond, *Failed Statebuilding*, 108.

⁸⁷ Richmond, 125; See also the reflection on the liberal peace critique: Meera Sabaratnam, ‘Avatars of Eurocentrism in the Critique of the Liberal Peace’, *Security Dialogue* 44, no. 3 (June 2013): 259–78, <https://doi.org/10.1177/0967010613485870>.

Moreover, peace, as multiple scholars have pointed out, cannot be understood as one of two binary conditions with conflict on the other end, but exists along a spectrum of experiences of varying types and scales of violence, often making war and peace coexist.⁸⁸ Peace is non-linear, and cannot “follow a pre-determined, and thus predictable, cause-and-effect path”; it might involve “disorder, chaos and randomness”, complexity and unpredictability.⁸⁹ Peace scholarship’s task, therefore, is essentially to point to this complexity, and display how peace is a contested notion and how epistemological choices affect its analysis and practice.⁹⁰

2.1.2 An evolution of peace studies towards the ‘critical’ and ‘local’

In response to the state-centric perspective that understands peace as a universalist idea, a set of studies has begun analyzing peace as a site-specific, historically contingent and multi-scalar practice.⁹¹ Critical peace scholars have expanded the idea of a ‘liberal peace’ to the local scale,

⁸⁸ Annika Björkdahl and Susanne Buckley-Zistel, ‘Spatializing Peace and Conflict: An Introduction’, in *Spatializing Peace and Conflict: Mapping the Production of Places, Sites and Scales of Violence*, ed. Annika Björkdahl and Susanne Buckley-Zistel, Rethinking Peace and Conflict Studies (London: Palgrave Macmillan UK, 2016), 1–22, https://doi.org/10.1057/9781137550484_1; Astri Suhrke and Mats Berdal, *The Peace in between: Post-War Violence and Peacebuilding* (London; New York: Routledge, 2012); Chrissie Steenkamp, ‘The Legacy of War: Conceptualizing a “Culture of Violence” to Explain Violence after Peace Accords’, *The Round Table* 94, no. 379 (1 April 2005): 253–67, <https://doi.org/10.1080/00358530500082775>; Michael J. Boyle, *Violence after War : Explaining Instability in Post-Conflict States* (Baltimore, MD: Hopkins University Press, 2014), <https://lib.mit.edu/record/cat00916a/mit.002209879>; Diehl, ‘Exploring Peace’.

⁸⁹ Cedric de Coning, ‘From Peacebuilding to Sustaining Peace: Implications of Complexity for Resilience and Sustainability’, *Resilience* 4, no. 3 (September 2016): 170, <https://doi.org/10.1080/21693293.2016.1153773>.

⁹⁰ Matti Jutila, Samu Pehkonen, and Tarja Väyrynen, ‘Resuscitating a Discipline: An Agenda for Critical Peace Research’, *Millennium: Journal of International Studies* 36, no. 3 (May 2008): 623–40, <https://doi.org/10.1177/03058298080360031201>.

⁹¹ Delia Duong Ba Wendel, ‘Introduction: Toward a Spatial Epistemology of Politics’, in *Spatializing Politics: Essays on Power and Place*, ed. Delia Duong Ba Wendel and Fallon Samuels Aidoo (Cambridge, MA: Harvard University Graduate School of Design, 2015), 3–13; Séverine Autesserre, *Peaceland: Conflict Resolution and the Everyday Politics of International Intervention* (Cambridge University Press, 2014); Annika Björkdahl, ‘Urban Peacebuilding’, *Peacebuilding* 1, no. 2 (2013): 207–21, <https://doi.org/10.1080/21647259.2013.783254>.

peace “from below”⁹² and “urban peacebuilding.”⁹³ Focused on the “everyday peace” at the community level, Pamina Firchow and Roger Mac Ginty have underlined the bottom-up agency of communities in defining and pursuing their own peace.⁹⁴ Peace hence needs to be investigated as a place-based, but also multi-scalar, networked and multi-agent phenomenon.⁹⁵ Remediating the early binary, and overly simplified, focus on the ‘local,’ research into the multiple fora of peacebuilding and the role of international organizations and transnational networks has further complicated the location and production of peace.⁹⁶ Studies have since documented the resistance to norms and institutions, and local-global relationships through pointing to different scales at which governance takes place, and the “hybrid” peace efforts and local engagements in the post-conflict context.⁹⁷ Peace is thus not singularly produced by one actor, or at one scale, but is the product of interacting scales and agents.

As critical peace scholarship provides a productive lens on local conflict and peacebuilding dynamics, urban sociology and planning studies, too, have called attention to the role of local communities, to city dwellers, architects and planners in understanding intergroup conflict and peace efforts. National conflict over sovereignty, they have documented, becomes visible and is

⁹² Béatrice Pouligny, *Peace Operations Seen from Below* (London: C. Hurst & Co, 2006); Autesserre, *Peaceland*.

⁹³ Björkdahl, ‘Urban Peacebuilding’.

⁹⁴ Pamina Firchow, *Reclaiming Everyday Peace: Local Voices in Measurement and Evaluation After War* (Cambridge: Cambridge University Press, 2018), <https://doi.org/10.1017/9781108236140>; Roger Mac Ginty, *Everyday Peace: How So-Called Ordinary People Can Disrupt Violent Conflict*, *Studies in Strategic Peacebuilding* (New York: Oxford University Press, 2021), <https://doi.org/10.1093/oso/9780197563397.001.0001>; Pamina Firchow and Roger Mac Ginty, ‘Measuring Peace: Comparability, Commensurability, and Complementarity Using Bottom-Up Indicators’, *International Studies Review* 19, no. 1 (March 2017): 6–27, <https://doi.org/10.1093/isr/vix001>.

⁹⁵ Annika Björkdahl et al., *Peacebuilding and Friction: Global and Local Encounters in Post Conflict-Societies* (Abingdon, Oxon; New York, NY: Routledge, 2016); Sara Koopman, ‘Let’s Take Peace to Pieces’, *Political Geography* 30, no. 4 (2011): 193–94, <https://doi.org/10.1016/j.polgeo.2011.04.013>; Mac Ginty, ‘Hybrid Peace’.

⁹⁶ Mac Ginty, ‘Hybrid Peace’; Susanna Campbell, ‘Routine Learning? How Peacebuilding Organisations Prevent Liberal Peace’, in *A Liberal Peace? The Problems and Practices of Peacebuilding*, ed. Susanna Campbell, David Chandler, and Meera Sabaratnam (Zed Books Ltd, 2011), 89–105, <https://doi.org/10.5040/9781350218017>; Björkdahl and Höglund, ‘Precarious Peacebuilding’.

⁹⁷ Mac Ginty, ‘Hybrid Peace’; Autesserre, *Peaceland*; Pouligny, *Peace Operations Seen from Below*.

carried out at the local level, especially in cities.⁹⁸ Checkpoints, walls, ghettos and graffiti materialize the conflict locally, and not only shape urban form but also the urban life and mobility.⁹⁹ Urban planning tools and practices, moreover, such as zoning regulations, licensing or mapping, play an important role and may serve to pursue conflict interests, consolidate power and control neighborhoods and resources in the blurred space between peace and war.¹⁰⁰

Based on the works of Henri Lefebvre, peace scholarship has also been inspired to consider space as analytical device and product of social relations, rather than mere physical condition.¹⁰¹

Based on this “spatial turn,”¹⁰² space and conflict have come to be understood as dynamic and co-constitutive. Space is produced by – at times, conflictual – human interaction, and is always under construction.¹⁰³ In line with Setha Low’s theory of spatialization, spatializing conflict implies the production and location of social relations in space.¹⁰⁴ This dynamic understanding of conflict and space territorializes practices of war and peace.¹⁰⁵ For example, peacekeepers

⁹⁸ Diane E. Davis and Nora Libertun de Duren, eds., *Cities & Sovereignty: Identity Politics in Urban Spaces* (Bloomington, Ind: Indiana University Press, 2011); Scott A. Bollens, *Urban Peace-Building in Divided Societies: Belfast and Johannesburg* (Boulder: Westview Press, 1999); Wendy Pullan and Britt Baillie, eds., *Locating Urban Conflicts - Ethnicity, Nationalism and the Everyday* (New York: Palgrave Macmillan, 2013).

⁹⁹ Teresa PR Caldeira, *City of Walls: Crime, Segregation, and Citizenship in São Paulo* (Berkeley: University of California Press, 2000); Pullan and Baillie, *Locating Urban Conflicts - Ethnicity, Nationalism and the Everyday*.

¹⁰⁰ Hiba Bou Akar, *For the War yet to Come: Planning Beirut’s Frontiers* (Stanford, California: Stanford University Press, 2018).

¹⁰¹ Björkdahl and Buckley-Zistel, ‘Spatializing Peace and Conflict’; Sven Chojnacki and Bettina Engels, ‘Overcoming the Material/Social Divide: Conflict Studies from the Perspective of Spatial Theory’, in *Spatializing Peace and Conflict: Mapping the Production of Places, Sites and Scales of Violence*, ed. Annika Björkdahl and Susanne Buckley-Zistel, *Rethinking Peace and Conflict Studies* (London: Palgrave Macmillan UK, 2016), 27, 30f., https://doi.org/10.1057/9781137550484_2.

¹⁰² Edward W. Soja, *Postmodern Geographies: The Reassertion of Space in Critical Social Theory* (London; New York: Verso, 1989), <http://archive.org/details/postmoderngeogra0000soja>.

¹⁰³ Doreen Massey, *For Space* (London: Sage, 2005); Setha Low, *Spatializing Culture: The Ethnography of Space and Place* (Routledge, 2016).

¹⁰⁴ Low, *Spatializing Culture: The Ethnography of Space and Place*.

¹⁰⁵ Paul Higate and Marsha Henry, ‘Space, Performance and Everyday Security in the Peacekeeping Context’, *International Peacekeeping* 17, no. 1 (February 2010): 32–48, <https://doi.org/10.1080/13533311003589165>; Elizabeth Lunstrum, ‘Terror, Territory, and Deterritorialization: Landscapes of Terror and the Unmaking of State Power in the Mozambican “Civil” War’, *Annals of the Association of American Geographers* 99, no. 5 (30 October 2009): 884–92, <https://doi.org/10.1080/00045600903253676>.

actively engage in territorializing practices through their presence in public space, their performance of security through checkpoints and timed patrols, or their way of transforming space – such as the common practice in conflict zones to repurpose a hotel as a United Nations mission headquarters.¹⁰⁶ As peace is dynamic and constructed, and embedded in place as a social practice, ‘space’ provides a variety of optics, such as place, scale, territory and network, borders and boundaries to analyze peace.¹⁰⁷

Last but not least, the spatial turn has drawn anew attention to natural resources, environmental degradation, and now climate change, as a stake in peace and conflict scholarship. The interest in the environment in policy and peace studies draws from a long history of research on resource-based conflicts that considers natural resources as both “curse” or asset for countries to engage in warfare and violence, or to achieve peace¹⁰⁸ – without, however, explicitly articulating the spatial dimension in relation to social structures, or considering space other than the territorial nation-state.¹⁰⁹ The recent interest in climate adaptation has once again brought to the fore the role of natural resources, their degradation and competition over their diminishing, in the context of climate change and natural hazards – while also adding voices that caution against an overly simplistic narrative. This research has underscored the possibility of environmental cooperation and “peacebuilding”, often driven by greater place-specificity, rather than resource-driven competition and environmental violence.¹¹⁰

¹⁰⁶ Higate and Henry, ‘Space, Performance and Everyday Security in the Peacekeeping Context’, 35.

¹⁰⁷ Chojnacki and Engels, ‘Overcoming the Material/Social Divide’; Björkdahl and Buckley-Zistel, ‘Spatializing Peace and Conflict’.

¹⁰⁸ Thomas Homer-Dixon, *Environmental Scarcity and Global Security*, 1993; Thomas F. Homer-Dixon, Jeffrey H. Boutwell, and George W. Rathjens, ‘Environmental Change and Violent Conflict’, *Scientific American* 268, no. 2 (1993): 38–45; Paul Collier and Anke Hoeffler, ‘Greed and Grievance in Civil War’, *Oxford Economic Papers* 56, no. 4 (22 June 2004): 563–95, <https://doi.org/10.1093/oep/gpf064>.

¹⁰⁹ Chojnacki and Engels, ‘Overcoming the Material/Social Divide’, 29–30.

¹¹⁰ Dresse et al., ‘Environmental Peacebuilding’.

2.2 Infrastructure history, politics and aspiration

In this dissertation I focus on infrastructure as material networks, as “the system of public works of a country, state, or region”¹¹¹ that distribute public services and allow for communities and organizations to function, to be protected, to communicate. While infrastructure can be “immaterial” and “people,”¹¹² this dissertation examines the variety of, often visible, public works in the context of peace operations. I focus on the physical and tangible outputs of peace operations because they are the dominant type in the UN’s catalog of interventions. They, as this section outlines, are deeply intertwined with politics, power, and ideas about societal futures and peace.

2.2.1 Infrastructure: its origins and history situated in urban planning

Infrastructure has always been front and center as an object of warfare.¹¹³ Contemplating on the roots and use of term ‘infrastructure’ in 1984, Assistant Director for Research at the New York State Senate H. William Batt not only noted the recent emergence of the term but its importance in the military context. Public works, protective installations and logistical amenities serve

¹¹¹ ‘Infrastructure’, in *Merriam Webster Dictionary*, accessed 22 March 2021, <https://www.merriam-webster.com/dictionary/infrastructure>.

¹¹² AbdouMaliq Simone, ‘People as Infrastructure: Intersecting Fragments in Johannesburg’, *Public Culture* 16, no. 3 (2004): 407–29; Filip De Boeck and Marie-Françoise Plissart, ‘Kinshasa and Its (Im)Material Infrastructure’, in *Cities of the Global South Reader*, ed. Faranak Miraftab and Neema Kudva (Routledge, 2014), 188–91, <https://doi.org/10.4324/9781315758640-31>.

¹¹³ It has been defined as “permanent installations forming a basis for military operations, as airfields, naval bases, training establishments.” (Cf. ‘Infrastructure, n.’)

military objectives and, as he was quick to point out, also economic and national development. Firmly grounded in the modernization paradigm, Batt considered the physical manifestation of the public sector, its construction and maintenance, as “social overhead capital” – the political and social organization of the state.¹¹⁴

A rich body of critical scholarship has emphasized infrastructure’s connective capacity, which has made it a prime vehicle for, and object of, modernization, economic growth and statebuilding.¹¹⁵ Through this development perspective, infrastructure has occupied an important place within urban planning and design; best exemplified in Le Corbusier’s *The City of Tomorrow and its Planning* or by Robert Moses’ plans for New York City. Infrastructure-building has been a central to empire- (and later, state-) building and colonialism, and extraction, occupation, and resettlement that constituted it, often through the construction of large-scale construction projects such as ports or railways as part of national, regional and urban planning programs.¹¹⁶ Post-independence architecture and planning, often too relied on large-scale infrastructure projects. Here infrastructure planning and construction has typically been attributed to serve the consolidation of power, state- and nation-building in the context of development, and frequently aided by the international development actors.¹¹⁷

¹¹⁴ William H. Batt, ‘Infrastructure: Etymology and Import’, *Journal of Professional Issues in Engineering* 110, no. 1 (1 January 1984): 5, [https://doi.org/10.1061/\(ASCE\)1052-3928\(1984\)110:1\(1\)](https://doi.org/10.1061/(ASCE)1052-3928(1984)110:1(1)).

¹¹⁵ Michael Mann, ‘The Autonomous Power of the State: Its Origins, Mechanisms and Results’, *European Journal of Sociology / Archives Européennes de Sociologie* 25, no. 2 (November 1984): 185–213, <https://doi.org/10.1017/S0003975600004239>; Scott, *Seeing like a State: How Certain Schemes to Improve the Human Condition Have Failed*; Bruno Latour, *We Have Never Been Modern*, trans. Catherine Porter (New York; London; Toronto: Harvester Wheatsheaf, 1993); Foucault, *Discipline and Punish*; Anthony Giddens, *The Consequences of Modernity* (Stanford, Calif.: Stanford University Press, 1990), <https://lib.mit.edu/record/cat00916a/mit.000485766>.

¹¹⁶ Stephen Ward, ‘Transnational Planners in a Postcolonial World’, in *Crossing Borders: International Exchange and Planning Practices.*, ed. Patsy Healey and Robert Upton, 2010, 49–50, <https://lib.mit.edu/record/cat00916a/mit.001728013>.

¹¹⁷ Scott, *Seeing like a State: How Certain Schemes to Improve the Human Condition Have Failed*; Ferguson, *The Anti-Politics Machine*.

In the post-World War II era, infrastructure prevailed as means of modernization, albeit often with a strategic, international connotation. In the American Cold War context, as Jennifer Light has shown, the highway infrastructure of suburbia as part of a broader urban and planning agenda was shaped by military and defense logics.¹¹⁸ In parallel, operational paradigms of the development institutions, from the World Bank/IMF, to USAID or the Ford Foundation, pursued infrastructure development as ‘sites and services’ under the loose banner of ‘world peace’.¹¹⁹ Infrastructure – defined at Vancouver’s Habitat I conference as “the complex networks designed to deliver to or remove from the shelter people, goods, energy or information”¹²⁰ ought to serve not only basic human needs but aim “for improving living conditions, achieving social justice, shaping the pattern of character of settlements, and creating employment opportunities.” Infrastructure, the declaration suggested, is a principal instrument for “national development” and should be “geared to achieve greater equity [and] to minimize adverse environmental impact.”¹²¹ Infrastructure thus became part of the toolbox in facing rapid urbanization and urban poverty, especially as part of new urban-focused development interventions in the Global South.

In parallel, in the Global North, infrastructure for a long time constituted the connective tissue in efforts to manage safety, segregation, crime and violence in dense and diverse urban settings. Environmental criminology in the 1970s laid the grounds for connecting urban design with criminality and instilled the idea of fostering “defensible space” to prevent crime and increase

¹¹⁸ Jennifer S. Light, *From Warfare to Welfare: Defense Intellectuals and Urban Problems in Cold War America* (Johns Hopkins University Press, 2003), <http://muse.jhu.edu/book/16013>.

¹¹⁹ Felicity Dale Elliston Scott, *Outlaw Territories: Environments of Insecurity/Architectures of Counterinsurgency*, 2016, 242, 244, <http://mitpress-ebooks.mit.edu/product/outlaw-territories>.

¹²⁰ Agenda item 10 (c), Habitat I, ‘The Vancouver Declaration on Human Settlements’ (United Nations, 1976).

¹²¹ Habitat I.

control in European and North American cities.¹²² Post-9/11 urban development and its implicit “military urbanism” in response to the threat of terrorism further deepened the securitization logics that have governed infrastructure building and that, too, served to consolidate the state and its security apparatus.¹²³

At the turn of the millennium, urban growth, sprawl, and densification, and its related problems of rising poverty, inequality and pollution, framed infrastructure as both problem and solution, increasingly linking it to questions of globalization, intercity connectivity and urban governance – in the Global North and South. Habitat II in 1996 presented a program framed around cities that mobilized the United Nations, and eventually, research and development actors around the ‘urban age’ proposition in the mid-2000s.¹²⁴ With the beginning of the 21st century, infrastructure became embedded in a broad quest to transform urban regions, and by extension, societies, towards more sustainability and resilience. Initiated by global agendas such as the Sustainable Development Goals (SDGs) and the New Urban Agenda, the envisioned change relied much on infrastructure, with governments pushing for reforms in energy, water, and transportation management, and overall ‘smart’ infrastructure in cities. Peace has become an integral part of today’s development agenda, suggesting that indeed peace and development are

¹²² Oscar Newman and National Institute of Law Enforcement and Criminal Justice, *Design Guidelines for Creating Defensible Space* (Washington: National Institute of Law Enforcement and Criminal Justice, Law Enforcement Assistance Administration, U.S. Dept. of Justice, 1976), <https://catalog.hathitrust.org/Record/007412445>.

¹²³ Stephen Graham, *Cities under Siege: The New Military Urbanism*, Pbk. ed (London; New York: Verso, 2011); Eyal Weizman, *The Least of All Possible Evils: Humanitarian Violence from Arendt to Gaza* (London; New York: Verso, 2011).

¹²⁴ Mike Davis, *Planet of Slums* (London: Verso, 2006); Neil Brenner and Christian Schmid, ‘The “Urban Age” in Question’, *International Journal of Urban and Regional Research* 38, no. 3 (2014): 732–34, <https://doi.org/10.1111/1468-2427.12115>; Diane E. Davis, ‘Cities in Global Context: A Brief Intellectual History’, *International Journal of Urban and Regional Research* 29, no. 1 (2005): 92–109, <https://doi.org/10.1111/j.1468-2427.2005.00572.x>.

inextricably linked where there is “no sustainable development without peace and no peace without sustainable development.”¹²⁵

2.2.2 Infrastructure’s ‘socio-technical imaginary’, politics and power

The history of infrastructure reveals the intertwined aspirations, politics and building practice that link to the physical matter. Infrastructure as material outcome, therefore, is political. As analytical device, infrastructure may help us render visible not only connections (aspirational and actual), but also politics, circulating ideas and ambitions, as they manifest in the built environment.¹²⁶ Infrastructure is driven by “infrastructural ideals” that rely on ideas of universality, connection, and modernization.¹²⁷ In addition, as I argue in this dissertation, peace itself is one of those many infrastructural ideals. In this coalescence of knowledge, practice, and power, engineers play an important role. Lisa Björkman and Andrew Harris write very instructively that

far from the technocratic exercise it sometimes professes to be, the engineering of city life – through myriad techniques, routines, regimes of knowledge, material practices and social imaginings – is inextricably bound up with the broader processes of spatial representation, political contestation and urban change.¹²⁸

¹²⁵ ‘Transforming our world: the 2013 Agenda for Sustainable Development,’ UN Department of Economic and Social Affairs, accessed 23 September 2022, <https://sdgs.un.org/2030agenda>.

¹²⁶ Brian Larkin, ‘The Politics and Poetics of Infrastructure’, *Annual Review of Anthropology* 42 (2013): 327–43; Nikhil Anand, Akhil Gupta, and Hannah Appel, *The Promise of Infrastructure* (Durham, NC: Duke University Press, 2018); Keller Easterling, *Extrastatecraft: The Power of Infrastructure Space* (London; New York: Verso, 2014).

¹²⁷ Jo Beall et al., ‘Understanding Infrastructure Interfaces: Common Ground for Interdisciplinary Urban Research?’, *Journal of the British Academy* 7, no. s2 (2019): 19.

¹²⁸ Lisa Björkman and Andrew Harris, ‘Engineering Cities: Mediating Materialities, Infrastructural Imaginaries and Shifting Regimes of Urban Expertise’, *International Journal of Urban and Regional Research* 42, no. 2 (2018): 244, <https://doi.org/10.1111/1468-2427.12528>.

STS studies have for a long time focused on technology, material things and scientific processes to explore the “coproduction” of the social and natural world, and the role of technical systems, expertise, and infrastructure therein. Jasanoff’s theory of “sociotechnical imaginaries” underscores that technology and expertise shape the social life and *vice versa*.¹²⁹ Such sociotechnical imaginaries are “collectively held,” “institutionally stable,” and “publicly performed,” thus highlighting the “centrality” of science and technology in making and stabilizing collectives.¹³⁰

This theoretical approach is embedded in a broader understanding that rather than mere ‘artefacts’, infrastructure and technology bear politics.¹³¹ Such ‘technopolitics’ framing underlines the material embeddedness of power, agency and societal ambitions, drawing from a long scholarly history of studying the Cold War¹³² and, more generally, understanding “how technological projects figured in the practices, symbolisms, and political narratives.”¹³³

STS studies have emphasized the importance of knowledge, expertise, and experts as agents carrying important influence over social and political outcomes. This view is informed by Michel Foucault’s critique of “*pouvoir-savoir*” which posits that knowledge and power are inextricably linked, if not co-constitutive.¹³⁴ Knowledge is produced in powerful organizations

¹²⁹ Sheila Jasanoff, ed., *States of Knowledge: The Co-Production of Science and Social Order*, International Library of Sociology (London; New York: Routledge, 2004), 13–45; Jasanoff and Kim, *Dreamscapes of Modernity*.

¹³⁰ Sheila Jasanoff, ‘Future Imperfect’, in *Dreamscapes of Modernity: Sociotechnical Imaginaries and the Fabrication of Power*, ed. Sheila Jasanoff and Sang-Hyun Kim (University of Chicago Press, 2015), 4, <https://doi.org/10.7208/chicago/9780226276663.001.0001>.

¹³¹ Langdon Winner, ‘Do Artifacts Have Politics?’, *Daedalus*, 1980, 121–36.

¹³² Gabrielle Hecht and Paul N. Edwards, ‘Chapter 7: The Technopolitics of Cold War - Toward a Transregional Perspective’, in *Essays on Twentieth-Century History*, ed. Michael Adas and American Historical Association, *Critical Perspectives on the Past* (Philadelphia: Temple University Press, 2010).

¹³³ Paul N. Edwards and Gabrielle Hecht, ‘History and the Technopolitics of Identity: The Case of Apartheid South Africa’, *Journal of Southern African Studies* 36, no. 3 (September 2010): 620, <https://doi.org/10.1080/03057070.2010.507568>.

¹³⁴ Michel Foucault, *Power/Knowledge: Selected Interviews and Other Writings, 1972-1977*, ed. Colin Gordon, 1st American ed (New York: Pantheon Books, 1980).

and they, in turn, build, maintain, and expand their power in their act of defining expertise. The very decision of what constitutes expertise and technical capacity are determined by power structures and their members. Expertise and knowledge are a key element of societal and political processes. Expertise is often constituted, and rendered visible, by technology, from surveys and plans, to drones and helipads. The experts' design, production and operation of technology forms the basis for any imaginary.

A recurring theme in this dissertation is therefore the role of technical expertise and alleged neutrality provided by UN staff and consultants in the conflict context. They are highly mobile, moving from one mission to the next, between countries, and pursue an international career that is marked by universal, technical know-how and independence from national politics and local, societal dynamics.¹³⁵ Infrastructure, specifically, has for long been subject to the experts' exclusive, depoliticized governance. Throughout the world, governments have commissioned large-scale public infrastructure projects and assigned specialists and technocrats to decide for the public how to manage – for better or worse – resource flows and space, and leaving the public very much in the dark.¹³⁶ The promise, especially, of a better connected, more peaceful future has been given by the experts, with infrastructure as the vehicle for progress, democracy, and statecraft, as political and military strategy.

¹³⁵ In her book 'The Trouble with the Congo', Séverine Autesserre recounts an anecdote that illustrates the global mobility of the UN officers, who implement the same strategies anywhere they go, copy-pasting the ensuing reports – and sometimes would forget to update the countries' names in 'newly drafted' report. (Autesserre, 'Chapter 3: A Top-Down Solution,' In *The Trouble with the Congo*, 2010)

¹³⁶ Stephen J. Collier, James Christopher Mizes, and Antina von Schnitzler, 'Public Infrastructures / Infrastructural Publics', *Limn*, 8 November 2016, <https://limn.it/articles/preface-public-infrastructures-infrastructural-publics/>.

The mobile, “nomadic expertise” points to the specialists’ influence in defining development, reconstruction and defense concerns.¹³⁷ In the history of the post-World War II development agenda, planners and architects as “global experts” took center stage in connecting practices of settlement and urbanization with development outcomes at large, shaping both the understanding of the threat scenario and its “solution” with the advance of computer-technology.¹³⁸ The rise of the international expert has facilitated the linking of infrastructure to the increasing importance of spatial planning globally: Key events, notably the 1972 Stockholm Conference on the Environment and, four years later, Habitat I in Vancouver, have provided a vivid testimony of the international technocratic quest for socio-spatial planning in which ‘peace’ remained an omnipresent yet elusive idea referred to by the experts as they pursued technical projects. The rise of the international development expert who treated “‘underdevelopment’ as a singular condition”, and based a career on transposable knowledge, models, and even a universal approach to place-based expertise, relegated genuine local experience to the fringe.¹³⁹

Experts, bureaucrats and politicians alike have for long seen infrastructure’s connective capacity and much less its potential for fragmentation and violence. International, national and regional infrastructure might decouple cities physically and culturally from its surrounding – for example turning Kabul into a modern bubble that exists in stark contrast to much of rural Afghanistan.

The turn to localized, ‘self-sufficient’ and resilient infrastructure, too, can create closed urban

¹³⁷ Eric Verdeil, ‘Expertises Nomades Au Sud. Eclairages Sur La Circulation Des Modèles Urbains’, *Géocarrefour* 80 (1 July 2005); Ward, ‘Transnational Planners in a Postcolonial World’.

¹³⁸ Johan Lagae and Kim Raedt, ‘Global Experts “off Radar”’, 1 January 2014; Scott, *Outlaw Territories*; Eric Paul Mumford, ‘Chapter 8: Globalization and Urbanism from the 1950s to the Present’, in *Designing the Modern City: Urbanism since 1850* (New Haven ; London: Yale University Press, 2018), 317–32; M. Ijlal (Muhammad Ijlal) Muzaffar, ‘The Periphery within: Modern Architecture and the Making of the Third World’ (Thesis, Massachusetts Institute of Technology, 2007), <https://dspace.mit.edu/handle/1721.1/41719>.

¹³⁹ Donna C. Mehos and Suzanne M. Moon, ‘The Uses of Portability: Circulating Experts in the Technopolitics of Cold War and Decolonization’, in *Entangled Geographies*, ed. Gabrielle Hecht (The MIT Press, 2011), 42–69, <https://doi.org/10.7551/mitpress/9780262515788.003.0003>.

systems, detached from larger geographies and the State.¹⁴⁰ A more fine-grained analysis has revealed how infrastructures serve to pursue political power and may marginalize people as they channel resources and materialize in- and exclusion.¹⁴¹ “Infrastructural violence” conceptualizes the structural violence that is exerted through, and built in, the material infrastructure, passively and actively evoking “social suffering ... often experienced in material terms.”¹⁴²

Infrastructure planning as a political tool is intimately linked to conflict dynamics unfolding in the city and beyond. Infrastructure may serve as a tool for negotiation and is often deployed “to address urban problems.”¹⁴³ It determines the everyday experience of the city. It constitutes “a key factor shaping people’s direct relationships both with each other and with their environment in cities,”¹⁴⁴ and thus needs to be understood as a process rather than a merely material object.¹⁴⁵ Postcolonial studies have unpacked how people live with the infrastructure projects, emphasizing their insurgent urbanism, but also the imaginaries and post-war aspirations that both the practice of planning and the physical infrastructures carry.¹⁴⁶ Alternative sources of power and protest define the experience of infrastructure in tandem with experts. While infrastructure therefore is not deterministic, it influences social interactions and may direct individuals in their mobility

¹⁴⁰ Mike Hodson and Simon Marvin, “‘Urban Ecological Security’: A New Urban Paradigm?”, *International Journal of Urban and Regional Research* 33, no. 1 (2009): 193–215, <https://doi.org/10.1111/j.1468-2427.2009.00832.x>; Easterling, *Extrastatecraft*.

¹⁴¹ Graham and Marvin, *Splintering Urbanism: Networked Infrastructures, Technological Mobilities and the Urban Condition*; Pullan, ‘Spatial Discontinuities’; Rodgers and O’Neill, ‘Infrastructural Violence’; Antina von Schnitzler, *Democracy’s Infrastructure: Techno-Politics and Protest after Apartheid* (Princeton, NJ: Princeton University Press, 2016).

¹⁴² Rodgers and O’Neill, ‘Infrastructural Violence’, 405–6.

¹⁴³ Delia Duong Ba Wendel, ‘Infrastructure’, in *The SAGE Handbook of Architectural Theory*, ed. Greig C. Crysler, Stephen Cairns, and Hilde Heynen (London: Sage, 2012), 547.

¹⁴⁴ Rodgers and O’Neill, ‘Infrastructural Violence’, 402.

¹⁴⁵ Stephen Graham and Colin McFarlane, *Infrastructural Lives: Urban Infrastructure in Context* (Routledge, 2014).

¹⁴⁶ Naseem Badiey and Christian Doll, ‘Planning amidst Precarity: Utopian Imaginings in South Sudan’, *Journal of Eastern African Studies* 12, no. 2 (3 April 2018): 367–85, <https://doi.org/10.1080/17531055.2018.1408305>.

and access to services and opportunities, suggesting – and at times defining – how, when and with whom/what they interact.

Today, in both the Global North and South, large-scale ‘mega’ infrastructure projects are pursued by cities as an elitist, exclusive, and yet most typical, strategy to achieve economic growth and market competitiveness.¹⁴⁷ Peaceful and conflictual interaction thus too are constrained by infrastructure. Precisely because of their embeddedness in, and instrumentalization for, politics, infrastructures need to be analyzed for their relation to “fragmentation, inequality and crisis”¹⁴⁸ – and for their temporal dimension because infrastructure is planned for “the long now,”¹⁴⁹ and implies, and materializes, the possibility for a different, better future.

2.3 A planning sensibility towards infrastructure in peace operations

The chapter now turns to peace operations and the role and meaning of infrastructure in the conduct and effect of peacekeeping. Infrastructure as the material base to study politics, conflicts, ideals and aspirations, may help us understand how peace is being operationalized by

¹⁴⁷ Erik Swyngedouw, Frank Moulaert, and Arantxa Rodriguez, ‘Neoliberal Urbanization in Europe: Large-Scale Urban Development Projects and the New Urban Policy’, *Antipode* 34, no. 3 (2002): 542–77, <https://doi.org/10.1111/1467-8330.00254>; Onyanta Adama, ‘Urban Imaginaries: Funding Mega Infrastructure Projects in Lagos, Nigeria’, *GeoJournal* 83, no. 2 (1 April 2018): 257–74, <https://doi.org/10.1007/s10708-016-9761-8>.

¹⁴⁸ Colin McFarlane and Jonathan Rutherford, ‘Political Infrastructures: Governing and Experiencing the Fabric of the City’, *International Journal of Urban and Regional Research* 32, no. 2 (2008): 363–74, <https://doi.org/10.1111/j.1468-2427.2008.00792.x>.

¹⁴⁹ David Ribes and Thomas Finholt, ‘The Long Now of Technology Infrastructure: Articulating Tensions in Development’, *Journal of the Association for Information Systems* 10, no. 5 (28 May 2009), <https://doi.org/10.17705/1jais.00199>.

the UN and its partners. Contrary to the often-communicated objectiveness and neutrality, the deployment of technology in peace operations has political implications for budgets and personnel decisions, and beyond the UN bureaucracy, for the people and places that live with the infrastructure. This section therefore emphasizes two aspects. First, infrastructure can have intended and unintended (known and unknown) effects, including possible harm, which are crucial to consider in the context of peacebuilding. Second, because of its deliberate usage, in spite of its ambivalent outcomes, infrastructure as imaginary sheds light on the peacekeepers' production and engagement with technical devices more broadly, and the idea(s) of peace that emerges. This section therefore suggests a planning perspective on peace operations that grounds the analysis spatially and provides the framework consider the social and spatial dimension conjoinedly.

2.3.1 Infrastructure in peace operations

In peace operations deployed to conflict zone, physical infrastructure appears in different functions. First, there is the infrastructure that a UN mission builds for its own logistical purposes, the offices, staff accommodation, solar farms, and warehouses. Related to this is logistics infrastructure that is built or rehabilitated primarily for UN usage, like helipads and airstrips, streets and buildings, which may be used presently or in the future by others. Secondly, there are the infrastructure projects that are built by the UN, its partners and contractors, expressly for the community. These projects can be legitimized differently, for example to buy a community's sympathy towards the peacekeepers, or to contribute to local conflict management, or pursue a variety of mandate-related goals – like, in the case of MINUSMA in Mali, restoring

the state's presence. In this two-fold purpose, infrastructure constitutes the logistical backbone of the political mandate and it also constitutes an intervention. As an ensemble, engineers are involved in building the hardware of support services for the troops, roads and dams, drainage systems and waste recycling stations, and health centers, serving the local population, the peacekeepers themselves, or both.

Traditionally, in a military approach to conflict situations, the building of infrastructure has been viewed as part of the post-war reconstruction repertoire.¹⁵⁰ For peace purposes, infrastructure projects facilitate the work of peacebuilding actors through (re-)constructions of roads, bridges, airports and military camps. The multiple connotations and synergetic purposes of infrastructure in the context of war were highlighted by former UN Under-Secretary-General for Humanitarian Affairs Jan Eliasson in 1998:

UN humanitarian action may also create goodwill and confidence in the United Nations, with positive effects on UN peacekeeping and peacemaking activities. Even the peacekeepers themselves could contribute to confidence building through their humanitarian activities. Many UN troops have had the experience of building roads for the local population or admitting patients for medical treatment in UN field hospitals. UNPROFOR in the former Yugoslavia, for example, helped in repairing schools, hospitals, and roads, as well as in providing electricity, gas, and water to Sarajevo and operating the Bosnian capital's airport.¹⁵¹

Within increasingly multifaceted peacekeeping mandates,¹⁵² infrastructure projects aim to contribute to statebuilding and the expansion of administrative authority through the construction of government buildings, electricity, water and sewer systems, or communication technology like

¹⁵⁰ Garland H. Williams, *Engineering Peace: The Military Role in Postconflict Reconstruction* (Washington, D.C.: United States Institute of Peace Press, 2005), <http://archive.org/details/engineeringpeace0000will>.

¹⁵¹ Jan Eliasson, 'Humanitarian Action and Peacekeeping', in *Peacemaking and Peacekeeping for the next Century*, ed. Clara A. Otunnu and Michael W. Doyle (Lanham: Rowman & Littlefield Publishers, 1998), 211, <http://hdl.handle.net/2027/mdp.39015040174263>.

¹⁵² Jennifer M. Hazen, 'Can Peacekeepers Be Peacebuilders?', *International Peacekeeping* 14, no. 3 (1 June 2007): 323–38, <https://doi.org/10.1080/13533310701422901>; Karlsrud, 'The UN at War'.

equipment for radio stations. On a smaller scale, peacekeepers have pursued peacebuilding objectives through small-scale infrastructure service delivery projects that sought to contribute to reconstruction and development at the community level.

Closely tied to the increasingly active role of peace operation during ongoing armed conflict, infrastructure building as Quick-Impact Projects (QIPs) has often been framed, and perhaps even downplayed, as a strategy to ‘win hearts and minds’ – a strategy deployed by military and increasingly civilian-humanitarian actors in conflict zones.¹⁵³ A close look at the early discourse around QIPs, especially how the UN High Commissioner for Refugees (UNHCR) presented their efficacy, sheds light on the projects’ peacebuilding dimension; a language that was subsequently adopted by the UN Secretariat. It is worthwhile considering this extract from a paper submitted by UNHCR in preparation for the Fourth High-Level Meeting between the United Nations and Regional Organizations, which offers:

A primary instrument of such reintegration and rehabilitation programmes has been the 'quick impact project' or QIP – small-scale initiatives that can be implemented at modest cost, with considerable speed and with the full participation of the local community. The precise nature of UNHCR's project portfolio evidently differs from one place to another, according to local needs, opportunities and the availability of resources. Typically, however, the organization's reintegration and rehabilitation programmes involve the reconstruction of houses, schools and health centres, the installation of water wells, as well as the repair of roads, bridges and irrigation systems and other infrastructural assets.

According to evaluations undertaken by UNHCR and other organizations, such programmes have proven to be relatively effective means of providing an immediate injection of resources into areas which have been devastated by war and which are confronted with the need to absorb large numbers of returning refugees and displaced people. They have also compensated for the limited rehabilitation capacity of state and civil society structures. In some situations, the community-based approach adopted by

¹⁵³ Lise Morjé Howard, *Power in Peacekeeping, Power in Peacekeeping / Lise Morjé Howard*. (Cambridge: Cambridge University Press, 2019), <https://lib.mit.edu/record/cat00916a/mit.002804360>; Susann Kassem, ‘Peacekeeping, Development, and Counterinsurgency: The United Nations Interim Force in Lebanon and “Quick Impact Projects”’, in *Land of Blue Helmets*, ed. Karim Makdisi and Vijay Prashad (Oakland, CA: University of California Press, 2017), 460–80.

UNHCR appears to have played a useful role in averting potential conflicts between different sections of the population.¹⁵⁴

In response, the final remarks of the UN Secretary-General during the closing session of the conference subsumed: “Quick impact projects can play an important role in the early implementation phase of a peace-building operation.”¹⁵⁵ Infrastructure projects, especially through the relatively speedy and unbureaucratic implementation process, thus opened a novel way for the UN to be involved in building peace.

The political instrumentalization of infrastructure, especially in the light of QIPs, has drawn greater attention to infrastructure building as part of the peacekeeping’s toolbox, yet the current debate neglects the full spectrum of peace operation’s infrastructure. In fact, infrastructure is often seen as an unintended, albeit positive side-effect of missions.¹⁵⁶ In contrast, Bachmann and Schouten suggest that infrastructure has emerged as a principal tool in contemporary stabilization missions; that it is “no longer the background to meaningful action but itself constitutes political agency” through which to create peace.¹⁵⁷ In focusing on the infrastructure development projects that take place as part of peace operations, the authors neglect the very operations infrastructure on which peacekeepers rely daily and its historical co-emergence with infrastructure as ‘peacebuilding tool’. Rather, infrastructure in peace operations sits, perhaps somewhat uncomfortably, between military objectives of defense, security and violence, and civilian purposes of peace and reconstruction. The full spectrum of infrastructure is crucial as the UN

¹⁵⁴ UN Archives, S-1093-0085-09-00001, “UNHCR and the challenge of peace-building, A paper prepared for the 4th UN-Regional Organizations High-Level Meeting,” New York, 6-7 February 2001.

¹⁵⁵ UN Archives, S-1093-0085-09-00001, Notes of speech by UN Secretary-General during Concluding Session of the of the 4th High-Level Meeting between the United Nations and Regional Organizations, New York, 6-7 February 2001.

¹⁵⁶ Landgren, ‘Unmeasured Positive Legacies of UN Peace Operations’.

¹⁵⁷ Jan Bachmann and Peer Schouten, ‘Concrete Approaches to Peace: Infrastructure as Peacebuilding’, *International Affairs* 94, no. 2 (1 March 2018): 382, <https://doi.org/10.1093/ia/iix237>.

builds increasingly large “supercamps,” diverts significant economic and ecological resources and imprint its military spatial logic on the host city, for an increasingly long period of time.¹⁵⁸ In fact, the varying *raisons d’être* of infrastructure are increasingly interrelated, and embed the same practices of planning, building, maintenance, and closure.

In international peacebuilding discourse, the concept of infrastructure, especially that of ‘peace infrastructure’ has been used inconsistently, ultimately leaving its spatial dimension under-theorized. Commonly, the terminology of ‘building’, ‘bridges’ and ‘pathways’ toward peace is used as the allegory of democratization, rule of law and non-violent conflict resolution and reconciliation – firmly seated in a liberal peace paradigm. “Infrastructure for peace” specifically has been used by UNDP to refer to a comprehensive set of peacebuilding activities anchored at the national level and structured along territorial-administrative entities of planning (e.g. national, county, local/municipal; sub-city/neighborhood).¹⁵⁹ Based on the early works of peace scholar John Lederach, literature close to the UNDP’s approach replicated “peace infrastructures” as an institutional set-up that links the local with the national and international scale of peacebuilding actors through mechanisms of dialog and mediation in committees and other institutions to foster reconciliation.¹⁶⁰

¹⁵⁸ Carnahan, Gilmore, and Durch, ‘New Data on the Economic Impact of UN Peacekeeping.’; Maertens, ‘From Blue to Green? Environmentalization and Securitization in UN Peacekeeping Practices.’; Malkit Shoshan, ‘UN Peacekeeping Missions in Urban Environments and the Legacy of UNMIL’, 2018, https://issuu.com/seamlessterritory/docs/un_peacekeeping_missions_in_urban_e/20; Lucile Maertens and Malkit Shoshan, ‘Greening Peacekeeping: The Environmental Impact of UN Peace Operations’ (New York: International Peace Institute, April 2018).

¹⁵⁹ UNDP. 2013. “Issue Brief: Infrastructure for Peace.” https://www.un.org/en/land-natural-resources-conflict/pdfs/Issue_brief_infrastructure_for_peace.pdf.

¹⁶⁰ Barbara Unger et al., eds., *Peace Infrastructures: Assessing Concept and Practice*, 1. Aufl, Berghof Handbook Dialogue Series 10 (Berlin: Berghof Foundation, 2013); ‘The Evolving Landscape of Infrastructures for Peace’, *Journal of Peacebuilding & Development* 7, no. 3 (1 December 2012): 1–7, <https://doi.org/10.1080/15423166.2013.774793>; Jordan Ryan, ‘Infrastructures for Peace as a Path to Resilient Societies: An Institutional Perspective’, *Journal of Peacebuilding & Development* 7, no. 3 (1 December 2012): 14–24, <https://doi.org/10.1080/15423166.2013.774806>.

2.3.2 Infrastructure as part of the ‘conflict urbanism’

Within urban conflict research, infrastructure has been framed as both product and means of conflict that takes centerstage in a “conflict urbanism” where conflict yields urban destruction *and* production.¹⁶¹ How urbanization and warfare are related have been well-documented in the United States and Cold War context.¹⁶² Outside the Global North and past the Cold War, Karen Büscher’s work in Goma has provided rich insights into the conflict-driven urbanization dynamics in East Africa.¹⁶³ Cities, like Goma, emerge as the hub of economic production, and as safe haven for internally displaced people – local dynamics that rapidly alter and adapt the local infrastructure. Indeed, conflict dynamics themselves – involving people’s displacement, financial and resource flows – produce spatial outcomes, like shifting settlement patterns or changes to the urban morphology.¹⁶⁴

Urban conflict scholarship has benefited from detailed descriptions of local dynamics in the context of national identity politics intersecting with growing pressures of urbanization, inequality, modernization and decay in cities globally – highlighting the spatial and material

¹⁶¹ Juan Francisco Saldarriaga, Laura Kurgan, and Dare Brawley, ‘Visualizing Conflict: Possibilities for Urban Research’, *Urban Planning* 2, no. 1 (4 April 2017): 100–107; Philipp Misselwitz and Tim Rieniets, ‘Jerusalem and the Principles of Conflict Urbanism’, *Journal of Urban Technology* 16, no. 2/3 (August 2009): 61–78, <https://doi.org/10.1080/10630730903278587>.

¹⁶² A Markusen, ‘The Military-Industrial Divide’, *Environment and Planning D: Society and Space* 9, no. 4 (1 December 1991): 391–416, <https://doi.org/10.1068/d090391>; Light, *From Warfare to Welfare*.

¹⁶³ Karen Büscher, ‘African Cities and Violent Conflict: The Urban Dimension of Conflict and Post Conflict Dynamics in Central and Eastern Africa’, *Journal of Eastern African Studies* 12, no. 2 (3 April 2018): 193–210, <https://doi.org/10.1080/17531055.2018.1458399>; Karen Büscher, ‘Violent Conflict and Urbanization in Eastern Democratic Republic of the Congo: The City as Safe Haven’, in *Cities at War Global Insecurity and Urban Resistance*, ed. Mary Kaldor and Saskia Sassen (New York: Columbia University Press, 2020), 160–83, <https://www.degruyter.com/isbn/9780231546133>; Koen Vlassenroot and Karen Büscher, ‘The City as Frontier: Urban Development and Identity Processes in Goma’, *Crisis States Working Papers Series*, no. 61 (2009): 22.

¹⁶⁴ Saldarriaga, Kurgan, and Brawley, ‘Visualizing Conflict’; Büscher, ‘African Cities and Violent Conflict’.

traces of violent conflict and war in cities.¹⁶⁵ Urban conflict is intimately linked to territorial claims— past and present – especially when territory intersects with consideration of class, ethnicity, religion or gender.¹⁶⁶ Urban conflict, in those instances, arises from spatialized divisions and identity markers in cities, often enforced through infrastructure like the ‘peace walls’ and murals in Belfast, claims about sovereignty and power.¹⁶⁷ In addition to the destruction that takes place during conflict, ethno-national strife thus not only shapes, but is also shaped by, urban form – rendering ever relevant Scott Bollens’ 1998 investigation of “how urban planning and policy are affected by, and themselves affect, the ideological imperatives imposed by extra-local ethnic conflict.”¹⁶⁸ City dwellers, investors, architects and planners build the city in a logic of past and future conflict, violence and discrimination.¹⁶⁹ A walk through Sao Paulo, Johannesburg or Beirut renders visible the segregation and speculation. The built infrastructure – the walls, checkpoints, security and surveillance systems, the housing projects and highways – indicate the mistrust and underlying cleavages in society, just as they determine urban morphology, people’s interaction, as well as the urban political economy.¹⁷⁰

The urbanism emerging from local and extra-local actors bound by conflict is equally – if not specifically – pronounced in the context of humanitarian interventions (under which I consider

¹⁶⁵ Danny Hoffman, *Monrovia Modern: Urban Form and Political Imagination in Liberia* (Durham: Duke University Press, 2017), <http://hdl.handle.net/2027/dul1.ark:/13960/t9870p87d>; Bou Akar, *For the War yet to Come: Planning Beirut’s Frontiers*; Scott A. Bollens, *City and Soul in Divided Societies* (London: Routledge, 2012); Pullan and Baillie, *Locating Urban Conflicts - Ethnicity, Nationalism and the Everyday*.

¹⁶⁶ Monica Duffy Toft, *The Geography of Ethnic Violence: Identity, Interests, and the Indivisibility of Territory* (Princeton, N.J: Princeton University Press, 2003); Helmuth Berking et al., eds., *Negotiating Urban Conflicts: Interaction, Space and Control* (Bielefeld: Transcript, 2006).

¹⁶⁷ Davis and Libertun de Duren, *Cities & Sovereignty*.

¹⁶⁸ Scott A. Bollens, ‘Urban Planning amidst Ethnic Conflict: Jerusalem and Johannesburg’, *Urban Studies* 35, no. 4 (1998): 729.

¹⁶⁹ Bou Akar, *For the War yet to Come: Planning Beirut’s Frontiers*; Faranak Miraftab, ‘Colonial Present: Legacies of the Past in Contemporary Urban Practices in Cape Town, South Africa’, *Journal of Planning History* 11, no. 4 (2012): 283–307.

¹⁷⁰ Caldeira, *City of Walls: Crime, Segregation, and Citizenship in São Paulo*.

UN peace operations), suggesting a specific “humanitarian urbanism.”¹⁷¹ Architecture, urban planning and infrastructure interventions by humanitarian and development actors impose their logic of organizing territory and the political, cultural and ecological processes of human settlement in those conflict- and disaster-affected settings. Extra-local actors produce “spaces of aid”, the compound, hotel, or SUV, that remain distinctly visible and shielded – a “bunkerization” – from the local context and violent environment.¹⁷² This “peaceland,” enables peacebuilding actors to operate in spaces of conflict and amidst acute threats to their own wellbeing, while also rendering their actions much less efficient.¹⁷³ At the same time, humanitarian and development actors shape urban development and governance, and their presence significantly increases socio-economic urban divides and perpetuates aid dependency.¹⁷⁴

Humanitarian studies have also already drawn attention to the intended and unintended consequences of inserting and distributing resources in a conflict context. This literature provides a glimpse into the dynamics paralleling peace interventions, especially if they have an explicit material component. Mary B. Anderson’s seminal *Do No Harm: How aid can support peace – or war* depicts the mechanisms that link aid agencies’ transfer and distribution of resources to community tensions as well as local peace capacities. She therefore dedicates the book to explain

¹⁷¹ Potvin, ‘Humanitarian Urbanism under a Neoliberal Regime: Lessons from Kabul’; Büscher, Komujuni, and Ashaba, ‘Humanitarian Urbanism in a Post-Conflict Aid Town’; Anne Bartlett, Jennifer Alix-Garcia, and David S. Saah, ‘City Growth Under Conflict Conditions: The View from Nyala, Darfur’, *City & Community* 11, no. 2 (2012): 151–70, <https://doi.org/10.1111/j.1540-6040.2012.01396.x>.

¹⁷² Lisa Smirl, *Spaces of Aid: How Cars, Compounds and Hotels Shape Humanitarianism* (London, UK: Zed Books Ltd., 2015); Mark Duffield, ‘Challenging Environments: Danger, Resilience and the Aid Industry’, *Security Dialogue* 43, no. 5 (1 October 2012): 475–92, <https://doi.org/10.1177/0967010612457975>.

¹⁷³ Autesserre, *Peaceland*.

¹⁷⁴ Gabriella Y. Carolini, ‘Aid’s Urban Footprint and Its Implications for Local Inequality and Governance’, *Environment and Planning A: Economy and Space* 53, no. 2 (March 2021): 389–409, <https://doi.org/10.1177/0308518X20947099>; Büscher, Komujuni, and Ashaba, ‘Humanitarian Urbanism in a Post-Conflict Aid Town’.

how external intervention in conflicts “rather than feeding into and exacerbating the conflict” may “help local people to disengage and establish alternative systems for dealing with the problems that underlie the conflict.”¹⁷⁵ The risk of incentivizing violence through the provision of humanitarian aid has, too, been found through quantitative studies.¹⁷⁶

A similar sensibility towards the possibility of harm has been raised in several peacekeeping-focused studies. Aoi et al. have framed the *Unintended Consequences of Peacekeeping Operations* as one of the rare collection of essays dedicated to discussing the variety of ways in which UN personnel and the ways of working may distort local social and economic dynamics, harm communities, and challenges the aid system.¹⁷⁷ The concept of the ‘peacekeeping economy’ has highlighted the real impact of peace operations’ presence on local employment patterns, the creation and distortion of local markets, and the risk for exploitation – including trafficking, prostitution and other illegal activities.¹⁷⁸ Impact studies have thus revealed a mixed picture, including possible harm and benefits – in areas as diverse as environmental quality, public health, and violence against civilians – of peacekeepers presence.¹⁷⁹

¹⁷⁵ Mary B. Anderson, *Do No Harm: How Aid Can Support Peace--or War* (Boulder, Colorado: Lynne Rienner Publishers, 1999), 1, <https://ebookcentral.proquest.com/lib/mit/reader.action?docID=6199413&ppg=81>.

¹⁷⁶ Reed M. Wood and Christopher Sullivan, ‘Doing Harm by Doing Good? The Negative Externalities of Humanitarian Aid Provision during Civil Conflict’, *The Journal of Politics* 77, no. 3 (July 2015): 736–48, <https://doi.org/10.1086/681239>.

¹⁷⁷ Chiyuki Aoi, Cedric De Coning, and Ramesh Chandra Thakur, eds., *Unintended Consequences of Peacekeeping Operations* (Tokyo, New York: United Nations University Press, 2007).

¹⁷⁸ Jennings and Bøås, ‘Transactions and Interactions’; Jennings, ‘Life in a “Peace-Kept” City’; Adam Moore, ‘Localizing Peacebuilding: The Arizona Market and the Evolution of U.S. Military Peacebuilding Priorities in Bosnia’, *Journal of Intervention and Statebuilding* 13, no. 3 (27 May 2019): 263–80, <https://doi.org/10.1080/17502977.2019.1610991>; Bernd Beber et al., ‘The Promise and Peril of Peacekeeping Economies’, *International Studies Quarterly* 63, no. 2 (1 June 2019): 364–79, <https://doi.org/10.1093/isq/sqz012>; Carnahan, Gilmore, and Durch, ‘New Data on the Economic Impact of UN Peacekeeping.’

¹⁷⁹ Zorzeta Bakaki and Tobias Böhmelt, ‘Can UN Peacekeeping Promote Environmental Quality?’, *International Studies Quarterly* 65, no. 4 (2021), <https://doi.org/10.1093/isq/sqab051>; Sara E Davies and Simon Rushton, ‘Healing or Harming? United Nations Peacekeeping and Health’ (New York: International Peace Institute, March 2015); Deniz Cil et al., ‘Mapping Blue Helmets: Introducing the Geocoded Peacekeeping Operations (Geo-PKO) Dataset’, *Journal of Peace Research* 57, no. 2 (2020): 360–70.

Highlighting the various socio-economic and socio-spatial ways in which international intervenors, and UN missions specifically, can impact the places in which they intervene sets important groundwork. It lays out that, irrespective of the aspirations of a short-termed, neutral, independent, and self-sufficient presence, UN peacekeeping missions are always deeply embedded in their locality of intervention and exist in multiple – social, economic, political, and ecological – relations with their host society. This embeddedness is important to recall as the next section delineates what a planning perspective on peace operations could entail.

2.3.3 A planning perspective on peace operation

In peace operations, infrastructure interventions take place in the larger, interdisciplinary context of security considerations, socio-economic development, and even environmental protection, and therefore benefit from a wider planning perspective. As I intend to unpack how planning ideas are implicated in peace operations, I use an approach to planning that touches upon aspects of both *governance*, the management and planning processes, and *territoriality*, the imagination, experience and shaping of places.¹⁸⁰ Planning forges conversation around development and conflict that are situated spatially. It draws our attention to how both conflict and development affect communities, people's daily lives and the environments they live in – centering the socio-spatial and everyday relation that peace operations enter with the host country and communities

¹⁸⁰ This distinction loosely draws from 'Four Planning Conversations.' Cf. Bishwapriya Sanyal, Lawrence J. Vale, and Christina Rosan, eds., *Planning Ideas That Matter: Livability, Territoriality, Governance, and Reflective Practice* (Cambridge, MA: MIT Press, 2012), <https://lib.mit.edu/record/cat00916a/mit.002084635>.

they operate in. Therefore, urban planning as practice, Scott Bollens has argued, is also relevant to peace because,

most immediate and existential foundations of inter-group conflict frequently lie in daily life and, importantly, that it is at this micro-level that antagonisms are most amenable to meaningful and practical strategies aimed at their amelioration.¹⁸¹

Planning grounds peace ideals in actual communities, economies and structures of power.

Planning makes an important contribution to considering power and its implication for the present and future. I understand planning as both practice and institution that sides with power¹⁸² – technologies, expertise and financial flows. The history of planning theory depicts the field’s struggle to come to terms with authority and power, and challenging planning as a *per se* benevolent activity,¹⁸³ which resonates with the basic premises of humanitarian urbanism. I also understand planning as the envisioning – through both policies and the visualization of actual plans – and implementation of socio-spatial interventions that produce the material infrastructures. They thus restructure social and material space, to serve peacekeeping objectives. The focus on societal futures conveyed by infrastructure building and their contestation at the city and state level is fundamentally embedded in planning as a domain of contestation and exercise of power over territories and people.¹⁸⁴

The planning perspective draws attention to the interface between local and extra-local forces that shape space. Planning takes place in the context of global, national and local forces that

¹⁸¹ Scott A. Bollens, ‘Urban Planning and Peace Building’, *Progress in Planning* 66, no. 2 (August 2006): 67, <https://doi.org/10.1016/j.progress.2006.07.001>.

¹⁸² Bent Flyvbjerg, ‘Bringing Power to Planning Research: One Researcher’s Praxis Story’, in *Readings in Planning Theory*, ed. Susan S. Fainstain and Scott Campbell, 3rd ed. (Wiley-Blackwell, 2011), 292–314.

¹⁸³ Nancy H. Kwak, ‘Interdisciplinarity in Planning History’, in *The Routledge Handbook of Planning History*, ed. Carola Hein, 2018, 27f.

¹⁸⁴ Yiftachel, ‘Planning and Social Control’; Bou Akar, *For the War yet to Come: Planning Beirut’s Frontiers*.

shape the very local regimes of governance and material living conditions of people.¹⁸⁵ Local actors are not passively on the receiving end of international influences but have the power to shape spatial interventions, resist and adapt infrastructure. Local economic and cultural dynamics shape the outcome of international projects – and people appropriate spaces and infrastructure to make them fit.¹⁸⁶ Participatory planning, facilitation and conflict mediation between residents and between the state and its citizens can be an outcome in itself, but can also reveal “conflicting rationalities” especially when the so-called planners or other intervenors make assumptions about those they plan for or with, their values and preferences.¹⁸⁷ Alternative conceptions of planning have suggested that planning as a practice can also challenge expert hegemony and create a realm for actualizing citizenship.¹⁸⁸

A critical planning perspective on peacekeeping recognizes the politics of the built environment and the spatial, urban and environmental logics that link and determine competing interests and allows us to question the planner’s authority. For example, a critical planning lens shifts the focus across scales and towards communities and the spatial impact and lived experience of sustainability-centered policies: While infrastructure projects have frequently been tied to sustainability objectives,¹⁸⁹ some researchers have underscored the dissonance between the

¹⁸⁵ Diane Davis, ‘City, Nation, Network: Shifting Territorialities of Sovereignty and Urban Violence in Latin America’, *Urban Planning* 5, no. 3 (31 August 2020): 206–16, <https://doi.org/10.17645/up.v5i3.3095>.

¹⁸⁶ Asef Bayat, ‘From ‘Dangerous Classes’ to ‘Quiet Rebels’: Politics of the Urban Subaltern in the Global South’, *International Sociology* 15, no. 3 (2000): 533–57, <https://doi.org/10.1177/026858000015003005>.

¹⁸⁷ Vanessa Watson, ‘Conflicting Rationalities: Implications for Planning Theory and Ethics’, *Planning Theory & Practice* 4, no. 4 (December 2003): 395–407, <https://doi.org/10.1080/1464935032000146318>.

¹⁸⁸ Faranak Miraftab, ‘Insurgent Planning: Situating Radical Planning in the Global South’, *Planning Theory* 8, no. 1 (February 2009): 32–50, <https://doi.org/10.1177/1473095208099297>; Lisa R. Peattie, ‘Communities and Interests in Advocacy Planning’, *Journal of the American Planning Association* 60, no. 2 (30 June 1994): 151–53, <https://doi.org/10.1080/01944369408975566>.

¹⁸⁹ Global Commission on the Economy and Climate, ‘The Sustainable Infrastructure Imperative’, 2016, https://newclimateeconomy.report/2016/wp-content/uploads/sites/4/2014/08/NCE_2016Report.pdf; UNOPS, ‘Infrastructure: Underpinning Sustainable Development’ (Copenhagen: UNOPS, 2018).

political rhetoric and practice of sustainable development.¹⁹⁰ As such, the “technomanagerial solutions” often embedded in plans constitute a significant clash with lived reality locally, and evoke the protest of communities globally.¹⁹¹

Peacekeeping’s theory of change become visible in the language and practice, in the tools and technologies, that peacebuilding actors deploy to make causal arguments as they analyze conflict and design interventions. For my dissertation, past scholarly efforts to theorize space provide for the language to systematize socio-spatial interventions. Space and materials shape social life. In this regard, a spatial approach focuses on architecture and design, and recognizes interdependency and reciprocity between the built environment and society. Furthermore, a material sensibility attributes importance to not only where relationships and social dynamics take place and who shapes them, but also what other tangible qualities, such as for example technological devices, objects and infrastructure, influence them.

2.4 The ‘infrastructural imaginary of peace’

In presenting the evolution of peace studies as well as discussing the domain of infrastructure studies in relation to urban planning, this chapter aimed to establish how infrastructure and planning matter for peace, thus laying out the motivation for studying global peace efforts through an infrastructure lens. The important place of politics involved in material and technical

¹⁹⁰ Timothy W. Luke, ‘Neither Sustainable nor Development: Reconsidering Sustainability in Development’, *Sustainable Development* 13, no. 4 (October 2005): 228–38, <https://doi.org/10.1002/sd.284>.

¹⁹¹ Maria Kaika, “Don’t Call Me Resilient Again!”: The New Urban Agenda as Immunology ... or ... What Happens When Communities Refuse to Be Vaccinated with “Smart Cities” and Indicators’, *Environment and Urbanization* 29, no. 1 (April 2017): 89–102, <https://doi.org/10.1177/0956247816684763>.

processes necessitates a look beyond peacekeeping's spatial intervention as merely neutral and short-termed side-effects.

Focusing on material infrastructure positions infrastructure as method and object of analysis. As method,¹⁹² infrastructure reveals the connections and disruptions it produces in communities emerging from war. As object of analysis, infrastructure reveals the ideas and practices of peace operations. They are not only material things. Instead, infrastructure conveys paradigms of how peacekeeping, and peace as a consequence, is imagined. In line with Sheila Jasanoff's proposition described earlier in this chapter, these paradigms are stable – that is, they are a shared set of ideas and practices over a certain time period – but they are also evolving, which makes them possible, and meaningful, to study. The 'infrastructural imaginary' thus is the theory of change that links the ideas about what infrastructure can achieve to its practice of how peace is operationalized.

In addition, rather than looking at the formation of paradigms as an activity of the UN Secretariat back in New York, infrastructure building, and the analysis that precedes it, take place at various levels, including the micro-level of intervention. It allows me to study how ideas about societal change, the nature and causes of conflict and the transformation of conflict to peace can materialize on the ground. As the formation of ideas, plans and budgets, infrastructure also pinpoints larger transformative processes in institutions, like the United Nations, and within societies experiencing violent conflict. The paradigms of UN peacekeeping can be mission-specific, and emerge out of the interaction between different actors. Infrastructure projects, as the

¹⁹² Cf. Susan Leigh Star, 'The Ethnography of Infrastructure', *American Behavioral Scientist* 43, no. 3 (1 November 1999): 377–91, <https://doi.org/10.1177/00027649921955326>.

results of this interaction, therefore allow us insights into the international peacebuilding bureaucracy at large.

In view of the long history and ideological charge of infrastructure, such assumptions of *where* and *how* peace efforts ought to take place, and the very role of infrastructure in this process, merit further scrutiny. This dissertation suggests that the investigation of infrastructure proves highly productive to develop a deeper understanding of how societal transformation in conflict-affected societies at large is envisioned and implemented, therefore providing an analytical tool for the ‘infrastructural logics’ and ‘sociotechnical imaginaries’ that drive the international peacebuilding apparatus. Infrastructure as analytical device may help us render visible not only connections, but also politics, circulating ideas and ambitions, as they manifest in the built environment. Infrastructure as an object of planning, at last, continuously centers both governance as well as territoriality as they appear within peace operations. This socio-spatial focus reveals not only how power and politics manifest in space, but also sheds lights on the consequences for communities and, ultimately, their capacity to build peace.

Chapter 3 Infrastructure as Promise: Restoring ‘Normality’ in Cyprus

In the spring of 1964, Irish, Austrian, Canadian, Swedish, and Finish soldiers landed at the airport of Nicosia with their blue berets, the UN flag, and the UN Secretary-General’s order: “the prevention of bloodshed and violence and ... the restoration of normality in Cyprus.”¹⁹³ Just in March, the UN Security Council had unanimously voted into existence the United Nations Peacekeeping Force in Cyprus (UNFICYP), initially for three months.¹⁹⁴ Little did the New York-based diplomats know that their endeavor to keep peace would be one lasting more than half a century, and leaving a significant spatial imprint on the island’s landscape. Once deployed to the Mediterranean island, the blue berets soon became a visible institution across Cyprus. They engaged with the local population through a variety of projects, thereby contributing to humanitarian relief and, eventually, development and urbanization. As the American political scientist James A. Stegenga summed up UNFICYP’s activities in 1970:

the UN troops have done yeoman service on such a variety of technical assistance problems that one is tempted to suggest that the ideal peace force soldier would be a Scandinavian farm boy who had gone to the city, quit medical school, and spent a few years as a construction worker before becoming a labor union negotiator.¹⁹⁵

What this observation omits is the underlying motivation for such a diverse set of activities – namely, according to the UN, a ‘return to normal.’ How peacekeeping practice related to such

¹⁹³ UN Secretary-General U Thant in a message to UNFICYP, published in the UNFICYP’s *The Blue Beret* magazine’s first issue, 20 April 1964, 1.

¹⁹⁴ UN Doc, Resolution S/5575 (assigned resolution number S/RES/186 (1964)), 4 March 1964, para. 5.

¹⁹⁵ James A. Stegenga, ‘UN Peace-Keeping: The Cyprus Venture’, *Journal of Peace Research* 7, no. 1 (March 1970): 10, <https://doi.org/10.1177/002234337000700101>.

intention warrants a more detailed inquiry into the UN's early peace engagement, the ideas of peace pursued and the spatial imprint it left. If UNFICYP engaged in such a "variety of technical assistance problems," what factors and institutional logics shaped its intervention into the built environment in the pursuit of 'peace' – and ultimately the idea of peace itself?

If generally little attention has been given to the logics that govern 'the other things' peacekeepers do, this is even more so the case with regards to the first generation of peacekeeping. UN peace operations during the Cold War are commonly described as guided by clearly defined mandates of military interposition to maintain a ceasefire or peace accord between two belligerent parties, located in little populated border zones between two neighboring countries.¹⁹⁶ Yet little does this perspective consider, and even less credit, peace operations' various logistical, relational, and socio-spatial activities that pursue goals beyond the absence of violence, but state development or 'positive peace.' While the intervention in the post-independence civil wars of the Congo and Cyprus are clear outliers at the time, they have laid the groundwork for the comprehensive pursuit of peace through peace operations' various engagement beyond military activities.

This chapter historically situates peace operations infrastructure engagement. It sets up a series of recurring ideas, from 'development' to 'the urban' that the subsequent chapters will unpack further. I show in this chapter that peacekeepers have engaged with infrastructure as a vehicle for stabilization and societal transformation, and as a means to further peace, as early as the 1960s. My focus on planning practices and intervention into the built environment reveals how infrastructure was put to service for peace by the UN's blue helmets in the early years of

¹⁹⁶ Marrack Goulding, 'The Evolution of United Nations Peacekeeping', *International Affairs* 69, no. 3 (1993): 451–64, <https://doi.org/10.2307/2622309>; Richmond, *Maintaining Order, Making Peace*.

UNFICYP. Peacekeepers were often required to respond to humanitarian emergencies, yet their activities encompassed what can be considered part of a broader, longer-term ‘development’ portfolio with interventions that go beyond the immediate humanitarian need. They pursued economic growth, the state’s bureaucratic functioning, and modernization. UNFICYP was part of an alliance with the Cypriot government, the UN Development Program (UNDP) and other UN agencies that pursued large-scale infrastructure projects for resource extraction and, as Panayiota Pyla and Petros Phokaides have suggested, in support of a postcolonial, modern Cypriot nation-state.¹⁹⁷ Infrastructure meant a technical and scientific intervention. In the conflict context, it also constituted a neutral intervention. The quest for development became a way of managing social tension that existed on the island, parallel to the UN’s mediation efforts.

This chapter proposes infrastructure in conjunction with the intent and logic with which peace efforts relate to the built environment and the “promises” built therein. In their exploration of the meaning of infrastructure, Nikhil Anand, Akhil Gupta and Hannah Appel have suggested:

Material infrastructures, including roads and water pipes, electricity lines and ports, oil pipelines and sewage systems, are dense social, material, aesthetic, and political formations that are critical both to differentiated experiences of everyday life and to expectation of the future. They have long promised modernity, development, progress, and freedom to people all over the world.¹⁹⁸

Similarly, Penny Harvey and Hannah Knox have shown how road construction in Peru pursues a promise of transforming rural communities in connecting them, at greater speed, and integrating them into international trade, but that the very same engineering projects also bear a promise of

¹⁹⁷ Panayiota Pyla and Petros Phokaides, ‘An Island of Dams: Ethnic Conflict and Supra-National Claims in Cyprus’, in *Water, Technology and the Nation-State*, ed. Filippo Menga and Erik Swyngedouw (Earthscan, 2018), 115–30, https://296214fb-3882-4652-b49a-49af3c5216cd.filesusr.com/ugd/2b0b61_65a22c56947a4576bf884bfa12876833.pdf; Panayiota Pyla and Petros Phokaides, ‘Ambivalent Politics and Modernist Debates in Postcolonial Cyprus’, *The Journal of Architecture* 16, no. 6 (December 2011): 885–913, <https://doi.org/10.1080/13602365.2011.636994>.

¹⁹⁸ Anand, Gupta, and Appel, *The Promise of Infrastructure*, 3.

stability and domination over unruly terrain.¹⁹⁹ Indeed, as the ensemble of ‘public works’, infrastructures are a crucial material output and object of rural and urban planning that have played an important role in the development of the modern state.²⁰⁰ Infrastructure, as Stephen Graham and Simon Marvin have written, has been pursued as part of a “modern urban ideal”²⁰¹ that has significantly shaped policy-makers and experts’ intervention in urban and rural space, and the very organization of those spaces.

In pursuit of such promise, I posit that UNFICYP’s early activities in Cyprus, despite their both rural and urban location, paved the way for peacekeeping’s urban engagement. Infrastructure in UNFICYP was a crucial vehicle in the pursuit of ‘normalcy’ in Cyprus in order to achieve peace. UNFICYP conceived of ‘normalcy’ as urban. The ‘return to normality’ imposed an urban conception of living. UNFICYP therefore engaged urban planning practices to operationalize this urban normalcy as peace, and infrastructural provision being its primary medium. The establishment of urban services and utility connections in a segregated territory by UNFICYP during its first decade of peace operations foreshadows the national peace and development agenda that the UN would detail only several decades later.

I begin this chapter by presenting the context of the UN’s intervention in Cyprus, notably the organization’s experience in the civil war in Congo and the emerging self-understanding of peacekeepers in Cyprus as close to the people. With this background, I turn to analyze the peace

¹⁹⁹ Penny Harvey and Hannah Knox, ‘The Enchantments of Infrastructure’, *Mobilities* 7, no. 4 (1 November 2012): 521–36, <https://doi.org/10.1080/17450101.2012.718935>; Cf. Penelope Harvey and Hannah Knox, *Roads: An Anthropology of Infrastructure and Expertise*, 1 online resource vols, Expertise (Ithaca, N.Y.) (Ithaca, New York: Cornell University Press, 2015), <https://www.degruyter.com/doi/book/10.7591/9780801456466>.

²⁰⁰ Ferguson, *The Anti-Politics Machine*; Scott, *Seeing like a State: How Certain Schemes to Improve the Human Condition Have Failed*.

²⁰¹ Graham and Marvin, *Splintering Urbanism: Networked Infrastructures, Technological Mobilities and the Urban Condition*, 104, 91.

mission's employment of infrastructure in order to establish 'normality' – first in discourse, then in practice. The various ways of how the peacekeepers engaged with infrastructure, drawing on the various domains of planning, highlight the role and importance of infrastructure networks, public services and, increasingly, urban issues in the operation. The last section returns to the promise of infrastructure, suggesting the beginning of peace efforts' developmentalization and urbanization through infrastructure building.

3.1 Intervening in post-colonial civil war

3.1.1 From Congo to Cyprus

When the UN sent troops to Cyprus in 1964, their role was to keep Turkish and Greek Cypriots away from each other and to re-establish – however ill-defined – 'normal' life including those very points of connections that linked Turks and Greeks. Unlike previous UN peace operations of the Cold War era, UNFICYP was, after the UN Mission in Congo (ONUC), only the second mission to intervene in a civil war. As unique point of comparison, UNFICYP therefore drew important lessons from its Congolese precedent, while also recognizing the limits and very different baseline of the two newly independent countries. As Séverine Autesserre has highlighted, today ONUC has been generally forgotten and was considered a deviance and failure at the time, exposing peacekeepers to too much risk as they intervened in domestic politics and conflict.²⁰² Ultimately, the much longer UN involvement in Cyprus would

²⁰² Séverine Autesserre, *The Trouble With the Congo: Local Violence and the Failure of International Peacebuilding*, 2010, 36, <https://doi.org/10.7916/D8TM79X5>.

demonstrate the full extent of what a response to civil war could look like, inspired by a development logic that peacekeepers first piloted during ONUC.

Responding to the demise of state-provided services in the newly independent Congo, ONUC had been involved in large-scale infrastructure and development programs – and politics. The mission had provided health care, public service infrastructure and education in an effort to stabilize the country after the 1960s crisis, sponsoring agricultural courses and other “civilian efforts.”²⁰³ More than two thousand, mostly international, development experts and consultants served the mission.²⁰⁴ Infrastructure access, too, played an important role. When the UN Secretary-General proposed a Plan for National Reconciliation, he relied on the military peacekeepers to remove roadblocks in order to increase the ONUC-controlled territory and protect mining areas as well as the civilians in the towns of Katanga province.²⁰⁵ ONUC managed access to airports, radio and power stations in the capital and was therefore effectively in control of political communication. This power came with responsibility in a decisive moment of crisis in the Congo’s early years of independence, when in 1960, competing political fractions sought to forcefully seize the Leopoldville radio station.²⁰⁶ As ONUC found itself the referee of domestic Congolese politics, it was exposed to the power related by infrastructure, its governance, and its connective capacity to urban areas: ruling over the physical communications infrastructure decided who was able to hold power.²⁰⁷ ONUC, through its involvement in

²⁰³ House, *The U.N. in the Congo*.

²⁰⁴ Sally Morphet, ‘Organizing Civil Administration in Peace-Maintenance’, *Global Governance* 4, no. 1 (1998): 44.

²⁰⁵ Indarjit Rikhye, ‘The United Nations Operation in the Congo: Peacekeeping, Peacemaking and Peacebuilding’, in *Beyond Traditional Peacekeeping*, ed. Donald C. F. Daniel and Bradd C. Hayes (London: Palgrave Macmillan UK, 1995), 215, <https://doi.org/10.1007/978-1-349-23855-2>.

²⁰⁶ United Nations, *Yearbook of the United Nations 1960* (United Nations, 1960), <https://doi.org/10.18356/0e957b6f-en>.

²⁰⁷ Georges Abi-Saab, *The United Nations Operation in the Congo, 1960-1964* (Oxford; New York: Oxford University Press, 1978), <http://archive.org/details/unitednationsope0000abis>.

infrastructure management, could be the tipping point of political developments and determine political outcomes, challenging the UN's self-ascribed impartial role.

Many troops stationed in Cyprus had served in the tumultuous mission in the Congo. From Sweden alone, around 150 members of its contingents had served in ONUC. It is therefore no surprise that news from the Congo featured regularly in the UNFICYP's newspaper *The Blue Beret*, published by the Information Office of the UN force in Cyprus. Points of comparison between the two countries were a present topic in *The Blue Beret*,²⁰⁸ reflecting a readership – from UNFICYP commanders to the cooks – that had prior experience in central Africa. The UNFICYP chief engineer Lt. Col J.I. Cooney, for example, had completed two assignments with the UN in the Congo as military assistant to three Force Commanders before joining the Cyprus mission in 1967.²⁰⁹ Comparisons between Cyprus and Congo, including the engineer's perspective, thus centered around the post-colonial experience and the UN's involvement in civil war but also highlighted the stark differences between the two countries.

The state of public infrastructure in Cyprus was less dramatic than what peacekeepers had found in the Congo. Once in Cyprus, Major-General Indarjit Rikhye of the Indian Army reflected back on his ONUC experience, suggesting that the peacekeepers had faced an unprecedented situation of weak or nonexistent public service infrastructure in the Congo. The “complete breakdown in public services, communications, labor administration, social security, judiciary and supply”²¹⁰ caused by the exit of the Belgian colonial forces reshaped the mission's focus towards civilian needs and complicated peacekeeping logistics. In contrast, although the conflict between Greek

²⁰⁸ For example, an article about the UN's work in Congo published in the *Blue Beret* smoothly connects the UN's military mandate and the major efforts of “civil aid” that are provided in “every sector of the country's life.” Source: UNFICYP, ‘The United Nations at Work’, *Blue Beret*, October 20, 1964, 6. See also *Blue Beret*, April 21, 1965.

²⁰⁹ UNFICYP, *The Blue Beret*, July 12, 1967.

²¹⁰ Rikhye, ‘The United Nations Operation in the Congo: Peacekeeping, Peacemaking and Peacebuilding’, 217.

and Turkish Cypriots had left its mark on the built environment, public infrastructure was in better shape for UNFICYP. Indeed, colonial investments in Cyprus had been concentrated on the smaller territory of the island with the purpose of developing economic activity. British investment into a major irrigation infrastructure set up in the 1920s, for example, provided for much of the agricultural activity for decades to come and would serve as the spring board for future water infrastructure interventions by the World Bank and others.²¹¹

Paired with a different political and cultural context, Cyprus' transition into independence thus proceeded very differently and provided a contrasting, much more favorable, stage of intervention for the peacekeepers. Faced with the challenge of accessing the vast Congolese territory consisting of multiple, discrete socio-political communities, ONUC was spread thin. The conciseness and manageability of the Cypriot territory, in contrast, gave UNFICYP a head start to be present throughout the country. For Cyprus, the colonial legacy instituted favorable starting conditions which fueled the Mediterranean country's much better economic performance during the early years of UNFICYP. Advantageous economic conditions including the availability of skilled labor as well as an effective government policy allowed Cyprus to experience an average annual economic growth rate of 7 percent from independence in 1960 to 1972.²¹² Peacekeepers' perception of the Cypriot island, its more favorable climate, geography and cultural proximity, too, shaped a different mission outlook on its territory of intervention.

While ONUC might have been the first "significant exception to the norm of traditional peacekeeping operations" and early *peacebuilding* operation, including in urban areas,²¹³ it was a

²¹¹ Pyla and Phokaides, 'An Island of Dams: Ethnic Conflict and Supra-National Claims in Cyprus', 123.

²¹² Frederica M. Bunge, ed., *Cyprus, a Country Study* (Washington, D.C.: American University, 1979), 105, <https://catalog.hathitrust.org/Record/001304882>.<https://www.thredup.com/product/women-polyester-jenny-yoo-collection-blue-cocktail-dress/123994388>

²¹³ Diehl and Balas, *Peace Operations*, 45.

short-lived and insurmountably challenged endeavor. The UN troops withdraw after four years, just a few months after troops had set up their camps in Cyprus. Against this backdrop, UNFICYP found itself again faced with the dilemma of intervening in a civil war. As the UN Secretary-General U Thant summarized in September of 1964:

it may be properly concluded that the United Nations Force in Cyprus is in an unhappy position. A civil war is the worst possible situation in which a United Nations peace-keeping force can find itself. Strong reasons other than financial can be adduced in support of the position against maintain a United Nations force in Cyprus. But the overriding reason for extending UNFICYP beyond 26 September is the position of those directly concerned with the Cyprus problem, and many others, that, despite all handicaps, to withdraw UNFICYP at this time could lead to utter disaster in the Island.²¹⁴

As the reports of kidnappings, mass shootings, and further militarization in Cyprus rocked international headlines, indeed, that disaster would not only have been a military but, most of all, a humanitarian one.²¹⁵ UNFICYP thus was maintained against this previous, but limited, experience in civil war intervention and infrastructure management – influenced by the development-approach taken by the Congolese predecessor and yet finding a quite different set of conditions locally that favorably added to the promise of modernization and peace that UNFICYP pursued.

3.1.2 Peacekeepers: a ubiquitous presence

²¹⁴ UN Secretary-General, 'Report on the United Nations Operation in Cyprus (S/5950)' (UN, 10 September 1964), para. 229, <https://digitallibrary.un.org/record/538505>.

²¹⁵ Sam Pope Brewer, 'Cyprus Massacre by Greek Forces Charged by Turks: Minority Leader Tells U.N. Many Hostages Were Shot', *New York Times*, 1964; W. Granger Blair, 'All-Day Fighting Rages on Cyprus; Town Is Cut Off: Turkish Community Defies Greeks' Demands It Yield Fortifications in Paphos; Thant Issues Warning: He Calls Violence Senseless and Fears "Tragic" Results', *New York Times*, 1964; Lawrence Fellow, 'New Cyprus Tension Imperils Reopening of Roads', *New York Times*, 1964; W. Granger Blair, 'Greek Cypriotes Enlarging Force: Tens of Thousands, Voicing Allegiance to Makarios, Receive Foreign Arms', *New York Times*, 1964; Michael Wall, 'Cyprus - Island of Hate and Fear', *New York Times*, 1964, sec. Magazine.

Because UNFICYP intervened in a civil war and because fighting took place among the Cypriot community throughout the island, the arriving troops were stationed throughout the island, too. UNFICYP peacekeepers aimed to be visible as part of their military strategy. This very presence involved a different, more frequent, interaction for UNFICYP staff with the local population, and a new way of seeing and understanding problems and, possibly, solutions in Cyprus.

Peacekeepers were deployed to maintain close contact to the civilian population. Different from previous UN peacekeeping missions posted at countries' borders, the mission in Cyprus was present in both rural and urban communities. In fact,

UNFICYP's troops are everywhere – patrolling the streets and countryside, stationed in Nicosia's stores, even standing guard around hotel swimming pools ... UNFICYP is mixed thoroughly into Cypriot life. The blue berets and helmets are commonplace symbols of a ubiquitous UN presence.²¹⁶

The UNFICYP camps were usually located in cities, each the most important urban center in its respective military zones into which the island had been divided. Out of the zone headquarters, the lead troop-contributing country's contingent managed its territory, supported by other countries' contingents (see *fig. 3.1*).

²¹⁶ Stegenga, 'UN Peace-Keeping', 6.

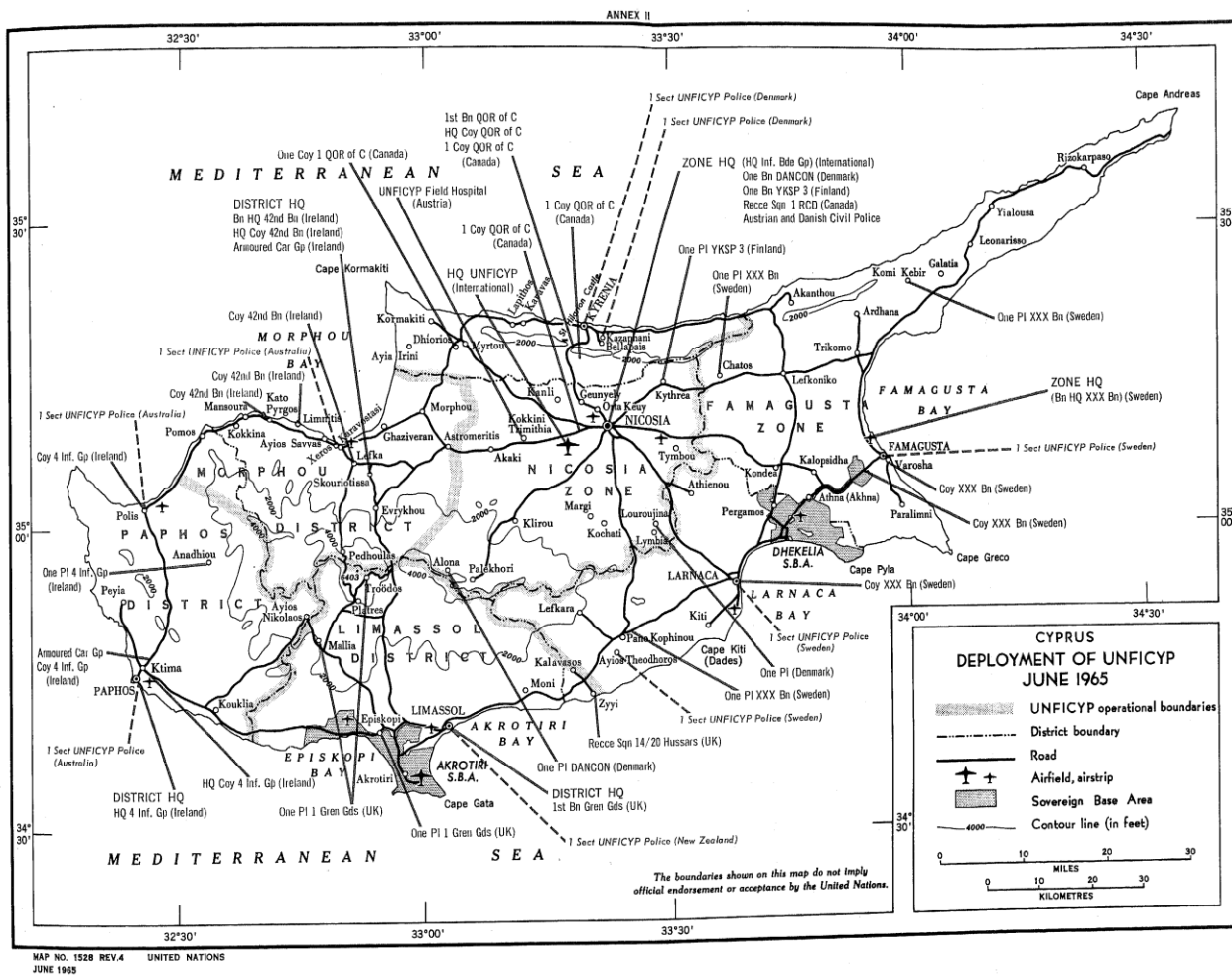


Figure 3.1. UNFICYP presence in Cyprus in June 1965. Source: United Nations 1965.

By the end of April 1964, 3218 military and police personnel had arrived in Cyprus, including contingents from Canada, Sweden, Ireland, Finland and Austria.²¹⁷ The leadership and political staff of UNFICYP further included a variety of nationalities beyond European personnel, from India, the US, Sri Lanka (then Ceylon), Chile, Argentina, Mexico, New Zealand, or Trinidad.²¹⁸ Each of the troop-contributing countries brought contingents to Cyprus that consisted of both

²¹⁷ UN Archives, S-0869-0002-09-00001, 'UNFICYP – Arrival of Contingents,' included in note by I.J. Rijhye, April 14, 1964.

²¹⁸ UN Archives, S-0869-0002-09-00001, 'Maning Table for United Nations Force in Cyprus,' March 30, 1964.

military personnel and support personnel – from cooks and medics, to engineers. This is because UNFICYP camps were set up and managed by the respective troop-contributing countries' contingents. For the camps outside of the capital-based headquarters, peacekeeping contingents were usually required to bring equipment along with them – including the cumbersome transportation of generators between camps.²¹⁹ It also meant establishing communication lines to connect the various sites of UNFICYP, thereby traversing rural areas in order to link urban centers.

With both basic engineering and military infantry training, the engineers were responsible for, primarily, the logistics around the military operation. In the British and Commonwealth countries' armies, the sappers and “members of the Corps of Royal Engineers” conducted all types of construction, fortification and repair projects. They operated and maintained the machinery necessary for those construction projects, and because of that were usually pulled in for infrastructure improvement works (see *fig. 3.2*), even outside the camps for the “civil community.”²²⁰

²¹⁹ UNFICYP, *The Blue Beret*, May 24, 1970.

²²⁰ Archives of the Royal Engineering Museum, 30/48/1, ‘62 Cyprus Support Squadron Royal Engineers Military Aid to the Civil Community 1976,’ <http://81.145.194.75/Details/archive/110028395>.

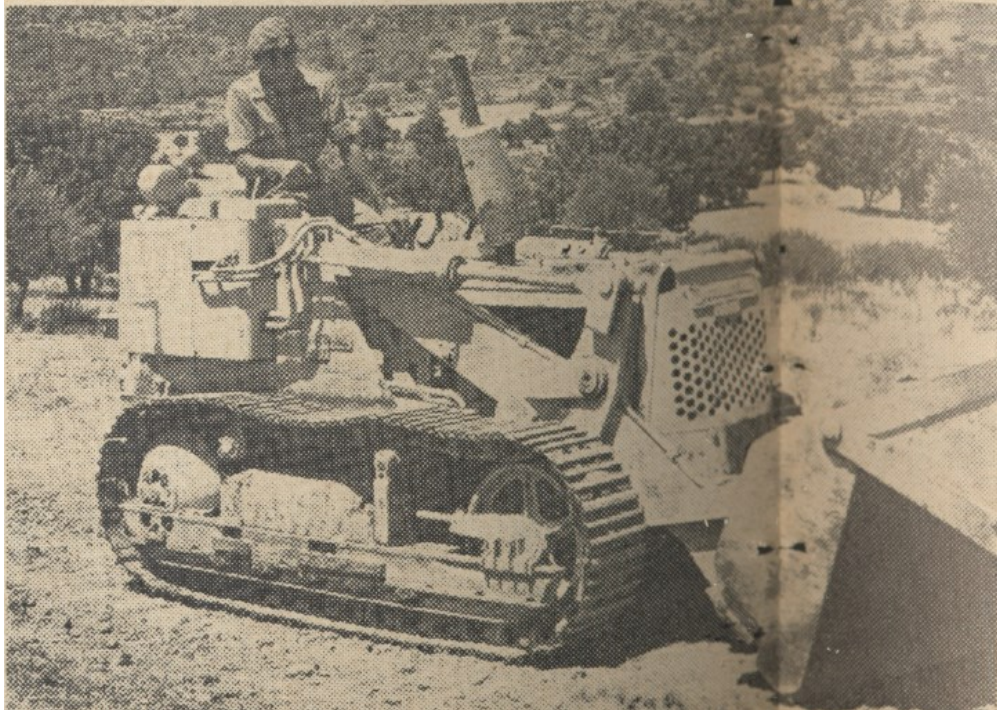


Figure 3.2. A military engineer and member of the British contingent's section of sappers conducted some road improvement works in 1967. Source: UNFICYP, The Blue Beret, August 30, 1967, 4.

In addition to the sappers, there were also other military units that had dedicated tasks related to infrastructure. Members of the Canadian Signal Squadron were deployed to Cyprus to be part of a joined British-Canadian Signal Troop. During the late 1960s and early 1970s, this around 80-people-strong unit managed all forms of communication, operating the radio and also installing and maintaining the hard infrastructure of phone lines across the country and between all UNFICYP camps (see *fig. 3.3*).²²¹ In doing so, they guaranteed open channels for information

²²¹ A website dedicated to the Royal Canadian Corps of Signals collects and publishes its military history, including memoir essays of military officers. For UNFICYP, the essays by LtCol Mac Savage and Will Norton shed light on the operations and daily experience of the Signal Corps in the 1960s and 70s before the island's division. RCSigs, '73 Canadian Signal Squadron support to UNFICYP - July 1974,' http://www.rcsigs.ca/index.php/73_Canadian_Signal_Squadron_support_to_UNFICYP_-_July_1974#Two_major_lessons, and '644 Signal Troop - UNFICYP 1973-74,' http://www.rcsigs.ca/index.php/644_Signal_Troop_-_UNFICYP_1973-74.

exchange, which was a crucial part in maintaining the state's administrative functions and contact between at times separated communities.



Figure 3.3. Canadian Signal Corps Linemen Servicing Telephone Lines between the Headquarters of the 1st Battalion, Canadian Guards, in Kyrenia, and Nicosia Zone Headquarters of UNFICYP in Nicosia. Source: UN Archives. #181028, March 1, 1965.

The pervasive military presence allowed the peacekeepers to develop a different knowledge of the place and community they were operating in. Canadian troops, for example, patrolled on foot in communities, appearing sufficiently spaced out in order to be perceived as individual, approachable persons, who could – too – view into people's single-story houses and gardens and observe Cypriot everyday life (see *fig. 3.4*). The exposure nurtured a curiosity for the Cypriot society, reflected in the frequent reporting about local language, traditions and cuisine – including descriptions of bread baking – in *The Blue Beret*.²²² Given the relatively few threats

²²² E.g. UNFICYP, *The Blue Beret*, May 11, 1964; *Blue Beret*, May 31, 1967.

directed against the peacekeepers, the troops could go on leisurely weekend beach trips, bring their fiancées and wives to Cyprus, and even celebrate weddings locally.



Figure 3.4. Canadian troops of UNFICYP street patrol in urban environments. Source: UNFICYP, *Blue Beret*, September 29, 1964.

The openness to local culture and way of life featured prominently in peacekeepers' self-understanding of their tasks and role. It was often with pride that the peacekeepers were reported to “adapt themselves to new surroundings” which allowed them to get “to know the personalities, places and routes in the area,” according to *The Blue Beret*'s August 1965 issue commenting on newly-installed troops in the Lefka district.²²³ Overall, the troops were highly visible in the public sphere and not always armed. Activities like filling sand bags would take place with no military protection or body armor, letting appear the young soldiers as approachable in the city (see *fig.* 3.5).

²²³ UNFICYP, *The Blue Beret*, August 18, 1965, 5.



Figure 3.5. Soldiers of the Danish contingent DANCON VI filled sandbags with sand. Source: UNFICYP, *Blue Beret*, April 12, 1967.

The view of proximity to the local population as a peacekeeping strategy remained unshattered even in the face of hostility. When UNFICYP soldiers found themselves caught up in community violence, the UN expanded the definition of peacekeepers' self-defense in order for them to be able to use force when hindered to execute the mandate.²²⁴ In view of the added barbed wire and armed guards protecting the UNFICYP camps and infrastructure, *The Blue Beret* titled that such addition “belies [the] friendly atmosphere” and “seems rather forbidding” but would be made up with a “warm and friendly atmosphere” inside.²²⁵ Indeed, the close and positive interaction with the community remained a priority to the peace operations, and the camps were, whenever possible, accessible through little fencing and few barriers (see *fig.* 3.6). Even further, young

²²⁴ Marrack Goulding, *Peacemonger* (Baltimore, MD: Johns Hopkins University Press, 2003), 47–48, <http://archive.org/details/peacemonger0000goul>.

²²⁵ UNFICYP, *The Blue Beret*, February 2, 1966, 3.

soldiers were tasked to conduct engineering works to set up and improve their amenities and appearance of the camps, incentivized by no less than the participation in the ‘camp beautification’ contest.²²⁶

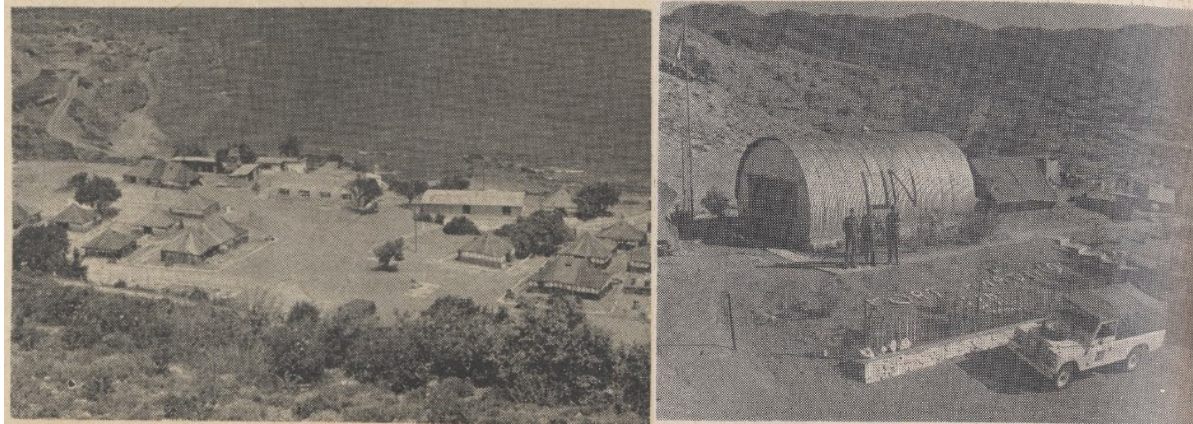


Figure 3.6. A UNFICYP camp ‘Kato Pyrgos’ occupied by Irish troops in 1967, on the left, and an observation post by UNFICYP in the Troodos mountains. Source: UNFICYP, Blue Beret, September 27, 1967; December 4, 1974.

Despite this, perhaps overly romantic, view of peacekeepers’ presence, the self-proclaimed cultural awareness and learning constituted one of the principal ways of conflict analysis and means to calibrate UNFICYP’s activities. The on-the-ground knowledge through patrols was supplemented by spatial surveillance and map making. Mapping constituted a tool to make sense of, and engage with, Cyprus and to understand, and manage, risks. Road accidents, the location of land mines, and other incidents were tracked through maps. A Danish soldier’s accidental fall into a well was attributed to it being “unmapped,” pointing to a new set of tasks for future more detailed cartography to prevent such accident.²²⁷ Difficulties accessing, or passing through, areas controlled by the National Guard, too, were managed with the help of “marked 1:50,000 scale

²²⁶ UNFICYP, *The Blue Beret*, April 3, 1968.

²²⁷ UNFICYP, *The Blue Beret*, December 22, 1965.

maps on traces showing agreed restricted areas and the roads through them which are open to UNFICYP” backed by markings on the terrain in correspondence to the maps.²²⁸

How UNFICYP inserted itself into the Cypriot landscape, both in responding to the type of conflict and through the day-to-day activities, mattered for the subsequent programmatic activities that became part of the peace operations. Highlighting the role of the socio-spatial dimension of setting-up UNFICYP shows how the daily lives of the peacekeepers were intertwined with the mission’s objectives, and how infrastructure featured in those: road accidents, touristic weekend trips to ancient ruins, and efforts to navigate the conflict all at once. It also shows how infrastructure intervention in communities were a key way of making connections between the foreign peacekeepers and the locals, positioning UNFICYP soldiers as friendly. The peacekeepers’ omnipresence on the Cypriot territory meant closer embeddedness in the local community and interaction with Cypriot civilians through the same shared infrastructure. This set-up shaped the peace operation, its spatial footprint and the types of projects in which the mission became involved. In the eye of the UNFICYP leadership at the time, the peacekeepers’ proximity allowed for closer integration in and understanding of the Cypriot public sphere, and ultimately a more adequate response to local needs.

²²⁸ UN Secretary-General, ‘Report of the Secretary-General on the United Nations Operation in Cyprus (S/6426)’ (UN, 10 June 1965), para. 19, <https://digitallibrary.un.org/record/605944>.

3.2 The pursuit of ‘normalcy’ in discourse

In Cyprus, the UN Security Council mandated the peacekeeping mission not only to halt the fighting among the islanders but – as the mediator was tasked – to settle the conflict “having in mind the well-being of the people of Cyprus as a whole and the preservation of international peace and security.”²²⁹ UNFICYP was to prevent violence between the communities, but also – a lesson learned from ONUC – to honor its neutrality and stay out of internal politics.²³⁰ A recurring theme, as per UNFICYP’s mandate, was the mission’s engagement to facilitate the return to normalcy. In fact, the return to normal conditions was already introduced in the very first UN Security Council resolution on the Cyprus Question, where the Council

recommends that the function of the Force should be, in the interest of preserving international peace and security, to use its best efforts to prevent a recurrence of fighting and, as necessary, to contribute to the maintenance and restoration of law and order and a return to normal conditions.²³¹

What ‘normal’ meant, however, remained largely undefined, containing both elements of pursuing an ex-ante situation, as well as a more pragmatic establishment of basic conditions of livelihood. The Secretary-General’s report of September 1964 is again very instructive in that sense, as the UN’s chief executive lauded UNFICYP’s “significant advances” while also providing a mixed assessment on achieving a return to normalcy:

As regards a return to normal conditions, there has also been vast improvement in the situation since the arrival of UNFICYP, although conditions in Cyprus today, without question, are still far from those prevailing in the island prior to the outbreak of communal fighting in December of last year.²³²

²²⁹ UN Security Council, ‘The Cyprus Question,’ *Resolution 186* [S/5575], March 4, 1964.

²³⁰ J. King Gordon, ‘The U. N. in Cyprus,’ *International Journal* 19, no. 3 (1964): 341–42.

²³¹ UN Security Council, ‘The Cyprus Question,’ *Resolution 186* [S/5575], March 4, 1964.

²³² UN Secretary-General, ‘Report on the United Nations Operation in Cyprus (S/5950)’, para. 216.

While this is the most explicit suggestion of ‘normal’ being the pre-civil war situation, other communications provide a glimpse at a much more subjective interpretation of normality. A ‘normal’ that was in the eye of the beholder left much leverage to the UN – both the Secretariat in New York and the mission staff locally – to interpret ‘normalcy’ freely in its activities. The reestablishment of ‘normalcy’ thus covered the diverse public engagement of UNFICYP.

As part of the guidelines from New York, the UN Secretariat had laid out various “interim aims of a comprehensive program of action for UNFICYP” in April 1964: the facilitation of return for refugees and rehabilitation of their housing, or the reinstallation of public utilities and services “to ensure normal living conditions for the Turkish Cypriot community in tense areas.”²³³

Indeed, in the early days of UNFICYP, the UN’s bureaucratic leadership in New York was very concerned about the communities’ separation and sought to maintain, or restore, the freedom of movement and connection between Greek and Turkish Cypriots, including the return to economic, “normal” life which was based on the communities’ integration and common usage of joined infrastructure.²³⁴ In turn, UNFICYP undertook an effort to translate and implement the directives from New York. Reports of the UN Secretary-General on the peace operations were shared and discussed locally in *The Blue Beret*, informing the peacekeepers about the guidelines from headquarters. Functioning infrastructure, it seemed, was *normal*.

The infrastructural efforts in the name of normalcy, the focus on roads, mobility, and connective capacity of infrastructure, were also immediately linked to the peace process. As the UN

Secretary-General reported in late 1964:

²³³ UN Secretary-General, ‘Report to the Security Council on the Operations of the United Nations Peace-Keeping Force in Cyprus (S/5671)’ (UN, 29 April 1964), pt. Annex 1, <https://digitallibrary.un.org/record/573107>.

²³⁴ Annex 1: Objectives and interim aims of a comprehensive programme of action for UNFICYP, in: UN Secretary-General, ‘Report to the Security Council on the Operations of the United Nations Peace-Keeping Force in Cyprus (S/5671)’.

During the period under review, UNFICYP searched diligently for ways of bringing about a return to normal conditions and the achievement of a more peaceful atmosphere. In addition to the numerous efforts pursued on particular issues in all regions and at all levels, it was felt, after the successful completion of the negotiations and arrangements for the reopening of the Kyrenia road and for the rotation of the Turkish contingent, that a further across-the-board effort should be made vis-a-vis both communities in order to review the most fundamental unresolved issues and to seek agreed solutions for them.²³⁵

After the initial momentum in the first months of UNFICYP, the “return to normal conditions” however stalled, as later reports noted, foreshadowing the anew outburst of violence and de facto split of the island. In 1973, the Secretary-General lamented a “tendency towards separate development of the economic life of the Turkish Cypriot” and regrettably slow progress “in extending essential public services and restoring others to Turkish Cypriots.”²³⁶ Despite those adverse conditions, UNFICYP, alone and in tandem with humanitarian and development organizations, pursued the quest for ‘normality’ throughout the mission’s first decade. UNFICYP was involved in most dimensions of urban services, including water and electricity, postage and communication, health, and education, as the next section will unpack.

3.3 The pursuit of ‘normalcy’ in practice: planning domains of intervention

UNFICYP’s activities were vigorously geared towards putting back into place what was considered ‘normalization.’ To re-establish a functioning society “UNFICYP and its civilian staff and technicians,” as James A. Stegenga noted the mission’s flexible work arrangements,

²³⁵ UN Secretary-General, ‘Report by the Secretary-General on the United Nations Operation in Cyprus : For the Period 10 September to 12 December 1964 (S/6102)’ (UN, 12 December 1964), para. 25, <https://digitallibrary.un.org/record/539124>.

²³⁶ UN Archives ‘Item S-0903-0002-02-00001 United Nations Peacekeeping Force in Cyprus (UNFICYP), UN Secretary-General, ‘Report on the United Nations Operation in Cyprus,’ 1 June 1973 to 1 December 1973, p. 18.

“have drafted proposals, conducted negotiations, and pitched in with manual labor to assist a badly dislocated and divided bicomunal country to get back on its feet again.”²³⁷ These efforts were successful in reestablishing public services including phone and postal communication; electricity and water were running again “through most of the island.”²³⁸ Since the little-defined idea of ‘normality’ provided leverage, in practice the peacekeepers were involved in a variety of tasks encompassing mission-support and community-support, and immediate ‘humanitarian’ relief and longer-term ‘development’ planning. This section will focus on the community projects. Led by the engineers and carpenters of the troop-contributing countries they cannot always be neatly separated from the operational support, the logistical set-up and maintenance of the military operation. Cyprus’ existent civil infrastructure constituted an important backdrop to the daily routines of the peace operations, and it was from there that peacekeepers engaged in a variety of activities to improve, maintain and eventually contribute to the (infrastructure) development for the local population.

Upon arrival, the UN sought a favorable ‘service agreement’ with the Cypriot government, to be able to rely, at privileged conditions, on the host country’s infrastructure. It also sought the government’s endorsement to generate its own infrastructure and utility provision as needed:

33. The Force shall have the right to the use of roads, bridges, canals and other waters, port facilities and airfields without the payment of dues, tolls or charges either by way of registration or otherwise, throughout Cyprus. ...

34. The Force shall have the right to the use of water, electricity and other public utilities at rates not less favorable to the Force than those to comparable consumers. The Government will, upon the request of the Commander, assist the Force in obtaining water, electricity and other utilities required, and in the case of interruption or threatened interruption of services, will give the same priority to the needs of the Force as to essential Government services. The Force shall have the right where necessary to

²³⁷ Stegenga, ‘UN Peace-Keeping’, 8.

²³⁸ Stegenga, 9.

generate, within the premises of the Force either on land or water, electricity for the use of the Force, and to transmit and distribute such electricity as required by the Force.²³⁹

Indeed, in practice peacekeepers improved the roads in order to have better transport condition or set up a system to manage their waste, and it could also benefit the Cypriots people.

Among the projects explicitly for the local population, UNFICYP engaged in humanitarian assistance that, beyond being an important end in itself, often provided entry points for longer-term projects. UNFICYP participated in, and sometimes led, humanitarian efforts, which the mission leadership considered “an important part of the duties.”²⁴⁰ Those tasks involved the supply of food and medicine, medical service, and supporting the communication between cut-off family members and friends as travel was severely hampered by the conflict.²⁴¹ UNFICYP’s medical team provided health care for children in rural communities, often combining therapeutic with preventive measures.²⁴² After the division of the country, the mission partnered with humanitarian agencies, notably the International Committee of the Red Cross, to conduct the exchange of prisoners, resettle civilians, and take charge of relief convoys, especially to communities enclaved after the Turkish invasion and refugee settlements in need of medical and food aid.²⁴³ Over the years, UNFICYP continued its emergency response: field hospitals treated Cypriots, UN helicopters delivered food, and troops handed out donated mattresses. In many situations, the lines between ‘humanitarian’ and ‘development’ activities blurred. Infrastructure

²³⁹ ‘Report of the Secretary-General on the Organization and Operation of the United Nations Peace-Keeping Force in Cyprus (S/5634)’, 31 March 1964, <https://undocs.org/en/S/5634>.

²⁴⁰ UNFICYP, *The Blue Beret*, April 27, 1964, 3.

²⁴¹ UN Secretary-General, ‘Report on the United Nations Operation in Cyprus : Addendum Covering the Developments from 10 to 15 September 1964 / by the Secretary-General (S/5950/Add.2)’ (UN, 15 September 1964), <https://digitallibrary.un.org/record/538513>.

²⁴² UNFICYP, *The Blue Beret*, February 9, 1966.

²⁴³ UNFICYP, *The Blue Beret*, December 4, 1974; UN Archives ‘Item S-0903-0012-07-00001’, Cables between UNFICYP and UN Secretariat, August 1974, Folder ‘Items-in-Cyprus - Miscellaneous - Refugees and Relief (Cables).

repair, construction, or transformation – even with a humanitarian purpose like the provision of drinking water – constituted significant undertakings that, influencing the flow and allocation of resources, left a longer-term spatial mark.

3.3.1 Utilities

UNFICYP positioned itself as a reliable provider of infrastructure services in situations of need. When water supply to villages was interrupted, UNFICYP restored the service. When, because of the fighting, communities were cut off from electricity or communication, UNFICYP would restore basic provision lines. In Ktima for example, part of today's southwestern coastal town of Paphos, UNFICYP troops in 1964 ensured functioning water supply, electricity, and telephone lines after the services were disrupted.²⁴⁴ In order to respond quickly, the mission would stay abreast of disturbances, conflict- or weather-induced, and facilitate repairs by government authorities in addition to doing repairs itself.²⁴⁵

Beyond the maintenance of public utilities, projects quickly took on a new, development dimension. In 1965, the UN Secretary-General reported the Cypriot Government's approval of a UNFICYP constructed water supply system for the enclaved Kokkina village as part of humanitarian access negotiations to end the embargo of civilian goods imposed by the Greek Cypriot authorities.²⁴⁶ A year into the mission, the restoration of public services – under altered geographical conditions of settlement – remained a key concern of the mission. For that,

²⁴⁴ UN Secretary-General, 'Report on the United Nations Operation in Cyprus (S/5950)', paras 184–86.

²⁴⁵ UN Secretary-General, 'Report on the United Nations Operation in Cyprus: For the Period 13 December 1964 to 10 March 1965 (S/6228)' (UN, 11 March 1965), para. 171, <https://digitallibrary.un.org/record/573131>.

²⁴⁶ UN Secretary-General, 'Report of the Secretary-General on the United Nations Operation in Cyprus (S/6426)', para. 151.

UNFICYP cooperated with the various development agencies and programs of the UN, including UNDP, the UN Food and Agriculture Organization (FAO), the International Labor Organization, the World Food Program, and UNESCO, and including a loan from the International Bank for Reconstruction and Development for a UNDP/FAO-led water feasibility project to design a sprinkler irrigation system for Morphou-Tylliria which had previously already been conducted in the Paphos district.²⁴⁷

Like water, electricity supply was part of the humanitarian assistance. Together with the ICRC, UNFICYP troops escorted workers to fix power lines. In other instances, UNFICYP troops themselves would repair the cables. Indicative of those subtle changes in roles are reported by the UN Secretary-General in his 1974 report: UNFICYP soldiers repaired a transformer in Pyroi as well as the power line from Nicosia to Kyrenia which had been broken at Kaimakli. Furthermore, UNFICYP utilized the broken infrastructure as a peg to bring together Greek and Turkish Cypriot technicians to plan further repairs for destroyed electricity lines between various settlements.²⁴⁸ In parallel to the rehabilitation, Cyprus' electricity grid developed rapidly within the first decade of the peace operations. Initially, electricity was only available in most towns and very few villages, and solar energy was widely used to heat water. By the late-1970s, the Electricity Authority of Cyprus had connected all towns and almost all villages, including those formally under Turkish rule, to the grid, fueled by the country's two thermal stations.²⁴⁹

3.3.2 Transportation and mobility

²⁴⁷ UN Archives 'Item S-0903-0002-02-00001 United Nations Peacekeeping Force in Cyprus (UNFICYP),' p. 18.

²⁴⁸ UN Archives 'Item S-0903-0002-03-00001 United Nations Peacekeeping Force in Cyprus (UNFICYP)'; Report of the Secretary-General pursuant to Security Council Resolution 361 (1974), S/11488, September 4, 1974.

²⁴⁹ Bunge, *Cyprus, a Country Study*, 138.

The return to normalcy was motivated by the peacekeepers' ability to perform their duty and the undesirability of a "no-mans-land" in between the communities emptied of shops along the Green Line.²⁵⁰ It was also motivated by the identified "hardship" especially for the Turkish Cypriot community, including "restrictions on the freedom of movement of civilians, economic restrictions, the unavailability of some essential public services, and the suffering of refugees."²⁵¹ The "freedom of movement" as motor of economic activity was therefore identified by the UN Secretary-General as "a convenient yard stick of political conditions on the island."²⁵² Given the island's demographic distribution, these political conditions manifested particularly in Nicosia, which was under close observation by the UN and subject to a strict regime of import and export controls at checkpoints, while also constituting the island's central transport node.

The Cypriot transport system saw some changes with the end of the colonial rule, and more with the advent of UNFICYP. Even though the country's infrastructure was generally deemed to be of overall acceptable quality,²⁵³ the roads did not necessarily accommodate the type and frequency of driving by the UN troops, which led to numerous accidents. UNFICYP was steadily occupied with analyzing, warning, and pleading among the mission to reduce the frequent, often fatal, road accidents involving UNFICYP personnel.²⁵⁴ It warned of the "subjective and "objective dangers," like the Cypriot climate, the maladapted vehicles, or the practice of driving on the

²⁵⁰ UN Secretary-General, 'Report of the Secretary-General on the United Nations Operation in Cyprus (S/6426)', para. 64.

²⁵¹ UN Secretary-General, para. 104.

²⁵² UN Secretary-General, para. 108.

²⁵³ Bunge, *Cyprus, a Country Study*, 132–38.

²⁵⁴ The issue of speeding, reports on road accidents, and educational material on road safety feature regularly in *The Blue Beret* of the early years of the mission. The issue of June 1, 1964, illustratively writes, with an increasingly dramatic undertone: "WHO WILL BE NEXT? WILL YOU? It would be the height of insanity if you, who have come here to try and stop people from killing each other, should yourselves be killed in a road accident. This can so easily happen to-day." (p. 1) as well as "Remember – The roads are wrongly cambered and in a bad state of repair. Roads are not built as racing circuits or speedway tracks. Death will result if accidents continue to increase. There is a military cemetery in Dhekelia. Make sure you are not buried there when UNFICYP leaves Cyprus...."

left.²⁵⁵ The risk emanating from the old infrastructure was a powerful push to repair potholes, widen the roads, and develop the road infrastructure, informed by the UNFICYP-mapped “black spots” where accidents had occurred.²⁵⁶ These efforts improved UNFICYP’s accessibility and safety, but of course, were also beneficial to civilians who traveled those roads as well. As the result of constant road improvement and densification – a four-lane highway between Nicosia and Limassol was built around 15 years into the mission – in the late 1970s, more than 8000 kilometers of highway covered the island.²⁵⁷ In fact, it has been suggested that in the early 1970s, the ration of motor vehicles per inhabitants was the highest in any developing country in the eastern Mediterranean.²⁵⁸

As automobile traffic rose, the use of the little-developed railroads decreased: it had become more complicated and increasingly unattractive to use in the conflict context. At last UNFICYP soldiers drove a locomotive in the Swedish sector – again, thanks to prior practice in the Congo²⁵⁹ – to connect the Cypriot Greek and Turkish communities, neither of whom would be available to provide a train driver to cross into enemy territory.²⁶⁰ Without a real purpose for UNFICYP and little use by Cypriots, the railroads eventually ceased to be used, substituted by the dense road and highway network that was more amenable to accommodate to changing geopolitics on the island (see *fig. 3.7*).

²⁵⁵ UNFICYP, *The Blue Beret*, August 26, 1965.

²⁵⁶ UNFICYP, *The Blue Beret*, June 1, 1964; January 27, 1965.

²⁵⁷ Bunge, *Cyprus, a Country Study*, 132.

²⁵⁸ Bunge, 134.

²⁵⁹ UNFICYP, *The Blue Beret*, June 30, 1964.

²⁶⁰ UNFICYP, *The Blue Beret*, June 1, 1964.

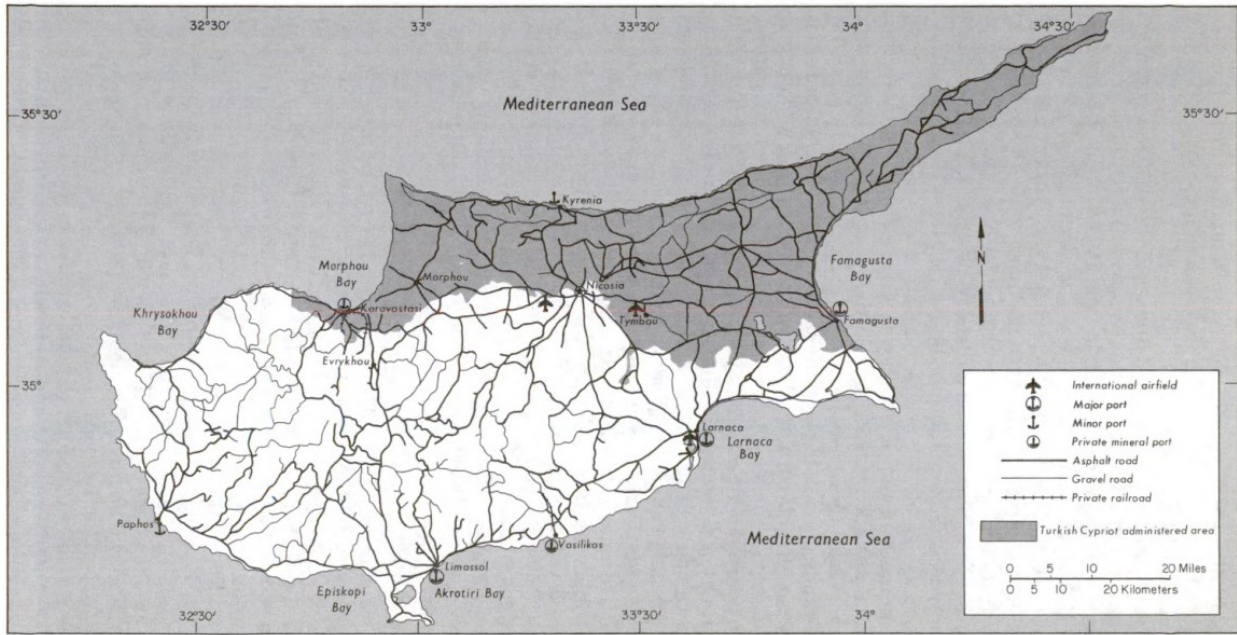


Figure 3.7. The transportation system in Cyprus in the early 1970s. Source: Bunge, Frederica M., ed. *Cyprus, a Country Study*. (Washington, D.C.: American University, 1979), 133.

The expansive road network was also connected to the airport and ports. As common in most peace operations, the country's largest airport served as the central logistics hub and administrative core of the mission. The three camps in the Cypriot capital out of which the UN operations were managed – Blue Beret Camp, Camp UNFICYP, and Cleneagles Camp – were adjacent to Nicosia's airport. At times, UNFICYP occupied the airport too, as during the 1974 crisis.²⁶¹ At last, connected to the transport network, and of significance for the economy and no less for military supply chains and humanitarian deliveries, was the port of Famagusta in the country's northeast (see *fig.* 3.8). It served as a major cargo and logistics hub, especially in the early years of UNFICYP until the second deepwater port in Limassol in southern Cyprus was

²⁶¹ UN Secretary-General, 'Further Report on Developments in Cyprus: By the Secretary-General (S/11353/Add.4)' (UN, 23 July 1974), <https://digitallibrary.un.org/record/484451>.

completed with the help of the World Bank, just before the island's division and Turkish occupation of Famagusta.²⁶²



Figure 3.8. The port of Famagusta in the 1970s, photo by Yutaga Nagata, UN. Source: Bunge, Frederica M., ed. Cyprus, a Country Study. (Washington, D.C.: American University, 1979), 141.

As part of its conflict monitoring, UNFICYP kept close track of all infrastructure development on the island. Among the peacekeepers' concerns was the infrastructure building by the conflicting parties to prepare military action, which was often intertwined with civilian infrastructure. UNFICYP thus began to oversee construction works, with the peacekeepers carrying out "an engineering survey" for each project built to ensure that newly constructed roads were indeed only for civilian and not military purposes.²⁶³ It quickly had to face the

²⁶² Bunge, *Cyprus, a Country Study*, 136.

²⁶³ UN Secretary-General, 'Report of the Secretary-General on the United Nations Operation in Cyprus (S/6426)', para. 75.

intricate nature of infrastructure works, where humanitarian goals not only intersected with development tasks, but were also intertwined with political and security-relevant matters.

3.3.3 Communication and public administration

Communications and public administration were considered a crucial task for UNFICYP to support in order to keep Cypriots in touch with each other, and to ensure a functioning state.

Among the tasks were the postal services, where UNFICYP substituted the national post, collecting and distributing mail, and the restoration of telephone lines, as the mission showed particular concern for a reliable communications network.²⁶⁴ UNFICYP furthermore facilitated the payment of social insurance benefits, that relied on inspectors escorted by peacekeepers.²⁶⁵

For UNFICYP, the disruption of public services was also a serious concern in view of longer-term, political developments. The UN Secretary-General noted in 1964, less than a year into the mission, that

[b]ecause of the very real practical and psychological factors which keep Greek and Turkish Cypriot Government employees apart, pending a final settlement, UNFICYP could make only a modest contribution to normalizing the public services. In dealing with those problems, however, UNFICYP found in a number of instances, among career civil servants of long standing, feelings of professional solidarity, mutual respect and personal friendliness towards colleagues of the other community with whom they had been out of touch since December 1963.²⁶⁶

In practice, however, civil servants could, or would, not traverse to the other side of Nicosia's Green Line to go to their office. For example, all ministries' headquarters were located in the

²⁶⁴ UN Secretary-General, 'Report on the United Nations Operation in Cyprus: For the Period 13 December 1964 to 10 March 1965 (S/6228)', paras 215–216.

²⁶⁵ UN Secretary-General, 'Report of the Secretary-General on the United Nations Operation in Cyprus (S/6426)', paras 157, 162.

²⁶⁶ UN Secretary-General, 'Report on the United Nations Operation in Cyprus (S/5950)', para. 107.

Greek Cypriot sector but the court archives of official records (including land deeds and mortgage records) were on the Turkish Cypriot side. The latter, as the UN Secretary-General discussed in one of his reports in 1964, created a host of problems related to land titles, leases, and payments. Therefore, to facilitate property transactions, UNFICYP – based out of its Nicosia offices – facilitated the inspection into books, and later moved on to provide office spaces for a temporary District Lands Office.²⁶⁷

UNFICYP also conducted surveys of the damage of public buildings (like the Cyprus Telecommunications Authority, the Public Works Department, Water Development Department, or the Forest Department) that would allow for an assessment and subsequent reconstruction and return to the normal functioning of the public administration within its respective offices.²⁶⁸ The contingents' carpenters and engineers also constructed classrooms for displaced children, completed with bamboo roofs against the sun and outside showers for the children's refreshment.²⁶⁹ Those projects rendered visible the state's presence and guaranteed its functioning.

3.3.4 Agriculture, land, and natural resources management

In addition to the involvement in public service delivery and administrative matters, UNFICYP became involved in industrial and agriculture-related issues, relying on good offices to mediate the disruptions that emerged from the separation. UN peacekeepers continuously pursued local

²⁶⁷ UN Secretary-General, paras 110–12.

²⁶⁸ UN Secretary-General, para. 153.

²⁶⁹ UN Doc, S/5764, 15 June 1964, par. 93. cited in Stegenga, 'UN Peace-Keeping', 10.

peace mediation efforts and trust-building – at times through, at times aside from, infrastructure planning. From a largely subsistence-centered farming, agriculture had developed increasingly commercial interest during the 1950s. Despite limited irrigation, the climate and also investments into water infrastructure stimulated the development of agricultural markets, bolstered by an increasing demand from the British and then, after independence, the UNFICYP troops for milk, meat, and wines.²⁷⁰

Given the prevalence of agricultural activity among Cypriots, UNFICYP was naturally drawn into tasks facilitating agricultural resource management and land. UNFICYP troops responded to events such as “long-standing friction between farmers of the two communities [in the Kalzvakia-Chatos area] over both grazing rights and illicit harvesting of crops:”²⁷¹ patrolling agricultural fields of adjoined Greek and Turkish Cypriot villages during harvest time, accompanying farmers as they tended to their fields, and mediating disputes over crops and rents. UNFICYP personnel, albeit apart from the UN’s official mediator for Cyprus, pursued its own mediation activities, investigation and de-escalation of incidents between the two communities, and “made major contributions in ‘nonmilitary’ areas.”²⁷²

UNFICYP also brought in experts and new technology to substitute conflict-induced lack of labor and equipment. In some regions, peacekeepers took over the responsibility for farms and cared for livestock and crops in the absence of the usual workforce.²⁷³ Those early, rather impromptu, activities were extended over the years through formal cooperation with

²⁷⁰ Bunge, *Cyprus, a Country Study*, 107f.

²⁷¹ UN Secretary-General, ‘Report of the Secretary-General on the United Nations Operation in Cyprus (S/6426)’, para. 81.

²⁷² James M. Boyd, ‘Cyprus: Episode in Peacekeeping’, *International Organization* 20, no. 1 (Winter 1966): 13, <https://doi.org/10.1017/S0020818300002721>.

²⁷³ UNFICYP, *The Blue Beret*, May 5, 1964, 4.

development agencies like UNDP and FAO that would provide technical aid – usually international experts and equipment – to improve irrigation and other agricultural issues.²⁷⁴ For example, the safety of displaced Greek or Turkish Cypriot farmers reaching and cultivating their fields was specifically a concern in accessing the many citrus orchards that had been left unattended due to the threat of intercommunal violence. In partnering with FAO, UNFICYP relied on the UN agency’s botanical expertise to determine the orchards’ state and maintenance needs and facilitated the irrigation and cultivation of the trees between farmers and paid laborers using mobile pumps in the absence of traditional, now embargoed, agricultural equipment.²⁷⁵

Similarly, UNFICYP assisted in the reopening of several mines and other industrial plants in the spring and summer of 1964. Mining’s overall importance decreased throughout UNFICYP’s presence as copper ore resources gradually exhausted and the island’s most important copper mines located in the western Nicosia district closed after the 1974 Turkish invasion. Instead, manufacturing grew in importance, stimulated by the government’s five-year plan that induced the rapid construction of industrial facilities, large-scale infrastructure, and urban and rural housing.²⁷⁶

3.3.5 Housing

Beyond UNFICYP’s facilitation of economic activities, often based on technical expertise in domains as varied as agriculture or property law, human settlement-related issues and the

²⁷⁴ UNFICYP, *The Blue Beret*, December 7, 1966.

²⁷⁵ UN Secretary-General, ‘Report on the United Nations Operation in Cyprus (S/5950)’, para. 163.

²⁷⁶ Bunge, *Cyprus, a Country Study*, 126, 130.

improvement of housing remained a most important issue in the face of conflict-induced displacement. Estimates suggested as many as 200,000 Cypriots during the 1960s had fled their homes and communities because of intercommunal violence and safety concerns and thousands of houses were destroyed or damaged.²⁷⁷ Enclaved communities cut off from public services, due to their untenable provisioning in the long run, were also gradually resettled by Cypriot authorities.

With the help of its aerial and ground photography capabilities, in part thanks to *The Blue Beret*'s editor and journalists, UNFICYP carried out evaluations of the housing damage in Cyprus as early as 1964.²⁷⁸ The surveyed property damage resulting from the fighting throughout the island was detailed in a report for the Government and community leaders. UNFICYP's spatial survey also served as a basis for early reconstruction tasks, as the UN Secretary-General reported in 1964, again drawing on the mission's very own in-house technical expertise: "an UNFICYP architect and military engineers planned and, with local help, built provisional matting roofs" for a refugee camp.²⁷⁹ The aerial and ground survey also informed UNFICYP to recommend a national housing plan that aimed

at rebuilding the destroyed housing and public buildings and also at improving housing especially in rural areas where the situation is described as rather critical regarding water, sanitary services and the quality of roofs and floors. The report further suggests the desirability of formulating a national housing rehabilitation programme.²⁸⁰

²⁷⁷ Pierre Oberling, *The Road to Bellapais: The Turkish Cypriot Exodus to Northern Cyprus* (Social Science Monographs, 1982), 127.

²⁷⁸ UNFICYP, *The Blue Beret*, June 15, 1964, 4.

²⁷⁹ UN Secretary-General, 'Report on the United Nations Operation in Cyprus (S/5950)', para. 179.

²⁸⁰ UN Secretary-General, paras 180–81.

UNFICYP's advocacy for a national housing plan to "be integrated with a social and economic development plan for Cyprus" was successful and echoed in the country's second Five-Year plan.²⁸¹

Rather than concentrating on the reconstruction of infrastructure destroyed by the war, however, UNFICYP noted the dire housing conditions that required an improvement from the status before the conflict – a 'building back better' in Cyprus. Linked to addressing the immediate housing needs was a sensitization, and recognition of the need, for larger land reform, tenure, and property rights and security, which *The Blue Beret* reported on in its 'UN Economic and Social Council news' section.²⁸² Throughout, land records remained an important conflict management occupation for UNFICYP given the large population movement and displacement, and the inaccessibility of government services including cadaster. The housing questions were thus intimately linked to UNFICYP ensuring the communication infrastructure – including postal services and payments systems – in order to prevent an escalation of land and housing-related conflicts.²⁸³

3.4 The rise of the urban, and ideas about peace

3.4.1 The pursuit of 'normalcy': a bridge to development

²⁸¹ UN Secretary-General, para. 181; Cyprus Planning Bureau. *The Second Five-Year Plan (1967– 1971)*. Nicosia: Printing Office of the Republic of Cyprus, n.d.

²⁸² UNFICYP, *The Blue Beret*, July 27, 1965, 5.

²⁸³ Un Secretary-General, 'Report by the Secretary-General on the United Nations Operation in Cyprus (S/7611)' (UN, 8 December 1966), <https://digitallibrary.un.org/record/523936>.

Beyond the good offices and infrastructural interventions to ‘return to normality,’ UNFICYP’s involvement and public service focus were understood as the basis for an economic development and modernization program. Rather than mere reconstruction, it aimed at increased connection and betterment based on technological progress. In 1965, the *Blue Beret* reported that an “Expert committee decides how modern science can assist developing countries,” including in domains of “housing and urban planning, natural resources and transportation”²⁸⁴ – good news for the troops and readers of the magazine in Cyprus as they engaged in a variety of activities of this ‘assistance.’

From the onset of UNFICYP, both humanitarian and development concerns stimulated the mission’s engagement in Cyprus that could be pursued through infrastructural logics. This is noteworthy since, by nature of its statutory set-up, UNFICYP could not committedly engage in long-term projects. Long-term planning was difficult because UNFICYP was initially foreseen only for 3 months, and subsequently renewed every quarter until it was renewed for 6 months at a time – still not a long timeframe for development projects – starting in June 1965. Evidently, such short financing time frames prohibited any longer-term planning of intervention.²⁸⁵ The partnerships with other UN agencies and programs were therefore crucial to address what UNFICYP had identified as some of the important building blocks of its support to the peace process.

The vague guidelines from the UN Secretariat allowed UNFICYP staff to unpack locally what the turn to ‘normality’ ought to entail. In 1964, the UN Secretary-General problematized the ideal of normalcy and the “very heavy responsibility without any precise definition of its general

²⁸⁴ UNFICYP, *The Blue Beret*, April 21, 1965.

²⁸⁵ Boyd, ‘Cyprus’, 16.

mandate”²⁸⁶ that UNFICYP faced. This gap between the legal base and practice applied to the use of force in particular, but also the ambiguous understanding of what a return to ‘normal’ condition would entail.²⁸⁷ Yet rather than a liability, vagueness allowed for discretionary flexibility to respond to local conditions and needs on the ground and let the peace operation be guided by socio-spatial surveys, real-time risk mapping, troops’ local interactions, and ad hoc conflict analysis – in fact, very much a planner’s approach.

UNFICYP’s activities featured a high degree of fluency between traditional emergency and development tasks, that often took place side-by-side, implemented by the same units and personnel. Rather than remaining the neutral interposing force that the UN had ascribed to UNFICYP after the ONUC-failure, insertions into issues like housing development, settlement, land tenure, and property rights suggested a political role for the peace operation. In fact, infrastructure construction and maintenance as the link between humanitarian and development-focused tasks accompanied the mission for decades, well beyond the 1960s. In 1992, UNFICYP explained the “two areas – economic and humanitarian” which had organizationally been combined under the UNFICYP ‘Humanitarian Section’ as follows:²⁸⁸

Within the economic tasks, the Section has the responsibility of supervising the farming of land within the Buffer Zone, in addition to problems related to electricity and sewage lines. Finally, construction and renovation projects are monitored and examined to ensure that they conform to building regulations within the Buffer Zone.

The Humanitarian Section tasks involve cooperating with the Cyprus Red Cross in the transfer of medical supplies. This Section also aids the delivery of mail between the two communities.

²⁸⁶ UN Secretary-General, ‘Report on the United Nations Operation in Cyprus (S/5950)’, para. 215.

²⁸⁷ UN Secretary-General, para. 218.

²⁸⁸ UNFICYP, *The Blue Beret*, June 1, 1992, 7.

Among this mix of tasks, the Section has built sports facilities and conducted human rights monitoring visits to prisons and psychiatric facilities.²⁸⁹ This variegated portfolio, which smoothly integrated ‘emergency’ and ‘long-term development’ workstreams, formalized a practice of community interventions that easily bridged short- to long-term concerns and intervened into the built environment with a development ambition for as long as the mission has existed.

3.4.2. *Setting the ‘urban’ scene*

In spite of the increasingly critical examination of the “modern urban infrastructural ideal” in scholarly circles in the 1960s,²⁹⁰ it was vividly pursued in practice. UN Peacekeeping was not spared from this long-time dominant paradigm of progress – on the contrary. The pursuit of infrastructure monopolies, bolstered by functioning bureaucracy, standardized technology and a network approach, was very much a modern ideal. The electricity grid that connected rural and urban communities materialized this vision, buttressed by UNFICYP’s pursuit of improvement and peace. And it was successful in practice at that, as the Secretary-General reported a few months into the peace operation:

there have been significant advances from the dire situation that existed when the Force arrived in Cyprus. This is reflected in such developments as much more freedom of movement on the roads and much less harassment on them; as the harvesting, with good results, thanks to the assistance of the Force; as in the lifting of the sieges of a number of

²⁸⁹ UNFICYP, *The Blue Beret*, June 1, 1992, 7.

²⁹⁰ Graham and Marvin, *Splintering Urbanism: Networked Infrastructures, Technological Mobilities and the Urban Condition*, 91.

Turkish communities; as in restoring the operation of public utility services; and as in the increased movement of essentials.²⁹¹

In light of the peace that the UN mission pursued, the UN's self-assessment was indeed rather favorable. The development that Cyprus witnessed, the rise of manufacturing and commercial agricultural production, the massive expansion of road infrastructure and personal vehicle-based mobility, and comprehensive electrification, paired with displacement-induced urbanization, led the way for a remarkably urban transformation of Cyprus in the presence of UNFICYP.

Peacekeeping presence, from town patrols and service works, to the troops' contribution to the local economy and availability of consumer goods, made the mission fuel the expansive urban environment. It, too, shaped the very nature of peacekeeping, situating peace operation for the first time within cities – and specifically in Nicosia after the 1974 division of the island.

3.5 Conclusion

The 'return to normalcy' in discourse matters, because it is linked to an urban ideal of peace pursued through peacekeepers' activities. It is linked to the idea of a city that functions well because it possesses infrastructure. Infrastructural efforts, aimed at connectivity, linked directly to the ways UNFICYP sought to resolve issues between the Greek and Turkish Cypriot communities, acting as a local-level, incident-based mediator and, eventually, contributing to peacebuilding. The various planning and construction activities that the blue helmets engaged in under the umbrella of 'restoring normality' provide testimony to the early developmentalization

²⁹¹ UN Secretary-General, 'Report on the United Nations Operation in Cyprus (S/5950)', para. 216.

of peace efforts, while also firmly setting an urban agenda for the UN's involvement in conflict zones – decades before urban issues became the centerpiece of peacekeeping attention. The pursuit of intercommunal peace was conditioned upon that developed, urban normality which could be achieved through the various infrastructure interventions.

Ironically, it is the 1974 crisis in Cyprus and the Turkish Cypriot declaration of independence that drastically altered the peacekeepers' spatial engagement, further removing the possibility of a return to 'normal.' Ten years into the mission, UNFICYP's operation suddenly faced – and was asked to reinforce – a military clear line division. Since then, peacekeepers have guarded the ensuing buffer zone, shifting the thematic and geographical focus of intervention. Murrack Goulding, at the time a British diplomat and later UN Under-Secretary-General, described how the geopolitical term spatialized:

Tragic though it was, the 1974 war left the UN force with an easier military task. No longer did it have to try to protect minority communities in enclaves and mixed villages all over the island. No longer did it have to keep the peace between, and with, irregular forces of the two sides who thought they could protect their communities more effectively than UNFICYP. Now UNFICYP's task was the traditional one of controlling a buffer zone between the front lines of two reasonably disciplined armies. In the divided city of Nicosia the zone was in places only three metres wide, which led to occasional incidents, some of them fatal.²⁹²

As infrastructure, the buffer zone created long-lasting facts on the ground, fault lines that would persist for decades to come and will – after sixty years of UNFICYP – speak to the legacy of peace operations' infrastructure. 'Normality' one might say, became the criteria of judging risk, the risk of violent confrontation, which ultimately led to the use of infrastructure as a way to

²⁹² Goulding, *Peacemonger*, 48.

disconnect, through a euphemistically-called ‘green line,’ communities that previously were aided by the very same UNFICYP to be reconnected.

While this chapter has focused primarily on the founding logics and practices of UNFICYP’s early years, the peace operations have obviously changed over the decades to reflect trends at headquarters and globally. Brigadier Michael Harbottle, who served as a Chief-of-Staff in UNFICYP between 1966 and 1968, and later became director of the Centre for International Peacebuilding, wrote together with Carl Grundy-Warr in 1991 that UNFICYP peacekeepers were doing “localized peace-building” due to their many socio-economic tasks²⁹³ – an understanding and framing that could only emerge in hindsight with a different, post-Cold War, terminology available. Furthermore, as has transpired throughout this chapter, also the course of the conflict determined the local infrastructure priorities and their adaptation. What remains from this glimpse into UNFICYP is the distinct narrative of ‘normalcy’ which has allowed peacekeeping to be interposing and mediating, fleeting and long-term, humanitarian and developmental, involved in a variety of social and spatial projects in pursuit of the peace promise of infrastructure, and covered up by an air of modern neutrality.

²⁹³ Bodleian Archive, Oxford University, Papers of military officers serving with the United Nations Peacekeeping Force in Cyprus (UNFICYP), 1963-1968, MS. Eng. c. 4731. ‘Soldiers Blue,’ *Geographical Magazine*, October 1991.

Chapter 4 Infrastructure as Risk: Managing Violence in Haiti

The Risk Assessment of the UN's Internal Audit Division for MINUSTAH – *la Mission des Nations Unies pour la stabilisation en Haïti* – was not very favorable in 2008. It had identified a variety of areas in which the mission faced “high risk” related to its performance and efficacy. For example, the “lack of coordination between the Engineering Section, Logistics Section and the Military Engineering Company may negatively impact the effectiveness and efficiency of engineering activities”, equally the “lack of project management capacity may result in the inefficient and fraudulent use of funds” and the “overlap of mandates with other UN agencies in the humanitarian and development coordination areas (OCHA and UNDP) could lead to inefficiency of operations and/or failure to address important areas.”²⁹⁴ The assessment highlighted the lack of project management, including inadequate property and facilities management, insufficient procurement practices, and safety risks for staff. In the big picture of things, however, the 37-page report captured only a fraction of what risk would come to mean for peacekeepers in Haiti, and to this new generation of so-called ‘stabilization missions.’

From its involvement in Nicosia in 1964 until its mandate in Haiti, UN peacekeeping had evolved remarkably, just as the international order had changed: From a mostly interposing and lightly – if at all – armed force during the bipolar Cold War, UN peacekeepers were increasingly sent into ongoing civil wars after 1989 in order to protect civilians. Not only did these new interventions render peacekeeping more dangerous, but it also drew the blue helmets

²⁹⁴ All three quotes from “Risk Assessment - United Nations Stabilization Mission in Haiti (MINUSTAH).” United Nations Office of Internal Oversight Services, February 11, 2008 (pp. 11, 17, 18).

increasingly into urban areas. Peacekeepers' intervention in civil wars had multiplied, and so did their failures to protect civilians and prevent mass violence, let alone contribute to 'peacebuilding' as the UN's new policy direction stipulated. In this moment of disenchantment, after more than a decade of liberal euphoria, and in the face of post-9/11 globalized terrorism, organized crime, and rising attention to global urbanization, the UN Security Council decided to send peacekeepers to Haiti.

MINUSTAH took sharp turns throughout its 13-year presence, often assuming a dizzying spiral of tasks and domains of activity. Faced with high levels of urban violence, including murders, armed robberies and pervasive sexual violence and child slavery,²⁹⁵ MINUSTAH engaged in active warfare in urban areas, implemented community projects in cities and the countryside, contributed to post-disaster logistics and conducted large-scale public works, in addition to the lengthy peacebuilding catalog of institution building, elections organization, human rights and rule of law support. MINUSTAH, with its multiple objectives, was a testing ground of sorts for a peacebuilding and stabilization approach that, at the time, was little-defined and extremely multifaceted, and often involved great physical and reputational damage for the peacekeepers, troop-contributing countries, and the UN at large.

Against the backdrop of the UN's expansive engagement, this chapter turns the infrastructural lens on MINUSTAH to analyze how infrastructure became a way to manage, mitigate and

²⁹⁵ Between 2007 and 2010, Haiti's homicide rate almost doubled to 10.2 persons per 100,000 inhabitants, with 75% of the violence occurring in Port-au-Prince ("Global Study on Homicide." Vienna: UN Office on Drugs and Crime, 2013, p. 17). Human trafficking and child slavery have been documented by scholars and journalists, especially in the aftermath of the 2010 earthquake (cf. Grams, Nicolette. "Island of Lost Children." *The Atlantic*, January 18, 2010. <https://www.theatlantic.com/magazine/archive/2010/01/island-of-lost-children/307876/>. Gupta, Jhumka, and Alpna Agrawal. "Chronic Aftershocks of an Earthquake on the Well-Being of Children in Haiti: Violence, Psychosocial Health and Slavery." *CMAJ: Canadian Medical Association Journal* 182, no. 18 (December 14, 2010): 1997–99. <https://doi.org/10.1503/cmaj.100526>).

contain, risk. A cursory glance at MINUSTAH's strategy suggests that urban community projects were key to the pursuit of peace in Haiti in the face of urban risks of poverty and gang violence. Infrastructure projects were consistently used to foster development, stabilization, and betterment, while also creating a positive relationship between peacekeepers and the community. In fact, as the UN policy analysis reveals, MINUSTAH's engagement in the urban slums of Port-au-Prince hinged on a causal logic in which development is the precondition for security. This assumption, and its translation into programs and projects by the UN and its partners, has since given rise to the standard integration of Quick-Impact Projects (QIPs) in peace operations' toolkit. MINUSTAH resorted to urban infrastructure construction as part of its response to instability in Haiti, similar to UNFICYP's spatial interventions in Cyprus in pursuit of a modern 'normal'.

Considering peace operations only as the pursuit of a modern promise, however, would fail to grapple with the significant changes in how peacekeeping operated, the issues it sought to address, and the way it framed peace and conflict. Therefore, rather than focusing on risk mitigation through infrastructure alone, this chapter suggests that risk, and risk management, entered into peacekeeping's infrastructural landscape in a double bind. "The purpose of infrastructure," Cymene Howe and colleagues have argued, "is to mitigate risk, yet it also introduces new risks."²⁹⁶ Indeed, as MINUSTAH pursued infrastructure projects to mitigate urban risk, it produced unintended, yet harmful, consequences.²⁹⁷ In MINUSTAH, the risk and

²⁹⁶ Cymene Howe et al., 'Paradoxical Infrastructures: Ruins, Retrofit, and Risk', *Science, Technology, & Human Values* 41, no. 3 (May 2016): 556, <https://doi.org/10.1177/0162243915620017>.

²⁹⁷ The notion of unintended consequences of social interventions has been discussed in sociology, and in humanitarian and development studies. Cf. Raymond Boudon, *The Unintended Consequences of Social Action* (New York: St. Martin's Press, 1982); Anderson, *Do No Harm*.

potential for violence embedded in peacekeeping's infrastructural interventions became apparent.

Over the duration of the peacekeeping mission, the understanding of where risk originates changed. For the first years of operation, risk was framed primarily as occurring outside the peacekeeping operation, outside of MINUSTAH, and impacting it: the country's political instability, violent attacks against MINUSTAH staff, natural hazards. After the 2010 earthquake and subsequent cholera outbreak, the UN's very own infrastructure moved into the center of attention, radically expanding the understanding of risk and its relation to infrastructure. Policymakers previously had given little attention to the peacekeepers' infrastructure, the bases, their sewage and waste pipes, not to mention their relation to and significance for the local community and for peacebuilding at large. The second phase of MINUSTAH, post-2010, is thus marked by the UN's excruciatingly slow recognition of the risk of infrastructural harm.

MINUSTAH constitutes a challenge to the 'promise of infrastructure.' The modalities of pursuing small-scale, punctual 'community violence reduction' projects, without substantial and community-led planning, without considering the social dimension of those interventions at large, and the – by design – uneven distribution of infrastructure as part of a military logic to 'win hearts and minds' highlight the haphazard nature of employing infrastructure projects as part of peace operations. Furthermore, the 2010 cholera outbreak caused by the flawed management of peacekeepers' own camp infrastructure underlined the harm that can emanate from peacekeeping infrastructure.

This recognition has set in motion a series of changes way beyond Haiti, marking the beginning of the UN's attention to peacekeeping's environmental 'footprint.' Risk – and risk management

– hence become an important parcel in the infrastructural imaginaries through which peace operations have come to understand and design their engagement in conflict zones. Beyond Haiti, risk as a framing device had several implications for peacekeeping practice at large. As it broke with infrastructure as a promise, it also paved the way for peacekeeping to evolve towards more self-consciousness, an expanded understanding of what constitutes infrastructure in the peacekeeping context and how peacekeepers are linked to their environment, and the rise of what will become ‘environmental management’ – the topic of the subsequent chapter.

4.1 Urban risks as peace risks

4.1.1 Urban risk as international security threat

The UN Security Council established MINUSTAH on April 30, 2004, after the ousting of Haiti’s President Jean-Bertrand Aristide during a period of intense unrest and gang-implicated political violence in the country’s capital and beyond. The mission was founded shortly after the equally UN Security Council-authorized Multinational Interim Force in Haiti, which had been mandated for a brief period in 2004 to protect the population against gang violence and “prevent chaos in Haiti.”²⁹⁸ Following the UN Security Council’s Resolution 1542, MINUSTAH was deployed on June 1 to improve security and stability, and to contribute to democratization and human rights. The UN peacekeeping force that landed in Port-au-Prince in mid-2004 was to ramp up the

²⁹⁸ Eduardo Aldunate, ‘Peace Operations: On the Importance of Perceiving versus Just Seeing’, in *Fixing Haiti: MINUSTAH and Beyond*, ed. Jorge Heine and Andrew S. Thompson (Tokyo: United Nations University Press, 2011), 127.

international presence and help prepare the grounds for national elections as a new start for the country. MINUSTAH was the first mission to carry ‘stabilization’ in its name – although it remained unclear what motivated this shift or what it signified.²⁹⁹

When the UN Security Council created MINUSTAH, it considered domestic events, “the existence of challenges to the political, social and economic stability of Haiti” and “determin[ed] that the situation in Haiti continues to constitute a threat to international peace and security in the region.”³⁰⁰ Urban crime and gang violence had been a rather unknown subject for the UN and would typically have been a national problem at best. For UN peacekeeping, subject to international law, to tackle it through what is commonly called a UN Charter ‘Chapter VII’ intervention, UN bureaucrats and diplomats needed to reframe the urban issues in international terms. Moreover, given the contested nature of that type of intervention, which authorized the use of force beyond self-defense, it required some concessions among the negotiating Security Council members.³⁰¹ In the diplomatic consensus-building, managing urban violence in Port-au-Prince became the necessary step towards making progress on MINUSTAH’s initial mandate to organize elections and establish a government.

In practice, as many analysts have pointed out, the mission was indeed immediately confronted with a, for UN operations, unseen level of urban warfare and gang violence as well as pervasive

²⁹⁹ The High Panel on Peace Operations remarks this gap in its report and suggests further clarification (UN Doc, A/70/95-S/2015/446, 44.)

³⁰⁰ UN Doc, Resolution S/RES/ 1542 (2004), 30 April 2005.

³⁰¹ Bri Kouri Nouvel Gaye et al., ‘Submission to the United Nations Universal Periodic Review: Haiti’s Renewal of MINUSTAH’s Mandate in Violation of the Human Rights of the Haitian People’, accessed 27 October 2021, https://doi.org/10.1163/2210-7975_HRD-5555-2015006; ‘Brazil’s Participation in MINUSTAH (2004-2017)’ (Rio de Janeiro, Brazil: Igarape Institute, 2018), <https://igarape.org.br/wp-content/uploads/2018/03/Brazils-Participation-in-MINUSTAH-2004-2017.pdf>.

poverty.³⁰² By the time MINUSTAH was operational, Haiti had experienced two decades of rapid population growth and urbanization, tripling Port-au-Prince's inhabitants. At the same time, around half of Haitians lived in extreme poverty and lacked access to basic infrastructure, services, and employment opportunities. In contrast to rural Haiti, the rapid changes in cities, and especially the capital region, resulted in a lack of traditional community-based social cohesion. The UN Office on Drugs and Crime noted that 75% of homicides occurred in the capital,³⁰³ and 58 percent of Port-au-Prince's population felt unsafe most of the time, in contrast to 15 percent in rural areas.³⁰⁴ The loss of social ties and pervasive insecurity added to the prevalent poverty and inequality among urban Haitians. These structural challenges were further complicated by institutional instability after decades of autocratic rule, again especially perceptible in urban Port-au-Prince as the center of political power.

Internationally, diplomatic circles and development institutions had rather recently begun to focus on cities. The challenges of urban settlement were perceived globally, but it was especially in relation to the developing world that the narrative of “exploding cities” as a security risk became ever more prominent.³⁰⁵ The 1996 *Istanbul Declaration on Human Settlements* produced by Habitat II, the second United Nations Conference on Human Settlement, had stressed safety

³⁰² Jean-Marie Guéhenno, ‘HAITI: The Difficulty of Helping Others’, in *The Fog of Peace: A Memoir of International Peacekeeping in the 21st Century* (Brookings Institution Press, 2015), 261f., <https://www-jstor-org.libproxy.mit.edu/stable/pdf/10.7864/j.ctt7zsvvr.14.pdf?refreqid=excelsior%3A36fa2c53897c6de2367e0af94e5d0658>; Pingeot, ‘United Nations Peace Operations as International Practices’.

³⁰³ UNODC, ‘Global Study on Homicide 2013’ (March 2014): 17, https://www.unodc.org/documents/gsh/pdfs/2014_GLOBAL_HOMICIDE_BOOK_web.pdf.

³⁰⁴ Dorte Verner and Willy Egset, ‘Social Resilience and State Fragility in Haiti, A Country Social Analysis’ (Washington, D.C.: World Bank, 27 April 2006), <https://documents1.worldbank.org/curated/en/533491468257084108/pdf/360690HT.pdf>.

³⁰⁵ Eugene Linden, ‘The Exploding Cities of the Developing World’, *Foreign Affairs* (New York: Council on Foreign Relations NY, February 1996), 214283741; 01135335; 02655662, ABI/INFORM Collection, <https://doi.org/10.2307/20047467>.

and acknowledged the interrelated nature of peace and development.³⁰⁶ Robert Muggah, co-founder of the Rio de Janeiro-based Igarapé Institute, a human rights and security think-tank, linked the emergence of ‘stabilization’ in peacekeeping with the “growing alarm over fragile states and cities,” including the threat of organized, criminal violence.³⁰⁷ The first World Urban Forum held in Nairobi by UN-Habitat in 2002 drew attention to “the urbanization of poverty.”³⁰⁸ The second World Urban Forum two years later already elaborated on the role of municipal authorities in managing risk and conflict, and pursuing peacebuilding.

Decentralization and the empowerment of local authorities was a topic of extensive discussions. When human settlements fall into crisis, through conflict, or because of disasters, institutions across the board suffer. Peace-building and recovery in post-crisis environs is a process in which the roles and responsibilities of various actors at all levels need to be clearly defined. Social inclusion, transparency and accountability formulate the basis for building trust and a sense of ownership in society as a whole. The starting point is the legal and policy framework, followed by strategic leadership and planning, operational management, and service delivery within local authorities, and “governance links” to the community. But as stated by one of the speakers, decentralization is not just about shifting power and resources from the centre to the governorate and municipal levels; it is about the public interest, which is particularly important in the peace-building and post-crisis reconstruction process.

A critical observation made during the open discussion was not to create artificial barriers between natural and human-made disasters, because the one often influences the other. Disaster risk reduction, peace-building, and conflict prevention are, therefore, as important before, during and after a disaster.³⁰⁹

The conference’s final report formally acknowledged peace, conflict and disaster risk as part of the key urban concerns, almost premediating MINUSTAH’s evolution. Pervasive poverty in

³⁰⁶ Habitat II, ‘Report of the United Nations Conference on Human Settlements (HABITAT II), Istanbul’ (United Nations, 3 June 1996), <https://www.tandfonline.com/doi/full/10.1080/10261133.1993.9673888>.

³⁰⁷ Robert Muggah, ‘The United Nations Turns to Stabilization’, *IPI Global Observatory* (blog), 5 December 2014, <https://theglobalobservatory.org/2014/12/united-nations-peacekeeping-peacebuilding-stabilization/>.

³⁰⁸ UN-Habitat, ‘Press Release: First Ever World Urban Forum Begins in Nairobi’, 30 April 2002, <https://www.un.org/press/en/2002/hab180.doc.htm>.

³⁰⁹ UN-Habitat, ‘Report of the Second Session of the World Urban Forum’ (Barcelona, September 2004), 42, https://mirror.unhabitat.org/downloads/docs/3065_91300_WUF-FINAL_Report.pdf.

urban slums became a particular point of attention as the global challenge of the post-Cold War order.³¹⁰

Risk, according to the works of Ulrich Beck and Anthony Giddens, is a projection by society, especially powerful elites, based on capital-driven estimations of future harm.³¹¹ In Haiti, Beck and Giddens' description of risk is understood to take place in forms of urban and environmental risk, the former especially perpetuated through poverty and gang-related violence. The meaning, making and mitigation of risk took place in the interaction between international and local, between MINUSTAH and Haitians. Because risk is constructed, its meaning could evolve over the duration of the mission. From the initial focus on urban violence and poverty, the mission was later faced with environmental risks to public health and an expansion of the understanding of violence – which came to conceptually resonate with “infrastructural violence,” defined by Dennis Rodgers and Bruce O’Neill as the “socially harmful effects derive[d] from infrastructure's limitations and omissions rather than its direct consequences.”³¹²

For the first years of the mission, the UN saw poverty and gang-related violence as the key perils on the way towards a successful peacekeeping mission, the population’s wellbeing and the country’s future: “While security challenges continue to hamper normal economic activities and effective humanitarian and development assistance, the limited economic opportunities that exist exacerbate the risk of violence and provide a motive for criminal activity,” the UN Secretary-General wrote in his 2006 report on MINUSTAH.³¹³ Similarly, a 2005 Security Council

³¹⁰ Davis, *Planet of Slums*.

³¹¹ Ulrich Beck, *Risk Society: Towards a New Modernity*, trans. Mark Ritter (London; Newbury Park, Calif.: Sage Publications, 1992); Anthony Giddens, ‘Risk and Responsibility’, *The Modern Law Review* 62, no. 1 (1999): 1–10, <https://doi.org/10.1111/1468-2230.00188>; Giddens, *The Consequences of Modernity*.

³¹² Rodgers and O’Neill, ‘Infrastructural Violence’, 407.

³¹³ UN Doc, S/2006/60, Report of the Secretary-General on the United Nations Stabilization Mission in Haiti, 2 February 2006, para. 50.

resolution extending MINUSTAH’s mandate emphasized “pervasive poverty [as] an important root cause of unrest in Haiti.” The duality of economic and political drivers of urban violence, making it an overall intricate subject, was also highlighted in this UN DDR Resource Center’s description of Haiti’s gangs as

complex and often confusing. There [was] a multiplicity of independent and yet interlinked armed groups that operate[d] in a dynamic political and economic environment, obeying the tendency of pay master of the day. Their allegiance, objectives, composition, and strength [were] based on their financial resources and sponsors [...] Few possess[ed] a clear chain of command or a defined political agenda.³¹⁴

To simplify matters, from the Security Council to MINUSTAH staff on the ground, population groups “at-risk,” especially urban youth, became a frequent designation as the main target group of UN civilian, social programming.³¹⁵

The specific urban understanding of risk was also subject of the World Bank’s 2006 report on Haiti, highlighting its wider political and security implications: “violence and insecurity in Port-au-Prince’s slums in particular have undermined the political process, fuelled conflict, and negatively affected development and reconstruction efforts.”³¹⁶ This is parallel to the understanding of risk in disaster studies, where urban risk has been described as “constantly and rapidly evolving, characterized by increasing complexity and creeping accumulation ... over time, directly or indirectly related to broader external processes at a range of scales.”³¹⁷ Similarly to Beck and Giddens, Mark Pelling also noted risk as “an outcome of the political interests and

³¹⁴ Cited in Guy Hammond, ‘Saving Port-Au-Prince: United Nations Efforts To Protect Civilians In Haiti In 2006–2007 - Haiti’ (Stimson Center, June 2012), 20, <https://reliefweb.int/report/haiti/saving-port-au-prince-united-nations-efforts-protect-civilians-haiti-2006%E2%80%932007>.

³¹⁵ UN Doc, S/RES/1702 (2006); DDR Section, Office of Rule of Law and Security Institutions, UN Department of Peace Operations, ‘DDR - Community Violence Reduction: Creating Space for Peace’, accessed 10 December 2021, <https://peacekeeping.un.org/sites/default/files/ddr-and-cvr-creating-space-for-peace.pdf>.

³¹⁶ Verner and Egset, ‘Social Resilience and State Fragility in Haiti, A Country Social Analysis’, viii.

³¹⁷ Patricia Zweig and Robyn Pharoah, ‘Unique in Their Complexity: Conceptualising Everyday Risk in Urban Communities in the Western Cape, South Africa’, *International Journal of Disaster Risk Reduction*, Africa’s Urban Risk and Resilience, 26 (1 December 2017): 51–56, <https://doi.org/10.1016/j.ijdr.2017.09.042>.

struggles over power that shape the urban environment and society.”³¹⁸ To understand where and how risk is located in the city, he therefore argues that we need to consider both the material and discursive forms of power that act in the city.³¹⁹

MINUSTAH’s assessment of urban poverty and crime as critical risk factors for peace, fueled by both local observation and international discourse, framed the poor and densely populated parts of Port-au-Prince as a matter of national and international security. Most remarkable is the strong focus on Cité Soleil, one of the poorest and violence-affected neighborhoods of Port-au-Prince, as the embodiment of Haiti’s overall problems. As Eduardo Aldunate, Deputy Force Commander of MINUSTAH, poignantly recalled: “I moved my office furniture around so that my desk faced the sea. Now, as it turned out, I had a view of the troubled place that would demand so much attention and cause so many worries: Cité Soleil.”³²⁰ He further described:

Cité Soleil is bounded by Route #1 on the east, the sea on the west, and the Bois Neuf and Drouillard neighborhoods in the north and south respectively. It is ironic that this area has the highest levels of violence in Haiti, even though it is right next to Shodecosa, the country’s leading industrial park. Cité Soleil is no more than 5 km long from the north to south; it is 4 km at its widest point ... The land is marshy, and there is neither electricity or potable water. During my posting, the absence of the state there was complete. The strongest criminal gangs fought constantly among themselves for turf ... Besides an utter lack of any state presence, this area suffers from severe unemployment. There is nothing to help people improve their lives ... No one thinks that the *favelas* in Rio de Janeiro are an accurate indication of security in Brazil as a whole. Yet Cité Soleil is assumed to represent the security level of Haiti as a whole.³²¹

³¹⁸ Mark Pelling, *The Vulnerability of Cities: Natural Disasters and Social Resilience* (London; Sterling, VA: Earthscan Publications, 2003), 4, <https://lib.mit.edu/record/cat00916a/mit.001157348>.

³¹⁹ Pelling, 4.

³²⁰ Eduardo Aldunate, *Backpacks Full of Hope: The UN Mission in Haiti* (Waterloo: Wilfrid Laurier University Press, 2010), 38, <http://archive.org/details/backpacksfullofh00edua>.

³²¹ Aldunate, 110.

The Chilean Army officer's memoir illustrates the distinct emphasis on poverty and infrastructural gaps in the urban zone, often singularly focused on the 300,000 inhabitants-strong municipality.³²²

This perception of UN staff on the ground was shared by colleagues in New York. A 2006 review of ongoing peacekeeping operations by the Department of Peacekeeping Operations stipulated as the principal indicator for security and stability and Haiti that “sensitive locations, such as Cité Soleil and Bel-Air, are accessible to humanitarian and development organizations, all roads are open with complete freedom of movement without armed escort.”³²³ UN Secretary-General Ban Ki-Moon, in a joint press conference with Haitian President René Préval, too, reminded the assembled press corps that “MINUSTAH [was] here to create the necessary condition for Haitian authorities and international donors to implement the national strategy for the poorest urban areas.”³²⁴

Urban risk, compounding poverty and violence, then became defined as a threat to peace and security, globally. With a focus on non-state actors, Diane E. Davis has advanced our understanding of the transnational dimension of urban violence, driven by global capital and political struggle, and its essential challenge to national sovereignty.³²⁵ For UN peacekeeping, this meant that in order to achieve national-level democratic peace, the urban gang problem in

³²² Population data based on a 2015 estimate of adults living in Cité Soleil by the Institut Haitien de Statistique et d'Informatique (*Population totale, de 18 ans et plus – Menages et Densities estimes en 2015*, March 2015).

³²³ UN Archives, S-1953-0011-0001-00002, “Note to Mr. Nambiar, 2006 Compact - Assessment Performance,” Jean-Marie Guehenno, Department of Peacekeeping Operations (DPKO), 23 March 2007.

³²⁴ UN Archives, S-1942-0040-0009-00003, “Discourse of UN Secretary General at joint press conference with President of Haiti, Palais National, Port-au-Prince, Haiti,” 1 August 2007.

³²⁵ Diane E. Davis, ‘Non-State Armed Actors, New Imagined Communities, and Shifting Patterns of Sovereignty and Insecurity in the Modern World’, *Contemporary Security Policy* 30, no. 2 (1 August 2009): 221–45, <https://doi.org/10.1080/13523260903059757>.

the townships of Port-au-Prince needed to be resolved first.³²⁶ Parallel to the start of MINUSTAH, the US Army War College asserted in 2005, that “the new urban insurgency” constituted a “challenge to state sovereignty.”³²⁷ Globally, the phenomenon was noted as a “proliferation of militias and armed groups ... along with political disenfranchisement and urbanization.”³²⁸ Additionally, the rise of the ‘protection of civilians,’ the ‘right to protect’ and an expanding human rights agenda, further facilitated the framing of inter-personal violence as an international issue. Peacekeepers thus responded to poverty-induced urban conflict perpetrated by non-state armed actors that challenged the state and therefore the contemporary international sovereign order. In response to Haiti’s ‘urban problems’, MINUSTAH was understood as a crucial vehicle for urban development, pursuing both military, at times destructive, interventions and community-based reconstruction projects.³²⁹

4.1.2 Conceiving urban peacekeeping in Haiti

The operations in Haitian cities, and particularly in Port-au-Prince, required new knowledge and an adaptation of peacekeeping instruments and approaches that ultimately conditioned the very

³²⁶ Benedict Clouette and Marlisa Wise even suggest that, from MINUSTAH’s perspective, national level issues could be resolved through urban, tactical interventions (cf. Benedict Clouette and Marlisa Wise, ‘Port-Au-Prince and Humanitarian Liberalism’, in *Forms of Aid* (Birkhäuser, 2017), 68–97, <https://doi.org/10.1515/9783035608267-005>, 73).

³²⁷ Max G Manwaring, Strategic Studies Institute, and US Army War College, *Street Gangs the New Urban Insurgency* (Carlisle Barracks, Pa: Strategic Studies Institute, U.S. Army War College, 2005), v, <http://www.strategicstudiesinstitute.army.mil/pubs/download.cfm?q=597>.

³²⁸ DDR Section, Office of Rule of Law and Security Institutions, UN Department of Peace Operations, ‘Second Generation Disarmament, Demobilization and Reintegration (DDR) Practices in Peace Operations: A Contribution to the New Horizon Discussion on Challenges and Opportunities for UN Peacekeeping’ (New York: United Nations, 2010), 26, https://peacekeeping.un.org/sites/default/files/2gddr_eng_with_cover.pdf.

³²⁹ In fact, the destruction of infrastructure as necessary activity towards achieving peacekeeping goals extended beyond Port-au-Prince’s slums. In a 2007 briefing of the UN Security Council on MINUSTAH, the UN SRSG for Haiti Hedi Annabi clarified that in order to curb illicit trafficking throughout the country, MINUSTAH was prepared to “destroy” the many identified “clandestine landing strips”. (UN Archives, S-1953-0008-0005-00022, Proceedings of the Security Council, formal meeting, 10 October 2007, 2)

‘urban’ developmental response by the international organization. In *Cities under Siege*, Stephen Graham has drawn our attention to how military and security actors have transformed cities into zones of conflict that require control, especially through counter-insurgency tools of high-tech surveillance.³³⁰ Peacekeepers, too, adjusted their practices, the patrols and interaction with the local population, to the narrow streets of unmapped settlements and the dynamics in urban, informal communities. Foot patrols were accompanied by helicopters, night-vision technology made due for the lack of street lighting, and pamphlets in Creole asked for cooperation. MINUSTAH leadership pursued a dual, if not ambiguous, strategy of relational, on-the-ground intelligence through contact and community-projects with the population, on the one hand, and high-tech military surveillance and enforcement, on the other hand.

MINUSTAH’s leadership emphasized the relational and community-centric approach to peacekeeping, based on “the importance of perceiving versus just seeing,” which required capabilities, “knowledge and sensitivity” to correctly assess the environment and events.³³¹

MINUSTAH’s systematic ‘human intelligence’ through trusted contacts and personal communication, resembling community policing approaches, has also been highlighted by analysts.³³² Among those attempts at building relationships, MINUSTAH installed a telephone hotline *Je Wè Bouch Pale* (Creole for ‘I see, I speak’) for residents to share sensitive information with peacekeepers.³³³ The proximity to the local community through foot patrols and community activities, at least according to Deputy Force Commander Aldunate, allowed peacekeepers to

³³⁰ Graham, *Cities under Siege*.

³³¹ Aldunate, ‘Peace Operations: On the Importance of Perceiving versus Just Seeing’.

³³² Dorn, ‘Intelligence-Led Peacekeeping’.

³³³ ‘UN mission in Haiti installs free phone line to receive reports of criminal activities,’ UN Press Release, 9 June 2005, <https://news.un.org/en/story/2005/06/140492-un-mission-haiti-installs-free-phone-line-receive-reports-criminal-activities>.

“get a clearer picture who the enemies were, where they were and who the violent ones were,”³³⁴ especially in the face of frequently circulating rumors and attempts at discrediting the mission. Faced with threats and attacks that repelled the Haitian police, often “only UN troops were present.”³³⁵

In the understanding of MINUSTAH’s leadership, peacekeepers’ activities beyond their military (armed) capacity allowed them to learn about Haitians and gain their support.

The blue helmets mingled with the population on a daily basis. Sometimes they would be soldiers in security-related situations. On another occasion, they would be riot police, social workers, builders or rescuers in natural disasters, and so on. In short, our men could play multiple roles, understand local idiosyncrasies and the demands and needs of Haitians. This type of soldiering helped us to gain the hearts and minds of the population, one of our main objectives.

MINUSTAH’s performance was due to multiple “pro-people” activities, such as water delivery, road construction, street cleaning, medical care, training courses and so on. As our soldiers became police, social workers and providers of medical help, they showed they were able to provide the population with support. Ultimately, a blue helmet is much more than a combatant. They gained the people’s trust and respect, and learned to have a better understanding of who they are.³³⁶

According to MINUSTAH’s logic, the diverse localized knowledge that peacekeepers gained was crucial for acting effectively in such diverse, ‘developmental’ capacity – but it is also the very diverse activities that allowed peacekeepers to gain insights into people’s lives. The close-up knowledge, indeed, did not only provide insights into urban poverty but also violence. Crimes perpetrated by gangs in those “*zones surpeuplées*”³³⁷ disclosed violence no longer directed against the central government but motivated by local power struggles outside national

³³⁴ Aldunate, ‘Peace Operations: On the Importance of Perceiving versus Just Seeing’, 31.

³³⁵ Aldunate, 130.

³³⁶ Aldunate, 135.

³³⁷ MINUSTAH, ‘Réduction de la violence communautaire’ (n.d.), <https://minustah.unmissions.org/r%C3%A9duction-de-la-violence-communautaire>.

government and socio-economic gains.³³⁸ The intimate link between poverty and violence as a prevailing analysis of Haiti's problem paved the way for a response through the prism of a security-development nexus.³³⁹

As major troop contributors, Latin American countries have constituted an impellent force in relating urban poverty with violence as the ground for military intervention. Already in the negotiation of the initial mission mandate, Brazil – participating then as a nonpermanent member of the Security Council – sought to include reconstruction and development support for Haiti, as former Minister Counsellor at the Brazilian Mission to the UN during the launch of MINUSTAH Paulo Roberto C. T. da Fantoura and Counsellor Eduardo Uziel recalled.³⁴⁰ MINUSTAH's urban focus rendered countries like Brazil the seemingly natural fit to lead the peacekeeping mission.³⁴¹ Brazil's own experience with urban crime, poverty and violence, shaped the optic through which the Brazilian force commander and military leadership saw Haiti. They drew back on prior knowledge and experience with urban gang-related warfare and military intervention in Rio de Janeiro's favelas, including the violent excesses of interventions like *Operação Rio* in the mid-1990s.³⁴²

Despite what has been described by senior Brazilian diplomats as their advocacy for a more development-oriented intervention, domestic military motives have weighed down those

³³⁸ Hammond, 'Saving Port-Au-Prince', 19–20.

³³⁹ Hammond, 20.

³⁴⁰ 'Brazil's Participation in MINUSTAH (2004-2017)'.

³⁴¹ Although some scholars have also argued for Brazil's leadership in this mission being motivated by the country's evolving foreign policy more broadly, including its positioning for the UN Security Council. Cf. Eugenio Diniz, 'Brazil: Peacekeeping and the Evolution of Foreign Policy', in *Capacity Building for Peacekeeping: The Case of Haiti*, ed. John T. Fishel, Andrés Sáenz, and National Defense University Center for Hemispheric Defense Studies, 1st ed. (Washington, D.C.: National Defense University Press, 2007), 91–111.

³⁴² Kai Michael Kenkel, 'South America's Emerging Power: Brazil as Peacekeeper', *International Peacekeeping* 17, no. 5 (1 November 2010): 644–61, <https://doi.org/10.1080/13533312.2010.516958>.

ambitions. Haiti's 'urban problem' suggested MINUSTAH as a training ground to prepare Brazilian police and military personnel for intervention back home in view of the 2014 World Cup and 2016 Olympic Games that required safe, stable, and tourist-friendly urban areas.³⁴³ Brazilian troops from the country's Marine Corps participated in MINUSTAH and the same units later conducted major operations in the favelas of Rio de Janeiro.³⁴⁴ Trained by the very same troops, the state of Rio de Janeiro established the *Unidade de Polícia Pacificadora* (Pacifying Police Units) whose subsequent operations like the *Operação Arcanjo* from November 2010 to June 2012 strongly echoed the Haitian experience.

The military emphasis provided by the troop-contributing countries highlighted a reality in which high levels of violence forced UN staff to live and work in a very shielded, distant and securitized manner, rendering the close community interactions very challenging. Jean-Marie Guéhenno, former UN Under-Secretary-General for Peacekeeping Operation during MINUSTAH's launch, described his first visit to Port-au-Prince in 2005:

Coming down from the hill of Bel Air, the slum that overlooks the Palais, people were shooting, and we had to wait for a lull in the shooting to leave the Palais National. The next day, in bulletproof jacket and blue helmet, I toured the neighborhood with [Special Representative of the Secretary-General and head of MINUSTAH] Valdes. I was later told we had been shot at, but the engine of the Brazilian armed personnel carrier in which we were riding was too noisy for me to have noticed. And we did not even try to enter the bigger slum of Cité Soleil, which was too violent for a visit.³⁴⁵

³⁴³ FIFA declared South America the host in 2003, and Brazil was elected as a candidate in 2004, leading up to it winning the bid in 2007.

³⁴⁴ Kristian Hoelscher and Per M. Norheim-Martinsen, 'Urban Violence and the Militarisation of Security: Brazilian "Peacekeeping" in Rio de Janeiro and Port-Au-Prince', *Small Wars & Insurgencies* 25, no. 5–6 (3 September 2014): 964, <https://doi.org/10.1080/09592318.2014.945636>.

³⁴⁵ Jean-Marie Guéhenno, *The Fog of Peace: A Memoir of International Peacekeeping in the 21st Century*, 2015, 260.

Despite the often-flawed implementation of information gathering with local participation, intelligence as the basis for decision-making emerged in MINUSTAH as a key planning tool.³⁴⁶

This was especially due to the parallel introduction of a series of spatial technologies and institutional innovation that filled in the gaps left in MINUSTAH's community relationship-building: From commercially purchased satellite imagery and aerial imagery of makeshift ditches, barriers, and sniper positions obtained through overflights by unmanned aerial vehicles, to helicopters and foot patrols equipped with infrared and night vision technology, these tools were first used in Port-au-Prince and have since been employed in other peacekeeping missions.³⁴⁷ Already in August 2005, the UN established MINUSTAH's Joint Military Analysis Center (JMAC)³⁴⁸ to collect, connect and distribute intelligence in Haiti. The center became essential to forward the intelligence received from informants to the UN Police commissioner, who then would contact the Haitian Police Director-General to launch a military operation "any hour of the day or night."³⁴⁹ Evaluations of JMAC have suggested that the systematic collection of intelligence through the instrument was well-adapted for the type of urban gang violence the UN faced in Haiti and therefore yielded positive results for quick and precise intervention by

³⁴⁶ Ramjoué describes in her article 'Improving UN Intelligence through Civil-Military Collaboration: Lessons from Joint Mission Analysis Centres' (International Peacekeeping 18(4): 468-484) in great detail how the UN came to employ 'intelligence' as concept and practice with some hesitation.

³⁴⁷ Hammond, 'Saving Port-Au-Prince', 23–24; Dorn, 'Intelligence-Led Peacekeeping', 816, 823–25.

³⁴⁸ UN Doc, Resolution S/RES/1608 (2005), 22 June 2005.

³⁴⁹ Wikileaks, US Embassy Cable 06PORTAUPRINCE2424_a, 'MINUSTAH/HP to move on Cite Soleil,' December 21, 2006.

MINUSTAH.³⁵⁰ Piloted in Haiti, intelligence support to senior peacekeeping officials has since been mainstreamed by DPKO across all UN peacekeeping missions in 2006.³⁵¹

The urban knowledge gained did not come without challenges and backdrops. The UN's security management relied on mapping and visual sense-making to simplify the "complex" urban environment. MINUSTAH color-coded neighborhoods and attributed safety rankings and other markers to territories. The establishment of zones of different degrees of risk provided rules that determined the access, presence, and action of the UN in Port-au-Prince's neighborhoods, including civilian MINUSTAH staff. These rules, as documented by Nicolas Lemay-Hébert, significantly shaped how humanitarian actors at large, including the UN agencies and other organizations, engaged with the communities in those various locations.³⁵² Emblematic of the wide acceptance of this security management is a 2007 World Bank study that reproduced MINUSTAH's urban violence map for Port-au-Prince (see *fig. 4.1*).

³⁵⁰ Melanie Ramjoué, 'Improving UN Intelligence through Civil–Military Collaboration: Lessons from the Joint Mission Analysis Centres', *International Peacekeeping* 18, no. 4 (1 August 2011): 475–76, <https://doi.org/10.1080/13533312.2011.588392>; Dorn, 'Intelligence-Led Peacekeeping', 826; Michael Dziedzic and Robert M. Perito, 'Haiti: Confronting the Gangs of Port-Au-Prince' (Washington, D.C.: US Institute for Peace, 2008), 8, <https://www.usip.org/publications/2008/09/haiti-confronting-gangs-port-au-prince>; Philip Shetler-Jones, 'Intelligence in Integrated UN Peacekeeping Missions: The Joint Mission Analysis Centre', *International Peacekeeping* 15, no. 4 (1 August 2008): 519, <https://doi.org/10.1080/13533310802239741>.

³⁵¹ UN DPKO Policy Directive: Joint Operations Centres and Joint Mission Analysis Centres," Ref: Pol/2006/3000/04, 1 July 2006, pp. 3–4. Cf. Shetler-Jones, 'Intelligence in Integrated UN Peacekeeping Missions'.

³⁵² Nicolas Lemay-Hébert, 'Living in the Yellow Zone: The Political Geography of Intervention in Haiti', *Political Geography* 67 (1 November 2018), <https://doi.org/10.1016/j.polgeo.2018.08.018>; Cf. Marsha Henry and Paul Higate, *Insecure Spaces: Peacekeeping, Power and Performance in Haiti, Kosovo and Liberia* (Zed Books Ltd., 2013), 61–66.

Figure 2.13. High Crime Threat Areas in Port-au-Prince

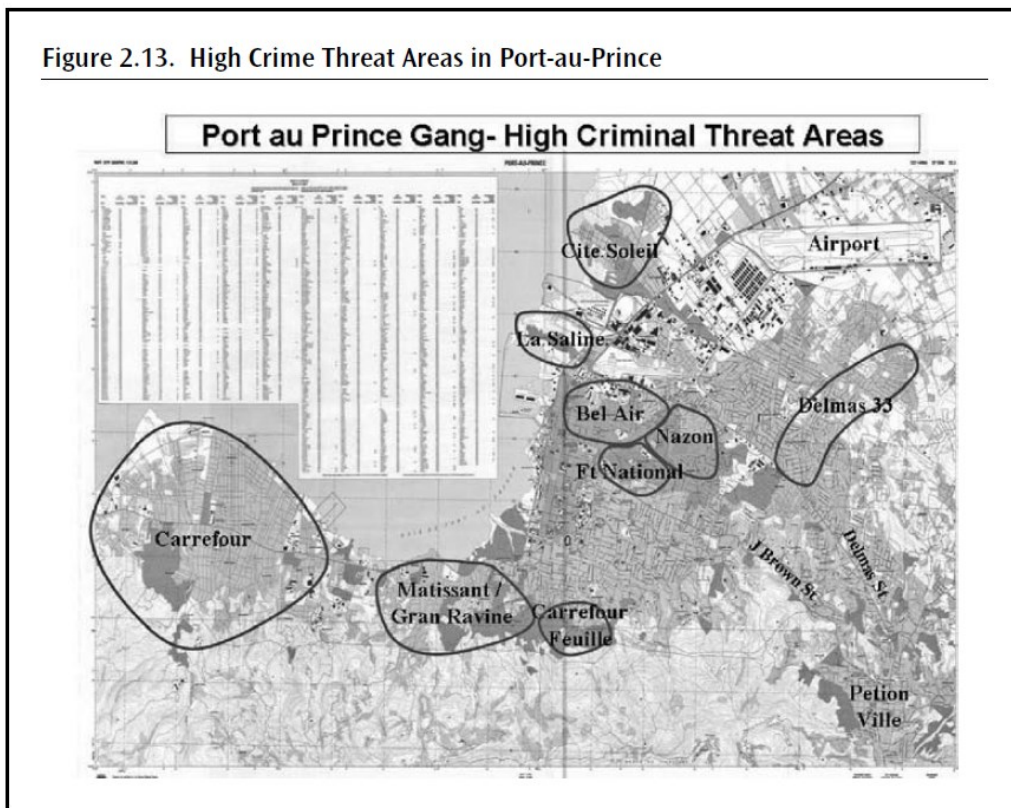


Figure 4.1. A map produced by MINUSTAH is reproduced in a World Bank publication. Source: Dorte Verner and Willy Egset, *Social Resilience and State Fragility in Haiti. Country Studies. The World Bank, 2007.*

Adversely, the spatial understanding of risk and risk management at times preempted the closer contact and dialog with communities that according to the MINUSMA leadership was so needed.

In spite of its occasional idealization, the focus on intelligence, including the reliance on human observation and ‘relational’ information brought to light the socio-economic and everyday life of communities in which the violence took place. The new expertise and practice of collecting socio-spatial intelligence was crucial in forming a more comprehensive understanding of Haiti’s urban challenges that linked socio-economic with conflict-related issues. Through foot patrols in Port-au-Prince, urban poverty was perceptible with the eyes, it could be seen by soldiers and thus

became a lens through which to understand insecurity. It also revealed, in the eyes of the soldiers, the contradictions of Haitians' urban lives:

Our men's respect for locals grew quickly when they saw that Haitians, despite their painful poverty, never failed to pay their fare while boarding a "tap tap", a fragile-looking vehicle used as public transportation, or when they learned that the freely roaming goats that one could see everywhere had an owner and no would ever dare "take" one despite their need for food and protein.³⁵³

Multiple urban scenes would not necessarily form a coherent picture, especially in the absence of communication skills in Creole by most of the UN military and civilian staff and cumbersome reliance on translators. It set up the urban as a complex terrain for intervention.

4.2 Community infrastructure as risk mitigation

4.2.1 Military operations in urban areas

Port-au-Prince, and especially those areas governed by gangs and ridden by urban violence, lack of services, and little public infrastructure, soon became the focus of peacekeeping attention. As Jean-Marie Guéhenno recalled a dinner with "key figures of la bourgeoisie" during his 2005-visit of MINUSTAH: "the message I heard was loud and clear: the UN mission has to do whatever it takes to purge Haiti of its dangerous elements; it has to rein in the dangerous class, the poor."³⁵⁴ Following the 2006 national elections, a series of severe attacks against civilians including many children, against the Haitian police and against MINUSTAH spurred the UN's commitment to

³⁵³ Aldunate, 'Peace Operations: On the Importance of Perceiving versus Just Seeing', 129.

³⁵⁴ Guéhenno, *The Fog of Peace*, 260.

end violence. Upon the insistence of the new Special Representative of the UN Secretary-General, Edmond Mulet, the newly-elected Haitian government gave its green light for the peacekeeping mission to focus on curbing criminal activities in urban areas. In 2007, the members of the UN Security Council revised the MINUSTAH mandate to concentrate on “armed gangs.”³⁵⁵

MINUSTAH’s military action was, in the UN parlance, ‘robust’. In a three-month period alone, from late December 2006 to March 2007, MINUSTAH pursued at least 14 high-profile, intense, hours-long military operations, each employing a crushing force of hundreds of troops, tens of armored vehicles, and often a helicopter within a narrow block of one of Port-au-Prince’s slums (see *fig. 4.2*).³⁵⁶ Through these operations, peacekeepers arrested high-profile gang members, seized the gangs’ (and other strategic) buildings, and cleared gang-built road blocks.



Figure 4.2. MINUSTAH peacekeepers in heavy armor patrolling a neighborhood’s narrow streets as part of an operation to curb crime, and occupying an outpost in a previously cleared and partly-destroyed building. Source: United Nations, 31 January 200, <https://www.flickr.com/photos/minustah/34869680166/> (above), <https://www.flickr.com/photos/minustah/34869680006/> (below).

³⁵⁵ UN Doc, Resolution S/RES/1743 (2007), 15 February 2007.

³⁵⁶ Dorn, ‘Intelligence-Led Peacekeeping’, 818; Hammond, ‘Saving Port-Au-Prince’, 24–25.

MINUSTAH's intervention into urban spaces left a trail of destruction. Taking a particular interest in MINUSTAH's military capacity to target gang members and free kidnapping victims, detailed descriptions of past and planned MINUSTAH operations were recounted in US Embassy cables back to Washington DC. They shed some light on the urban military operations, including the calculated destruction of infrastructure, in which the UN forces engaged:

[UN Police commissioner] Warren's plan calls for the [UN and Haitian troops] to enter Cite Soleil and establish a defensible base in an already identified building. From there, teams will move against specific gang residences identified by ... informants, arrest gang members, destroy the buildings, and hopefully, liberate kidnapping victims ... MINUSTAH troops, principally Brazilians, will clear a traffic obstruction, built by the gangs, to open access ... and form a cordon with armored personnel carriers ... blocking 'the main escape route' (presumably along route national 9, running through the center of Cite Soleil) ... In any event, Warren predicted there would be 'a major battle.'³⁵⁷

MINUSTAH's birth in the post-9/11 climate echoed not only the "militarized approach to urban security" reverberating from the 1990s Balkan wars but the US counterinsurgency war in Iraq and Afghanistan.³⁵⁸ Echoing the 2006 United States' Field Manual 3-24 *Counterinsurgency*,³⁵⁹ MINUSTAH's series of high-intensity raids in slums of Port-au-Prince was only part of a wider program to curb urban violence in Haiti. Part of the program was to engage police contingents for an increased presence and for MINUSTAH to expand its presence in the zones it had identified as problematic. MINUSTAH would be stationed permanently in neighborhoods like Cité Soleil, rather than retreating at night to their camps outside for safety.

The reception of MINUSTAH's action was mixed. The military presence was positively recognized by national government and international agencies, which attributed MINUSTAH

³⁵⁷ Wikileaks, US Embassy Cable 06PORTAUPRINCE2424_a, 'MINUSTAH/HP to move on Cite Soleil,' December 21, 2006.

³⁵⁸ Hoelscher and Norheim-Martinsen, 'Urban Violence and the Militarisation of Security', 966.

³⁵⁹ Cf. Field Manual 3-24 MCWO 3-33.5 Insurgencies and Countering Insurgencies (2014), accessed 20 May 2022, <https://irp.fas.org/doddir/army/fm3-24.pdf>.

with a dissuasive power, reducing crime and violence, and quite literally planned for MINUSTAH in featuring its presence in local land use plans of Port-au-Prince's neighborhoods.³⁶⁰ The perspective of local residents in those neighborhoods, however, looked very different. MINUSTAH was faced with mounting criticism and disapproval by the residents who had experienced the military interventions first hand. Through ethnographic research, Paul Higate and Marsha Henry, among others, have documented the perceived oppressive and performative nature of MINUSTAH in Port-au-Prince.³⁶¹ They point to the "carnavalesque security drama" that residents observe each time peacekeepers exit and enter their highly-secured compounds, peacekeepers' patrols and checkpoints at the fringes of what has been defined as the most dangerous parts of Port-au-Prince, and, most of all, the devastating "collateral damage" of UN raids.³⁶²

MINUSTAH's raids led to the ruination of physical infrastructure, which increased communities' opposition to the peacekeepers, the UN at large, and government forces. Already early operations, like operation 'Iron Fist' of 6 July 2005 in Bois Neuf, were excessively equipped, when the UN authorized the use of 22700 bullets, 78 grenades, and 5 mortar heads in a few hours.³⁶³ Scholar-activists, journalists, and humanitarian actors have documented the significant damage to communities resulting from MINUSTAH's military operations in the

³⁶⁰ IIED Haiti Community Planning Archive, 'Schéma d'aménagement de Martissant, Version définitive mise au point après, Le Comité de pilotage du 13 mars 2012,' Ministère des Travaux Publics des Transports, de la Communication, et de l'Energie, République d'Haïti, avec Agence Française de Développement, et FOCKAL - Fondation connaissance & liberté, p. 171

³⁶¹ Higate and Henry, 'Space, Performance and Everyday Security in the Peacekeeping Context'; Henry and Higate, *Insecure Spaces: Peacekeeping, Power and Performance in Haiti, Kosovo and Liberia*.

³⁶² Higate and Henry, 'Space, Performance and Everyday Security in the Peacekeeping Context', 36.

³⁶³ UN Doc, E/CN.4/2006/53/Add.1, 'Extrajudicial, Summary or Arbitrary Executions: Report of the Special Rapporteur, Philip Alston,' March 27, 2006, 329.

dense urban settlements.³⁶⁴ The devastation of housing and utilities infrastructure and its long-term socio-psychological effects on residents has also been recorded in the 2017 documentary film 'It Stays With You' by researchers Cahal McLaughlin and Siobhán Wills. The heavy armor and aggressive approach not only injured and killed numerous civilians, but resulted in severe damage to the built environment, which have remained the subject of popular protest, claims and legal action for compensation. A military approach alone, visibly, was not enough.

4.2.2 *Community projects and violence reduction*

Despite its forceful military intervention, UN staff decided early that the mission would need to engage the Haitian population in other, more social, ways as well. A key to this approach were community projects, first nominally introduced as Quick-Impact Projects in the 2000 *Brahimi Report* of the Panel on UN Peace Operations. Chaired by former Algerian Minister of Foreign Affairs Lakhdar Brahimi, the panel was tasked to suggest peacekeeping reforms in response to the peacekeeping failures of the 1990s. In its response, the panel centered peacebuilding and suggested “a doctrinal shift”³⁶⁵ to integrate policing, the rule of law and human rights considerations into peace operations side-by-side with the military, ultimately producing a larger budget for the developmental dimension of peacekeeping. The panel also recommended – and effectively introduced – an earmarked part of missions’ budget for Quick-Impact Projects which would “make a real difference in the lives of people in the mission area” and should “help

³⁶⁴ *It Stays With You*, 2017, <https://itstayswithyou.com/full-film/>; Siobhan Wills, ‘Use of Deadly Force by Peacekeepers Operating Outside of Armed Conflict Situations: What Laws Apply?’, *Human Rights Quarterly* 40, no. 3 (2018): 663–702.

³⁶⁵ United Nations, ‘Report of the Panel on United Nations Peace Operations (‘Brahimi Report’)', 2000, ix, <https://undocs.org/A/55/305>.

establish the credibility of a new mission.”³⁶⁶ Despite some critique,³⁶⁷ QIPs have since become common practice as short-term, limited, and low-cost initiatives, clearly visible and “sensible to ... conflict.”³⁶⁸ For MINUSTAH, QIPs were introduced by the UN Security Council for the first time in 2005,³⁶⁹ and became quickly an important tool in shifting from traditional disarmament, demobilization, reintegration (DDR) to ‘community violence reduction’ (CVR).

At the beginning of MINUSTAH’s intervention, the operation had followed a rather traditional DDR approach to demilitarize the gangs. As this program turned out to be insufficient to curb gang violence in the urban context following the 2006 national elections, MINUSTAH moved to an offensive military approach accompanied by

different types of activities that can be implemented when the preconditions for traditional DDR are not in place in order to support the peace process, build trust, contribute to a secure environment, and help build the foundation for longer-term peacebuilding. Instead of implementing relevant provisions of a peace agreement, ... activities are programmed locally using an evidence-based approach.³⁷⁰

Indeed, the collected spatial intelligence as evidence base not only informed the military action but also the longer-term ‘rebuilding.’ MINUSTAH thus began operating under the mandate to

reorient its disarmament, demobilization and reintegration efforts ... towards a comprehensive community violence reduction programme adapted to local conditions, including assistance for initiatives to strengthen local governance and the rule of law and to provide employment opportunities to former gang members, and at-risk youth³⁷¹

³⁶⁶ United Nations, ix, 6.

³⁶⁷ Since its introduction, especially in a context like Haiti, the use of QIPs raised new questions regarding the risk of endangering humanitarians’ perceived neutrality. Humanitarian actors have increasingly become conflated with military armed personnel who, through implementing QIPs, provide services very similar to humanitarian actors. The UN’s 2008-Capstone Doctrine, in discussing infrastructure projects, acknowledged the potential backlash from humanitarian actors and contested nature of QIPs with an appeal to better civil-military coordination.

³⁶⁸ UNDPKO, ‘Policy: Quick Impact Projects (QIPs)’, 2013, https://www.unocha.org/sites/unocha/files/dms/Documents/DPKO_DFS_revised_QIPs_2013.pdf.

³⁶⁹ UN Doc, Resolution S/RES/1608 (2005), 22 June 2005, para. 14.

³⁷⁰ DDR Section, Office of Rule of Law and Security Institutions, UN Department of Peace Operations, ‘Second Generation Disarmament, Demobilization and Reintegration (DDR) Practices in Peace Operations: A Contribution to the New Horizon Discussion on Challenges and Opportunities for UN Peacekeeping’, 3.

³⁷¹ UN Doc, Resolution S/RES/1702 (2006), 15 August 2006.

The CVR approach, led by the CVR Section established in MINUSTAH in 2007, aimed at “overpopulated zones” and marginalized neighborhoods under the control of armed gangs.³⁷²

In New York, this shift in DDR practice was formalized by the newly-created *Office of Rule of Law and Security Institutions*. OROLSI was established in July 2007 as part of a major institutional reform of the UN’s Department of Peacekeeping Operations – in parallel with other new entities, such as the Department of Field Support and the Policy, Evaluation and Training Division. OROLSI, under the leadership of Assistant Secretary-General for the Rule of Law and Security Institutions, Dimitry Titov, advocated for a reorientation of DDR to better integrate the urban dimension, crime and the role of the police – issues that had already been identified in the 2000 Brahimi Report. Operational in early September 2007, the office began to significantly shape the language and priorities of engagement in the field, notably in response to the events in Haiti – the “birthplace of CVR.”³⁷³

The programming filled a perceived gap within UN programs, a lack of response to violence that was not perpetrated by an identified rebel group in a civil war, but by a multitude of groups.³⁷⁴ MINUSTAH’s CVR Section’s “logical framework” motivated a CVR intervention by the dearth of, or unequal access to, basic services as a key conflict driver that would be met with the construction and rehabilitation of local infrastructure.³⁷⁵ In turn, according to that reasoning,

³⁷² Translated from French, the original reads: “Ciblant les zones surpeuplées, et les quartiers défavorisés soumis à l’influence et sous contrôle partiel des bandes armées et/ou historiquement politisés, le Programme de Réduction de la Violence Communautaire vise à fournir des opportunités d’emploi aux anciens membres des gangs armés et aux jeunes à risque, ainsi qu’aux groupes vulnérables en particulier les femmes, et ce, de manière à contribuer aux efforts de stabilisation du pays.” (<https://minustah.unmissions.org/r%C3%A9duction-de-la-violence-communautaire>)

³⁷³ DDR Section, Office of Rule of Law and Security Institutions, UN Department of Peace Operations, ‘DDR - Community Violence Reduction: Creating Space for Peace’.

³⁷⁴ Interview with Sergiusz Sidorowicz, OROLSI, February 11, 2022.

³⁷⁵ Logical framework of CVR. Source: UN DPO DDR Section (n.d.), ‘DDR Community Violence Reduction: Creating Space for Peace’ brochure, <https://peacekeeping.un.org/sites/default/files/ddr-and-cvr-creating-space-for-peace.pdf>.

improved service access would strengthen communities and keep community members away from engaging in violence. Additionally, the labor-intensive, albeit short-term projects would occupy youth at risk and, according to the CVR logic, keep them away from gang-affiliated activities.

Different entities within MINUSTAH took part in the design and implementation of small-scale community projects. MINUSTAH's *Unité des Projets à Impacte Rapide* managed the small-scale projects as a key instrument in the peacekeeping toolbox, covering a variety of domains such as agriculture, human rights and education, health, and infrastructure rehabilitation, including the refurbishment of local administrative office buildings.³⁷⁶ Apart from projects managed by civilian mission personnel, peacekeeping contingents were also directly involved in projects, sometimes in collaboration with the Haitian National Police and other actors.

Anecdotally cleaning the streets in Bel-Air of burnt tires and cars, or bringing in heavy vehicles like tractors and trucks to rehabilitate a few kilometers of road here and there across Port-au-Prince.³⁷⁷ Haitians could observe, for example, how the Brazilian contingent, led by a Brazilian force commander and supported by Chilean military engineers cleaned and repaired a playground in Cité Soleil to “recover public space.”³⁷⁸

One civil society partner that benefited from this approach, and became crucial in its operationalization, was the Brazilian NGO Viva Rio. Receiving grants from MINUSTAH's CVR unit – Viva Rio's executive director served as a DDR consultant for MINUSTAH in 2004³⁷⁹ –

³⁷⁶ UN Doc, S/2006/1003, Report of the Secretary-General on MINUSTAH, 19 December 2006.

³⁷⁷ E.g. ‘Haïti: La MINUSTAH Effectue Des Travaux de Réhabilitation de La “Route Des Rails” à Port-Au-Prince - Haïti’, ReliefWeb, 2005, <https://reliefweb.int/report/haiti/ha%C3%Afti-la-minustah-effectue-des-travaux-de-r%C3%A9habilitation-de-la-route-des-rails-%C3%A0-port>.

³⁷⁸ Aldunate, ‘Peace Operations: On the Importance of Perceiving versus Just Seeing’, 136.

³⁷⁹ ‘Brazil’s Participation in MINUSTAH (2004-2017)’, 7.

the organization implemented a range of community projects in Port-au-Prince's poorer neighborhoods since 2004. Founded in Rio de Janeiro in the 1990s, Viva Rio entertained close relations with the Brazilian MINUSTAH contingent and was based in the capital's Bel Air district, which had been assigned to the Brazilian battalion.³⁸⁰ Early on, it conducted a study of water access in Bel Air, identifying the need for additional potable water kiosks.³⁸¹ It then also proceeded to sign 'peace agreements' with neighborhood community leaders.³⁸²

One such accord from May 2011 illustrates the pursued link between development – as material interventions – and conflict prevention. For every month during which no murder occurs in the community, Viva Rio would furnish different services and goods to the community: scholarships for children, professional music training, cultural celebrations, hip-hop music production to one rap group per neighborhood, or a motorcycle lottery for the community leaders which act as liaisons between the NGO and the community.³⁸³ The seven-page 'peace accord', signed by up to 15 leaders per neighborhood,³⁸⁴ is not framed as an agreement among the community leaders, but a pact between the NGO and the community leaders – indicative of the conditionality between non-violence and 'development' gifts as incentives to pursue the absence of violence. More than an incentive for some form of negative peace alone, however, the peace accord's modality also introduced a socio-economic dimension into the pursuit of peace, albeit in a powerful top-down fashion through the external assistance.

³⁸⁰ 'Brazil's Participation in MINUSTAH (2004-2017)', 113.

³⁸¹ Federico Neiburg and Natacha Nicaise, 'La Vie Sociale de l'Eau: Bel Air, Port-Au-Prince, Haiti' (Rio de Janeiro: Viva Rio, 2009), <https://docplayer.com.br/2814112-La-vie-sociale-de-l-eau-the-social-life-of-water-a-vida-social-da-agua-bel-air-port-au-prince-haiti-federico-neiburg-natacha-nicaise.html>.

³⁸² 'Brazil's Participation in MINUSTAH (2004-2017)', 114.

³⁸³ Viva Rio, 'Accord de Paix V,' 28 May 2011, <https://haitiici.files.wordpress.com/>.

³⁸⁴ The communities of Solino, Bel Air, Delmas 2, Fort-Touron/La Saline, Fort-National (Batia), Pont-Rouge/Wharf Jeremi/Fort-Dimanche, and St Matin are included in the peace agreement.



Figure 4.3. MINUSTAH engaged in waste removal in the Bel-Air neighborhood of Port-au-Prince, and employed men from the community to build a canal in Port-au-Prince to improve drainage for the upcoming rainy season as part of the Community Violence Reduction project. Source: United Nations, 27 January 2005, <https://www.flickr.com/photos/minustah/34869718066/> (left), <https://www.flickr.com/photos/minustah/4875800461/> (right)

Overall, during MINUSTAH’s lifespan, the mission financed over 2250 projects, with a total budget of more than \$125 million³⁸⁵ – a considerable budget of which most foreign intervenors could only dream of. While responding to local needs, the projects clearly reflected the urban focus that MINUSTAH had adopted right from the start, emphasizing ‘clean-up’ and labor-intensive urban development projects involving residents – usually specifically young and ‘at risk’ men – in the poor neighborhoods of Port-au-Prince (see *fig. 4.3*)

4.2.3 Developmentalizing approaches to urban risk and security

Once urban poverty was established as the “root cause of unrest in Haiti,” it allowed for a response aimed at improving the lives of city dwellers as part of the long-term development

³⁸⁵ ‘MINUSTAH completes Mandate in Haiti,’ 2017, <https://peacekeeping.un.org/sites/default/files/haiti-infographicv10-main.png>.

strategy.³⁸⁶ Both the international discourse and place-based learning in MINUSTAH, in fact, clearly centered urban development. In the words of MINUSTAH's Force Commander in 2009: "The challenge is basically development. Because before we had first security to have an expectation for development. Now we have almost an expectation for development to confirm security."³⁸⁷ Previous Force Commanders, too, had already questioned, and effectively reversed, the logical order of security and development: indeed, development was needed for security, and not the other way round.³⁸⁸ MINUSTAH's infrastructure projects, both the community projects and large-scale public works, were crucial in the emerging self-understanding of what issues peace operations should address, and how.

The adoption of 'community violence reduction' as a programmatic approach in MINUSTAH reinforced the developmentization of responses to urban risk. As the author of CVR, the UN's Office of Rule of Law and Security Institutions, OROLSI, became a strong advocate for further decentralizing peacekeeping programming, shifting decision-making from the UN Secretariat to the peacekeeping mission, relying on the "presence, capacities, and contacts in the field" and responsiveness to the local context.³⁸⁹ It also relied on the "partnerships" with the various UN agencies in-country and government agencies, that could reinforce continuity through their development-centered, longer project time frames.³⁹⁰ Once the Sustainable Development Goals were introduced in 2015, the Department of Peace Operation's DDR Section explicitly linked the

³⁸⁶ UN Doc, S/2005/302, Report of the Security Council mission to Haiti, 13 to 16 April 2005, 6 May 2005, 17, 21.

³⁸⁷ Interview with General Carlos Dos Santos Cruz in: *On The Line: 2008 Military Operations in Haiti* (United Nations, 2008), <https://www.youtube.com/watch?v=yweLsMH6VGU>.

³⁸⁸ Aldunate, *Backpacks Full of Hope*, 103–4.

³⁸⁹ Email exchange including Dimitry Titov, Assistant Secretary-General for Rule of Law and Security Institutions, on draft 'Progress Report of the Secretary-General on Peacebuilding in the Immediate Aftermath of conflict', UN Archives, S-1953-0083-0006-00006 - Peacebuilding Support Office (PBSO), 2010.

³⁹⁰ Interview with Chief DDR Section, OROLSI, UN Department of Peace Operations, April 8, 2022.

CVR intersection with no less than six Sustainable Development Goals and 13 of its sub-targets (see *fig. 4.4*), further formalizing its developmental claims.

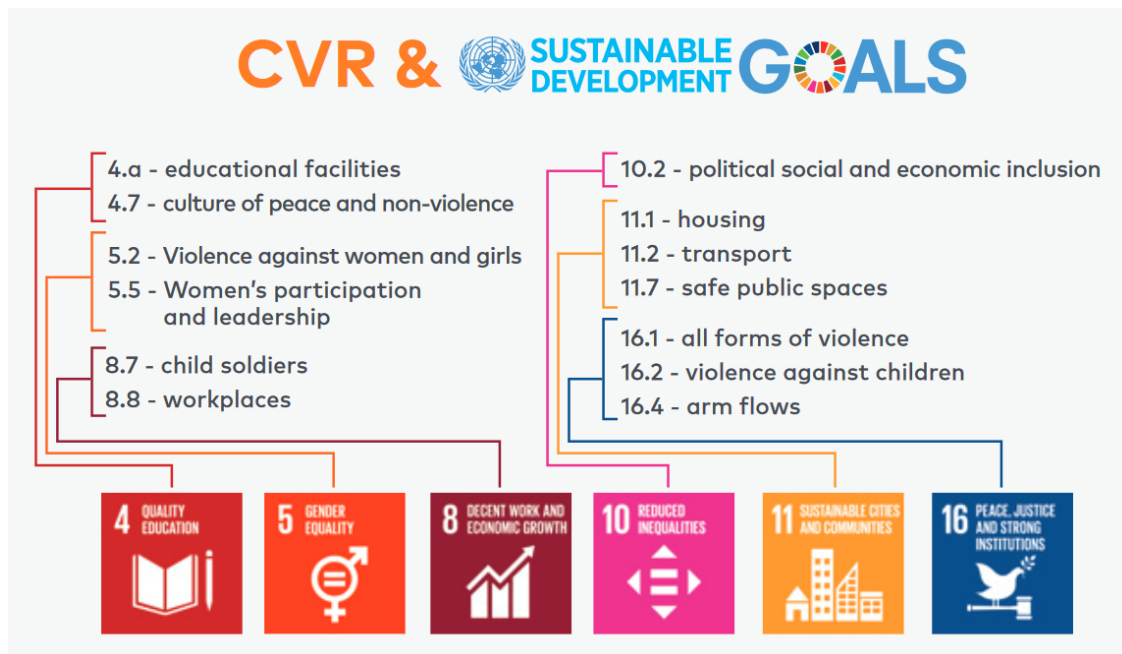


Figure 4.4. CVR connections to SDGs. Source: UN DPO DDR Section (n.d.), 'DDR Community Violence Reduction: Creating Space for Peace' brochure, <https://peacekeeping.un.org/sites/default/files/ddr-and-cvr-creating-space-for-peace.pdf>.

Urban development as a response to Haiti's 'peace problem' was not entirely new. An evaluation of the UN Mission in Haiti (UNMIH) during the mid-1990s had already underlined the necessity of peacebuilding activities at the local community level, for example through improved street lighting.³⁹¹ As the mission's 'lessons learned report' noted, such activities were not directly mandated but possible in a rather generous interpretation of the command to provide stability

³⁹¹ UNDPKO Lessons Learned Unit. *United Nations Mission in Haiti (UNMIH) Mid-Mission Assessment Report, April 1995 - February 1996*, para. 16, 129, March 1996. Ford Foundation records, Grants U-Z, Reel R7422, Folder 'United Nations (09600210), Rockefeller Archive Center.

and security – some financed by the UN budget, some through bilateral development assistance funneled through the participating military contingents. Despite some ambiguity about the repurposing of peacekeeping material and personnel for community development projects headquarters hence had already concluded that “if circumstances permit, the military can be an excellent agent of development.”³⁹²

MINUSTAH’s focus on localized, tactical interventions as catalysts for violence reduction in the communities did not only constitute a form of developmentalizing of peacekeeping, but a securitization of urban interventions. The military attention to “strategic points ... to (re)create, enliven, and reinvigorate urban spaces” echoes an ‘urban acupuncture’ approach,³⁹³ based on the idea that specific interventions within cities can reverberate to a broader area and stimulate a community beyond the spatial and temporal scope of the intervention. In fact, the Brazilian military’s influence in MINUSTAH – the short-term military logics of defense and violence reduction – coexisted with the distinct Brazilian roots of ‘urban acupuncture: Jaime Lerner, Brazilian architect and planner, long-term mayor of Curitiba and Governor of Paraná state, was a long-time advocate and author of *Acupunctura urbana*, for whom cities were “solutions” rather than problems.³⁹⁴ Eventually, urban infrastructure projects, like Viva Rio’s efforts at “social

³⁹² UNDPKO Lessons Learned Unit. *United Nations Mission in Haiti (UNMIH) Mid-Mission Assessment Report, April 1995 - February 1996*, para. 132, March 1996. Ford Foundation records, Grants U-Z, Reel R7422, Folder ‘United Nations (09600210), Rockefeller Archive Center.

³⁹³ Kirralie Houghton, Jaz Hee-jeong Choi, and Artur Lugmayr, ‘From the Guest Editors: Urban Acupuncture’, *Journal of Urban Technology* 22, no. 3 (3 July 2015): 1, <https://doi.org/10.1080/10630732.2015.1087684>.

³⁹⁴ Jaime Lerner, ‘Urban Acupuncture’, *Harvard Business Review*, 18 April 2011, <https://hbr.org/2011/04/urban-acupuncture>; Jamie Lerner, *Acupunctura Urbana* (Rio de Janeiro: Editora Record, 2003); Cf. Arthur Lubow, ‘The Road to Curitiba’, *The New York Times*, 20 May 2007, sec. Magazine, <https://www.nytimes.com/2007/05/20/magazine/20Curitiba-t.html>.

integration,” would produce “stabilization” and a reduction of urban risks related to poverty.³⁹⁵

Infrastructure was a compelling approach to “fixing Haiti.”³⁹⁶

Operating in an urban context ultimately led to a reversal, where development was no longer the consequence of peace and security, but where it was understood as its precursor. The ‘urban’ allowed to flip the security-development causality and set peace operations on a development track. The roads, bridges, community centers, and police stations became the symbolic driver of that development, realizing for MINUSTAH what Ash Amin has described as the “social power of infrastructural visibility.”³⁹⁷ MINUSTAH’s interventions in the neighborhoods of Port-au-Prince became an instrument in reimagining Port-au-Prince, and Haiti more broadly, for a future of stability and peace. In practice, they were also a crucial component in making sense of relationships, between MINUSTAH and local population, in ‘seeing’ and ‘knowing.’

4.2.4 Post-disaster recovery

On January 12, 2010, a 7.0 earthquake shook Haiti, killing hundreds of thousands of Haitians were killed or injured, and rendering million homeless. The UN Security Council responded with an immediate mandate change centering “recovery, reconstruction and stability.”³⁹⁸ Never before, or thereafter, had a UN peacekeeping mission been explicitly tasked to support post-

³⁹⁵ Helen Moestue and Robert Muggah, ‘Intégration Sociale, Ergo, Stabilisation: Évaluation Du Programme de Sécurité et de Développement de Viva Rio à Port-Au-Prince’ (Rio de Janeiro: Viva Rio, 2009), https://reliefweb.int/sites/reliefweb.int/files/resources/Muggah2009_Viva%20Rio%20Haiti.pdf.

³⁹⁶ Jorge Heine and Andrew S. Thompson, eds., *Fixing Haiti: MINUSTAH and Beyond* (Tokyo; New York: United Nations University Press, 2011).

³⁹⁷ Ash Amin, ‘Lively Infrastructure’, *Theory, Culture & Society* 31, no. 7–8 (December 2014): 140, <https://doi.org/10.1177/0263276414548490>.

³⁹⁸ UN Doc, Resolution S/RES/1908 (2010), 19 January 2010.

disaster reconstruction efforts. MINUSTAH however did have experience with disaster recovery and had been involved in the humanitarian management in the aftermath of a series of tropical storms and hurricanes in Haiti in 2008, supporting the efforts to “build back better.”³⁹⁹

Nonetheless, the scale of recovery after January 2010 constituted a dramatic change for the peacekeeping mission and incision for the UN peacekeeping globally – not least because the institution’s presence in Port-au-Prince itself was severely affected, losing many of its staff as the world organization’s central office collapsed. The shift in mandate to earthquake response substantiated and enhanced MINUSTAH’s urban development focus.

While the UN had previously begun reducing the number of troops, it strengthened again the mission size after the earthquake, increasing the number of troops (and police) to an all-time high of 8,940 troops (in comparison to the baseline of 6,700 at the mission start) with an additional 4,391-person strong police force (in June 2010). Responding to the unfolding events and mounting opposition to MINUSTAH, the mission stepped up its small-scale community intervention in the domains of health, water and sanitation: repairing water pipes, building water kiosks, distributing filters, constructing health centers. The emphasis on disaster risk reduction was particularly salient because of the consistent risk of hurricanes and flooding that affected urban population, which therefore allowed MINUSTAH to continue pursue its urban service focus. In the city of Gonaïves, for example, the locally-stationed engineering company of the Indonesian MINUSTAH contingent built and rehabilitated a series of canals, drainage, and bridges to be used in the case of heavy rains during the hurricane period, noting the risk of water-

³⁹⁹ UN Archives. S-1943-0010-0003-00062, Decision of the Secretary-General – 9 June meeting of the Policy Committee, 16 June 2009; S-1943-0011-0003-00014, Letter of the Secretary-General to Former US President Clinton, 27 March 2009.

borne diseases.⁴⁰⁰ At the peacekeeping mission level, the community infrastructure projects thus allowed linking urban violence reduction with disaster risk reduction, while also acknowledging the devastating consequences of the cholera outbreak and critical need for better community infrastructure.

Homologous engineering companies of the Brazilian and the mixed Chilean-Ecuadorian contingents in Port-au-Prince conducted similar public works projects. The military contingents asphalted and repaired roads to support the project *bouche twou* by the Haitian National Ministry for Public Works, Transport and Communication.⁴⁰¹ In the Martissant neighborhood, usually described as especially vulnerable and at-risk, the Community Violence Reduction Section financed disaster risk reduction awareness events paired with labor-intensive community projects: MINUSTAH involved local youth to clean latrines and canals from waste, and more than one thousand local inhabitants from three neighborhoods, including Martissant, to build catchment basins for the communities as an additional flood prevention measure.⁴⁰² These short projects complemented the larger projects by a consortium of international institutions, like the World Bank, Inter-American Development Bank, and United Nations, to build water and sanitation infrastructure.⁴⁰³ Peacekeeping's infrastructure projects served to locally stabilize urban communities in the midst of humanitarian crisis.

⁴⁰⁰ A series of MINUSTAH press releases documents the projects: 'Gonaïves : aménager les canaux pour assainir la ville,' 31 July 2012; 'Gonaïves : Les Casques bleus indonésiens construisent plusieurs ponts sur le plus grand canal de la ville,' 28 September 2012 ; 'Gonaïves: Des travaux d'infrastructure pour une ville plus salubre,' 14 August 2012; 'Une rue des Gonaïves mieux protégée des inondations,' 27 December 2012.

⁴⁰¹ MINUSTAH, Press release 'Réparation de routes à Port-au-Prince : La MINUSTAH continue d'appuyer le Gouvernement,' 1 August 2012.

⁴⁰² MINUNSTAH, Press release 'Martissant : la jeunesse mobilisée pour affronter les risques d'inondation,' 26 September 2012.

⁴⁰³ The small-scale community projects that MINUSTAH pursued were not the only form of infrastructure building through the peacekeepers. The mission also engaged in a variety of large-scale infrastructure projects with partners that alone would often have not been feasible or accessible to those organizations. For example, a \$0.9 million project by the World Bank financed the rehabilitation of Martissant Road. The repairs of *Route Nationale* No. 4, a principal lifeline for humanitarian relief transports, led to a rare multi-agency collaboration between the World

As part of the strengthened efforts to provide relief to the Haitian population, MINUSTAH had already undergone some organizational changes, which facilitated a focus on quick impact projects as the principal response. In June 2010, the UN Security Council endorsed Haiti's Action Plan for Reconstruction and National Development, coordinated by MINUSTAH, and notably through its *Centre Conjoint des operations logistiques* (JLOC). Previously, only a few days after the earthquake, MINUSTAH in partnership with the UN Office for the Coordination of Humanitarian Affairs (OCHA) had already created the Joint Operation and Task Center (JOTC) to serve as the focal point for all humanitarian relief. Then, in the fall of 2011, the *Cellule des Projets de la Mission* (MPC) was created to manage, coordinate and monitor technical assistance – upon request by the UN Security Council to use its military engineering resources strategically and “to develop its longer-term planning”.⁴⁰⁴

MINUSTAH's mechanisms to plan and implement infrastructure projects grew exponentially under the disaster-induced pressure. The QIPs program grew from \$1 million in 2004 to \$7.5 million in 2010 (also allowing a quadrupled budget limit per individual project, from \$25 thousand to \$100 thousand), and the CVR section used more than \$23 million for infrastructure rehabilitation and reconstruction after the earthquake, including in domains such as water and waste management, environmental risk management, road and bridge construction and the installation of solar lighting. Projects sought to be particularly labor-intensive, thus providing short-term occupation for young residents of Haiti's most “vulnerable” and “marginalized”

Bank, as funder, UNOPS, as manager, and MINUSTAH engineers from the South Korean contingent, providing the necessary machinery. MINUSTAH also collaborated with other UN agencies, working with UNDP's Cash-for-Work projects in the community infrastructure sector, or with the World Food Programme to secure food deliveries and facilitate logistics.

⁴⁰⁴ UN Doc, Resolution S/RES/2012 (2011), 12 October 2011.

neighborhoods, former gang members, and vulnerable groups more generally, notably women.⁴⁰⁵

Focused, still, on Port-au-Prince, the program also expanded to other towns beyond the capital.

The nature of those urban development projects – as entry points, forms of appeasement, and catalysts – also constituted their limits. Introducing infrastructure somewhere, as critical voices referenced throughout this chapter have already well-documented, can create further marginalization elsewhere. In fact, as Caroline Moser and Cathy McIlwaine have argued, contrary to what has been commonly been understood in the past, urban violence cannot be 'developed away' but is “an integral part of the current model of development itself.”⁴⁰⁶ The short-termed urban initiatives paired with the oppressive military presence and physical destruction added insecurity. MINUSTAH's labor-intensive quick-impact-yielding projects were designed to be in the present, addressing present needs, often in a rather top-down, military fashion. Little went into a planning process that would consider and monitoring potential harm and projects' impact more broadly. Furthermore, no record was kept that would allow staff over the length of the mission, or of MINUSTAH's successor missions for that matter, to trace and follow up with past projects and their implementing partners from a decade ago.⁴⁰⁷ Nonetheless, this security-development model would shape the next generation of interventions, especially those carrying a 'stabilization' mandate, driven by a pursuit of peace as the 'absence of violence.'

⁴⁰⁵ MINUSTAH, 'La MINUSTAH en action: Les travaux d'infrastructure depuis le seisme', n.d., <https://minustah.unmissions.org/sites/default/files/la-minustah-en-action.pdf>.

⁴⁰⁶ Caroline Moser and Cathy McIlwaine, 'New Frontiers in Twenty-First Century Urban Conflict and Violence', *Environment & Urbanization* 26, no. 2 (2014): 332, <https://doi.org/10.1177/09562478145462>.

⁴⁰⁷ Several of my interviewees at both headquarters and mission level confirmed this.

4.3 Introducing the camp as risk

While MINUSTAH pursued infrastructure projects as a key element of its peacekeeping portfolio, especially in the urban context, infrastructure did not remain a risk mitigation strategy. Instead, infrastructure introduced risk, escalated through the dramatic 2010 earthquake and subsequent public health crisis in Haiti. This rupture with the promise of infrastructure requires an expanded understanding of what constitutes infrastructure in a peace operation. In turning to the UN camps, the service lines and pipes that sustain it, and the rules that regulate the peacekeepers' presence, risk becomes inherent to peacekeeping's very own infrastructure.

4.3.1 Peace operations management

When the Department of Field Support (DFS) was created in UN Headquarters in 2007, it firmly located the management of peace operations, its logistics and sustenance, in the peacekeeping's purview. Even prior to that, some basic documents and procedures governed the relationship between the peacekeeping mission and its host country. Thus, when MINUSTAH was expanded in the course of 2010, the arriving peacekeeping contingents were, per standard practice, subject to the Status of Force Agreement between the Government of Haiti and the UN, and the national laws and regulations of the country. Signed between MINUSTAH and the Government of Haiti on July 9, 2004, the Status of Force Agreement however provided little direction for the missions' environmental and spatial operation. (In fact, it stipulates the right to a claims commission to be set up in the case of dispute, which however never took place.) If nothing else, the Status of Force Agreement reflected a balance of power favorably tipping towards the UN.

Among the many provision, MINUSTAH was authorized to install and operate its own infrastructure, including its own radio station to inform the population about its mandate, and use much of the country's infrastructure from roads and canals to airspace, without charges. The mission ensured its provision of utilities like water and electricity for free – or at least, at the same favorable rate as other government services, while also being allowed to generate its own electricity and import other supplies. The mission also ensured that the land it was given free of charge, for its offices, camps and other facilities, remained exclusively governed by MINUSTAH. In hindsight, the agreement's brief paragraph inciting the mission and government to “cooperate with respect to sanitary services and ... in matters concerning health, particularly with respect to the control of communicable diseases” seems too inconsequential.⁴⁰⁸

For the first six years of the mission, UN reports suggest a standard compliance of the mission with the headquarters' guidelines, with a growing interest in environmental management. In 2009, the UN issued an Environmental Policy, which further specified environmental support to missions, including the responsibilities of an Environmental Officer, responsible for setting-up a mission-specific environmental management system, including an environmental baseline study and environmental action plan, and even an emergency preparedness plan. The post of environmental officer for MINUSTAH had already been created in 2006,⁴⁰⁹ and the establishment of an Environmental Compliance Unit was reported in 2009.⁴¹⁰ In the same budget year 2008-2009, the new unit conducted baseline environmental “inspections” in 33 MINUSTAH sites and planned monitoring and training for the mission's waste management. It

⁴⁰⁸ ‘Agreement between the United Nations and the Government of Haiti Concerning the Status of the United Nations Operation in Haiti’ (translation), July 9, 2004, para. 23.

⁴⁰⁹ UN Doc, A/60/728, ‘Budget for the United Nations Stabilization Mission in Haiti for the period from 1 July 2006 to 30 June 2007,’ 28 March 2006.

⁴¹⁰ UN Doc, A/63/709, ‘Budget for the United Nations Stabilization Mission in Haiti for the period from 1 July 2009 to 30 June 2010,’ 6 February 2009.

reported a “90 per cent compliance with the environmental standards of Headquarters.”⁴¹¹ On the military side of the peacekeeping mission, the Environmental Policy designated a focal point to serve as the counterpart to the Environmental Officer for liaising, coordination and advice. While the 15-page Environmental Policy was not very detailed, it did cover the basic concerns of waste, water and energy, wildlife, and cultural and historic preservation, and detailed the instruments for the mission to further analyze the environmental dimension of its action.

4.3.2 *The camp as risk*

Among the new peacekeeping contingents joining MINUSTAH after the earthquake were troops from Nepal who would soon be at the root of a second humanitarian catastrophe. Just days after the arrival of Nepali troops at MINUSTAH Mirebalais camp in October 2010, a quickly growing number of cholera cases were reported. The Nepali MINUSTAH camp, in the *Département* Artibonite, was built close to the Latem river, a tributary to Haiti’s longest and most important river ‘Artibonite’ (see *fig.* 4.5).

⁴¹¹ UN Doc, A/63/709, ‘Budget for the United Nations Stabilization Mission in Haiti for the period from 1 July 2009 to 30 June 2010, 6 February 2009, 38.



Figure 4.5. Satellite image of MINUSTAH camp located at the banks of a tributary leading to Haiti's longest river, passing the town of Mirebalais in September 2010. Source: Google Earth..

First cases appeared in communities in proximity to the Artibonite river in mid-October. Cholera deaths soon spiraled, and first pointers to the MINUSTAH camp, well documented,⁴¹² emerged soon after.

Recognizing the connection between the virus outbreak and the peacekeepers, buried in denial and refute, took much longer. Early internal communication from 2010 provided vivid testimony of the UN Secretariat's concerns with the "continuous negative press."⁴¹³ In a 'strictly confidential' note to the Secretary-General's Chief of Staff, the Under-Secretary-General of the Department of Field Support, Susana Malcorra, and Alain Le Roy, Under-Secretary-General for Peacekeeping Operations, Alain Le Roy, deflected responsibility and offered no reflection on the role of peacekeepers in the health crisis.⁴¹⁴ Indeed, UN statements and policy documents avoided

⁴¹² Fabini D. Orata, Paul S. Keim, and Yan Boucher, 'The 2010 Cholera Outbreak in Haiti: How Science Solved a Controversy', ed. Joseph Heitman, *PLoS Pathogens* 10, no. 4 (3 April 2014): e1003967, <https://doi.org/10.1371/journal.ppat.1003967>.

⁴¹³ UN Archives, S-1943-0109-0002-00003, 'Update Note for the Secretary-General,' 22 November 2010, 4.

⁴¹⁴ UN Archives, S-1943-0109-0002-00003, 'Update Note for the Secretary-General,' 22 November 2010, 6-7.

the question of responsibility, not at least to avoid financial liability. Instead, the UN excused itself by reference to the general lack of, or faulty, sewage and sanitation infrastructure in Haiti. If poverty rather than peacekeepers' action was the root cause, then, logically, the lack of infrastructure was the handicap and disaster risk, and building infrastructure would constitute the remedy. The framing of infrastructural deficiency as indicator of poverty, as root cause of Haiti's trouble, made for the continuation of the narrative that began years prior to the earthquake.

In MINUSTAH, the low-level environmental management first continued. Environmental issues received no mention again in the 2010 strategic objectives and performance plan of Edmond Mulet, who returned to the post of Special Representative of the Secretary-General and Head of MINUSTAH after the passing of his predecessor in the earthquake.⁴¹⁵ An Environmental Action Plan for MINUSTAH was, then, reported a year after the earthquake,⁴¹⁶ critiqued for its lack of systematic data collection for effective environmental monitoring.⁴¹⁷ Despite the lack of specific studies on the public health effects of MINUSTAH since 2010, the overall management of the crisis and continues high cholera risk for Haitians is troublesome.⁴¹⁸ While the local compliance with standards, site inspection, awareness-raising events and action plan did not prevent the crisis, it lay the foundation for the environmental management to come.

⁴¹⁵ UN Archive, S-1953-0071-0001-00003, '2010 Senior Managers Compact between Special Representative of the Secretary-General and head of the United Nations Stabilization Mission in Haiti, Mr. Edmond Mulet, and the Secretary-General, Mr. Ban Ki-moon,' 2010.

⁴¹⁶ UN Doc, A/65/703, Performance report on the budget of the United Nations Stabilization Mission in Haiti for the period from 1 July 2009 to 30 June 2010, 1 February 2011.

⁴¹⁷ Lucile Maertens, 'Quand les Casques bleus passent au vert: Environnementalisation des activités de maintien de la paix de l'ONU', *Études internationales* 47, no. 1 (3 April 2017): 57–80, <https://doi.org/10.7202/1039469ar>; Maertens and Shoshan, 'Greening Peacekeeping: The Environmental Impact of UN Peace Operations'.

⁴¹⁸ Ralph R. Frerichs, 'Epilogue', in *Deadly River*, 1st ed., Cholera and Cover-Up in Post-Earthquake Haiti (Cornell University Press, 2016), 249–54, <http://www.jstor.org/stable/10.7591/j.ctt20d896m.29>; Anwar Huq et al., 'Assessment of Risk of Cholera in Haiti Following Hurricane Matthew', *The American Journal of Tropical Medicine and Hygiene* 97, no. 3 (7 September 2017): 896–903, <https://doi.org/10.4269/ajtmh.17-0048>.

Two years after the cholera outbreak, Susana Malcorra, Under-Secretary-General for Field Support, and Hervé Ladsous, Under-Secretary for Peacekeeping Operation provided a glimpse at the change unfolding in headquarters. They jointly declared that “United Nations peacekeeping missions constitute the largest environmental footprint in the UN system.”⁴¹⁹ The *Greening the Blue Helmets* report, where those words were uttered, focused on the intersection between natural resources and peacekeeping. Carrying the penmanship of the UN Environment Programme (UNEP), the report could not avoid a reference to the cholera outbreak in Haiti: Its introduction points to the “confluence of circumstances” that have caused it. While still deflecting blame, the report’s authors acknowledged, in line with the 2011 UN-initiated *Final report of the independent panel of experts on the cholera outbreak in Haiti*, that the Mirebalais camp had required better waste management.⁴²⁰ More generally, the report constituted the early fruits of a growing collaboration between UNEP and the UN Secretariat on peacekeeping affairs. Eventually, a series of internal reports and leaked statements on the origins of the cholera outbreak increased the pressure on the UN.⁴²¹ In 2016, the UN Secretary-General publicly recognized the organization’s responsibility for the cholera outbreak.⁴²² The laborious and slow recognition of peacekeepers’ harm to the Haitian population and responsibility for the outbreak moved to the background as peacekeeping’s engagement in environmental questions stepped up.

⁴¹⁹ Foreword by Susana Malcorra and Hervé Ladsous. UNEP, *Greening the Blue Helmets: Environment, Natural Resources and UN Peacekeeping Operations* (Nairobi, Kenya: United Nations Environment Programme, 2012), http://postconflict.unep.ch/publications/UNEP_greening_blue_helmets.pdf.

⁴²⁰ UNEP, 8.

⁴²¹ Jonathan M. Katz, ‘U.N. Admits Role in Cholera Epidemic in Haiti’, *The New York Times*, 17 August 2016, sec. World, <https://www.nytimes.com/2016/08/18/world/americas/united-nations-haiti-cholera.html>.

⁴²² In his remarks to the UN General Assembly, the Secretary-General expressed that “we are profoundly sorry”, and that a “New Approach to cholera in Haiti” was launched and financed. (Cf. Secretary-General remarks to UNGA, 1 December 2016, <https://www.un.org/sg/en/content/sg/statement/2016-12-01/secretary-generals-remarks-general-assembly-new-approach-address>). A class action lawsuit by survivors and victims’ families is still ongoing.

4.3.3 Infrastructural interdependence

When the peacekeepers' camp caused the cholera epidemic, infrastructure and risk became related in an entirely novel way. Primarily, it moved the camp as peacekeeping infrastructure into the center of attention, effectively expanding the understanding of what constitutes infrastructure in the context of a peace operations. The management of military and civilian assets, thus far, had been divorced from the peacekeeping activity and objectives. It also established that risk emanated from very presence of peacekeepers, and that the way peacekeepers' physical assets are managed mattered because it could cause harm.

The experience in Haiti demonstrated that the peacekeeping base was – despite its pursuit of maximum independence and self-sufficiency in the face of violence and hostility directed against peacekeepers – inextricably linked to its surrounding. Water and electricity, waste and produce, pollution and labor, relate the peacekeepers to the civilian population outside the parameters of the camps. This was a paradigm shift. While the UN previously took for granted an infrastructural independence, neatly distinguishing urban community infrastructure projects from peacekeeping operations' infrastructure, it came to face its interdependence. This shift offered two principal insights.

First, the peacekeeping site emerged as a perpetrator of harm that could reverse developmental and humanitarian gains, and cause direct, interpersonal violence. Understanding infrastructure in the peacekeeping context as potentially detrimental introduced the recognition of 'infrastructural violence.' It draws attention to the risk of neglecting the organization of resources and waste, downplaying the environmental impact of public works, and discounting the physical and

material changes that come with the installation of peacekeepers' camps. In Haiti, this ignorance resulted in mental and physical harm and death of thousands of cholera victims.

Second, the environmental disaster exposed infrastructure as a potential barrier, as a risk to peacebuilding efforts and peacekeeping success. Through MINUSTAH's role in Haiti's cholera epidemic, the harm resulting from the existence, non-existence, and negligent management of the camps, and especially its waste and waste water management, became a sudden and inescapable risk for UN peacekeeping. Protest against the mission rose and support for its continued role in Haiti's peace process decreased. Peace operations' logistics and management, including its infrastructural base, were immediately – physically and politically – linked to the peacebuilding efforts inscribed in a mission's mandate. How MINUSTAH's infrastructure systems were managed thus influenced the peace process. Managed badly, it constituted a serious security risk for peacekeepers and obstacle in the stabilization and peace process.

If risk is seen as regulatory or “bureaucratic failure,” as Sheila Jasanoff analyzes,⁴²³ changes in policy and management can, and are often thought to, minimize it. The technical tools that the Department of Peacekeeping Operations and the Department of Field Support introduced contributed to the standardizing and quantifying of peacekeeping infrastructure's environmental impact. It aimed at rendering environmental issues in peace operation measurable, and thus traceable and comparable for managers to assess performance relative to other mission teams and offices. The numbers attached to indicators appeared objective and emanated scientific authority. In budget committees back in New York, such ‘scientific’ approach, removed the politics and possible contention of peacekeeping missions overstepping their mandate. Ultimately, managing

⁴²³ Sheila Jasanoff, ‘The Songlines of Risk’, *Environmental Values* 8, no. 2 (1999): 135f., <https://doi.org/info:doi/10.3197/096327199129341761>.

this risk of infrastructural violence, as the subsequent chapter will trace, led to a significant rise in environmental consciousness and future orientation in peace operations, operationalized in part, as the French philosopher Robert Castel has put, countering risk with a “new mode of surveillance: that of systematic predetection.”⁴²⁴ Centering the environment, as the next chapter will also explore, meant recognizing peace operations’ embeddedness in the space and community they seek to serve.

4.4 Conclusion

This chapter has unpacked the double bind that is infrastructure in relation to risk. MINUSTAH was launched to address risk – urban risk – with a set of community-scale projects often involving infrastructure as part of a larger development idea. In order for that response to be formulated, urban risk in the context of the peace operation was defined as the accumulation of poverty, lack of (state) services, and gang-related crime and interpersonal violence, further complicated by natural hazards. The limited efficacy of traditional peacekeeping strategies, like disarmament, demobilization and reintegration, shifted resources towards small-scale community interventions that set-up access to utilities like water and electricity, or built road and community centers, in an effort to reduce community violence through a development approach to achieve greater physical and human security. Peace operations’ involvement in community projects has since been replicated in mission globally, and it will be the task of the next chapters to further

⁴²⁴ Robert Castel, ‘From Dangerousness to Risk’, in *The Foucault Effect: Studies in Governmentality*, ed. G. Burchell, C. Gordon, and P. Miller (Hemel Hempstead: Harvester-Wheatsheaf, 1991), 287–88, <https://mit-illiad-oclc-org.libproxy.mit.edu/illiad/illiad.dll?Action=10&Form=75&Value=592621>.

explore the grappling with the function and meaning of community infrastructure and problematize peace operations' engagement 'outside the fence.'

The UN's experience in Haiti, however, is important because it set up the notion of risk – a fundamental break with the idea of 'infrastructure as promise.' Infrastructure no longer contributed to an idea of peace where peace is 'normality.' Instead, here in the infrastructural imaginary of peace, peace becomes risk mitigation. MINUSTAH's experience exemplifies that the UN's initial understanding of risk was too insular and focused on poverty and development, thereby underappreciating environmental, public health and infrastructural aspects of risk, and missing out on the consequences this very construction of risk had for the efficacy of peacekeeping.

Therefore, the other aspect to the double bind of risk is that, during its operation, MINUSTAH also introduced new risks. First, related to the very nature of its engagement in communities, the short-term and militaristic nature caused destruction and perpetuated violence – well documented by both scholars and activists that have consistently criticized the UN for how it intervened in Haiti. MINUSTAH introduced new risks through its (acu)punctual intervention in the urban social and spatial fabric, reinforcing uneven and short-termed modes of planning. Second, MINUSTAH introduced risks through its mere presence and negligent management of its own infrastructure. This recognition, on part of the UN, drew the peacekeeping camps into the understanding of the UN's physical infrastructure and the possibility of harm emerging from there. Fundamentally, it changed the self-perception of peace operations as a contained, self-sufficient and fleeting presence, to one that is fundamentally connected through infrastructure and embedded within the host country and communities it serves. Risk thus became multi-

sourced and variegated and, rather than a temporally and physically detached from peacekeepers, intimately linked to peace operations.

Since the cholera epidemic, MINUSTAH has been a frequent reference point for UN civil servants to demonstrate the need for, and historically situate, the rise of peacekeeping's environmental paradigm and sense of professionalization. Indeed, infrastructure "particularly in a time of ecological crisis ... is also an opportunity to reevaluate what we intend by infrastructure."⁴²⁵ MINUSTAH became a cornerstone mission of the peacekeeping's involvement with infrastructure for the decade to come. The years after the cholera outbreak have seen significant organizational shifts within the UN Secretariat, the emergence of new bureaucratic entities, and the production of more reports, policies, and guidelines. The logistics of peacekeeping have received more attention by UN civil servants and member state diplomats, but also felt more pressure to be cost-effective, scalable and appraisable. This is where modularization and supply chain logistics, indicators and environmental assessments, have entered the pursuit of peace. The UN's experience in Haiti paved the way for a logic of environmental (risk) management and the rise of question of 'footprint' and, eventually, 'legacy,' which the next chapter will address.

⁴²⁵ Howe et al., 'Paradoxical Infrastructures', 557.

Chapter 5 Infrastructure as Legacy: An Environmental Mandate for Peace in Mali

The experience of MINUSTAH weighted heavily on the UN administration. The Indian diplomat and Under-Secretary-General for Operational Support, Atul Khare, is said to have promised to his boss Ban-Ki Moon that under his watch, “he would never let there be another Haiti.”⁴²⁶ This gave the political backing to a small group of dedicated UN civil servants to ensure that the UN would indeed never again be at the center of a public health crisis of epidemic proportion.⁴²⁷ The vision of Haiti has been a predominant and recurring narrative when inquiring the origins and motivation of environmental management in UN peacekeeping and the mandate formulation for the UN’s intervention in Mali. Fueled by the visual reporting of Haitians’ suffering and personal witnessing, a group of Secretariat staff pushed for enhanced environmental awareness. It also led to the successful lobbying of the civil servants to include environment-specific language in a peacekeeping mission mandate. In 2013, the new UN Stabilization Mission in Mali (MINUSMA) was mandated “to consider the environmental impacts of the operation ... to manage them ..., and to operate mindfully in the vicinity of cultural and historical sites.”⁴²⁸ A key aspect of these efforts was shifting the narrative to consider peacekeeping missions’

⁴²⁶ As related to me by one of my interviewees with direct knowledge of UN field support policy, and confirmed by two other interviewees attesting to the Under-Secretary-General’s leadership in developing the environmental agenda.

⁴²⁷ Multiple of my interviewees used versions of the same language of “making sure Haiti doesn’t happen again.”

⁴²⁸ UN Docs, Resolution S/RES/2100 (2013), 25 April 2013.

footprint and their ‘legacy’ in the places of intervention in the face of environmental degradation and climate change.⁴²⁹

Since the 2013 Security Council resolution, staff in MINUSMA, and other UN missions like UNSOM in Somalia,⁴³⁰ have steadily developed the environmental management of peacekeeping bases. Key performance indicators track consumption patterns and environment-related activities. Such environmental activities gained significant traction within UN peace operations, just as the missions became involved in an increasingly varied set of infrastructure projects. On the one hand, with the rise of the “supercamp” – a blueprint design for a camp of 1000 people – UN missions are set to leave an ever-larger footprint themselves. On the other hand, infrastructure projects for the local community have multiplied, especially in Mali given various funding streams managed by MINUSMA. They, too, leave a spatial footprint.

The growing attention to peace operations’ impact on the environment has been accompanied by a shift in discourse centering the ‘footprint’ of missions and the ‘legacy’ that peacekeepers may leave. Turning the infrastructure lens to MINUSMA, I explore how ‘legacy’ is operationalized, specifically through environmental management. More broadly, what does it mean to pursue environmental management in peace operations, in a conflict zone? UN staff in headquarters crafted ‘legacy’ to garner momentum for the introduction of environmental management in peace

⁴²⁹ For Mali, since 2018, the UN Security Council has also referenced climate change as an important factor for security and stability in the country and charged MINUSMA to consider its climate impact. This language was most pronounced in UN Security Council Resolution 2423 (2018), and has been reiterated, albeit in weaker language, in the resolutions renewing MINUSMA’s mandate in 2019 and 2020. Cf. Farah Hegazi, Florian Krampe, and Elizabeth Seymour Smith, ‘Climate-Related Security Risks and Peacebuilding in Mali’, Policy Paper (Stockholm: SIPRI, April 2021), <https://www.sipri.org/sites/default/files/2021-04/sipripp60.pdf>.

⁴³⁰ Most referenced is the 2020 solar power purchase agreement by the UN Support Office in Somalia (UNSOS) – not a peacekeeping but a political mission – with the energy provider Kube Energy. Cf. ‘Baidoa Set to Boost Renewable Energy Production,’ Press Release, UNSOS, October 26, 2020, <https://somalia.un.org/index.php/en/97895-baidoa-set-boost-renewable-energy-production>.

operations as a bridge to address larger question of the “wider impact” of peace operations. However, rather than considering their wider impact for the good of the community, peace operations’ environmental management is often confined to tracking that generators are working, water is saved, and waste water is sufficiently treated, rendering peace operations technologically smarter, more efficient, cost-effective, and business-like.

The focus on infrastructure in MINUSMA reveals the interpretation of ‘legacy’ as an imaginary of peace, and its operationalization on the ground where strategy meets concrete action. While the terminology of ‘legacy’ has altered the significance and usage of infrastructure in MINUSMA, it bears inconsistencies, revealing diversity and the ad hoc nature of its understanding and implementation. As an analytic mode, infrastructure allows us to see the contradiction between theory and practice, and specifically the challenges of environmental management in a conflict zone. The infrastructure lens also exposes the efficiency considerations and business logics that have influenced peace operations. In analyzing the rise of the supercamp and, in the subsequent part, MINUSMA’s involvement in infrastructure projects for the community, the chapter problematizes these inconsistencies, notably the common distinction between ‘inside’ and ‘outside the fence’ and the implications of a broader shift in planning modes towards environmental management in the conflict context.

5.1 The crafting of legacy

In the peacekeeping context, ‘legacy’ is a rather recent addition to the vocabulary to accentuate the multiple and long-term effects of peace operations on communities. It was not part of the

initial language in the environmental management efforts after Haiti's cholera outbreak. Instead, 'legacy' was introduced through the Environmental Section of the Office of the Under-Secretary-General, in the Department of Operational Support (then the Department of Field Support) driven by a confluence of rising environmental awareness and the urgency of infrastructure as risk.

At first, the term 'wider impact' of peace operations was entertained, to highlight that the operations – just like in Haiti – may have consequences beyond their immediate realm of action, and specifically carry potentially adverse risks for local communities. 'Wider impact' had been stipulated as one of the action areas of the *Environment Strategy for Peace Operations*, issued by the UN Department of Field Support (DFS). It however was soon complemented with 'positive legacy' for its crisper and more "intuitive" usage.⁴³¹ An *Executive summary* document describing the Strategy's second implementation phase – the only publicly accessible official text on the Environment Strategy – defined "wider impact" as the efforts "to ensure that operational requirements are met in a way that takes account of environmental impact and to increase the extent to which the footprint leaves a *positive legacy* [emphasis added]."⁴³² The emergence of 'legacy' appeared as a continuation, a consequence of effective (environmental) risk management and the understanding that peacekeeping's impact could extend beyond its primary activities and peacekeepers' camp.

With this environmental focus, the terminology of 'legacy' has since been picked up by UN staff across missions and agencies, activists and researchers. In March 2022, the term appeared for the

⁴³¹ Interview with UN Official, January 13, 2022.

⁴³² UN Department of Operational Support, 'Environment Strategy For Peace Operation, Executive Summary Phase two July 2020 – June 2023,' March 2021, https://operationalsupport.un.org/sites/default/files/dos_environment_strategy_execsum_phase_two.pdf.

first time in a UN Security Council Resolution. Concerning Somalia, the Security Council members confirmed the environment-centric understanding of legacy, and also revealing a particular emphasis on the energy sector:

The sustainability of peace and security support is improved by the implementation of the United Nations Department of Operational Support's Environment Strategy (Phase II), which emphasises good stewardship of resources and a positive legacy of the mission, and identifies the goal of expanded renewable energy use in missions to enhance safety and security, save costs, offer efficiencies and benefit the mission, mindful of the Secretary-General's call for field operations to shift to renewable energy by 2030 to meet UNSCAP [UN Secretariat Climate Action Plan] goals⁴³³

While the mission's footprint – notably in the domain of energy consumption – is an important entry point, it begs the question of how to extend benefits of that very footprint, the infrastructure of the mission. The idea of a “secondary benefit” to the host community, during and after a mission, has been entertained by UN staff, although it still remains unclear how infrastructure and operation used by peacekeepers could best be made available to others without incurring extra costs.⁴³⁴ In four of my interviews, mid-level staff involved with peace operations explicitly mentioned that for them, ‘legacy’ carries a higher ambition “beyond do-no-harm.”⁴³⁵ How to link the quest for efficiency while doing-good has been a persistent theme among UN staff.

Legacy can, but does not have, center on the environment. Instead, as social legacy, it can encompass a wide range of domains that would typically considered as development. On a personal level among UN headquarters staff, this thematic connection was forged through professional inter-institutional secondments and hires of people with a background in international development, for example at UNDP. Practically, ‘legacy’ has also been perceived

⁴³³ UN Docs, Resolution S/RES/2628 (2022), 31 March 2022.

⁴³⁴ Interview with UN Official, January 13, 2022.

⁴³⁵ Interviews with staff at UN Secretariat, MINUSMA and UNDP, October 7, 2021; May 4, 2022; June 9, 2022; March 8, 2022.

as sufficiently unassuming to withstand internal politics and to signal that the Department of Peace Operations does not intend to overstep its mandate, thus ensuring the buy-in from the donor countries and UN member states represented in the budgetary committees deciding on peace operations' finances. Legacy is understood as a byproduct, a secondary impact, as UN Secretariat staff with good knowledge of contemporary peace operations explained to me. In keeping 'legacy' a byproduct, peace operations' primary intention of stabilizing a country in its transition from war to peace is not questioned. This is significant, because it foreshadows the limits of peace operations' environmental and social involvement in the communities they serve. The 'legacy' outlives the peace operations. Leaving a legacy, directly or indirectly,⁴³⁶ stipulates the (positive) spatial-environmental impact of peace operation once the camps' fences are removed. It implies a temporal orientation towards the long-term, the afterlife of the mission. As such, it may be distinct from the idea of 'wider impact' which reflects a spatial orientation, concerned with peace operations' impact 'outside the fence' during the peacekeepers' presence, as one interviewee speculated.⁴³⁷ While 'legacy' thus has a very clear political origin story, it has also become an operational tool to focus on the future. Bounded by pragmatic considerations of feasibility, it provides the motivation for an enhanced environmental management of peacekeeping operations, regulating the peacekeepers' infrastructure, the camps, and their utilities to not do any damage.

⁴³⁶ John Gledhill, 'The Pieces Kept after Peace Is Kept: Assessing the (Post-Exit) Legacies of Peace Operations', *International Peacekeeping* 27, no. 1 (1 January 2020): 1–11, <https://doi.org/10.1080/13533312.2019.1710367>.

⁴³⁷ Interview with UN Official, July 21, 2022.

5.2 From environmental management to the supercamp

By the time MINUSMA was created, a major shift occurred in the UN headquarters: “We [the UN] were pushing for ‘supercamps.’”⁴³⁸ The supercamp emerged as the result of a new way of thinking about peace operations’ logistics, financial management, and efficiency. In turn, it radically changed what peace operations look like on the ground, how they operate and how they are managed. The supercamp also forged a partnership of convenience with the growing awareness of peacekeeping’s environmental impact and the resulting turn to environmental management, with an impact much beyond the parameters of the camp.

5.2.1 MINUSMA’s supercamps

Today, MINUSMA occupies large patches of periurban lands across Mali. In Bamako, Mopti, Timbuktu, Gao, and Kidal,⁴³⁹ the MINUSMA camps resemble compact cities, with offices, accommodation, storage, and leisure facilities, with roads, solar panels, waste management and water treatment infrastructure, hosting more than 17,000 personnel.⁴⁴⁰ These ‘supercamps’ are designed for accommodation and offices, supplies, troops and civilian staff. All surrounded by one fence, heavily fortified towards the outside but allowing for free movement and access to a wide range of services – like a city or an “Amazon warehouse” (“plateforme Amazon”)⁴⁴¹ –

⁴³⁸ Interview with UN Official, January 25, 2022.

⁴³⁹ Based on an interview with a MINUSMA staff (May 26, 2022) in each sector one supercamp is located and acts as a sector headquarters, replicating the organizational structure of MINUSMA at smaller scale.

⁴⁴⁰ The UN (<https://peacekeeping.un.org/en/mission/minusma>) reported 17,06 total personnel in April 2022.

⁴⁴¹ ‘Barkhane: un repli à marche forcée’, *Grand reportage* (RFI, 14 July 2022), <https://www.rfi.fr/fr/podcasts/grand-reportage/20220714-barkhane-un-repli-%C3%A0-marche-forc%C3%A9e>.

inside. Given their need for space, the supercamps are built on available land given to the mission by the Malian government, and yet sufficiently close to major cities in the country's north. Camps in Mopti, Timbuktu, and Gao are in the vicinity to the airports and the Kidal camp was repurposed from national army military camps. Typically located at cities' outskirts on 'greenfield' land, the camps often lack the surrounding infrastructure connections of roads, sewage, or water.

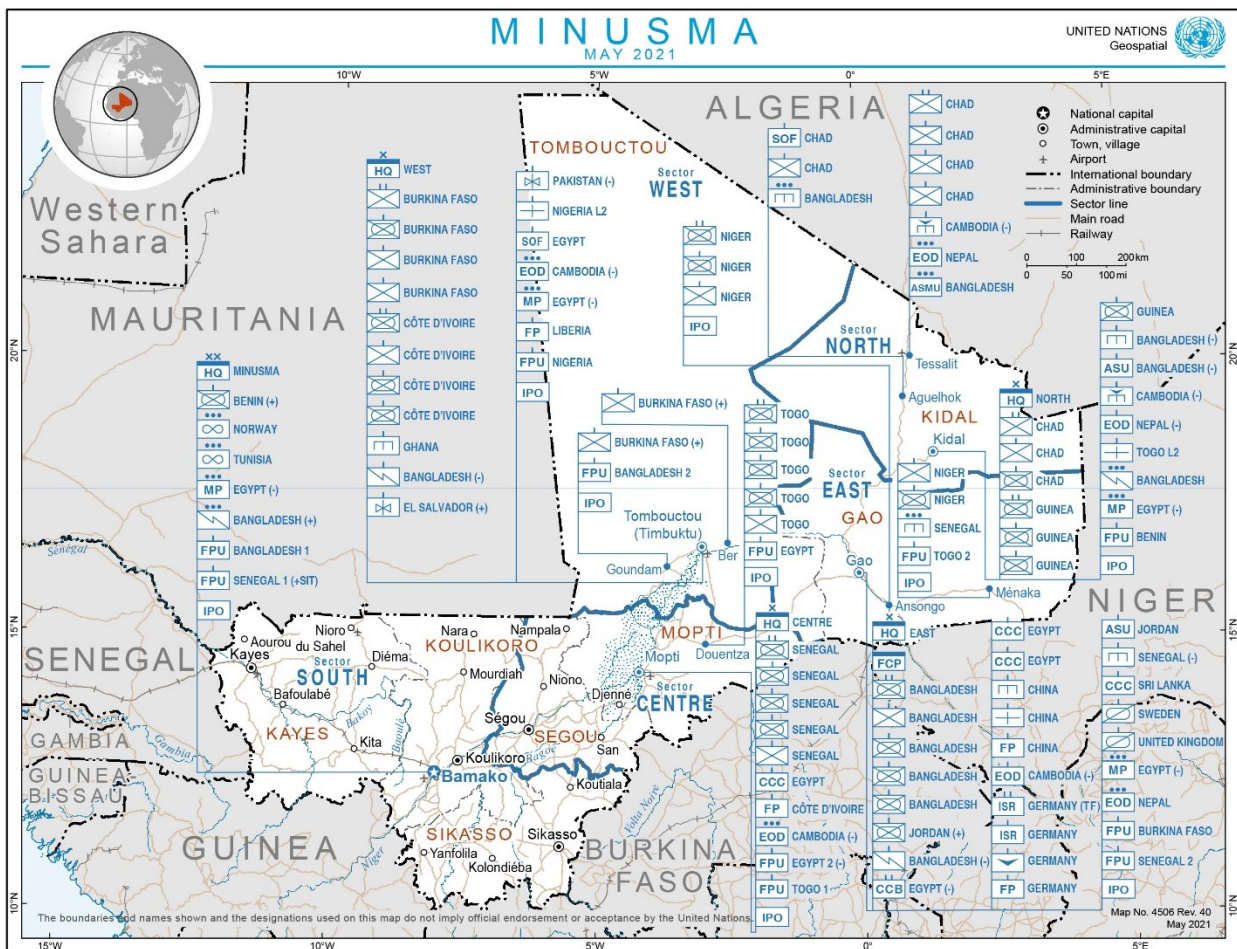


Figure 5.1. MINUSMA deployment map, May 2021 (Source: UN Cartographic Section)

In Gao, the hub for MINUSMA’s northern operation, several military camps are located in close proximity to each other. Camp Castor has been inhabited by, among others, NATO forces including Dutch, German, British, and Canadian troops. Equally in Gao are a camp used, until the operation’s end in 2022, by the French force *Barkhane*, a camp by the Malian Armed Forces, and the MINUSMA ‘supercamp’ where both civilian staff, police and peacekeepers are based. In contrast to other cities in northern Mali with significant military presence, Gao is the only city where troop-contributing countries of the Global North are stationed among the many other countries of the Global South (see *fig. 5.1*). In contrast to the supercamps, other camps with less amenities and lower levels of security (and therefore more attacks), including in Kidal and Gao, have hosted troops from Africa and Asia, in what has been described a “racial and regional division of labor” within peace operations.⁴⁴²

In Bamako, too, MINUSMA staff has been removed from the city center to one large camp, bringing together military, logistics, and political staff in one location. Like a settlement, the camp features a restaurant maintained by the global supply chain and logistics company *Ecolog*, but also – added to Google Maps by Bangladeshi peacekeepers – a garden, car wash, and board game club (see *fig. 5.2*). It is delineated by a sophisticated fence and protective barrier, surrounded by roads, and separated from pastures and few settlements.

⁴⁴² Ruben Andersson, ‘Bamako, Mali - Danger and the Divided Geography of International Intervention’, in *Cities at War Global Insecurity and Urban Resistance*, ed. Mary Kaldor and Saskia Sassen (New York: Columbia University Press, 2020), 37, <https://www.degruyter.com/isbn/9780231546133>.



Figure 5.2. MINUSMA main operations base in Bamako and the public mapping of facilities in Bengali by peacekeepers within the camp. Source: Google Earth, Airbus/Maxar Technologies, 2022; Google Maps 2022 (below).

Initially, as the supercamps were built, civilian staff temporarily occupied hotels. For most of the MINUSMA staff in Bamako, this was *Hôtel de l’Amitié*, providing the space and services needed to quickly mount the mission’s administration. For a while, MINUSMA kept this office in the

city, close to ministries and embassies and easily accessible for journalists. In late 2015, the Malian government assigned land in proximity to the Bamako airport for MINUSMA to build a camp. This was, as panafrikan journal *Jeune Afrique* pointed out, a reluctant move: Keeping MINUSMA in the provisional luxury hotel embodied the government's hope that the mission could close before it built up a much more permanent-looking military infrastructure on empty land.⁴⁴³ Indeed, a hotel would be easier to vacate than a camp built from scratch. Yet, the new camp in Sotuba, close to the airport at the fringes of Bamako, was built.

The camp first accommodated troops and logistics only, while civilian staff and management remained in the city. With such new and large space available, however, it became increasingly less economical to keep renting space in the *Hôtel de l'Amitié*, in addition to offices in the municipality of Badalabougou, southeast of Bamako, which was also rented from private landlords and housed MINUSMA staff and UN agencies. In 2016, ahead of the January 2017 Afrique-France summit in Bamako, during which the *Hôtel de l'Amitié* would receive high-level delegations, MINUSMA's contract with the hotel was no longer renewed and staff moved, first to the offices in Badalabougou – now the country's UN House – and then, in April 2019, eventually to the camp.⁴⁴⁴

The move of Bamako-based MINUSMA personnel is indicative of the consequences and challenges of the large camps. Per design, the new spaces integrate the different pillars of a mission, bringing together civilian and military staff, operational and substantive personnel. Being a self-sufficient space, it renders life on the camp more inward looking, furthered by the

⁴⁴³ Baba Ahmed, 'La Minusma doit quitter son quartier général de l'hôtel Laico de Bamako', *Jeune Afrique*, 22 January 2016, <https://www.jeuneafrique.com/296096/politique/mali-la-minusma-doit-quitter-son-quartier-general-de-lhotel-laico-de-bamako/>.

⁴⁴⁴ Interview with UN Official, January 25, 2022.

distance to the Bamako center and its political and social life. Security considerations in the face of a series of attacks against peacekeepers and Western institutions (including in 2015 through terrorist attacks in Bamako), too, may have driven the move, effectively cementing the vicious cycle of MINUSMA's increasing bunkerization and remoteness from the population it seeks to serve.⁴⁴⁵

The new size and location of the supercamp has been a drastic change from previous peace operations, when peacekeepers were hosted in smaller compounds, even in cities, frequently using existing facilities like schools or hotels. In part, this change was due to the recognition that taking away public infrastructure, especially schools, was problematic because it stripped away important public infrastructure from the community.⁴⁴⁶ More than that, though, the new (super)camp design was recognized as attractive for management, financial and security reasons.⁴⁴⁷

5.2.2 Environmental management

When in 2013 the UN Security Council members created MINUSMA and endowed it with the obligation to monitor its environmental impact, the memory of Haiti's cholera crisis was still fresh. After 2010, the recognition of possible infrastructural harm manifested in a rapid succession of reports, guides and institutional reforms that further embedded peace operations' environmental and, through that, infrastructural dimension in the UN's agenda. In parallel, peace

⁴⁴⁵ Andersson, 'Bamako, Mali - Danger and the Divided Geography of International Intervention'.

⁴⁴⁶ Interview with UN Official, January 25, 2022.

⁴⁴⁷ Ibid.

operations-related logistics received significantly more attention, too. Concerns of efficiency, rapid deployment capacities, and professionalization became inextricably linked with the impending environmental management.

What does environmental management look like? For the MINUSMA supercamps in Timbuktu and Gao, a 2020 UN brochure announced the building of large-capacity conventional wastewater treatment plants. The plants serve 3000 and 4,500 people, able to recycle and compost water-related waste for agriculture. Such infrastructure not only has immediate benefits but also reveals the future post-MINUSMA orientation of the project: “These systems will lower upfront costs, facilitate easier maintenance, and legacy after mission close-out.”⁴⁴⁸

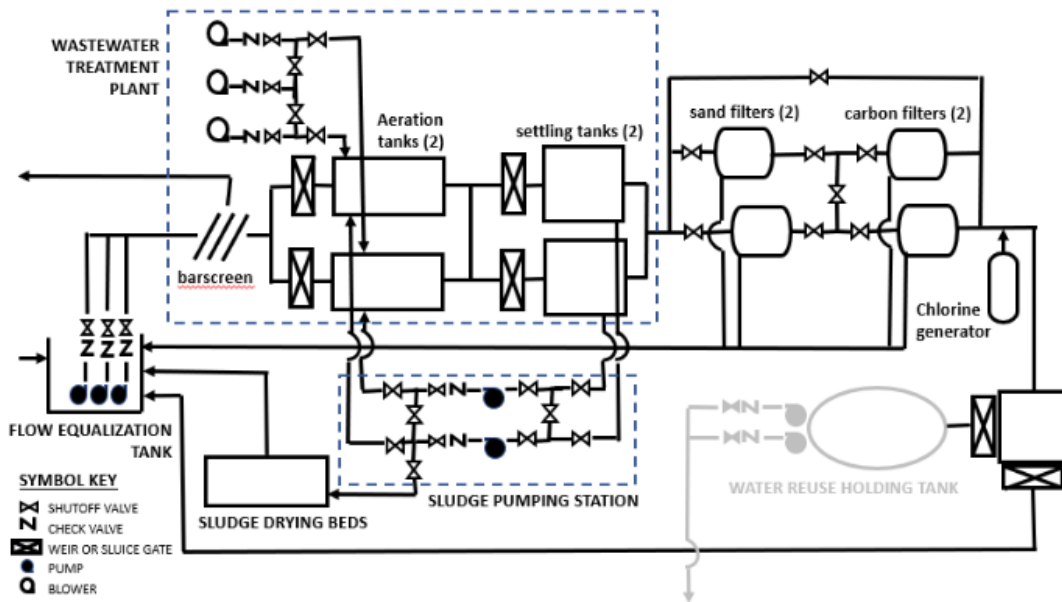


Figure 5.3. Plan of the wastewater treatment plan for MINUSMA supercamps. Source: UN DOS, ‘Environmental Good Practices : 2020 Implementation of the Environment Strategy for Field Missions,’ n.d., https://peacekeeping.un.org/sites/default/files/2020_good_practice_2020_implementation_of_the_environment_strategy_for_field_missions.pdf.

⁴⁴⁸ UN DOS, ‘Environmental Good Practices : 2020 Implementation of the Environment Strategy for Field Missions,’ n.d., https://peacekeeping.un.org/sites/default/files/2020_good_practice_2020_implementation_of_the_environment_strategy_for_field_missions.pdf

The sophisticated nature of the infrastructure (cf. *fig. 5.3*) and of environmental management at large is indeed enmeshed with the supercamp. There are economies of scale and planning security: the complex technology serves more people in one large and permanent camp in a relatively safe site. It is also easier to put environmental risk management in place in the vicinity of companies and communities that can provide services.⁴⁴⁹

Prior to the Haitian earthquake, the ‘Greening the Blue’ campaign launched in 2007 by the UN Secretary-General had garnered some initial awareness on environmental issues and the need to monitor and reduce or offset the United Nations’ environmental impact in the field. As the *New York Times* already reported back then, it incited highly-visible and symbolic environmental action for “troops entertainment” such as big-scheme tree-planting or public clean-ups that were questionable for their allocation of resources.⁴⁵⁰ In 2009, DFS issued its first Environmental Policy for UN Field Missions, replacing the various manuals and guidelines that had previously been produced by field staff on a provisional and ad hoc basis in the context of particular missions.

After 2010, a small group of New York and Geneva-based civil servants across UN DFS, the Policy, Evaluation and Training Division, and the Post-Conflict and Disaster Branch of UNEP collaborated to further develop the links between environmental concerns and peacekeeping. In 2016, these efforts resulted in the creation of the *Environment Section* in the Office of the Under-Secretary-General in the Department of Field Support. In June of the same year, DFS joined with UNEP to institutionalize efforts to reduce negative environmental impact and improve energy

⁴⁴⁹ Interview with UN Official, July 21, 2022.

⁴⁵⁰ Nathaniel Gronewold, ‘Environmental Demands Grow for U.N. Peacekeeping Troops’, *The New York Times*, 11 August 2009, <https://archive.nytimes.com/www.nytimes.com/gwire/2009/08/11/11greenwire-environmental-demands-grow-for-un-peacekeeping-40327.html>.

performance in field missions. Then, in 2016, the UN Department of Field Support (DFS) together with the UN Environment Programme launched the Rapid Environment and Climate Technical Assistance Facility (REACT) with a budget of \$8.5 million to assist peacekeeping missions.⁴⁵¹ REACT brought together a team of UN civil servants to provide in-house support to peacekeeping missions and strategic advice to the DFS's successor, the Department of Operational Support, its environment and engineering teams on all aspects of environmental management.

REACT's work is organized along the lines of the *Environment Strategy for Peace Operations*. The strategy came into effect in January 2017 for a six-year period. It aimed, as the Strategy's updated version for the second implementation phase stipulated, at creating "responsible missions that achieve maximum efficiency in their use of natural resources and operate at minimum risk to people, societies and ecosystems; contributing to a positive impact on these wherever possible."⁴⁵² The Strategy was organized in five thematic fields of activity, including energy, water and wastewater, waste management, environmental management system, and "wider impacts," onto which 'positive legacy' has since been added. These domains have been replicated in the organization of REACT where each domain is represented by one officer, and in working groups with field mission staff working on the respective issues in peace operations.

The efforts by the Environmental Section produced a rapidly growing paper trail, from missions' environmental action plans, to good practice publications, monitoring tools and performance reports, in which MINUSTAH remains a frequent reference. A 2017 Environmental Good

⁴⁵¹ Project REACT in the UNEP project database, UNEP, accessed 2 May 2021, <https://open.unep.org/project/PIMS-01954>.

⁴⁵² UN DOS, 'Environment Strategy for Peace Operations,' Executive Summary Phase 2, March 2021.

Practice publication by DFS, for example, suggests that MINUSTAH presented as “a lesson for all other missions that it is better to start early when it comes to hazardous waste management.”⁴⁵³ Field staff pre-deployment training manuals, which were updated with a 45-minutes ‘environment’ module in 2017,⁴⁵⁴ similarly reverberate the water theme of the Haiti crisis.⁴⁵⁵ To explain the ‘do no harm’ principle, the course features a sectional drawing with a UN peacekeeper next to an oil-leaking tank separated by a barbed wire fence from local community members assembled around a well (see *fig. 5.4*). Underground, water connects the two, showing how dark liquid seeps from the peacekeeping infrastructure into the ground water, connecting to the well.

⁴⁵³ DFS, ‘Environmental Good Practice: 2017 Implementation of the DFS Environment Strategy in Field Mission’ (United Nations, November 2017), 3,
https://peacekeeping.un.org/sites/default/files/171117_environmental_strategy_good_practices.pdf.

⁴⁵⁴ Maertens and Shoshan, ‘Greening Peacekeeping: The Environmental Impact of UN Peace Operations’.

⁴⁵⁵ The learner first watches a brief UNDP-produced video clip named after the 2006 UN Human Development Report *Beyond Scarcity: Power, Poverty and the Global Water Crisis*, which illustrates the scarcity of clean water in the urban slum of Kibera – unrelated to peacekeeping. From here, the learner is asked to reflect on the significance of water, the consequences of its scarcity, and motivation to manage water as a resource. Despite this initial, and recurring, water focus, the course becomes however comprehensive, touching upon tangible and intangible cultural heritage in the same vein as natural resources and the environment, and the many ways peacekeeping personnel can be caught up in them. (Cf. UN Repository, UN DPKO-DFS Core Pre-deployment Training Materials, 2017, Module 3 – Lesson 3.5 Environment and Natural Resources.)

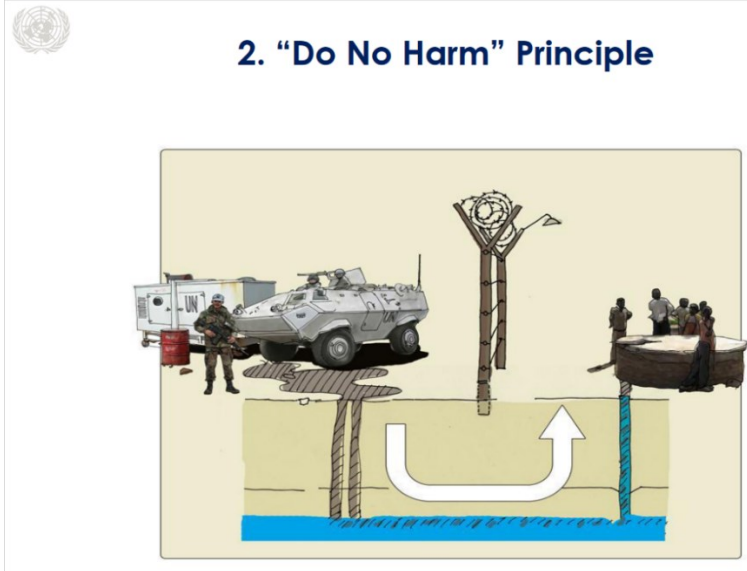


Figure 5.4. Slide from the UN Pre-deployment training manual. Source: UN DPKO-DFS CPTM Version 2017, Module 3 – Lesson 3.5 Environment and Natural Resources, p. 6.

Images like this are significant because they aim at visualizing the invisible infrastructural connections that have been ignored in peace operations for so long, but now understood as the foundation for environmental management.

The environmental advocates at the UN Secretariat in New York undertook efforts to draw environmental management near peacekeeping operations. In the spirit of broader field support reforms, to which the next section will turn, the Environmental Technical Support Unit (ETSU) was installed in the United Nations Global Service Centre in Brindisi, Italy. Just like with other missions, ETSU conducts annual site inspections together with the environmental officers and focal points in MINUSMA’s various camps. To bring environmental management to the missions’ military contingents – those that are managing the camps on a day-to-day basis – the Environment Section in New York also wrote the *Environmental Management Handbook for*

Military Commanders in UN Peace Operations, addressing the military planning and awareness raising for environmental issues before, during and at the end of deployment.⁴⁵⁶

Environmental management also became ‘smarter’. The UN Global Service Center in Brindisi launched the ‘Field Remote Infrastructure Monitoring’ (Unite FRIM). The management tool’s dashboard provides a glimpse into the distant monitoring of energy and water production and consumption, waste water indicators, and the overall environmental ‘key performance indicators’ (see *fig. 5.5*).

⁴⁵⁶ UN Department of Peace Operations, ‘Environmental Management Handbook for Military Commanders in UN Peace Operation,’ March 2021.

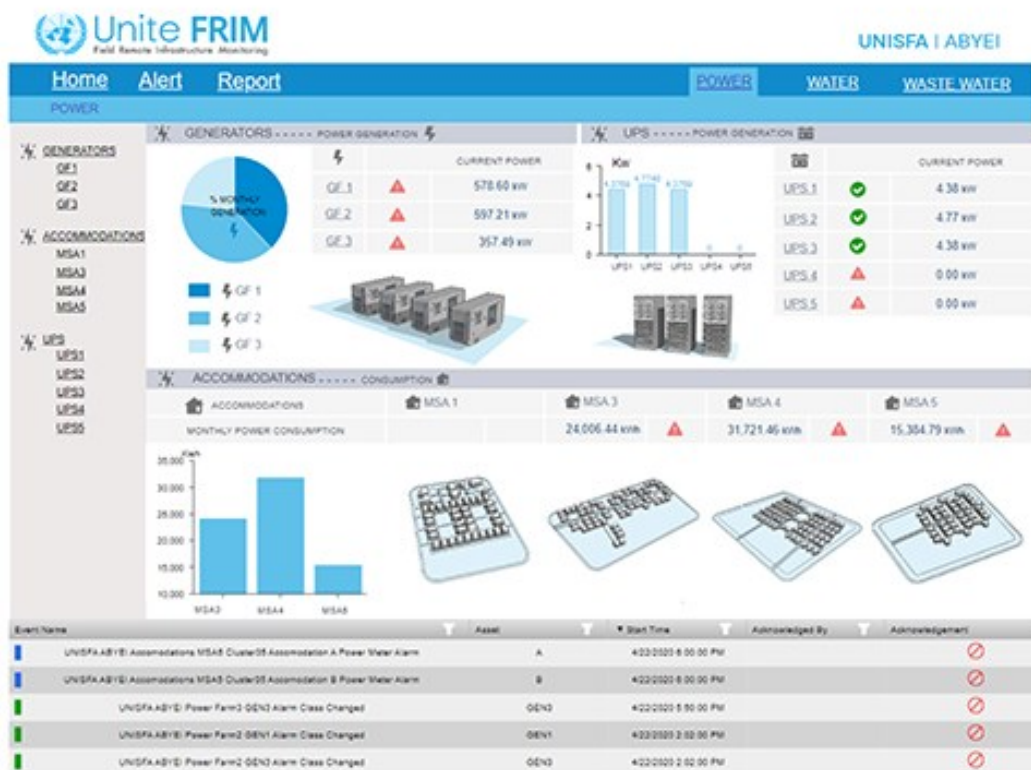


Figure 5.5. The UN Global Service Centre shared rare insights into the Unite FRIM dashboard and user interface of its missions' environmental management technology, presenting an example from the UN Interim Security Force for Abyei (Sudan, South Sudan). Source: UNGSC 2022, <https://www.ungsc.org/InFocus2>.

Cameras and a variety of sensors allow for infrastructure to be monitored remotely, which according to the UN's operational logic is more cost-effective and exposes personnel to less risk. For MINUSMA, 125 sensors were installed and 1,342 data collection points exist across the camps in Gao and Timbuktu.⁴⁵⁷ Mission personnel can also collect, validate, approve, report, analyze and validate data with *eAPP*, the 'Environment Action Planning Performance' online platform. Organized around the pillars of the Environment Strategy, it assembles the more than hundred indicators – the same for all missions – and provides a “score card” for each peace operation every six months.

Both the online platform, as part of various monitoring tools, and the educational efforts have been implemented in MINUSMA through environmental officers and focal points in all of the mission's regions, led by the responsible team in mission headquarters. Just as the app was designed to improve “environmental performance and risk management,”⁴⁵⁸ the team engages MINUSMA staff and contingents around environmentally conscious action, training and consumption monitoring. The regular data entry, validation, and verification of data through the *eAPP* was considered an important exercise in itself, bringing mission personnel together in this multi-step process, as two MINUSMA staff with knowledge of the process explained. Just like for other missions, a resulting low grade on the score card puts pressure on a mission to adjust its environmental management.

In the past, environmental management in MINUSMA has remained challenged. The 2019 audit report of the UN's Office of Internal Oversight Services criticized among other things, the

⁴⁵⁷ UN Global Service Centre, 'Unite FRIM MINUSMA Awareness Workshop,' April 24, 2022, https://www.ungsc.org/NEWS_18_Unite%20FRIM%20MINUSMA%20Awareness%20Workshop.

⁴⁵⁸ UN Department of Peace Operations, 'Environmental Management Handbook for Military Commanders in UN Peace Operation,' March 2021, p. 86.

mission's waste water treatment, disposal of construction waste, sewage treatment and continuous cooking with firewood in the contingents.⁴⁵⁹ The monitoring of consumption, too, was considered flawed. The report noted that some of the remote-control meters for diesel generators to track energy consumption were lacking or malfunctioning, and that ground water levels at MINUSMA's 32 boreholes had not been measured either, risking a depletion of groundwater resources – a severe issue in a climate-vulnerable Sahel country like Mali, and which already caused local communities' protest against MINUSMA in Kidal in 2016.⁴⁶⁰ Overall water consumption, too, was considered too high: MINUSMA staff was assessed to consume 160 liters per person per day in Bamako, rather than the prescribed 80 liters.⁴⁶¹ The mission also lacked strategic engagement on assessing its footprint. Until the audit, MINUSMA had not conducted any environmental impact assessment to understand the consequences of “mission-wide environmental activities including cultural, historical, animal, plants, and socioeconomic aspects in all sites/camps” on surrounding communities and the ecosystem.⁴⁶²

5.2.3 Business management

The increasingly 'smart' environmental management, irrespective of its implementation challenges, relates to a larger transformation of peace operations' camps, their conception, design and operation as 'supercamps'. The business-like manner in which the camp is being managed and rendered environmentally friendly is a function of what UN civil servants and

⁴⁵⁹ Office of Internal Oversight Services, Internal Audit Division, 'Report 2019/016: Audit of Implementation of the Environmental Action Plan in the United Nations Multidimensional Integrated Stabilization Mission in Mali' (United Nations, 21 March 2019).

⁴⁶⁰ Office of Internal Oversight Services, Internal Audit Division, 3–5.

⁴⁶¹ Office of Internal Oversight Services, Internal Audit Division, 4–5.

⁴⁶² Office of Internal Oversight Services, Internal Audit Division, 10.

political leaders are de facto able to control. The *Greening the Blue Helmets* report illustratively called on peacekeeping operations to employ “creative and transformational practices, technologies and behaviours” because they not only allow for positive environmental, but also financial gains.⁴⁶³ The smart supercamp, thus, is a way to manage in a rational-scientific and therefore apolitical way the environment in a context that is deeply conflictual and violent. It is also driven by an increasing pressure to be more cost-effective. Operational objectives with an eye to finance and efficacy have determined the rising technocratic turn in peacekeeping, in which environmental considerations found their place.

Three years after its founding in 2007, DFS issued the *Global Field Support Strategy*. The document formalized the operational and logistical aspects of peacekeeping – motivated under an umbrella of environmental protection. Approved by the UN member states in 2010, the strategy leaned heavily on private sector language and practices. A big push for a more managerial, standardized approach to UN peace efforts, it promoted relying on faster outputs, “economies of scale,” accountability and efficiency through supply chain management and “innovative contracting methodologies.”⁴⁶⁴ In rendering peacekeeping logistics, supply chains and physical outfitting of missions more efficient and effective, it suggested reducing the “in-country environmental impact of peacekeeping.”⁴⁶⁵ A corner stone in these efforts was to decentralize resources away from New York and render support capacities geographically closer to the places of peacekeeping intervention. Since most of UN interventions since the 2000s

⁴⁶³ Foreword by Achim Steiner, UNEP Executive Director. UNEP, *Greening the Blue Helmets*.

⁴⁶⁴ UN DFS, ‘Global Field Support Strategy 2010-2015: Overview of Context, Objectives, Results and Lessons Learned,’ 2015, https://unsos.unmissions.org/sites/default/files/gfss_overview_150626.pdf.

⁴⁶⁵ UN Documents, A/64/633, Global field support strategy, 26 January 2010.

haven taken place in Africa, the Global Service Center was established in Southern Italy, Brindisi, with additional hubs in Valencia, Spain and Entebbe, Uganda.

Essential to the supercamp, DFS introduced “modularization” to peace operations: a more standardized and replicable approach to mission design and therefore greater “effectiveness.” Modular, pre-designed and fabricated, ready-to-ship parts enabled the quick build-up of a peacekeeping presence. In turn, in order to fit peace operations’ presence on the ground with modular kitchen or ablution units, it required a standardized peacekeeping camp size to begin with. The 2014 progress report on the implementation of the *Global Field Support Strategy* suggested the review of designs for 50-, 200- and 1000-persons camps as the new design standard.⁴⁶⁶ Modular camps had already been designed at the UN Logistics Base in Brindisi for AMISOM in Mogadishu and later the ‘modular kits’ were also used MINUSMA. As a new approach, according to the *Global Field Support Strategy 2010-2015*, modularization meant “standardized modular designs for mission camps, including fortified structures,” “tailored mission infrastructure designs” by UN engineering design teams, and “diversified accommodation solutions, including new prefabs, modified sea containers, tented camps.”⁴⁶⁷

A critical partner in this logistical overhaul and entrepreneurial efficiency logic was UNOPS under the – now disgraced⁴⁶⁸ – Executive Director Grete Faremo. In the 2019-report of her organization, she stated that she “wanted to improve the way we managed risk,”⁴⁶⁹ outlining a

⁴⁶⁶ UN Documents, A/68/637, ‘Fourth annual progress report on the implementation of the global field support strategy, December 4, 2013, p. 7.

⁴⁶⁷ UN Department of Field Support, *Global Field Support Strategy 2010-2015, Review*, Jun 2015.

⁴⁶⁸ Farnaz Fassihi and David A. Farenthold, ‘Head of U.N. Agency Resigns After Questions Arise About Loans’, *The New York Times*, 8 May 2022, sec. U.S., <https://www.nytimes.com/2022/05/08/us/politics/un-agency-loans-resignation.html>.

⁴⁶⁹ UNOPS, ‘Hidden Champions: Smart Solutions to impossible challenges,’ 2019, https://content.unops.org/publications/UNOPS_Hidden-Champions_2019_EN.pdf.

business plan in which the relatively small agency would become a major lender to private sector infrastructure projects, thus effectively tackling UN bureaucracy: “More than 1,200 pages of rules went into the trash, and we began rewriting our operating principles, which I modeled after ... the largest Norwegian private pension provider,” Faremo told the *Harvard Business Review*.⁴⁷⁰

The standardized design allowed for a consistent evaluation with the same set of parameters anywhere in the world, which was considered key to more efficient peacekeeping. “In response to the performance challenges,” the 2017 audit report reviewing the *Global Field Support Strategy* noted, “a major emphasis was put on streamlining and standardizing shared service processes, and strong quality assurance and performance monitoring tools were developed.”⁴⁷¹ The auditors also noted that DFS “has now successfully institutionalized a standard-setting annual Global Client Satisfaction Survey,”⁴⁷² which canvasses the peacekeeping missions’ civilian, military, and police staff.⁴⁷³ In numbers: despite a 20% increase in personnel in land-locked or hard to reach locations between 2010 and 2015, from roughly 50 to 60 percent, the cost per deployed peacekeeper sunk by around 17 percent in the same time.⁴⁷⁴

Modularization and the broader push for greater efficiency was closely related to environmental concerns. Then Under-Secretary-General for Field Support Susana Malcorra explained in a 2011 interview the environmental motivation behind modularization:

⁴⁷⁰ Grete Faremo, ‘The Executive Director of a Un Agency on Running It Like a Business’, *Harvard Business Review* 97, no. 3 (5 June 2019): 39–43.

⁴⁷¹ United Nations Board of Auditors, ‘Compilation of lessons learned from the Global Field Support Strategy,’ 1 May 2017, 4.

⁴⁷² United Nations Board of Auditors, ‘Compilation of lessons learned from the Global Field Support Strategy,’ 1 May 2017, 5.

⁴⁷³ “Client Satisfaction,” n.d., UN Department of Operational Support, <https://operationalsupport.un.org/en/client-satisfaction>.

⁴⁷⁴ UN Department of Field Support, *Global Field Support Strategy 2010-2015, Review*, Jun 2015.

The carbon footprint of peacekeeping mission is huge and we are one of the largest polluters in the UN. One of the drivers of the GFSS is to be respectful of the environment by providing our services in a cleaner way. Modularization includes water treatment plants, a better way to manage waste, the notion of lowering fuel dependence and harnessing sunlight. We are also working on air services.⁴⁷⁵

Providing modules to peace operations, it seems, can provide the right, standardized infrastructure and technology to be more environmentally-friendly. Confining themselves to very technical tasks, the bureaucrats and environmental experts shaped the collective imaginary of how peacekeeping operations should operate.

Environmental concerns and the drive for greater efficiency, competitiveness and cost-cutting converged on the UN camps. As a site of intervention, it became the realm of environmental expertise. As a UN official with good knowledge of peacekeeping missions described in an interview, the focus on environmental management ‘inside the fence’ is the focus mostly because it is feasible.⁴⁷⁶ Data from the military bases and camps is available. It can be collected and tracked in a relatively stable environment, where measuring devices can be stationed and regularly visited, read and maintained. This is in stark contrast to the feasibility of such type of management, measuring electricity or water consumption, monitoring levels of toxicity or pollution ‘outside the fence’ in an often unstable and potentially threatening environment for peacekeepers. How ‘footprint’ and ‘legacy’ therefore are conceived in the context of community infrastructure projects will be the subject of the next section.

⁴⁷⁵ Susana Malcorra, ‘Interview with Susana Malcorra “Building on the Global Strategy”’, *Year in Review: United Nations Peace Operations 2011, 2012*, 7–9, <https://doi.org/10.18356/14fb9c29-en>.

⁴⁷⁶ Interview with UN Official, February 23, 2022.

5.3 MINUSMA community infrastructure projects

In parallel to environmental management, MINUSMA has pursued a range of community projects and peacebuilding initiatives through which it exerts influence on environmental, and increasingly climate-related, concerns. As instruments, the Quick-Impact Projects (QIPs) and community violence reduction projects have previously been used in other missions, notably in Haiti. As the previous chapter elaborated, MINUSTAH's experience specifically demonstrated the peace operation's *urban* engagement and its emphasis on the social and spatial context of intervention as an important factor conditioning the peace operation's strategic orientation, activities, and efficacy. Applying a critical urban planning lens, I will now review MINUSMA's engagement with community infrastructure projects to entertain another dimension to the inconsistencies of 'legacy'. Because of the environmental framing of legacy, I suggest, community projects are typically neither considered with the same rigor of environmental management, nor are they part of a wider understanding of legacy. They lack site- and context-specificity, and consideration of the social, cultural, and conflict context, to engage meaningfully with infrastructure projects' long-term, socio-spatial impact.

In Mali, infrastructure projects and other community interventions, like trainings and events, have been funded by a variety of sources administered by MINUSMA, including a QIPs budget line in the annual mission budget, financed through the UN member states annual assessed contributions, the Trust Fund for Peace and Security in Mali and, for some time, the Peacebuilding Fund. Specific thematic workstreams within MINUSMA such as the Community Violence Reduction Section or even military contingents, too, utilize infrastructure projects in their engagement with communities. While community projects like QIPs have been used in

peace operations prior to MINUSMA, the variety of funding sources has expanded and deepened the mission's socio-spatial involvement in the host country: MINUSMA engages with the Malian population, civil society and local authorities as it builds infrastructure, alleviates humanitarian needs, mediates conflicts, and contributes to what would typically be considered development.

The various funding mechanisms available to MINUSMA allow for different types of projects.

The UN Trust Fund for Peace and Security in Mali, the 'Trust Fund' in short, was created by UN member states in 2012 when the Security Council authorized AFISMA, the African-led International Support Mission in Mali.⁴⁷⁷ While AFISMA was soon replaced by MINUSMA, the fund was sustained through the financial contributions of several, mostly European, countries, who have since financed more than 300 projects with over \$100 million to strengthen the Malian state and its security forces.⁴⁷⁸ For the infrastructure projects managed by the Trust Fund, MINUSMA has worked with implementing partners, like NGOs, other UN agencies and local authorities in one out of two projects. The larger budget share, of around 65 percent, has been implemented directly by mission components, without any substantial role of, or financial benefit to, third-parties.⁴⁷⁹

Projects financed by the Trust Fund often consist of infrastructure with a dual, military and civilian purpose. For example, among the larger and highly visible projects, MINUSMA asphalted the around 7.5 km road from the Gao airport to the city center, which made the distance not only quicker to travel but also safer, as it became less amenable to plant Improvised

⁴⁷⁷ UN Security Council resolution 2085 (2012); MINUSMA, 'Trust Fund,'

<https://minusma.unmissions.org/en/united-nations-trust-fund-peace-and-security-mali>,

⁴⁷⁸ 'UN Trust Fund for Peace and Security in Mali,' <https://minusma.unmissions.org/en/united-nations-trust-fund-peace-and-security-mali>.

⁴⁷⁹ Office of Internal Oversight Services, Internal Audit Division, 'Report 2019/012: Audit of the Management of the Trust Fund for Peace and Security in the United Nations Multidimensional Integrated Stabilization Mission in Mali' (United Nations, 14 March 2019).

Explosive Devices on the street. Similarly, the construction of three concrete canal beds in Kidal, on roads linking two neighborhoods and the entrance of the Malian military camp Mécanisme Opérationnel de Coordination (MOC), was implemented by the NGO Camer (see *fig. 5.6*). Projects like these aim to improve circulation and reduce disaster risk in the face of heavy rains, which, like the other projects, serves the population and military operation.



Figure 5.6. MINUSMA infrastructure projects, including a canal bed construction that serves both the circulation of peacekeepers and the local population in Kidal when roads become impassable during heavy rains, and a water tower with solar-powered pump in the Kidal region “to prevent conflict between communities.” (Source: Twitter @MINUSMA, 23 September 2020 (left); MINUSMA press release, 8 July 2019, <https://minusma.unmissions.org/> (right).

In addition to the Trust Fund projects, MINUSMA employs QIPs to engage with the local community, including around issues like sustainable and smart urbanism and environmental, resource-driven conflict management (see *fig. 5.6*). Just at the onset of MINUSMA, in 2013, the Quick-Impact Policy Directive further codified QIPs as an instrument, detailing the planning process, budgetary parameters and project duration. Between 2013 and 2020, MINUSMA spent more than \$29 million on more than 690 (completed) projects – a significant amount given the comparably modest budgets that is generally at the disposal of UN agencies and NGOs doing similar work. A UN database of ongoing and completed QIPs, referred to as the DPO-DPET

QIPs Database⁴⁸⁰ – featured 318, in part incomplete, projects in 46 different municipalities for the budget cycles between 2016 and 2020 alone (see *fig. 5.7*).

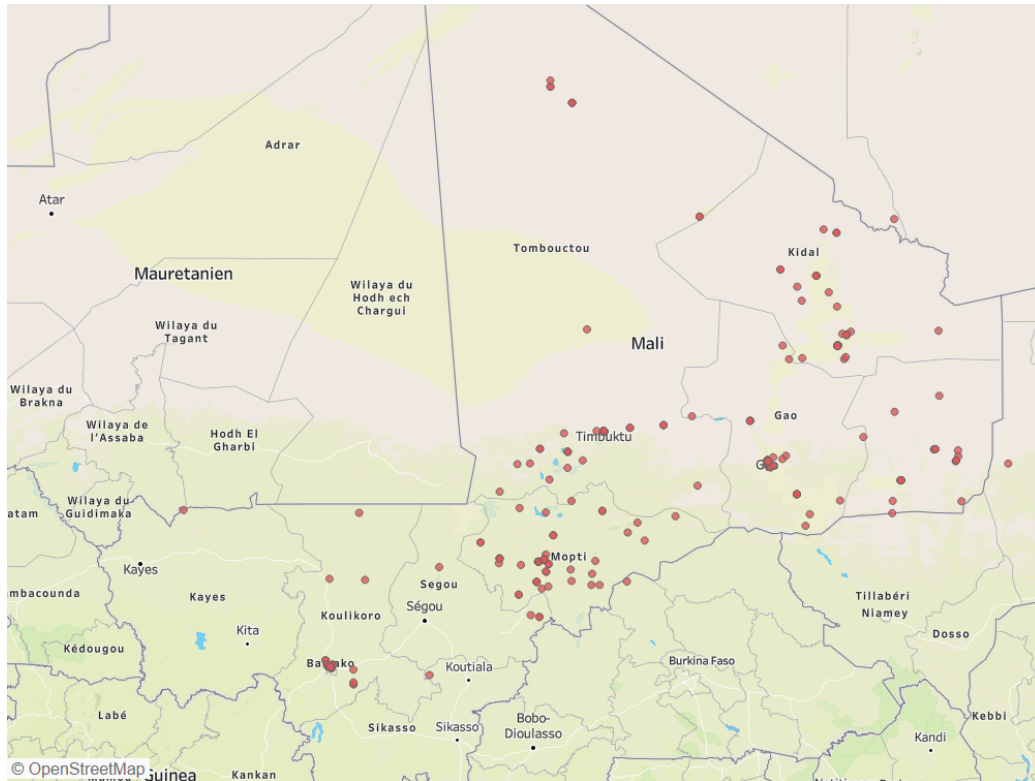


Figure 5.7. Location of Quick-Impact Projects in Mali between 2016 and 2020. Map by author based on UN data.

Of the projects, only 34 are in Bamako, and the majority is located in the central part of the country, which has become the most conflictual region and increasing focus of operation since the beginning of MINUSMA. The QIPs cover a range of activities of which 225 are stipulated as physical infrastructure projects. A QIPs audit report, too, has suggested a heavy focus on community infrastructure, with between 50 to 90 percent of the QIPs being community

⁴⁸⁰ The extract from the Department of Peace Operations (DPO) - Division for Policy, Evaluation and Training (DPET) Database was shared with me by a staff member of DPO. Similar data has also been included in the UN's publicly accessible Peace and Security Data Hub, initiated by the UN Secretary-General's Data Strategy 2020-22.

infrastructure or basic needs projects, such as boreholes and water supply systems, or backup solar energy equipment.⁴⁸¹ Some of these projects have included the planning of public spaces, like a project to rehabilitate the Al Farouk square in Timbuktu. Others center on service and utilities infrastructure, from water supply and electricity to public buildings such as schools and community centers, administrative offices and law enforcement facilities. Yet other QIPs constitute training workshops, sport and cultural events, advocacy and outreach. In the DPO-DPET QIPs Database, infrastructure projects are sorted in categories, including early recovery, rule of law, public services and administration, political and economic inclusivity, protection of civilians and conflict prevention, and “confidence building in mission” – the initial purpose of QIPs. In fact, however, only eight of all infrastructure projects, and overall 36 projects, are marked as such.

It is difficult to learn more about the projects, not because they are intentionally kept secret, but because documenting and evaluating seems of little priority. Assembled collectively through field office staff for the colleagues at headquarters, there is little process of tracing the life of the projects, and little ensures the completeness of the data set. The staff’s self-reported geocoded data might at times also be inaccurate, indicated on the mapped QIPs locations’ outside Mali’s borders (see *fig. 5.7*). The lack of monitoring, and especially the absence of monitoring field visits but also post-completion evaluations, has been a repeated issue raised by auditors, notably the UN’s Office of Internal Oversight Services. The Office’s report of the Community Violence Reduction projects from 2022 for example notes that in more than half of all projects, no site visit was conducted during the project due to security concerns and movement restriction related

⁴⁸¹ Office of Internal Oversight Services, Internal Audit Division, ‘Report 2022/010: Audit of Quick Impact Projects in the United Nations Multidimensional Integrated Stabilization Mission in Mali’ (United Nations, 28 April 2022).

to COVID-19.⁴⁸² Likewise audit reports of QIPs and Trust Fund projects have criticized the insufficiency – or sheer lack – of both experts and community consultations, monitoring during project implementation and evaluation after project completion.⁴⁸³

The strictly limited time and financial scope of QIPs, paired with the lack of on-the-ground management, is indicative of a trend among staff to downplay the projects as insignificant for MINUSMA and the community. During my interviews, QIPs as an instrument of peacekeeping was commonly framed, by peacekeeping staff in headquarters and missions alike, as transactional, where resources are placed in the community in return for short-term community-support to the mission. Dominated by the origin idea of QIPs, projects have been described as “pocket money” to smooth the relation with the host community, especially when – until recently – peace operations had no discretionary funding to implement ‘programmatic’ activities related to their mandate.⁴⁸⁴ In this logic, the infrastructure projects do not concern the pursuit and management of legacy.

Given the variety of infrastructure projects in Mali, and specificity of the UN Trust Fund, such common understanding of infrastructure omits the socio-spatial intervention that takes place through infrastructure. In fact, it is not coherent with MINUSMA’s own pursuit of infrastructure. MINUSMA’s internal evaluation study of QIPs suggests the significance of infrastructure,

⁴⁸² Office of Internal Oversight Services, Internal Audit Division, ‘Report 2022/007: Audit of Community Violence Reduction Projects in the United Nations Multidimensional Integrated Stabilization Mission in Mali’ (United Nations, 6 April 2022), 5.

⁴⁸³ Office of Internal Oversight Services, Internal Audit Division, ‘Report 2022/010: Audit of Quick Impact Projects in the United Nations Multidimensional Integrated Stabilization Mission in Mali’, 4, 6–7; Office of Internal Oversight Services, Internal Audit Division, ‘Report 2016/175: Audit of Quick Impact Projects in the United Nations Multidimensional Integrated Stabilization Mission in Mal’ (United Nations, 20 December 2016); Office of Internal Oversight Services, Internal Audit Division, ‘Report 2019/012: Audit of the Management of the Trust Fund for Peace and Security in the United Nations Multidimensional Integrated Stabilization Mission in Mali’.

⁴⁸⁴ Interview with Marco Donati, Civil Affairs Team Leader, UN Department of Peace Operations, March 8, 2022.

thereby revealing the very incoherence that occupies infrastructure projects in the mission.

Tilting to the other extreme in its absence of critique, the report has attested a consistent 75 to 90 percent agreement with projects' pertinence, design, effectiveness and efficiency, and positive impact on people's lives, according to the survey respondents who were recipients of the funds.⁴⁸⁵ Needless to say, these findings may be influenced by the respondents' dependency on future funds from MINUSMA and unwillingness to critically engage with MINUSMA's practices vis-à-vis the mission itself.

Moreover, MINUSMA itself has consistently linked infrastructure projects in a logical framework of cause-and-effect towards wider peace and stabilization goals. The infrastructure projects as part of the so-called "programmatic" activities, as I have suggested in *International Peacekeeping*,⁴⁸⁶ are connected discursively to peace outcomes. My analysis of MINUSMA public communications, including hundreds of newsletters, twitter communications and press releases, suggests that MINUSMA attributes urban infrastructure interventions with four capacities for peace: to yield connection, to contribute to stabilization, to resolve conflicts, and to stop violence and illicit activity. For example, a trench dug around Gao by peacekeepers keeps terrorists from coming into the city and prevents cars from being stolen away from it.

In MINUSMA press releases and newsletters as well as in the interviews with staff members, notions of duration and sustainability have largely been absent, confirming the short-term planning horizon of peacekeeping planning of which infrastructure community projects are part. My interviews with humanitarian and development actors in Mali, operating in the same space as

⁴⁸⁵ MINUSMA, 'Enquête Sur les Effets Induits (« impact ») des Projets a Effet Rapide (QIP) 2014-2017' (United Nations, n.d.).

⁴⁸⁶ Silvia Danielak, 'The Infrastructure of Peace: Civil-Military Urban Planning in Mali', *International Peacekeeping* 29, no. 1 (2): 115-38, <https://doi.org/10.1080/13533312.2021.1996236>.

peacekeepers, revealed the common frustration with QIPs, mirroring a critique of the militarization of humanitarian aid all too common.⁴⁸⁷ Especially those projects by national military contingents have been perceived to interfere with the neutral and apolitical humanitarian space that humanitarian actors need in order to deliver aid in communities experiencing conflict and hostility towards MINUSMA.⁴⁸⁸ Even further, when working with national or local NGOs, because of the military escorts that MINUSMA has provided, the mission has risked drawing those local actors into any conflict between the peacekeepers and the population, jeopardizing the humanitarians' independence and respect in the community, and exploiting their need for funds and inability to decline funding offers from an actor like MINUSMA.⁴⁸⁹ Because of the lack of impact measurement and sustainability safeguards, many interviewees outside UN peacekeeping agreed that the projects did not reduce any community needs but rather signified a shocking amount of wasted resources.⁴⁹⁰

Among the many ideas for infrastructure – either financed through QIPs or other mechanisms – that serve both the peacekeepers and the local communities, projects in the energy sector appear to have garnered most political and financial support. As one of my interviewees related, nobody, including the members of the Budget Committee back in New York, questions that electricity costs need to be paid for and that these costs are part of the peacekeeping budget they are asked to approve. And yet, authorizing the expensive installation of solar panels as an investment that most likely won't pay off during the, albeit regularly renewed, one-year mission mandate, is a stretch. Technological challenges have added question marks to the feasibility, too.

⁴⁸⁷ None of those interviewees agreed to speak with me on the record.

⁴⁸⁸ Cf. Melanie Sauter, 'A Shrinking Humanitarian Space: Peacekeeping Stabilization Projects and Violence in Mali', *International Peacekeeping* 0, no. 0 (28 June 2022): 1–26, <https://doi.org/10.1080/13533312.2022.2089875>.

⁴⁸⁹ Interview with staff of bilateral development agency in Mali, July 13, 2020.

⁴⁹⁰ Interview with staff of international non-governmental organization in Mali, June 12, 2020.

Batteries required to store solar-generated power do not operate well in the Sahelian heat and need to be replaced more frequently, adding cost and the environmental hazard of leaks.

The private sector has come in to form a convenient alliance to advance environmental goals for peace operations beyond the parameters of the military base. One of them is the Californian energy consulting firm Energy Peace Partners that, according to its website, “leverages climate and finance solutions to promote peace in the world's most fragile regions.” Partnering with peace and security think tanks like the Washington DC-based Stimson Center, the company has produced research reports advocating for the renewable energy transition in peacekeeping contexts.⁴⁹¹ For MINUSMA, the transition to solar energy is framed around three benefits: “peace dividends” because of enhanced electrification in the places of MINUSMA intervention, a “strengthening of the local energy market” through technology and skills import, and the steadiness of start-up funding through the UN as “anchor client.”⁴⁹² UN staff have readily adopted this vocabulary, envisioning an infrastructural embeddedness in – and therefore positive dependency on – local services and utilities. In fact, it is tempting to see in this latest iteration of community infrastructure projects a deepening of “peacekeeping-as-enterprise,” which Kathleen M. Jennings has suggested in opposition to “peacekeeping-as-protection” to highlight the transactions and commercial interests that bind different actors around a peacekeeping mission.⁴⁹³

Despite the allure of breaking down fences, several of my interviewees also entertained the desirability of keeping some physical and conceptual barriers between the peacekeepers’ camp

⁴⁹¹ Druet and Lyammouri, ‘From Renewable Energy to Peacebuilding in Mali’.

⁴⁹² Druet and Lyammouri, 32–34.

⁴⁹³ Jennings, ‘Life in a “Peace-Kept” City’.

and the local community in order to, so it seems, keep checks and balances on the peacekeeping-as-enterprise. The physical separation that governed so much of the peace operations' logic and administration not only protected peacekeepers but also separated the latter from the population. The history of sexual abuse scandals, prostitution and 'MINUSTAH babies' has reverberated in the administration, and fences as well as projects to "keep [peacekeepers] busy during down time,"⁴⁹⁴ seem the best remedy as yet. There are, obviously, some serious shortcomings in such reasoning. While it neglects the power imbalance between UN agents and local communities, it does acknowledge peace operations' place in a wider set of economic relations: local personnel, recruited through third-party firms, accesses the base, fulfils subcontracts, relies on and benefits from a peacekeeping economy, and – depending on security conditions locally – peacekeepers mingle with local populations (on peacekeepers' terms). What is commonly referred to as the "peacekeeping economy," irrespective of its negative but also positive effects on local populations,⁴⁹⁵ already reverses and undermines the logics of 'inside' and 'outside' the fence.

5.4 Incomplete legacies

Environmental management has mostly concentrated on the military bases, the peacekeepers' camps and mission staff offices. It focuses on the part that can be controlled, where sensors can be mounted and places can be safely accessed. The technical innovation for monitoring environmental output and the infrastructure put in place in the camps further increase the gap to

⁴⁹⁴ Gronewold, 'Environmental Demands Grow for U.N. Peacekeeping Troops'.

⁴⁹⁵ Carnahan, Gilmore, and Durch, 'New Data on the Economic Impact of UN Peacekeeping.'; Jennings and Bøås, 'Transactions and Interactions'; Jennings, 'Life in a "Peace-Kept" City'.

‘outside the camp’. Outside the fence, environmental monitoring, community engagement around sites, resources and sustainability, and the impact evaluation for community infrastructure projects remains limited at best. In a strange twist, the environmental management mindful of the mission footprint and in pursuit of ‘positive legacy’ has been mostly divorced from wider environmental and spatial consequences of the UN peacekeeping presence.

The significant gap and variation in the scrutiny and technology between the different types of infrastructure is by design. For a long time, Secretariat-staff and field personnel have focused on the footprint of the mission, which is commonly thought as the peace operations’ camps, “inside the fence.” Much of the spatial intervention outside the camps, the infrastructure building that MINUSMA invests in, is not even nominally part of the footprint and therefore not targeted by the efforts of planning, monitoring and evaluation. The distinction between ‘inside and outside’ the fence is very clearly articulated to describe the boundaries of what activities are mandated and where the staff has the guidelines, tools and authority to act.

So far, few projects integrate peacekeeping infrastructure with local communities, but there are anecdotes of past attempts to bridge ‘inside’ and ‘outside’ the fence. During the building of the supercamp in Gao, MINUSMA staff related, their on-site colleague envisioned for part of the offices to be built using local clay architecture, but procurement and administrative hurdles, as well as questions about the durability of the material in the face of strong rains, put an end to the project. In another anecdote, equally ended through conservative risk management, a MINUSMA staff tried to set up a taxi scheme to connect UN staff with local taxi drivers in Bamako to increase their business opportunities.⁴⁹⁶ In addition, there have been even more

⁴⁹⁶ Andersson, ‘Bamako, Mali - Danger and the Divided Geography of International Intervention’, 34.

visionary and ambitious initiatives. Most notably the exhibition ‘Blue’ on peacekeeping in Mali, presented at the 2016 Venice Biennale by the architect Malkit Shoshan, has demonstrated what a design approach could contribute to fundamentally question and reimagine the relationship between peacekeeping staff and the local population.

While the language of the “footprint” narrowly defines the realm of environmental management, my interviewees suggested an increasing interest in the impact of peace operations on local actors, the possibilities of partnerships and cooperation with the private companies and traditional development actors. The most prominent projects, in the renewable energy field, remain challenged by insufficient technology and security threats, and a large administration. The generation of solar power to provide electricity to peacekeeping camps and local communities requires business partners that can, independent from the Security Council’s decision to renew the peacekeeping mandate, uphold financial and service commitments to consumers, when the peace operation cannot. The greater openness to a new set of expertise and modes of operation is detectable internally, too, through the types of recruitment within the Department of Peace Operations, where entities like REACT have hired experts from the private sector, like consulting firms in the health, environment and safety sectors, from member states’ municipal civil service, and from UN development agencies.

The push for greater reliance on environmental management and private sector expertise, while by no means a rebuttal of the importance of local experiential knowledge or learning in international affairs,⁴⁹⁷ is closely tied to a discourse conveying neutrality and efficiency. The reliance on technocratic tools and methods constitutes its own ideology: “Technocratic ideals,”

⁴⁹⁷ Gordon Wilson, ‘Beyond the Technocrat? The Professional Expert in Development Practice’, *Development and Change* 37, no. 3 (2006): 501–23, <https://doi.org/10.1111/j.0012-155X.2006.00488.x>.

as Roger Mac Ginty has elaborated, change not only the nature of how participants think about peacebuilding, but the very type of actors involved, and the peace that is produced.⁴⁹⁸ For example, Karin Aggestam underscores the depoliticization of the contentious water access in the Israel-Palestinian conflict: Experts pursue a technical approach based on scientific standards in order to solve a problem, thereby downplaying power relations and eventually inhibiting comprehensive peacebuilding towards positive peace.⁴⁹⁹ In the day-to-day management of MINUSMA, environmental questions became the subject of environmental engineering experts. In joining the peacekeeping orbit, their specific, technical knowledge superseded broader considerations of politics, conflict dynamics, and place- and mission-specific history – and future.

This framing has severe implication for how peace operations have engaged with infrastructure, shifting from urban planning to environmental management. Traceable in its beginnings in MINUSTAH's operation in Haiti, an urban planning sensitivity emphasized local context and proximity, and the intimate linkages between development and peace. In turn, environmental standards have replaced site-specificity and the recognition of the social, spatial fabric.

Environmental planning has become a way of universalizing a place, a tabula rasa approach with the supercamp being its most prominent output. Like in an ideal planning scenario, the camp is the place where things can be controlled. The labeling and performance of environmental management supersede questions of deep engagement, local knowledge, concerns over equity and sustainability – which has indirectly been dismissed by many of my interviewees explaining

⁴⁹⁸ Roger Mac Ginty, 'Routine Peace: Technocracy and Peacebuilding', *Cooperation and Conflict* 47, no. 3 (September 2012): 287–308, <https://doi.org/10.1177/0010836712444825>.

⁴⁹⁹ Karin Aggestam, 'Desecuritisation of Water and the Technocratic Turn in Peacebuilding', *International Environmental Agreements: Politics, Law and Economics*; *Dordrecht* 15, no. 3 (2015): 327–40, <http://dx.doi.org.libproxy.mit.edu/10.1007/s10784-015-9281-x>.

that peace operations are “not good at project management” typically because they do not engage in the full project management cycle including monitoring and evaluation.⁵⁰⁰ While many of the, especially water-focused, projects have an implicit environmental dimension, the environmental impact in conjunction with the social impact is not tracked beyond the project completion. Even further, visits to sites of infrastructure construction have often be neglected. Driven by a managerial approach and business model, peacekeeping practice, therefore, is not only further removed from a socially-grounded peacekeeping but risks falling victim to green-washing.

There are few exceptions of projects engaging with an environmental peacebuilding logic of intervention. These projects typically involve financing activities rather than building hard infrastructure, like a UN Trust Fund-financed project to stop elephant poaching in the Gourma region. Wildlife guards have received equipment and been trained to prevent wild life poaching for ivory which is recognized as a major source of financing for weapons used by armed groups.⁵⁰¹ Similarly, MINUSMA sponsored flights on its aircraft for experts to rebuild Timbuktu’s mausoleums destroyed in the war with traditional techniques.⁵⁰² Projects like these may be counted as environmentally- and culturally-conscious peacebuilding. More often than not, however, the environmental discourse remains separate from the larger, socio-spatial and longer-term impacts and implications for peacebuilding in society.

⁵⁰⁰ Based on interviews with mid-level and senior staff at the UN Secretariat and MINUSMA, March 8, 2022; January 25, 2022.

⁵⁰¹ ‘Roundtable on Operational resilience of peacekeeping operation in the face of climate-related disruption,’ organized by the Effectiveness of Peace Operation Network (EPON) at the UN Secretariat, New York, May 10, 2022. Cf. MINUSMA, ‘La MINUSMA appuie la conservation et la valorisation des éléphants et de la biodiversité du Gourma (Douentza),’ *Actualités*, February 6, 2020, <https://minusma.unmissions.org/la-minusma-appuie-la-conservation-et-la-valorisation-des-%C3%A9l%C3%A9phants-et-de-la-biodiversit%C3%A9-du-gourma>.

⁵⁰² ‘Past and Present Role of MINUSMA in the Protection of Cultural Heritage in Mali’ (Intersessional Workshop on cultural rights and the Protection of cultural heritage, Session 2 ‘Cultural heritage in crisis’, OHCHR, 2021), <https://www.ohchr.org/sites/default/files/Documents/Issues/ESCR/CulturalHeritage/Session2/UN/b7ravier.pdf>.

While the material remnants of community infrastructure projects may outlast MINUSMA's mandate, the current policy, discourse and understanding of legacy does not encompass it. Instead, it is focusing on a narrow ecological definition of footprint, the fumes, CO2-emissions, and waste water toxicity, leaving aside the cement poured, boreholes dug, and pipes laid that are also part of the footprint. International actors, Cedric de Coning wrote, are limited in their capacity to forge sustainable peace and might even jeopardize it.⁵⁰³ Perhaps this is where the limits of legacy are: As long as the totality of peace operations' infrastructure is not recognized as legacy, there is little peacebuilding potential. The lack of site visits and follow-up after infrastructure construction reveals the lost opportunity to think about how such interventions may constitute opportunities for mediation and conflict management towards sustainable peace that is environmentally conscious and socially grounded in specific sites.

5.5 Conclusion

UN staff has successfully established 'legacy' as a current term in the peacekeeping lexicon, frequently referenced by my interviewees in the mission on the ground and across agencies, and reproduced by the UN Security Council. The practice of legacy is backed by a series of policies from headquarters and technologies in the field, together creating a precise monitoring system for environmental management. With its environmental science precision, 'legacy' benefited from two concerns that gained momentum just as Mali appeared on the UN Security Council agenda in 2013. On the one hand, the indignation among UN staff about what had happened in

⁵⁰³ Coning, 'From Peacebuilding to Sustaining Peace'.

Haiti was a strong motivator to make sure a similar UN-made catastrophe would not happen again. On the other hand, a broader management reform, aimed at rendering the United Nations more efficient, smart and ‘business-like’ made any reform welcome that would provide more indicators, promises to save money, render missions’ performance comparable, and boost competitiveness.

In practice, the operationalization of legacy has been confined by what is technically feasible and politically mandated. As a function of international law, UN missions in the country spend funds allocated to them by UN member states represented in a budgetary committee in accordance with the UN Charter, rules and regulations. Any activity that would be perceived as overstepping such mandate can hardly be justified – and is, within this world order, left to other international agencies that are funded by separate contributions from member states. In turn, initiatives to challenge established practices pursued by individual staff members face plenty hurdles, from bureaucratic regulation to safety concerns, especially in a context of asymmetric warfare and complex layers of actors, in which a good working relation with the local community is no guarantee for protection. Indeed, understanding this global and local order and the institutional workings is necessary, as my interviewees repeatedly emphasized, because it directly circumscribes their realm of action. And yet, personal leadership and committed individuals, as many anecdotes time and time again proved, also greatly shaped the outcomes I have described in this chapter.

The concern to leave a positive legacy, including the critical examination of infrastructure projects’ utility for the community, closely relates to the broader question of sustainability. Its absence has been raised as the main critique for MINUSMA’s community infrastructure projects. Yet, the environmental management and concerns about the footprint yield at precisely the

sustained impact of peacekeeping, and ultimately the sustainability of peace gains. Beyond ‘do no harm’ peacekeeping aims at leaving a positive legacy. The “intellectual emptiness of sustainable development” has been widely critiqued, in part for the term’s cooptation in the neoliberal logic pursuing economic growth and markets.⁵⁰⁴ With an eye to the procurement reform, camp management, and competitiveness efforts, this is a critique that certainly applies to UN peace operations. It also sheds a different light on those drivers that have facilitated the rise of environmental consciousness and the legacy discourse, facilitated by smart camp infrastructure and modular units, solar panels and remote sensors. From the outset, the aspiration of social legacy remains at odds with the conflict environment that demands the temporary presence and short timeframes of peacekeepers. The UN discourse of ‘sustaining peace’ embedded in blue helmets’ action is therefore already demanding an exercise in wrapping one’s head around unimaginable temporalities. In that, infrastructure might be the most tangible aspect of peacekeeping that could sustain – for better or worse.

⁵⁰⁴ Luke, ‘Neither Sustainable nor Development’, 228.

Chapter 6 Conclusion ‘Infrastructure Planning for Sustainable Peace’

UN peacekeepers might be unusual but certainly not unambitious infrastructure builders. Throughout the history of peace operations, starting soon after the founding of the UN, and specifically with their first intervention in a civil war, peacekeepers have been building infrastructure – not only for themselves, but for the population they served. Infrastructure building has never been an unintended byproduct. Instead, it has been embedded in a discourse of building peace and in theories of change that map out the path towards peace. Peacekeepers surely did not do that work alone, but their physical, material, economic and social intervention in the host countries has been significant enough to be concerned about peacekeepers’ footprint. This is why I employed a socio-spatial planning perspective on UN peace operations to understand how infrastructure was imagined and operationalized by the UN bureaucracy, its military and civilian staff in missions and headquarters.

The dissertation’s central argument is that peacekeeping operations conduct a significant socio-spatial (re-)organization in pursuit of peace through infrastructure building. My research considered peacekeepers as a set of urban actors and socio-spatial planners who have traditionally received little attention in urban studies. Focusing on the ideas and discourse around peacekeeping’s infrastructure building showcases the spatial production, and the aspirations embedded therein, as part of peace efforts, oftentimes during persistent conflict. Infrastructure aimed at benefitting local communities constitutes an important vehicle for conflict

transformation and imaginary for the future of a conflict-affected society. As peacekeepers plan and build wells, roads, and bridges, they render those ideas a material reality.

The dissertation's historical perspective on peacekeeping's involvement in infrastructure projects highlights that – contrary to the recent uptick in attention to peacekeepers' footprint – socio-spatial, urban and environmental aspects have always featured in peace operations, albeit through different paradigms. The focus on infrastructure building throughout the UN's history, as a set of practices and knowledge, reveals the steady developmentalization of peacekeeping, driven, on the one hand, by a set of stable, yet evolving “sociotechnical imaginaries,” and on the other hand, the urban and environmental complexity faced in peace operations.

Infrastructure projects set the material foundation for what is often a very long process away from violence towards peace. Increasingly long-term and multi-tasked peacekeeping missions are being authorized and deployed, and significant financial and personnel resources invested in the reconstruction of post-war societies. Much of the infrastructure that the UN relies on, notably its camps, airports and utilities networks, are designed for maximum security, to prevent violence against peacekeepers and maintain operations in a context of violence and profound adversity. Many projects, however, like the installation of solar panels, the repair of roads, and the construction of fuel storage facilities not only serve the peace operations' logistic needs but also local communities. Recent public works projects intend to integrate the public service needs of peacekeeping missions from the outset with those of surrounding communities, more deliberately envisioning the long-term utility of infrastructure and its impact on peacebuilding and the environment.

Today, the increased attention to “positive legacy” and “greening” peacekeeping reveals an uneasy positioning of peace operations’ infrastructure building between the pursuit of positive and negative peace objectives. Despite greater ambitions for infrastructure projects, peacekeeping practice remains constraint by real security threats on the ground, in-country politics, and UN regulations and mandates. This renders operations’ tools and practices detached from the sustainability discourse to which peacebuilding has turned. Missions’ objectives – between immediate military needs for security and long-term community requirements for more peace – are not easily reconcilable and challenge us to rethink the spatial and temporal dimension of peace efforts.

My dissertation draws attention to peacekeeping’s material imprint through its logistics and through its community engagement projects. My findings are relevant to current debates on the environmental and urban dimensions of peace efforts within the UN and beyond, the spatiality of peace, as well as the links between urbanization and conflict. Greater consideration needs to be given to that material and spatial imprint, especially since recently, several long-term missions that started in the early 2000s have come to a close, and more might follow.⁵⁰⁵ Those missions are an opportunity to rethink ‘sustainability’ in the post-war context. In this final chapter, after a brief recount of the theoretical contribution, the infrastructural lens this dissertation employed and the imaginaries of peace it uncovered, I will offer observations for the present and future practice of peace operations. I specifically focus on the treatment of infrastructure, emphasizing the tensions and paradoxes they reveal, and their implications for the planning for peace, in which infrastructure maintains an important position.

⁵⁰⁵ E.g. UNMIL in Liberia (2003-2018), UNOCI in Cote d’Ivoire (2004-2017), UNAMID in Darfur (2007-2021), and possibly currently still active missions like MINUSMA in Mali.

6.1 Three infrastructural imaginaries of peace

As an object of analysis, infrastructure reveals the force of change attributed to it. Infrastructure is part of imagining the societal transformation from conflict to peace. For the UN, it occupies a central place in envisioning the role of peace operations in such process. Throughout the history of UN efforts, the organization's civil servants, peacekeepers, diplomats and politicians have given specific meaning to socio-spatial interventions in the host country in the process of rendering peace possible and durable. Infrastructure could, potentially, stop direct violence, contribute to access to social services, connect communities, or facilitate economic development. These manifold powers and capacities speak to the promise of betterment that public works carry. But, as the analysis of the UN's engagement in the various settings has shown, the promise hardly ever stands alone. Instead, it is connected to specific, place-based and time-bound, logics of change that determine the role of infrastructure in each conflict setting and each UN intervention, imposing both the nature of the peace problem and solution.

The infrastructural imaginaries of peace are both stable but also subject to change. Studying infrastructure planning in peace operations throughout the history of the UN and across all peacekeeping generations has revealed two paradigmatic shifts in how infrastructure is conceived and what capacities are attributed to it. First, the shift from rural to urban, paralleled by peace operations' expanding mandate towards civilian protection, is marked by a growing awareness of urban issues and risks as obstacles to peace. This first shift was marked by efforts to become increasingly independent from host countries' infrastructure networks while engaging planning technology and infrastructure building as part of interventions in often dense urban

environments, for civilian purposes. The second shift marked peace operations' turn to environmental logics of peace, as climate change and environmental degradation have come to frame key threats to peace. As part of this evolving logic, service infrastructures between the military operation and the host country are integrated and built-up, and the mandate of protection is further expanded to the environment, driven by a host of environmental assessment technologies and renewable energy infrastructure that serve to 'sustain peace'.

These changes have been motivated by both a shift in the types of conflict that the peacekeepers have been involved in and the evolution of the expertise, technologies and practices in international development at large. These changes in 'infrastructural logics' of peace were also shaped by planning and urban expertise. I therefore paid particular attention to how (spatial) knowledge and practices have developed to respond to the evolving remit of peacekeeping, particularly as those operations adapted to the demands of specific conflicts and to urban and climate-related risks. I analyzed the construction and circulation of knowledge and the formation of planning ideologies between headquarters and the field, and how urban and environmental technical expertise and planning technologies have shaped the design and practice of peacebuilding, and the variety of tensions that have emerged along the way. The focus on technical knowledge, studying the engineers, planners and military personnel that defined peace operations agendas, tools and technologies, highlights how the idea of peace has been constructed and shaped by experts in power. Hence the imaginaries of peace, too, are those of the experts, civil servants, advisors, and policymakers. They preclude any inference on how local populations envision the building of peace.

In peace operations, specific framings of 'the problem', like underdevelopment, urban violence, or environmental risk have materialized in solutions that center infrastructure building: rural

connectivity, urban services, and – as the latest turn – ‘green’ peacekeeping camps. Within the respective peace imaginaries (see *table 6.1*), infrastructure as part of ‘the solution’ has always been bestowed with potency.

	Infrastructure as promise	Infrastructure as risk	Infrastructure as legacy
Type of infrastructure	Road construction, irrigation systems, public service infrastructure building, public administration	Urban acupuncture-inspired service delivery, humanitarian infrastructure, Quick-Impact Projects, ad hoc harm mitigation	Quick-Impact Projects and large-scale ‘Trust Fund’ projects, supercamps, energy and operational infrastructure
Outcome of infrastructural engagement	Regional and intercommunity connectivity	Presence, reduced crime and poverty, Liability	Economic and ecological efficiency, reduced footprint
Infrastructural imaginary of peace – “<i>infrastructure as enabler for...</i>”	Normalcy; continuation, modernization	Risk mitigation	Smart, green innovation, sustainable community development
Time implications of infrastructure	Concerned with restoration of the past	Concerned with the presence (‘bouncing back’)	Concerned with a long-time horizon, the future
Space implications of infrastructure	Concerned with community infrastructure	Shift of attention from ‘outside’ the fence’ to recognizing interdependence of peace operation infrastructure and community infrastructure	Concerned with the camp

Table 6.1. Summary of analytical framework

As *promise*, infrastructure was UNFICYP's vehicle to achieve normalization in Cyprus. It was oriented towards the past, defining 'normal' as the restoration of the past, when ethnic communities coexisted non-violently. The promise, however, also bore an interest in the future that would look different from the past. Peacekeepers not only sat in for government agencies to keep the public administration running, but contributed to developing a modern urban life, its roads and housing projects. "Normal," here, became the modern, urban Cyprus that would experience peace.

Infrastructure as *risk* embodied the peace operations' occupation with the presence, the imminent urban risk of violence and poverty, natural hazards, and ultimately the harm of the UN's very own operation management and camps in Haiti. The infrastructure lens on MINUSTAH revealed a break with the UN's previous conception of infrastructure as serving peace goals only through outward-facing community projects. Instead, it brought into focus a thus far neglected aspect of peacekeeping infrastructure: peacekeepers' bases, the footprint of peace operations, and the importance of what happens "inside the fence" as part and parcel of peace operations.

As *legacy*, the infrastructural imaginary turned towards the future. It projects a longer time horizon that extends the UN peace operations' impact beyond the mission's end. Concerned about environmental degradation and climate change mitigation as important factors for peace, MINUSMA through its operations infrastructure aims to adjust peacekeeping to do no harm and perhaps even better. Pursued primarily through a narrow environmental management on peacekeeping bases alone, however, legacy remains an inconsistent and incomplete pursuit.

The peacekeeping missions operate in communities that have faced continuous violent conflict and profound socio-economic and environmental challenges.⁵⁰⁶ The peace operations' activities often wavered between military, political and civilian action, and between humanitarian and development interventions. What has since been codified as the UN's "New Way of Working" – calling for the collaboration between humanitarian and development actors – continues to pose profound challenges in the day-to-day operations in peacekeeping missions. UN civilian staff is acutely aware of their range of action, provided by the UN Security Council mandates, rules and regulations. The innovation, political entrepreneurship and local ad hoc initiatives push to expand the understanding of peace towards a 'positive peace' approach. This manifests in the pursuit of a functioning civil administration or agricultural productivity in Cyprus, people's occupation, less urban crime, and more community services in Haiti, and water, energy, and small-scale financial investment schemes for economic activity in Mali.

Despite such endeavors toward a development-oriented approach, today's reality for peacekeepers is more militarized than ever before. The many attacks have increased the efforts to protect peacekeepers. Efforts to securitize peacekeeping infrastructure and shield the blue helmets have drastically changed what peacekeeping looks like, ranging from body armor to higher barriers and complex camp gates that seek to further seal UN staff from potential invaders and therefore from the community at large. Recognizing the peacekeeping infrastructure as interconnected with the community infrastructure challenges such security management. How can such 'bunkerization' coexist with pursuing infrastructure shared by peacekeepers and local communities?

⁵⁰⁶ In comparison between the three countries of study, this is especially the case for Haiti and Mali.

6.2 The time and space of infrastructure

The infrastructure lens this dissertation employed also posits infrastructure as a method to study forms of division and conflict, as well as moments for conjunction. When applying an infrastructure lens to peace operations, it reveals a set of tension and paradoxes that are relevant to current and future peace efforts. Based in the study of present-day peace operations, a set of assumptions emerged of how the UN operations are imagined at large, both temporally and spatially. These conventions and expectations define the parameters of action today and in the near future, and eventually determine peace operations' outcomes. The assumptions that guide peace operations matter because they (re)produce the infrastructural imaginaries of peace. UN operation thus appears as a hegemonic force with considerable capital that creates a set of norms that are not questioned anymore.

This set of norms can be organized along two dimension – ‘time’ and ‘space’ – in which infrastructure operates.⁵⁰⁷ A focus on ‘time’ and ‘space’ as organizing dimensions allows me to

⁵⁰⁷ In using time and space as the dimension to organize hegemonic forces, I drew inspiration from two related sociological concepts that help frame the relationship between power and, respectively, space and time, by George Lipsitz and Charles W. Mills. George Lipsitz's notion of white space and, based on that work, Charles W. Mills notion of “white time” have created a framework to address discriminatory and racialized assumptions and practices of time and place. The organization of space, spatial representation and infrastructure, according to Lipsitz, follow racial logics, allow white people to reproduce their privilege, while extracting from Black people. Even further, “these spaces make racial segregation seem desirable, natural, necessary, and inevitable.” In turn, “white time” is produced by a “white temporal imaginary... structuring social affect as well as social cognition, and helping to constitute exclusionary gated moral communities protected by temporal, no less than spatial, walls.” “White time” is time taken away from Black people through exploitation, rules and practices. Cf. George Lipsitz, *How Racism Takes Place* (Philadelphia: Temple University Press, 2011); Charles W. Mills, ‘White Time: The Chronic Injustice of Ideal Theory’, *Du Bois Review: Social Science Research on Race* 11, no. 1 (2014): 27–42, <https://doi.org/10.1017/S1742058X14000022>.

debate the underlying principles and assumptions in peace operations, as revealed through the infrastructure lens; and, as Loren B. Landau has advocated for in his reflection on the social sciences in South Africa, to “destabilise the language that informs our deliberations and the often teleological aetiologies behind our analysis.”⁵⁰⁸ Currently, these norms and assumptions complicate the pursuit of sustainable peace. They require reconsideration in peacekeeping practice in order to move from a *United Nations* time and space to *local* space and time, and to credit infrastructure with the potency it possesses.

6.2.1 UN space

The space of UN intervention holds a series of assumptions about its character and organization. First of all, and perhaps most evident, the UN operates through and in nation-states. Nation-states consist in an overlay of population and territory, bound by an internationally accepted border, and ruled by one central government. Because of that, the UN space, within those borders, consists of a center and a periphery. Just like a mission’s headquarters is located in the capital, the further away a site is from the headquarter, the more it is peripheral. This structure is repeated at the level of the districts, where, for example, major cities in the North and Center of Mali locate the regional mission headquarters. MINUSMA camps, therefore, are the center, surrounded by a periphery that becomes more pronounced the further it is from the camps. A similar center-periphery structure at the global level is also replicated between the UN Secretariat in New York, where the UN Security Council and other organs of the UN decide on

⁵⁰⁸ Loren B. Landau, ‘Privilege and Precarity: Public Scripts and Self-Censorship in Shaping South African Social Science’, *Social Dynamics* 43, no. 3 (2 September 2017): 375, <https://doi.org/10.1080/02533952.2017.1401873>.

policies to be implemented in the far-away periphery of “the field” in member states and UN missions within countries.

The UN space is also divided between inside and outside. On the one hand, there is the mission’s camp that is well-organized, monitored and manageable, and safe. The camp is replicable, built out of easily-shippable modules. It is the space of “a global enterprise” with “great efficiency and economies of scale.”⁵⁰⁹ On the other hand, there is the hazardous ‘outside the camp.’ It is the poor messiness of urban Haiti, or the deserts vastness of the Sahel. It is the periphery that becomes more obscure the further it is removed from the center. They are violent and hostile spaces, with adverse environmental conditions of sand storms and heat, home to both local populations and enemies. In the face of such conditions, the camp is indeed central. If it was not for the colleagues in the missions’ operational support, who provide food, water and shelter in the midst of the desert, a MINUSMA colleague admitted to me, indeed work of any other staff would be simply impossible in those conditions.

In turn, UN space proposes that the periphery needs to be opened up and connected to the center, because connection will lead to security and economic development. The mission responds to that need by building roads, because roads link places and open economies. In fact, several interviewees mentioned the essential road, and even more so air transport, network that a mission like MINUSMA entertains. One of them, based at the Department of Peace Operations in New York after a long career between several field missions and various international organizations, suggested that the “idea that we are more out and present in the periphery, in this spatial way and

⁵⁰⁹ Susana Malcorra, ‘Remarks before the 4th Committee, Agenda Item: Comprehensive Review of the Whole Question of Peacekeeping Operations in All Their Aspects,’ October 24, 2011. https://peacekeeping.un.org/sites/default/files/4thc_dfsug_24102011.pdf.

somehow politically making that geographic space feel slightly smaller – I think it’s an interesting, positive aspect of the infrastructure.”⁵¹⁰ The periphery is also rendered more legible, more manageable through risk zoning maps, geospatial analysis, and surveying, in addition the very sturdy transportation infrastructure. Sensors and remote monitoring and communication tools allow for information exchange and control from the center, rendering the periphery logistically closer.

The reason, as interviewees repeatedly explained, for doing the public works– rather than leaving it to any other agency – is that often, the peacekeepers and their civilian colleagues are the only one *there*. The contingents’ experience in engineering is there, the machinery is there, and some discretionary funding – notably through the QIPs mechanisms - is there too, to do the work. In fact, in my interviews, very often UN staff would ask back to me: “if not us, then who?” Despite the reliance on UN and the military contingents’ machinery, expertise and manpower, globally operating commercial contractors, local businesses, NGOs and authorities operate within the UN space, too. They furnish raw materials, labor and knowledge, without which many projects could not take place.

The UN space also invites in partner-actors. Peacekeeping’s large-scale transportation network facilitates the connectivity and renders the territory accessible for those that do not have their own travel infrastructure. As of early 2015, MINUSMA had conducted over 9,000 flights with its 12 commercial and 15 military aircrafts, operating out of 17 airfields and 55 ad hoc landing sites, with a budget of roughly \$180 million for the fiscal years 2013 to 2015.⁵¹¹ For government,

⁵¹⁰ Interview with UN Official, Department of Peace Operations, October 7, 2021.

⁵¹¹ Office of Internal Oversight Services, Internal Audit Division, ‘Report 2015/148: Audit of Air Operations in the United Nations Multidimensional Integrated Stabilization Mission in Mali’ (United Nations, 27 November 2015).

humanitarians and journalists, the UN system is often the only reliable way to travel and communicate. An anecdote shared with me by one of my interviewees with knowledge of the MINUSTAH transition illustrates this point: At the end of the mission, all MINUSTAH-owned helicopters were brought out of the country, only to be brought back later when it was realized how essential they were for access and operation in support of the Haitian government, for example during elections.⁵¹² Similarly, only thanks to the MINUSTAH transportation, the Haitian president was able to travel in his country after the hurricanes.⁵¹³ Infrastructure shapes the perception of space, shrinks space, and enables access and control. Peace operation grants access to the UN space – on the UN’s terms and flight routes. UN space is access to UN infrastructure and protection.

At last, there is a recognition that peacekeeping missions govern space like, or might substitute, a state. MINUSMA built entire towns – their own supercamps – and they rehabilitate and build infrastructure like roads, dams, water systems, and trenches. These construction projects serve the mission for its operation, immediate goals to decrease violence and risk, and for society in the long-term. The mission builds them, because the state is not. As a service to the host country, MINUSMA’s technical GIS and mapping expertise is used to map and delineate national heritage sites, for instance in order for the Malian government to better control its heritage.⁵¹⁴ When in a place of conflict, like in Mali, the state is mostly absent in parts of its territory, indeed the infrastructure falls into the purview of whoever is *there*. Building infrastructure for the state

⁵¹² Interview with Rachel Scott, Senior Policy and Partnerships Advisor, UNDP, September 16, 2021.

⁵¹³ Wkileaks, US Embassy Cable 08PORTAUPRINCE1381_a, ‘Why We Need Continuing Minustah Presence in Haiti,’ October 1, 2008.

⁵¹⁴ ‘Past and Present Role of MINUSMA in the Protection of Cultural Heritage in Mali’.

to increase its capacity, while also substituting the state at times, is a delicate balance that mission staff in Mali are well aware of.⁵¹⁵

The UN space is certainly not completely ignorant of tradition, culture and locality. In fact, previous chapters have showcased initiatives to be responsive to local condition and UN staff's genuine efforts to localize UN space. The dominant ideas and practices of connection, market engagement and security management related in this section, however often override the existent principles of mobility and movement of the Sahelian people, the groundwater levels at the project site for a borehole, or a neighborhood's capacity to maintain an urban service point in Cité Soleil.

6.2.2 UN time

Just like space, time, too, is defined through several assumptions, which becomes especially evident through the infrastructure lens. UN operations, and projects too, are based on a linear understanding of time. Infrastructure projects are mandated, planned, built, and then opened through a ribbon-cutting ceremony. The same linearity is still the *modus operandi* for peace operations as a whole, intervening to accompany the transition from conflict to peace, to move a country from instable to stable. The afterlives of peacekeeping missions, including the management of the spatial remains of a mission between “asset handover,” the fight against looting of UN premises, and inter-mission infrastructure recycling, has recently gained more

⁵¹⁵ Following a presentation to around 60 MINUSMA staff, I was precisely asked to comment on this challenge. (JOC Briefing ‘The Infrastructure of Peace: Civil–Military Urban Planning in Mali,’ MINUSMA, Bamako/remote, June 2, 2022).

recognition. The increased interest in legacy signals a future orientation. And yet, the term has not translated into a systematic overhaul of infrastructure maintenance. There is no possibility of re-visiting projects years later, or perceived value in doing a retroactive environmental impact assessment. Instead, the way infrastructure is used in peace operations conveys an understanding of synchronicity in which the duration of peace operations is the time of impact.

Nothing visualizes this better than the assumed speed of a *quick-impact* project. While projects have become more complex, and a variety of infrastructure projects are operated under different funds and financing modes, the notion of quick effectiveness seems to remain. As one of my interviewees with a background in military engineering explained, the very nature of ‘quick’ means that the project is an impromptu response to an appearing need.⁵¹⁶ Peacekeeping missions can act on those needs because typically they have funds available for them. Another interviewee entertained the idea that, if UN peacekeepers were not pressed for time, they would not need to conduct community infrastructure projects at all: They could “wait for UNOPS, which might take them a few more years ... [but] the military is usually efficient at these things, right? I mean, they get that bridge done tomorrow.”⁵¹⁷

The desired quick impact is at odds with infrastructures’ impact that may unfold and change over years and decades in communities. Infrastructure may have an immediate effect, but some consequences and impact may only become perceptible in the longer run. Its impact may also change over time. Infrastructure lives include, without exception, its operation, its decay or breakdown, repair, adaptation, repurposing, or closure. Infrastructure is, is Stephen Graham and

⁵¹⁶ Interview with Project Manager, Regional Service Center Entebbe, UN Office Nairobi, February 8, 2022.

⁵¹⁷ Interview with Rachel Scott, Senior Policy and Partnerships Advisor, UNDP, September 16, 2021.

Nigel Thrift have pointed out, anything but “fixed and stable.”⁵¹⁸ While infrastructure “cannot possibly endure,”⁵¹⁹ it seems that UN peace operations so far only selectively engaged with part of the infrastructure’s life. While some equipment can be decommissioned, auctioned off, recycled or shipped out of the country, wells, bridges and roads, or the relics of former supercamps, cannot be easily converted. Instead, peace operations possibly create “ruins of the future.”⁵²⁰

The selective infrastructure engagement and short-term strategy denies an interest, or any stake, in the longer-term development of the community and of conflict prevention in the future.

Infrastructure repair, maintenance and adaptations are an exercise in building peace, because neither is linear and both require constant efforts of trying, adaptation, and experimentation.

Furthermore, the UN’s peace bureaucracy crucially fails to consider the “infrastructure that never was,” the absence and “unfulfilled hopes” that the UN presence might produce, too.⁵²¹ For the

UN, understanding what happens to a project, therefore, is crucial: How it is planned, how it operates (if it is built) and what positive and negative consequences and legacies it has, matters.

If ignored, it is a missed opportunity to capitalize on positive impact, and correct harm.

In line with the necessity to produce results quickly – quick impact, rapid deployment – the UN time is marked by the absence of time, which is especially troubling given the average long duration of contemporary peace operations.⁵²² Within peace operations, as has been repeatedly

⁵¹⁸ Stephen Graham and Nigel Thrift, ‘Out of Order: Understanding Repair and Maintenance’, *Theory, Culture & Society* 24, no. 3 (1 May 2007): 10, <https://doi.org/10.1177/0263276407075954>.

⁵¹⁹ Howe et al., ‘Paradoxical Infrastructures’, 552.

⁵²⁰ Howe et al., 553.

⁵²¹ Howe et al., 550.

⁵²² Seven of the twelve currently ongoing mission are active since more than 24 years, and even the current stabilization missions in Mali, DRC and CAR are more than, or about, a decade old. (UN Peacekeeping, ‘Peacekeeping Operations Fact Sheet,’ November 30, 2021.)

raised during my interviews, there is the common sentiment that there is not enough time to reflect – neither on an individual nor team level – because of the rapid pace of action and constant new crises and politics that require quick reaction.⁵²³ Work in missions is stressful and staff faces a high turnover. While this is neither a new nor unique issue among emergency actors, it does have implication for the capacity to reflect about impact and sustainability, and envision the future. Because of this crisis-mode, peacekeeping missions are not sufficiently able to engage in program evaluation.⁵²⁴ This impedes feedback loops and the ability for learning and adjustment.

It is perhaps also because of this crisis mode that mission staff operates under a common perception that the mission never seems to close and therefore does not plan for its closure. This denial of the future becomes especially consequential for the supercamps. Practically, there is hardly any ‘end-user’ to whom a supercamp can be handed over at the end of the mission. Who can afford the size and costs of maintaining and transforming the vast land of the supercamp? And who needs such large amounts of space, neither organically grown nor properly planned, somewhat temporarily-outfitted and yet used for a long time? UN time, therefore, is no time to envision a future that looks different from the past and present. UN time operates on a regime of urgency that precludes careful planning, revision, the inclusion of stakeholders with possibly conflicting ideas, the mediation of such differences and the sustaining of radically different, contested, and challenging ideas.

⁵²³ Interview with Civilian Staff, MINUSMA, February 28, 2022.

⁵²⁴ In light of the large budgets, as several interviewees pointed out, the lack of systematic evaluation would be unthinkable in a development organization with similar amount of resources.

6.3 Planning for sustainable peace

Within the UN's current occupation with 'wider impact', 'legacy' and sustainable peace, infrastructure is an important element – but a more nuanced treatment is required to equally appreciate the promises as well as risks embodied in infrastructure. The norms of engagement, the assumption that drive peace operations, require reconsideration. Against the current treatment of UN time and space, the pursuit of peace is non-linear and often features side-by-side elements of peace and conflict, violence and non-violence. It is timely to redefine the role of peace operations to recognize their long-term presence and afterlives and to accommodate the new conflicts that peace operations' extended socio-spatial engagement with communities will evoke. An expansive understanding of peace operations encompasses local and equity-focused planning, in which conflict, if non-violent, is acceptable and part of an inclusive process.

The very nature of the 'planning' that undergirds the infrastructure matters. As an expert-driven endeavor subject to a military logic, participatory planning processes are of low priority in peace operations infrastructure' projects. There is a risk that peacekeepers commit "infrastructural violence"⁵²⁵ through the projects they pursue in missions. Infrastructure entails risk for peace operations and the pursuit of sustainable peace. This risk not only refers to the potential deforestation, soil sealing or predatory economic practices that peacekeepers incentivize through their presence. It also refers to the discriminatory politics and power wielded through infrastructure more broadly, embedded in 'UN time' and 'UN space': the exclusion, militarization, or preconceived impact. Given the UN's contemporary aim at longer-term impact,

⁵²⁵ Rodgers and O'Neill, 'Infrastructural Violence'.

it is noteworthy that sustainability as the current dominant paradigm of international cooperation has been similarly criticized in theory,⁵²⁶ and in practice for interventions' exclusive character, logic of securitization and economic competition.⁵²⁷ Through the infrastructure lens, the efforts to sustain peace requires a broader vision of planning and a practice centered on equity.

For peace operations to reconfigure its assumptions about time and space, it may consider 'local time' and 'local space' – both place-specificity and expanded time frames. It also means to engage with infrastructure futures, the possibility of adaptation and new partnerships. Today, peace operations have certainly moved beyond the idea of thinking of their best footprint as 'no footprint' where the mission leaves nothing behind. But more could be done, and missions may need to insert themselves more fully in the future of a country, even if this means more interdependency, local hires, and local resources, (and perhaps therefore longer wait times). Specifically, this means moving from quick-impact interventions to complex municipal projects, which is already envisioned in ventures like the renewable power plant in Baidoa, Somalia. It means taking a project-level perspective – a “project-level treatment”⁵²⁸ – and consider the city and even sub-city (rather than the nation-state) scale. It means planning community-centric and trans-border. Could, as one of my interviewees entertained, a supercamp be planned from the outset to become a university campus, hospital or social housing project one day?⁵²⁹ Indeed, once the nation-state is no longer the only scale and mode of planning, 'project management' can be reframed as community planning, and 'spending' can be rethought as investment priorities.

⁵²⁶ Luke, 'Neither Sustainable nor Development'.

⁵²⁷ Hodson and Marvin, “‘Urban Ecological Security’”; Michael Hodson and Simon Marvin, 'Intensifying or Transforming Sustainable Cities? Fragmented Logics of Urban Environmentalism', *Local Environment* 22 (2 January 2017): 8–22, <https://doi.org/10.1080/13549839.2017.1306498>; Mike Hodson and Simon Marvin, 'Urbanism in the Anthropocene: Ecological Urbanism or Premium Ecological Enclaves?', *City* 14, no. 3 (June 2010): 298–313.

⁵²⁸ Gabriella Y. Carolini, 'The Governmentality of Evaluation', in *Equity, Evaluation, and International Cooperation: In Pursuit of Proximate Peers in an African City* (Oxford: Oxford University Press, 2022), 153.

⁵²⁹ Interview with UN Official, July 21, 2022.

Infrastructure planning would require a different, expanded set of questions to be answered: How many people are being served? How flexibly is the infrastructure designed? Can it adapt or expand, and can it connect to existing or future infrastructure projects? Who should own, maintain, and finance the infrastructure, now and in the future? Several of my interviewees referred to an ongoing controversy among UN staff of how to count the beneficiaries of projects that leads to inflated numbers of people being positively impacted by interventions. A planning perspective concerned with equity would interject that the question of beneficiaries is not actually about the number but about *who* is being served. Because, as Gabriella Carolini emphasized, this question “implies a person-centered assessment of the distribution of material impacts or well-being benefits emergent from a development project.”⁵³⁰ Such approach asks about the recipients of a project, who might gain and lose, who might be rendered more resilient and who might be rendered more vulnerable – recognizing that each project involves an element of redistribution.

The implementation is certainly neither simple, nor without conflict. It is problematic to burden mission staff, increasing their exposure to violence or adding more to what has already been given the misnomer “Christmas tree mandates” – the growing list of tasks and responsibilities for peacekeeping missions. In the words of an official in the Department of Peace Operations:

They still need to be doing a good job of their day job. You know, the ability of an enabler of the mandated implementation of the mission. Doing this ‘oh, let’s have some lovely positive, local impact’ – that is a full-time job, as anybody knows in a ministry, anybody who’s an international actor. Trying to have a positive impact – that is a full-time job. That is very humbling and our long-term record on that, by the way, is not very positive. So I don’t think it’s a field that you wander into easily. They may not understand what an investment will be required to do it.⁵³¹

⁵³⁰ Carolini, ‘The Governmentality of Evaluation’, 169.

⁵³¹ Interview with UN Official, Department of Peace Operations, October 7, 2021.

Instead of deterrence, the challenges ahead should motivate more inquiry, for both practitioners and researchers. What could, and should, participation look like in planning in the context of peace operations, and how does such planning process link to the outcome? What *is* equitable and what does the ‘just city’ look like in the context of continuous violent conflict and in the presence of a peacekeeping mission? How can sustainability be operationalized, when is it desirable, and when not?

Practically, for sure, policy makers, internationally and at the local level, may benefit from better understanding the role of infrastructure – its building, maintenance, and possibly closure – in the context of peacekeeping, and the ideas of peace and conflict that are embodied in the intervention. The roads, camps, and renewable power plants constitute a significant input into spatial politics. If those spatial politics are omitted, infrastructures as part of peacekeeping may solidify destructive power structures, reinforce divides and preexisting conflictual relationships, and disempower marginalized communities even further – challenging the very idea of ‘sustainable’ peace that the UN has come to adopt over the last decade and seeks to implement – at least in part – through infrastructure building. The burden, of course, should not be on peace operations alone, and it requires a critical evaluation of when and where peacekeepers are best placed to build infrastructure. Not embracing infrastructure lives fully, not considering, planning for, tracking, and addressing the spatial, social and political consequences of a project might, at the very best, be a waste of resources and missed opportunity to bolster important peace gains in the community.

Bibliography

- Abi-Saab, Georges. *The United Nations Operation in the Congo, 1960-1964*. Oxford; New York: Oxford University Press, 1978. <http://archive.org/details/unitednationsope0000abis>.
- Adama, Onyanta. 'Urban Imaginaries: Funding Mega Infrastructure Projects in Lagos, Nigeria'. *GeoJournal* 83, no. 2 (1 April 2018): 257–74. <https://doi.org/10.1007/s10708-016-9761-8>.
- Adler, Emanuel, and Vincent Pouliot. 'International Practices'. *International Theory* 3, no. 1 (2011): 1–36.
- Aggestam, Karin. 'Desecuritisation of Water and the Technocratic Turn in Peacebuilding'. *International Environmental Agreements: Politics, Law and Economics; Dordrecht* 15, no. 3 (2015): 327–40. <http://dx.doi.org.libproxy.mit.edu/10.1007/s10784-015-9281-x>.
- Ahmed, Baba. 'La Minusma doit quitter son quartier général de l'hôtel Laico de Bamako'. *Jeune Afrique*, 22 January 2016. <https://www.jeuneafrique.com/296096/politique/mali-la-minusma-doit-quitter-son-quartier-general-de-lhotel-laico-de-bamako/>.
- Aldunate, Eduardo. *Backpacks Full of Hope: The UN Mission in Haiti*. Waterloo: Wilfrid Laurier University Press, 2010. <http://archive.org/details/backpacksfullofh00edua>.
- . 'Peace Operations: On the Importance of Perceiving versus Just Seeing'. In *Fixing Haiti: MINUSTAH and Beyond*, edited by Jorge Heine and Andrew S. Thompson, 126–37. Tokyo: United Nations University Press, 2011.
- Amin, Ash. 'Lively Infrastructure'. *Theory, Culture & Society* 31, no. 7–8 (December 2014): 137–61. <https://doi.org/10.1177/0263276414548490>.
- Amster, Randall. *Peace Ecology*. Boulder: Paradigm Publishers, 2015.
- Anand, Nikhil, Akhil Gupta, and Hannah Appel. *The Promise of Infrastructure*. Durham, NC: Duke University Press, 2018.
- Anderson, Mary B. *Do No Harm: How Aid Can Support Peace--or War*. Boulder, Colorado: Lynne Rienner Publishers, 1999. <https://ebookcentral.proquest.com/lib/mit/reader.action?docID=6199413&ppg=81>.
- Andersson, Ruben. 'Bamako, Mali - Danger and the Divided Geography of International Intervention'. In *Cities at War Global Insecurity and Urban Resistance*, edited by Mary Kaldor and Saskia Sassen. New York: Columbia University Press, 2020. <https://www.degruyter.com/isbn/9780231546133>.
- Aoi, Chiyuki, Cedric De Coning, and Ramesh Chandra Thakur, eds. *Unintended Consequences of Peacekeeping Operations*. Tokyo, New York: United Nations University Press, 2007.
- Asmussen, Jan. 'United Nations Peacekeeping Force in Cyprus (UNFICYP)'. In *The Oxford Handbook of United Nations Peacekeeping Operations*, edited by Joachim A. Koops, Thierry Tardy, Norrie MacQueen, and Paul D. Williams. Oxford University Press, 2015. <https://doi.org/10.1093/oxfordhb/9780199686049.013.24>.
- Autesserre, Séverine. 'Going Micro: Emerging and Future Peacekeeping Research'. *International Peacekeeping* 21, no. 4 (8 August 2014): 492–500. <https://doi.org/10.1080/13533312.2014.950884>.
- . 'International Peacebuilding and Local Success: Assumptions and Effectiveness'. *International Studies Review* 19, no. 1 (March 2017): 114–32. <https://doi.org/10.1093/isr/viw054>.

- . *Peaceland: Conflict Resolution and the Everyday Politics of International Intervention*. Cambridge University Press, 2014.
- . *The Trouble With the Congo: Local Violence and the Failure of International Peacebuilding*, 2010. <https://doi.org/10.7916/D8TM79X5>.
- Bachmann, Jan, and Peer Schouten. ‘Concrete Approaches to Peace: Infrastructure as Peacebuilding’. *International Affairs* 94, no. 2 (1 March 2018): 381–98. <https://doi.org/10.1093/ia/iix237>.
- Badiey, Naseem, and Christian Doll. ‘Planning amidst Precarity: Utopian Imaginings in South Sudan’. *Journal of Eastern African Studies* 12, no. 2 (3 April 2018): 367–85. <https://doi.org/10.1080/17531055.2018.1408305>.
- Bakaki, Zorzeta, and Tobias Böhmelt. ‘Can UN Peacekeeping Promote Environmental Quality?’ *International Studies Quarterly* 65, no. 4 (2021). <https://doi.org/10.1093/isq/sqab051>.
- ‘Barkhane: un repli à marche forcée’. *Grand reportage*. RFI, 14 July 2022. <https://www.rfi.fr/fr/podcasts/grand-reportage/20220714-barkhane-un-repli-%C3%A0-marche-forc%C3%A9e>.
- Bartlett, Anne, Jennifer Alix-Garcia, and David S. Saah. ‘City Growth Under Conflict Conditions: The View from Nyala, Darfur’. *City & Community* 11, no. 2 (2012): 151–70. <https://doi.org/10.1111/j.1540-6040.2012.01396.x>.
- Batt, William H. ‘Infrastructure: Etymology and Import’. *Journal of Professional Issues in Engineering* 110, no. 1 (1 January 1984): 1–6. [https://doi.org/10.1061/\(ASCE\)1052-3928\(1984\)110:1\(1\)](https://doi.org/10.1061/(ASCE)1052-3928(1984)110:1(1)).
- Bayat, Asef. ‘From ‘Dangerous Classes’ to ‘Quiet Rebels’: Politics of the Urban Subaltern in the Global South’. *International Sociology* 15, no. 3 (2000): 533–57. <https://doi.org/10.1177/026858000015003005>.
- Beall, Jo, Zegeye Cherenet, Liza Cirolia, Nuno da Cruz, and Philipp Rode. ‘Understanding Infrastructure Interfaces: Common Ground for Interdisciplinary Urban Research?’ *Journal of the British Academy* 7, no. s2 (2019): 11–43.
- Beber, Bernd, Michael J Gilligan, Jenny Guardado, and Sabrina Karim. ‘The Promise and Peril of Peacekeeping Economies’. *International Studies Quarterly* 63, no. 2 (1 June 2019): 364–79. <https://doi.org/10.1093/isq/sqz012>.
- Beck, Ulrich. *Risk Society: Towards a New Modernity*. Translated by Mark Ritter. London; Newbury Park, Calif.: Sage Publications, 1992.
- Berdal, Mats. ‘The Security Council and Peacekeeping’. In *The United Nations Security Council and War: The Evolution of Thought and Practice since 1945*, edited by Vaughan Lowe, Adam Roberts, Jennifer Welsh, and Dominik Zaum, 175–204. Oxford: Oxford University Press, 2008. <http://hdl.handle.net/2027/uc1.31822035338649>.
- Berking, Helmuth, Sybille Frank, Lars Frers, Martina Löw, Lars Meier, Silke Steets, and Sergej Stoetzer, eds. *Negotiating Urban Conflicts: Interaction, Space and Control*. Bielefeld: Transcript, 2006.
- Björkdahl, Annika. ‘Urban Peacebuilding’. *Peacebuilding* 1, no. 2 (2013): 207–21. <https://doi.org/10.1080/21647259.2013.783254>.
- Björkdahl, Annika, and Susanne Buckley-Zistel. ‘Spatializing Peace and Conflict: An Introduction’. In *Spatializing Peace and Conflict: Mapping the Production of Places, Sites and Scales of Violence*, edited by Annika Björkdahl and Susanne Buckley-Zistel, 1–22. Rethinking Peace and Conflict Studies. London: Palgrave Macmillan UK, 2016. https://doi.org/10.1057/9781137550484_1.

- Björkdahl, Annika, and Kristine Höglund. 'Precarious Peacebuilding: Friction in Global–Local Encounters'. *Peacebuilding* 1, no. 3 (September 2013): 289–99. <https://doi.org/10.1080/21647259.2013.813170>.
- Björkdahl, Annika, Kristine Höglund, Gearoid Millar, Jaïr Van Der Lijn, and Willemijn Verkoren. *Peacebuilding and Friction: Global and Local Encounters in Post Conflict-Societies*. Abingdon, Oxon; New York, NY: Routledge, 2016.
- Björkman, Lisa, and Andrew Harris. 'Engineering Cities: Mediating Materialities, Infrastructural Imaginaries and Shifting Regimes of Urban Expertise'. *International Journal of Urban and Regional Research* 42, no. 2 (2018): 244–62. <https://doi.org/10.1111/1468-2427.12528>.
- Blair, W. Granger. 'All-Day Fighting Rages on Cyprus; Town Is Cut Off: Turkish Community Defies Greeks' Demands It Yield Fortifications in Paphos; Thant Issues Warning: He Calls Violence Senseless and Fears "Tragic" Results'. *New York Times*. 1964.
- . 'Greek Cypriotes Enlarging Force: Tens of Thousands, Voicing Allegiance to Makarios, Receive Foreign Arms'. *New York Times*. 1964.
- Bleck, Jaimie, and Kristin Michelitch. 'The 2012 Crisis in Mali: Ongoing Empirical State Failure'. *African Affairs* 114, no. 457 (1 October 2015): 598–623. <https://doi.org/10.1093/afraf/adv038>.
- Bollens, Scott A. *City and Soul in Divided Societies*. London: Routledge, 2012.
- . *Urban Peace-Building in Divided Societies: Belfast and Johannesburg*. Boulder: Westview Press, 1999.
- . 'Urban Planning amidst Ethnic Conflict: Jerusalem and Johannesburg'. *Urban Studies* 35, no. 4 (1998): 729–50.
- . 'Urban Planning and Peace Building'. *Progress in Planning* 66, no. 2 (August 2006): 67–139. <https://doi.org/10.1016/j.progress.2006.07.001>.
- Bou Akar, Hiba. *For the War yet to Come: Planning Beirut's Frontiers*. Stanford, California: Stanford University Press, 2018.
- Boudon, Raymond. *The Unintended Consequences of Social Action*. New York: St. Martin's Press, 1982.
- Boutellis, Arthur, and Adam C Smith. 'Engineering Peace: The Critical Role of Engineers in UN Peacekeeping'. New York: International Peace Institute, January 2014.
- Boyd, James M. 'Cyprus: Episode in Peacekeeping'. *International Organization* 20, no. 1 (Winter 1966): 1–17. <https://doi.org/10.1017/S0020818300002721>.
- Boyle, Michael J. *Violence after War : Explaining Instability in Post-Conflict States*. Baltimore, MD: Hopkins University Press, 2014. <https://lib.mit.edu/record/cat00916a/mit.002209879>.
- Braun, Virginia, and Victoria Clarke. 'Using Thematic Analysis in Psychology'. *Qualitative Research in Psychology* 3, no. 2 (January 2006): 77–101. <https://doi.org/10.1191/1478088706qp063oa>.
- 'Brazil's Participation in MINUSTAH (2004-2017)'. Rio de Janeiro, Brazil: Igarape Institute, 2018. <https://igarape.org.br/wp-content/uploads/2018/03/Brazils-Participation-in-MINUSTAH-2004-2017.pdf>.
- Brenner, Neil, and Christian Schmid. 'The "Urban Age" in Question'. *International Journal of Urban and Regional Research* 38, no. 3 (2014): 731–55. <https://doi.org/10.1111/1468-2427.12115>.
- Brewer, Sam Pope. 'Cyprus Massacre by Greek Forces Charged by Turks: Minority Leader Tells U.N. Many Hostages Were Shot'. *New York Times*. 1964.

- Bri Kouri Nouvel Gaye, Mennonite Central Committee (MCC0 in Haiti, Let Haiti Live, and Unity Ayiti. 'Submission to the United Nations Universal Periodic Review: Haiti's Renewal of MINUSTAH's Mandate in Violation of the Human Rights of the Haitian People'. Accessed 27 October 2021. https://doi.org/10.1163/2210-7975_HRD-5555-2015006.
- UN News. 'Building Climate Resilience and Peace, Go Hand in Hand for Africa's Sahel – UN Forum', 13 November 2018. <https://news.un.org/en/story/2018/11/1025671>.
- Bunge, Frederica M., ed. *Cyprus, a Country Study*. Washington, D.C.: American University, 1979. <https://catalog.hathitrust.org/Record/001304882>.
- Büscher, Karen. 'African Cities and Violent Conflict: The Urban Dimension of Conflict and Post Conflict Dynamics in Central and Eastern Africa'. *Journal of Eastern African Studies* 12, no. 2 (3 April 2018): 193–210. <https://doi.org/10.1080/17531055.2018.1458399>.
- . 'Violent Conflict and Urbanization in Eastern Democratic Republic of the Congo: The City as Safe Haven'. In *Cities at War Global Insecurity and Urban Resistance*, edited by Mary Kaldor and Saskia Sassen, 160–83. New York: Columbia University Press, 2020. <https://www.degruyter.com/isbn/9780231546133>.
- Büscher, Karen, Sophie Komujuni, and Ivan Ashaba. 'Humanitarian Urbanism in a Post-Conflict Aid Town: Aid Agencies and Urbanization in Gulu, Northern Uganda'. *Journal of Eastern African Studies* 12, no. 2 (3 April 2018): 348–66. <https://doi.org/10.1080/17531055.2018.1456034>.
- Caldeira, Teresa PR. *City of Walls: Crime, Segregation, and Citizenship in São Paulo*. Berkeley: University of California Press, 2000.
- Cammett, Melani. 'Political Ethnography In Deeply Divided Societies'. *Qualitative Methods*. Accessed 4 May 2022. https://www.academia.edu/301421/Political_Ethnography_In_Deeply_Divided_Societies.
- Campbell, Susanna. 'Routine Learning? How Peacebuilding Organisations Prevent Liberal Peace'. In *A Liberal Peace? The Problems and Practices of Peacebuilding*, edited by Susanna Campbell, David Chandler, and Meera Sabaratnam, 89–105. Zed Books Ltd, 2011. <https://doi.org/10.5040/9781350218017>.
- Carnahan, Michael, Scott Gilmore, and William Durch. 'New Data on the Economic Impact of UN Peacekeeping.' *International Peacekeeping* (13533312), 2007. <https://doi.org/info:doi/10.1080/13533310701422943>.
- Carolini, Gabriella Y. 'Aid's Urban Footprint and Its Implications for Local Inequality and Governance'. *Environment and Planning A: Economy and Space* 53, no. 2 (March 2021): 389–409. <https://doi.org/10.1177/0308518X20947099>.
- . 'The Governmentality of Evaluation'. In *Equity, Evaluation, and International Cooperation: In Pursuit of Proximate Peers in an African City*. Oxford: Oxford University Press, 2022.
- Castel, Robert. 'From Dangerousness to Risk'. In *The Foucault Effect: Studies in Governmentality*, edited by G. Burchell, C. Gordon, and P. Miller. Hemel Hempstead: Harvester-Wheatsheaf, 1991. <https://mit-illiad-oclc-org.libproxy.mit.edu/illiad/illiad.dll?Action=10&Form=75&Value=592621>.
- Chandler, David. *Peacebuilding: The Twenty Years' Crisis, 1997-2017*. Rethinking Peace and Conflict Studies. Cham: Palgrave Macmillan, 2017.
- Chojnacki, Sven, and Bettina Engels. 'Overcoming the Material/Social Divide: Conflict Studies from the Perspective of Spatial Theory'. In *Spatializing Peace and Conflict: Mapping the*

- Production of Places, Sites and Scales of Violence*, edited by Annika Björkdahl and Susanne Buckley-Zistel, 25–40. Rethinking Peace and Conflict Studies. London: Palgrave Macmillan UK, 2016. https://doi.org/10.1057/9781137550484_2.
- Cil, Deniz, Hanne Fjelde, Lisa Hultman, and Desirée Nilsson. ‘Mapping Blue Helmets: Introducing the Geocoded Peacekeeping Operations (Geo-PKO) Dataset’. *Journal of Peace Research* 57, no. 2 (2020): 360–70.
- Clarke, Joe Sandler. ‘Where Does the \$8bn UN Peacekeeping Budget Go?’ *The Guardian*, 6 April 2016, sec. Working in development. <https://www.theguardian.com/global-development-professionals-network/2016/apr/06/where-does-8bn-un-peacekeeping-budget-go>.
- Clouette, Benedict, and Marlisa Wise. ‘Port-Au-Prince and Humanitarian Liberalism’. In *Forms of Aid*, 68–97. Birkhäuser, 2017. <https://doi.org/10.1515/9783035608267-005>.
- Collier, Paul, and Anke Hoeffler. ‘Greed and Grievance in Civil War’. *Oxford Economic Papers* 56, no. 4 (22 June 2004): 563–95. <https://doi.org/10.1093/oep/gpf064>.
- Collier, Stephen J., James Christopher Mizes, and Antina von Schnitzler. ‘Public Infrastructures / Infrastructural Publics’. *Limn*, 8 November 2016. <https://limn.it/articles/preface-public-infrastructures-infrastructural-publics/>.
- Coning, Cedric de. ‘From Peacebuilding to Sustaining Peace: Implications of Complexity for Resilience and Sustainability’. *Resilience* 4, no. 3 (September 2016): 166–81. <https://doi.org/10.1080/21693293.2016.1153773>.
- Danielak, Silvia. ‘Conflict Urbanism: Reflections on the Role of Conflict and Peacebuilding in Post-Apartheid Johannesburg’. *Peacebuilding* 8, no. 4 (2020): 447–59. <https://doi.org/10.1080/21647259.2019.1634867>.
- . ‘The Infrastructure of Peace: Civil–Military Urban Planning in Mali’. *International Peacekeeping* 29, no. 1 (2): 115–38. <https://doi.org/10.1080/13533312.2021.1996236>.
- Davenport, Christian, Erik Melander, and Patrick M. Regan. *The Peace Continuum: What It Is and How to Study It*. Oxford University Press, 2018.
- Davies, Sara E, and Simon Rushton. ‘Healing or Harming? United Nations Peacekeeping and Health’. New York: International Peace Institute, March 2015.
- Davis, Diane. ‘City, Nation, Network: Shifting Territorialities of Sovereignty and Urban Violence in Latin America’. *Urban Planning* 5, no. 3 (31 August 2020): 206–16. <https://doi.org/10.17645/up.v5i3.3095>.
- Davis, Diane E. ‘Cities in Global Context: A Brief Intellectual History’. *International Journal of Urban and Regional Research* 29, no. 1 (2005): 92–109. <https://doi.org/10.1111/j.1468-2427.2005.00572.x>.
- . ‘Non-State Armed Actors, New Imagined Communities, and Shifting Patterns of Sovereignty and Insecurity in the Modern World’. *Contemporary Security Policy* 30, no. 2 (1 August 2009): 221–45. <https://doi.org/10.1080/13523260903059757>.
- Davis, Diane E., and Nora Libertun de Duren, eds. *Cities & Sovereignty: Identity Politics in Urban Spaces*. Bloomington, Ind: Indiana University Press, 2011.
- Davis, Mike. *Planet of Slums*. London: Verso, 2006.
- DDR Section, Office of Rule of Law and Security Institutions, UN Department of Peace Operations. ‘DDR - Community Violence Reduction: Creating Space for Peace’. Accessed 10 December 2021. <https://peacekeeping.un.org/sites/default/files/ddr-and-cvr-creating-space-for-peace.pdf>.

- . ‘Second Generation Disarmament, Demobilization and Reintegration (DDR) Practices in Peace Operations: A Contribution to the New Horizon Discussion on Challenges and Opportunities for UN Peacekeeping’. New York: United Nations, 2010.
https://peacekeeping.un.org/sites/default/files/2gddr_eng_with_cover.pdf.
- De Boeck, Filip, and Marie-Françoise Plissart. ‘Kinshasa and Its (Im)Material Infrastructure’. In *Cities of the Global South Reader*, edited by Faranak Miraftab and Neema Kudva, 188–91. Routledge, 2014. <https://doi.org/10.4324/9781315758640-31>.
- DFS. ‘Environmental Good Practice: 2017 Implementation of the DFS Environment Strategy in Field Mission’. United Nations, November 2017.
https://peacekeeping.un.org/sites/default/files/171117_environmental_strategy_good_practices.pdf.
- Diehl, Paul F. ‘Exploring Peace: Looking Beyond War and Negative Peace’. *International Studies Quarterly* 60, no. 1 (March 2016): 1–10. <https://doi.org/10.1093/isq/sqw005>.
- Diehl, Paul F., and Daniel Druckman. ‘Not the Same Old Way: Trends in Peace Operations’. *Brown Journal of World Affairs* 24, no. 1 (Fall/Winter 2017): 249–60.
- Diehl, Paul F. (Paul Francis), and Alexandru Balas. *Peace Operations*. Second edition. War and Conflict in the Modern World. Cambridge, England: Polity Press, 2014.
- Diniz, Eugenio. ‘Brazil: Peacekeeping and the Evolution of Foreign Policy’. In *Capacity Building for Peacekeeping: The Case of Haiti*, edited by John T. Fishel, Andrés Sáenz, and National Defense University Center for Hemispheric Defense Studies, 1st ed., 91–111. Washington, D.C.: National Defense University Press, 2007.
- Dorn, A. Walter. ‘Intelligence-Led Peacekeeping: The United Nations Stabilization Mission in Haiti (MINUSTAH), 2006–07’. *Intelligence and National Security* 24, no. 6 (December 2009): 805–35. <https://doi.org/10.1080/02684520903320410>.
- Doyle, Michael W., and Nicholas Sambanis. ‘Peacekeeping Operations’. In *The Oxford Handbook on the United Nations*, edited by Thomas G. Weiss and Sam Daws, 323–48. Oxford: Oxford University Press, 2007. <http://hdl.handle.net/2027/uc1.31822035215193>.
- Dresse, Anaïs, Itay Fischhendler, Jonas Østergaard Nielsen, and Dimitrios Zikos. ‘Environmental Peacebuilding: Towards a Theoretical Framework’. *Cooperation and Conflict* 54, no. 1 (2019): 99–119. <https://doi.org/10.1177/0010836718808331>.
- Druet, Dirk, and Rida Lyammouri. ‘From Renewable Energy to Peacebuilding in Mali’. Washington, D.C.: Stimson Center, June 2021.
- Duffield, Mark. ‘Challenging Environments: Danger, Resilience and the Aid Industry’. *Security Dialogue* 43, no. 5 (1 October 2012): 475–92. <https://doi.org/10.1177/0967010612457975>.
- . *Global Governance and the New Wars The Merging of Development and Security*. London: Zed Books, 2001.
- Dziedzic, Michael, and Robert M. Perito. ‘Haiti: Confronting the Gangs of Port-Au-Prince’. Washington, D.C.: US Institute for Peace, 2008.
<https://www.usip.org/publications/2008/09/haiti-confronting-gangs-port-au-prince>.
- Easterling, Keller. *Extrastatecraft: The Power of Infrastructure Space*. London; New York: Verso, 2014.
- Edwards, Paul N., and Gabrielle Hecht. ‘History and the Technopolitics of Identity: The Case of Apartheid South Africa’. *Journal of Southern African Studies* 36, no. 3 (September 2010): 619–39. <https://doi.org/10.1080/03057070.2010.507568>.

- Eliasson, Jan. 'Humanitarian Action and Peacekeeping'. In *Peacemaking and Peacekeeping for the next Century*, edited by Clara A. Otunnu and Michael W. Doyle. Lanham: Rowman & Littlefield Publishers, 1998. <http://hdl.handle.net/2027/mdp.39015040174263>.
- Faremo, Grete. 'The Executive Director of a Un Agency on Running It Like a Business'. *Harvard Business Review* 97, no. 3 (5 June 2019): 39–43.
- Fassihi, Farnaz, and David A. Fahrenthold. 'Head of U.N. Agency Resigns After Questions Arise About Loans'. *The New York Times*, 8 May 2022, sec. U.S. <https://www.nytimes.com/2022/05/08/us/politics/un-agency-loans-resignation.html>.
- Fearon, James D., and David D. Laitin. 'Neotrusteeship and the Problem of Weak States'. *International Security* 28, no. 4 (2004): 5–43.
- Fellow, Lawrence. 'New Cyprus Tension Imperils Reopening of Roads'. *New York Times*. 1964.
- Ferguson, James. *The Anti-Politics Machine*. Cambridge: Cambridge University Press, 1990.
- Firchow, Pamina. *Reclaiming Everyday Peace: Local Voices in Measurement and Evaluation After War*. Cambridge: Cambridge University Press, 2018. <https://doi.org/10.1017/9781108236140>.
- Firchow, Pamina, and Roger Mac Ginty. 'Measuring Peace: Comparability, Commensurability, and Complementarity Using Bottom-Up Indicators'. *International Studies Review* 19, no. 1 (March 2017): 6–27. <https://doi.org/10.1093/isr/vix001>.
- Flyvbjerg, Bent. 'Bringing Power to Planning Research: One Researcher's Praxis Story'. In *Readings in Planning Theory*, edited by Susan S. Fainstain and Scott Campbell, 3rd ed., 292–314. Wiley-Blackwell, 2011.
- Foucault, Michel. *Discipline and Punish*. Translated by A. Sheridan. New York: Random House, 1977.
- . *Power/Knowledge: Selected Interviews and Other Writings, 1972-1977*. Edited by Colin Gordon. 1st American ed. New York: Pantheon Books, 1980.
- Frerichs, Ralph R. 'Epilogue'. In *Deadly River*, 1st ed., 249–54. Cholera and Cover-Up in Post-Earthquake Haiti. Cornell University Press, 2016. <http://www.jstor.org/stable/10.7591/j.ctt20d896m.29>.
- Fukuyama, Francis. 'The End of History?' *The National Interest*, no. 16 (1989): 3–18.
- Galtung, Johan. 'Three Realistic Approaches to Peace: Peacekeeping, Peacemaking, Peacebuilding'. *Impact of Science on Society* 26 (January 1976): 103–15.
- . 'Violence, Peace, and Peace Research'. *Journal of Peace Research* 6, no. 3 (1969): 167–91.
- Garland, David. 'What Is a "History of the Present"? On Foucault's Genealogies and Their Critical Preconditions'. *Punishment & Society* 16, no. 4 (2014): 365–84.
- Giddens, Anthony. 'Risk and Responsibility'. *The Modern Law Review* 62, no. 1 (1999): 1–10. <https://doi.org/10.1111/1468-2230.00188>.
- . *The Consequences of Modernity*. Stanford, Calif.: Stanford University Press, 1990. <https://lib.mit.edu/record/cat00916a/mit.000485766>.
- Gilligan, Michael J., and Ernest J. Sergenti. 'Do UN Interventions Cause Peace? Using Matching to Improve Causal Inference'. *Quarterly Journal of Political Science* 3, no. 2 (28 July 2008): 89–122. <https://doi.org/10.1561/100.00007051>.
- Glassmeyer, David Matthew, and Rebecca-Anne Dibbs. 'Researching From a Distance: Using Live Web Conferencing to Mediate Data Collection'. *International Journal of Qualitative Methods* 11, no. 3 (September 2012): 292.

- Gledhill, John. 'The Pieces Kept after Peace Is Kept: Assessing the (Post-Exit) Legacies of Peace Operations'. *International Peacekeeping* 27, no. 1 (1 January 2020): 1–11. <https://doi.org/10.1080/13533312.2019.1710367>.
- Gledhill, John, and Jonathan Bright. 'Studying Peace and Studying Conflict: Complementary or Competing Projects?' *Journal of Global Security Studies* 4, no. 2 (1 April 2019): 259–66. <https://doi.org/10.1093/jogss/ogz001>.
- Gledhill, John, Richard Caplan, and Maline Meiske. 'Developing Peace: The Evolution of Development Goals and Activities in United Nations Peacekeeping'. *Oxford Development Studies* 49, no. 3 (3 July 2021): 201–29. <https://doi.org/10.1080/13600818.2021.1924126>.
- Global Commission on the Economy and Climate. 'The Sustainable Infrastructure Imperative', 2016. https://newclimateeconomy.report/2016/wp-content/uploads/sites/4/2014/08/NCE_2016Report.pdf.
- Goldthorpe, John H., David Lockwood, Frank Bechhofer, and Jennifer Platt. *The Affluent Worker in the Class Structure*. CUP Archive, 1969.
- Gordon, J. King. 'The U. N. in Cyprus'. *International Journal* 19, no. 3 (1964): 326–47.
- Goulding, Marrack. *Peacemonger*. Baltimore, MD: Johns Hopkins University Press, 2003. <http://archive.org/details/peacemonger0000goul>.
- . 'The Evolution of United Nations Peacekeeping'. *International Affairs* 69, no. 3 (1993): 451–64. <https://doi.org/10.2307/2622309>.
- . 'The Evolution of United Nations Peacekeeping'. *International Affairs* 69, no. 3 (July 1993): 451–64. <https://doi.org/10.2307/2622309>.
- Graham, Stephen. *Cities under Siege: The New Military Urbanism*. Pbk. ed. London; New York: Verso, 2011.
- Graham, Stephen, and Simon Marvin. *Splintering Urbanism: Networked Infrastructures, Technological Mobilities and the Urban Condition*. London: Routledge, 2001.
- Graham, Stephen, and Colin McFarlane. *Infrastructural Lives: Urban Infrastructure in Context*. Routledge, 2014.
- Graham, Stephen, and Nigel Thrift. 'Out of Order: Understanding Repair and Maintenance'. *Theory, Culture & Society* 24, no. 3 (1 May 2007): 1–25. <https://doi.org/10.1177/0263276407075954>.
- Gronewold, Nathaniel. 'Environmental Demands Grow for U.N. Peacekeeping Troops'. *The New York Times*, 11 August 2009. <https://archive.nytimes.com/www.nytimes.com/gwire/2009/08/11/11greenwire-environmental-demands-grow-for-un-peacekeeping-40327.html>.
- Guéhenno, Jean-Marie. 'HAITI: The Difficulty of Helping Others'. In *The Fog of Peace: A Memoir of International Peacekeeping in the 21st Century*, 253–67. Brookings Institution Press, 2015. <https://www-jstor-org.libproxy.mit.edu/stable/pdf/10.7864/j.ctt7zsvvr.14.pdf?refreqid=excelsior%3A36fa2c53897c6de2367e0af94e5d0658>.
- . *The Fog of Peace: A Memoir of International Peacekeeping in the 21st Century*, 2015.
- Habitat I. 'The Vancouver Declaration on Human Settlements'. United Nations, 1976.
- Habitat II. 'Report of the United Nations Conference on Human Settlements (HABITAT II), Istanbul'. United Nations, 3 June 1996. <https://www.tandfonline.com/doi/full/10.1080/10261133.1993.9673888>.
- ReliefWeb. 'Haïti: La MINUSTAH Effectue Des Travaux de Réhabilitation de La "Route Des Rails" à Port-Au-Prince - Haiti', 2005. <https://reliefweb.int/report/haiti/ha%C3%Afti-la>

- minustah-effectue-des-travaux-de-r%C3%A9habilitation-de-la-route-des-rails-%C3%A0-port.
- Hammond, Guy. 'Saving Port-Au-Prince: United Nations Efforts To Protect Civilians In Haiti In 2006–2007 - Haiti'. Stimson Center, June 2012. <https://reliefweb.int/report/haiti/saving-port-au-prince-united-nations-efforts-protect-civilians-haiti-2006%E2%80%932007>.
- Harms, Hans. 'Cities of the Global South in the Context of Transnational Urbanism and International Development Policies'. In *Transnationalism and Urbanism*, edited by Stefan Krätke, Kathrin Wildner, and Stephan Lanz, 28. New York: Routledge, 2012.
- Harvey, Penelope, and Hannah Knox. *Roads: An Anthropology of Infrastructure and Expertise*. 1 online resource vols. Expertise (Ithaca, N.Y.). Ithaca, New York: Cornell University Press, 2015. <https://www.degruyter.com/doi/book/10.7591/9780801456466>.
- Harvey, Penny, and Hannah Knox. 'The Enchantments of Infrastructure'. *Mobilities* 7, no. 4 (1 November 2012): 521–36. <https://doi.org/10.1080/17450101.2012.718935>.
- Hazen, Jennifer M. 'Can Peacekeepers Be Peacebuilders?' *International Peacekeeping* 14, no. 3 (1 June 2007): 323–38. <https://doi.org/10.1080/13533310701422901>.
- Hecht, Gabrielle, and Paul N. Edwards. 'Chapter 7: The Technopolitics of Cold War - Toward a Transregional Perspective'. In *Essays on Twentieth-Century History*, edited by Michael Adas and American Historical Association. Critical Perspectives on the Past. Philadelphia: Temple University Press, 2010.
- Hegazi, Farah, Florian Krampe, and Elizabeth Seymour Smith. 'Climate-Related Security Risks and Peacebuilding in Mali'. Policy Paper. Stockholm: SIPRI, April 2021. <https://www.sipri.org/sites/default/files/2021-04/sipripp60.pdf>.
- Heine, Jorge, and Andrew S. Thompson, eds. *Fixing Haiti: MINUSTAH and Beyond*. Tokyo; New York: United Nations University Press, 2011.
- Henry, Marsha, and Paul Higate. *Insecure Spaces: Peacekeeping, Power and Performance in Haiti, Kosovo and Liberia*. Zed Books Ltd., 2013.
- Higate, Paul, and Marsha Henry. 'Space, Performance and Everyday Security in the Peacekeeping Context'. *International Peacekeeping* 17, no. 1 (February 2010): 32–48. <https://doi.org/10.1080/13533311003589165>.
- Hodson, Michael, and Simon Marvin. 'Intensifying or Transforming Sustainable Cities? Fragmented Logics of Urban Environmentalism'. *Local Environment* 22 (2 January 2017): 8–22. <https://doi.org/10.1080/13549839.2017.1306498>.
- Hodson, Mike, and Simon Marvin. "'Urban Ecological Security": A New Urban Paradigm?' *International Journal of Urban and Regional Research* 33, no. 1 (2009): 193–215. <https://doi.org/10.1111/j.1468-2427.2009.00832.x>.
- . 'Urbanism in the Anthropocene: Ecological Urbanism or Premium Ecological Enclaves?' *City* 14, no. 3 (June 2010): 298–313.
- Hoelscher, Kristian, and Per M. Norheim-Martinsen. 'Urban Violence and the Militarisation of Security: Brazilian "Peacekeeping" in Rio de Janeiro and Port-Au-Prince'. *Small Wars & Insurgencies* 25, no. 5–6 (3 September 2014): 957–75. <https://doi.org/10.1080/09592318.2014.945636>.
- Hoffman, Danny. *Monrovia Modern: Urban Form and Political Imagination in Liberia*. Durham: Duke University Press, 2017. <http://hdl.handle.net/2027/dul1.ark:/13960/t9870p87d>.
- Holt, Victoria K., and Glyn Taylor. *Protecting Civilians in the Context of UN Peacekeeping Operations*. New York: United Nations, 2009.

- Homer-Dixon, Thomas. *Environmental Scarcity and Global Security*, 1993.
- Homer-Dixon, Thomas F. *Environment, Scarcity, and Violence*. Princeton, N.J: Princeton University Press, 1999.
- Homer-Dixon, Thomas F., Jeffrey H. Boutwell, and George W. Rathjens. 'Environmental Change and Violent Conflict'. *Scientific American* 268, no. 2 (1993): 38–45.
- Houghton, Kirralie, Jaz Hee-jeong Choi, and Artur Lugmayr. 'From the Guest Editors: Urban Acupuncture'. *Journal of Urban Technology* 22, no. 3 (3 July 2015): 1–2. <https://doi.org/10.1080/10630732.2015.1087684>.
- House, Arthur H. *The U.N. in the Congo: The Political and Civilian Efforts*. Washington: University Press of America, 1978.
- Howard, Lise Morjé. *Power in Peacekeeping. Power in Peacekeeping / Lise Morjé Howard*. Cambridge: Cambridge University Press, 2019. <https://lib.mit.edu/record/cat00916a/mit.002804360>.
- Howe, Cymene, Jessica Lockrem, Hannah Appel, Edward Hackett, Dominic Boyer, Randal Hall, Matthew Schneider-Mayerson, et al. 'Paradoxical Infrastructures: Ruins, Retrofit, and Risk'. *Science, Technology, & Human Values* 41, no. 3 (May 2016): 547–65. <https://doi.org/10.1177/0162243915620017>.
- Huntington, Samuel P. 'Democracy's Third Wave'. *Journal of Democracy* 2, no. 2 (1991): 12–34. <https://doi.org/10.1353/jod.1991.0016>.
- Huq, Anwar, Rifat Anwar, Rita Colwell, Michael D. McDonald, Rakib Khan, Antarpreet Jutla, and Shafqat Akanda. 'Assessment of Risk of Cholera in Haiti Following Hurricane Matthew'. *The American Journal of Tropical Medicine and Hygiene* 97, no. 3 (7 September 2017): 896–903. <https://doi.org/10.4269/ajtmh.17-0048>.
- 'Infrastructure'. In *Merriam Webster Dictionary*. Accessed 22 March 2021. <https://www.merriam-webster.com/dictionary/infrastructure>.
- It Stays With You*, 2017. <https://itstayswithyou.com/full-film/>.
- Jasanoff, Sheila. 'Future Imperfect'. In *Dreamscapes of Modernity: Sociotechnical Imaginaries and the Fabrication of Power*, edited by Sheila Jasanoff and Sang-Hyun Kim. University of Chicago Press, 2015. <https://doi.org/10.7208/chicago/9780226276663.001.0001>.
- , ed. *States of Knowledge: The Co-Production of Science and Social Order*. International Library of Sociology. London; New York: Routledge, 2004.
- . 'The Songlines of Risk'. *Environmental Values* 8, no. 2 (1999): 135–52. <https://doi.org/info:doi/10.3197/096327199129341761>.
- Jasanoff, Sheila, and Sang-Hyun Kim, eds. *Dreamscapes of Modernity: Sociotechnical Imaginaries and the Fabrication of Power*. University of Chicago Press, 2015. <https://chicago-universitypressscholarship-com.libproxy.mit.edu/view/10.7208/chicago/9780226276663.001.0001/upso-9780226276496>.
- Jennings, Kathleen M. 'Life in a "Peace-Kept" City: Encounters with the Peacekeeping Economy'. *Journal of Intervention and Statebuilding* 9, no. 3 (3 July 2015): 296–315. <https://doi.org/10.1080/17502977.2015.1054659>.
- Jennings, Kathleen M., and Morten Bøås. 'Transactions and Interactions: Everyday Life in the Peacekeeping Economy'. *Journal of Intervention and Statebuilding* 9, no. 3 (3 July 2015): 281–95. <https://doi.org/10.1080/17502977.2015.1070022>.
- Johnson, David R., Christopher P. Scheitle, and Elaine Howard Ecklund. 'Beyond the In-Person Interview? How Interview Quality Varies Across In-Person, Telephone, and Skype

- Interviews'. *Social Science Computer Review*, 11 December 2019, 089443931989361. <https://doi.org/10.1177/0894439319893612>.
- Johnson, McKenzie F., Luz A. Rodríguez, and Manuela Quijano Hoyos. 'Intrastate Environmental Peacebuilding: A Review of the Literature'. *World Development* 137 (January 2021): 105150. <https://doi.org/10.1016/j.worlddev.2020.105150>.
- Jonah, James O. C. 'A Life in Peacekeeping'. In *The Palgrave Handbook of Peacebuilding in Africa*, edited by Tony Karbo and Kudrat Virk, 155–76. Cham: Springer International Publishing, 2018. https://doi.org/10.1007/978-3-319-62202-6_9.
- Jutila, Matti, Samu Pehkonen, and Tarja Väyrynen. 'Resuscitating a Discipline: An Agenda for Critical Peace Research'. *Millennium: Journal of International Studies* 36, no. 3 (May 2008): 623–40. <https://doi.org/10.1177/03058298080360031201>.
- Kaika, Maria. "'Don't Call Me Resilient Again!': The New Urban Agenda as Immunology ... or ... What Happens When Communities Refuse to Be Vaccinated with 'Smart Cities' and Indicators". *Environment and Urbanization* 29, no. 1 (April 2017): 89–102. <https://doi.org/10.1177/0956247816684763>.
- Kaplan, Robert D. 'The Coming Anarchy'. *The Atlantic*, February 1994. <https://www.theatlantic.com/magazine/archive/1994/02/the-coming-anarchy/304670/>.
- Karlsrud, John. 'The UN at War: Examining the Consequences of Peace-Enforcement Mandates for the UN Peacekeeping Operations in the CAR, the DRC and Mali'. *Third World Quarterly* 36, no. 1 (2 January 2015): 40–54. <https://doi.org/10.1080/01436597.2015.976016>.
- Kassem, Susann. 'Peacekeeping, Development, and Counterinsurgency: The United Nations Interim Force in Lebanon and "Quick Impact Projects"'. In *Land of Blue Helmets*, edited by Karim Makdisi and Vijay Prashad, 460–80. Oakland, CA: University of California Press, 2017.
- Katz, Jonathan M. 'U.N. Admits Role in Cholera Epidemic in Haiti'. *The New York Times*, 17 August 2016, sec. World. <https://www.nytimes.com/2016/08/18/world/americas/united-nations-haiti-cholera.html>.
- Keller, Reiner. *Doing Discourse Research: An Introduction for Social Scientists*. London: SAGE Publications, 2013.
- Kenkel, Kai Michael. 'South America's Emerging Power: Brazil as Peacekeeper'. *International Peacekeeping* 17, no. 5 (1 November 2010): 644–61. <https://doi.org/10.1080/13533312.2010.516958>.
- Koopman, Sara. 'Let's Take Peace to Pieces'. *Political Geography* 30, no. 4 (2011): 193–94. <https://doi.org/10.1016/j.polgeo.2011.04.013>.
- Kreimer, Alcira, John Eriksson, Robert Muscat, Margaret Arnold, and Colin Scott. *The World Bank's Experience with Post-Conflict Reconstruction*. The World Bank, 1998. <https://doi.org/10.1596/0-8213-4290-8>.
- Kwak, Nancy H. 'Interdisciplinarity in Planning History'. In *The Routledge Handbook of Planning History*, edited by Carola Hein, 2018.
- Lagae, Johan, and Kim Raedt. 'Global Experts "off Radar"', 1 January 2014.
- Landau, Loren B. 'Privilege and Precarity: Public Scripts and Self-Censorship in Shaping South African Social Science'. *Social Dynamics* 43, no. 3 (2 September 2017): 374–85. <https://doi.org/10.1080/02533952.2017.1401873>.

- Landgren, Karin. 'Unmeasured Positive Legacies of UN Peace Operations'. *International Peacekeeping* 27, no. 1 (1 January 2020): 65–69. <https://doi.org/10.1080/13533312.2019.1710375>.
- Larkin, Brian. 'The Politics and Poetics of Infrastructure'. *Annual Review of Anthropology* 42 (2013): 327–43.
- Latour, Bruno. *We Have Never Been Modern*. Translated by Catherine Porter. New York; London; Toronto: Harvester Wheatsheaf, 1993.
- Lecocq, Baz, Gregory Mann, Bruce Whitehouse, Dida Badi, Lotte Pelckmans, Nadia Belalimat, Bruce Hall, and Wolfram Lacher. 'One Hippopotamus and Eight Blind Analysts: A Multivocal Analysis of the 2012 Political Crisis in the Divided Republic of Mali'. *Review of African Political Economy* 40, no. 137 (1 September 2013): 343–57. <https://doi.org/10.1080/03056244.2013.799063>.
- Lemay-Hébert, Nicolas. 'Living in the Yellow Zone: The Political Geography of Intervention in Haiti'. *Political Geography* 67 (1 November 2018): 88–99. <https://doi.org/10.1016/j.polgeo.2018.08.018>.
- Lerner, Jaime. 'Urban Acupuncture'. *Harvard Business Review*, 18 April 2011. <https://hbr.org/2011/04/urban-acupuncture>.
- Lerner, Jamie. *Acupuncture Urbana*. Rio de Janeiro: Editora Record, 2003.
- Light, Jennifer S. *From Warfare to Welfare: Defense Intellectuals and Urban Problems in Cold War America*. Johns Hopkins University Press, 2003. <http://muse.jhu.edu/book/16013>.
- Linden, Eugene. 'The Exploding Cities of the Developing World'. *Foreign Affairs*. New York: Council on Foreign Relations NY, February 1996. 214283741; 01135335; 02655662. ABI/INFORM Collection. <https://doi.org/10.2307/20047467>.
- Lindley, Dan. 'Historical, Tactical, and Strategic Lessons from the Partition of Cyprus'. *International Studies Perspectives* 8, no. 2 (1 May 2007): 224–41. <https://doi.org/10.1111/j.1528-3585.2007.00282.x>.
- Lipsitz, George. *How Racism Takes Place*. Philadelphia: Temple University Press, 2011.
- Lo Iacono, Valeria, Paul Symonds, and David H.K. Brown. 'Skype as a Tool for Qualitative Research Interviews'. *Sociological Research Online* 21, no. 2 (May 2016): 103–17. <https://doi.org/10.5153/sro.3952>.
- Low, Setha. *Spatializing Culture: The Ethnography of Space and Place*. Routledge, 2016.
- Lubow, Arthur. 'The Road to Curitiba'. *The New York Times*, 20 May 2007, sec. Magazine. <https://www.nytimes.com/2007/05/20/magazine/20Curitiba-t.html>.
- Luke, Timothy W. 'Neither Sustainable nor Development: Reconsidering Sustainability in Development'. *Sustainable Development* 13, no. 4 (October 2005): 228–38. <https://doi.org/10.1002/sd.284>.
- Lunstrum, Elizabeth. 'Terror, Territory, and Deterritorialization: Landscapes of Terror and the Unmaking of State Power in the Mozambican "Civil" War'. *Annals of the Association of American Geographers* 99, no. 5 (30 October 2009): 884–92. <https://doi.org/10.1080/00045600903253676>.
- Mac Ginty, Roger. 'Against Stabilization'. *Stability: International Journal of Security and Development* 1, no. 1 (1 November 2012): 20–30. <https://doi.org/10.5334/sta.ab>.
- . *Everyday Peace: How So-Called Ordinary People Can Disrupt Violent Conflict*. Studies in Strategic Peacebuilding. New York: Oxford University Press, 2021. <https://doi.org/10.1093/oso/9780197563397.001.0001>.

- . ‘Hybrid Peace: The Interaction Between Top-Down and Bottom-Up Peace’. *Security Dialogue* 41, no. 4 (August 2010): 391–412. <https://doi.org/10.1177/0967010610374312>.
- . ‘Routine Peace: Technocracy and Peacebuilding’. *Cooperation and Conflict* 47, no. 3 (September 2012): 287–308. <https://doi.org/10.1177/0010836712444825>.
- MacQueen, Norrie. *The United Nations, Peace Operations and the Cold War*. Second. Routledge, 2011. <https://doi.org/10.4324/9781315833415>.
- Maertens, Lucile. ‘From Blue to Green? Environmentalization and Securitization in UN Peacekeeping Practices.’ *International Peacekeeping* 26, no. 3 (June 2019): 302–26.
- . ‘Quand les Casques bleus passent au vert: Environnementalisation des activités de maintien de la paix de l’onu’. *Études internationales* 47, no. 1 (3 April 2017): 57–80. <https://doi.org/10.7202/1039469ar>.
- Maertens, Lucile, and Malkit Shoshan. ‘Greening Peacekeeping: The Environmental Impact of UN Peace Operations’. New York: International Peace Institute, April 2018.
- Malcorra, Susana. ‘Interview with Susana Malcorra “Building on the Global Strategy”’. *Year in Review: United Nations Peace Operations 2011, 2012*, 7–9. <https://doi.org/10.18356/14fb9c29-en>.
- Mann, Michael. ‘The Autonomous Power of the State: Its Origins, Mechanisms and Results’. *European Journal of Sociology / Archives Européennes de Sociologie* 25, no. 2 (November 1984): 185–213. <https://doi.org/10.1017/S0003975600004239>.
- Manwaring, Max G, Strategic Studies Institute, and US Army War College. *Street Gangs the New Urban Insurgency*. Carlisle Barracks, Pa: Strategic Studies Institute, U.S. Army War College, 2005. <http://www.strategicstudiesinstitute.army.mil/pubs/download.cfm?q=597>.
- Markusen, A. ‘The Military-Industrial Divide’. *Environment and Planning D: Society and Space* 9, no. 4 (1 December 1991): 391–416. <https://doi.org/10.1068/d090391>.
- Massey, Doreen. *For Space*. London: Sage, 2005.
- McFarlane, Colin, and Jonathan Rutherford. ‘Political Infrastructures: Governing and Experiencing the Fabric of the City’. *International Journal of Urban and Regional Research* 32, no. 2 (2008): 363–74. <https://doi.org/10.1111/j.1468-2427.2008.00792.x>.
- Mehos, Donna C., and Suzanne M. Moon. ‘The Uses of Portability: Circulating Experts in the Technopolitics of Cold War and Decolonization’. In *Entangled Geographies*, edited by Gabrielle Hecht, 42–69. The MIT Press, 2011. <https://doi.org/10.7551/mitpress/9780262515788.003.0003>.
- Mills, Charles W. ‘White Time: The Chronic Injustice of Ideal Theory’. *Du Bois Review: Social Science Research on Race* 11, no. 1 (2014): 27–42. <https://doi.org/10.1017/S1742058X14000022>.
- MINUSMA. ‘Quick Impact Projects (QIPs)’. MINUSMA, 3 March 2015. <https://minusma.unmissions.org/en/quick-impact-projects-qips>.
- MINUSTAH. ‘La MINUSTAH en action: Les travaux d’infrastructure depuis le seisme’, n.d. <https://minustah.unmissions.org/sites/default/files/la-minustah-en-action.pdf>.
- Miraftab, Faranak. ‘Colonial Present: Legacies of the Past in Contemporary Urban Practices in Cape Town, South Africa’. *Journal of Planning History* 11, no. 4 (2012): 283–307.
- . ‘Insurgent Planning: Situating Radical Planning in the Global South’. *Planning Theory* 8, no. 1 (February 2009): 32–50. <https://doi.org/10.1177/1473095208099297>.
- Misselwitz, Philipp, and Tim Rieniets. ‘Jerusalem and the Principles of Conflict Urbanism’. *Journal of Urban Technology* 16, no. 2/3 (August 2009): 61–78. <https://doi.org/10.1080/10630730903278587>.

- Moestue, Helen, and Robert Muggah. 'Intégration Sociale, Ergo, Stabilisation: Évaluation Du Programme de Sécurité et de Développement de Viva Rio à Port-Au-Prince'. Rio de Janeiro: Viva Rio, 2009. https://reliefweb.int/sites/reliefweb.int/files/resources/Muggah2009_Viva%20Rio%20Haiti.pdf.
- Moore, Adam. 'Localizing Peacebuilding: The Arizona Market and the Evolution of U.S. Military Peacebuilding Priorities in Bosnia'. *Journal of Intervention and Statebuilding* 13, no. 3 (27 May 2019): 263–80. <https://doi.org/10.1080/17502977.2019.1610991>.
- Morphet, Sally. 'Organizing Civil Administration in Peace-Maintenance'. *Global Governance* 4, no. 1 (1998): 41–60.
- Moser, Caroline, and Cathy McIlwaine. 'New Frontiers in Twenty-First Century Urban Conflict and Violence'. *Environment & Urbanization* 26, no. 2 (2014): 331–244. <https://doi.org/10.1177/09562478145462>.
- Muggah, Robert. 'The United Nations Turns to Stabilization'. *IPI Global Observatory* (blog), 5 December 2014. <https://theglobalobservatory.org/2014/12/united-nations-peacekeeping-peacebuilding-stabilization/>.
- Muggah, Robert, and Keith Krause. 'A True Measure of Success - The Discourse and Practice of Human Security in Haiti'. *Whitehead Journal of Diplomacy and International Relations* 7, no. 2 (2006): 129–42.
- Mumford, Eric Paul. 'Chapter 8: Globalization and Urbanism from the 1950s to the Present'. In *Designing the Modern City: Urbanism since 1850*, 317–32. New Haven ; London: Yale University Press, 2018.
- Muzaffar, M. Ijlal (Muhammad Ijlal). 'The Periphery within: Modern Architecture and the Making of the Third World'. Thesis, Massachusetts Institute of Technology, 2007. <https://dspace.mit.edu/handle/1721.1/41719>.
- Nations, United. *Yearbook of the United Nations 1960*. United Nations, 1960. <https://doi.org/10.18356/0e957b6f-en>.
- Neiburg, Federico, and Natacha Nicaise. 'La Vie Sociale de l'Eau: Bel Air, Port-Au-Prince, Haiti'. Rio de Janeiro: Viva Rio, 2009. <https://docplayer.com.br/2814112-La-vie-sociale-de-l-eau-the-social-life-of-water-a-vida-social-da-agua-bel-air-port-au-prince-haiti-federico-neiburg-natacha-nicaise.html>.
- Newman, Oscar and National Institute of Law Enforcement and Criminal Justice. *Design Guidelines for Creating Defensible Space*. Washington: National Institute of Law Enforcement and Criminal Justice, Law Enforcement Assistance Administration, U.S. Dept. of Justice, 1976. <https://catalog.hathitrust.org/Record/007412445>.
- Oberling, Pierre. *The Road to Bellapais: The Turkish Cypriot Exodus to Northern Cyprus*. Social Science Monographs, 1982.
- Office of Internal Oversight Services, Internal Audit Division. 'Report 2015/148: Audit of Air Operations in the United Nations Multidimensional Integrated Stabilization Mission in Mali'. United Nations, 27 November 2015.
- . 'Report 2016/175: Audit of Quick Impact Projects in the United Nations Multidimensional Integrated Stabilization Mission in Mal'. United Nations, 20 December 2016.
- . 'Report 2019/012: Audit of the Management of the Trust Fund for Peace and Security in the United Nations Multidimensional Integrated Stabilization Mission in Mali'. United Nations, 14 March 2019.

- . ‘Report 2019/016: Audit of Implementation of the Environmental Action Plan in the United Nations Multidimensional Integrated Stabilization Mission in Mali’. United Nations, 21 March 2019.
- . ‘Report 2022/007: Audit of Community Violence Reduction Projects in the United Nations Multidimensional Integrated Stabilization Mission in Mali’. United Nations, 6 April 2022.
- . ‘Report 2022/010: Audit of Quick Impact Projects in the United Nations Multidimensional Integrated Stabilization Mission in Mali’. United Nations, 28 April 2022.
- On The Line: 2008 Military Operations in Haiti*. United Nations, 2008.
<https://www.youtube.com/watch?v=yweLsMH6VGU>.
- Orata, Fabini D., Paul S. Keim, and Yan Boucher. ‘The 2010 Cholera Outbreak in Haiti: How Science Solved a Controversy’. Edited by Joseph Heitman. *PLoS Pathogens* 10, no. 4 (3 April 2014): e1003967. <https://doi.org/10.1371/journal.ppat.1003967>.
- Paris, Roland. *At War’s End: Building Peace after Civil Conflict*. Cambridge: Cambridge University Press, 2004. <https://lib.mit.edu/record/cat00916a/mit.001264688>.
- ‘Past and Present Role of MINUSMA in the Protection of Cultural Heritage in Mali’. OHCHR, 2021.
<https://www.ohchr.org/sites/default/files/Documents/Issues/ESCR/CulturalHeritage/Session2/UN/b7ravier.pdf>.
- Peattie, Lisa R. ‘Communities and Interests in Advocacy Planning’. *Journal of the American Planning Association* 60, no. 2 (30 June 1994): 151–53.
<https://doi.org/10.1080/01944369408975566>.
- Pelling, Mark. *The Vulnerability of Cities: Natural Disasters and Social Resilience*. London; Sterling, VA: Earthscan Publications, 2003.
<https://lib.mit.edu/record/cat00916a/mit.001157348>.
- Picon, Antoine. ‘Urban Infrastructure, Imagination and Politics: From the Networked Metropolis to the Smart City: Urban Infrastructure, Imagination and Politics’. *International Journal of Urban and Regional Research* 42, no. 2 (March 2018): 263–75.
<https://doi.org/10.1111/1468-2427.12527>.
- Pingeot, Lou. ‘United Nations Peace Operations as International Practices: Revisiting the UN Mission’s Armed Raids against Gangs in Haiti’. *European Journal of International Security* 3, no. 3 (October 2018): 364–81. <https://doi.org/10.1017/eis.2018.4>.
- Potvin, Marianne. ‘Humanitarian Urbanism under a Neoliberal Regime: Lessons from Kabul’. Presented at the International RC21 Conference, Berlin, 2013.
<http://www.rc21.org/conferences/berlin2013/RC21-Berlin-Papers/24-1-Potvin-Marianne.pdf>.
- Poulligny, Béatrice. *Peace Operations Seen from Below*. London: C. Hurst & Co, 2006.
- ‘Profile of Internal Displacement: Cyprus’. Geneva: Norwegian Refugee Council/Global IDP Project, 27 April 2005. [https://web.archive.org/web/20071218054957/http://www.internal-displacement.org/8025708F004BE3B1/\(httpInfoFiles\)/F17FD28BEBBF6287802570BA00563EDE/\\$file/Cyprus+-April+2005+\(2\).pdf](https://web.archive.org/web/20071218054957/http://www.internal-displacement.org/8025708F004BE3B1/(httpInfoFiles)/F17FD28BEBBF6287802570BA00563EDE/$file/Cyprus+-April+2005+(2).pdf).
- Pullan, Wendy. ‘Spatial Discontinuities: Conflict Infrastructures in Contested Cities’. In *Locating Urban Conflicts: Ethnicity, Nationalism and the Everyday*, edited by Wendy Pullan and Britt Baillie, 17–36. London: Palgrave Macmillan UK, 2013.
https://doi.org/10.1057/9781137316882_2.

- Pullan, Wendy, and Britt Baillie, eds. *Locating Urban Conflicts - Ethnicity, Nationalism and the Everyday*. New York: Palgrave Macmillan, 2013.
- Pyla, Panayiota, and Petros Phokaides. 'Ambivalent Politics and Modernist Debates in Postcolonial Cyprus'. *The Journal of Architecture* 16, no. 6 (December 2011): 885–913. <https://doi.org/10.1080/13602365.2011.636994>.
- . 'An Island of Dams: Ethnic Conflict and Supra-National Claims in Cyprus'. In *Water, Technology and the Nation-State*, edited by Filippo Menga and Erik Swyngedouw, 115–30. Earthscan, 2018. https://296214fb-3882-4652-b49a-49af3c5216cd.filesusr.com/ugd/2b0b61_65a22c56947a4576bf884bfa12876833.pdf.
- Ramjoué, Melanie. 'Improving UN Intelligence through Civil–Military Collaboration: Lessons from the Joint Mission Analysis Centres'. *International Peacekeeping* 18, no. 4 (1 August 2011): 468–84. <https://doi.org/10.1080/13533312.2011.588392>.
- Regan, Patrick M. 'Bringing Peace Back in: Presidential Address to the Peace Science Society, 2013'. *Conflict Management and Peace Science* 31, no. 4 (1 September 2014): 345–56. <https://doi.org/10.1177/0738894214530852>.
- 'Report of the Secretary-General on the Organization and Operation of the United Nations Peace-Keeping Force in Cyprus (S/5634)', 31 March 1964. <https://undocs.org/en/S/5634>.
- Ribes, David, and Thomas Finholt. 'The Long Now of Technology Infrastructure: Articulating Tensions in Development'. *Journal of the Association for Information Systems* 10, no. 5 (28 May 2009). <https://doi.org/10.17705/1jais.00199>.
- Richmond, Oliver. *Failed Statebuilding: Intervention, the State, and the Dynamics of Peace Formation*. Yale University Press, 2014. <https://www.jstor.org/stable/j.ctt13x1thc>.
- Richmond, Oliver P. *Maintaining Order, Making Peace*. Houndsmills, Basingstoke, Hampshire ; New York : Palgrave, 2002. <http://archive.org/details/maintainingorder0000rich>.
- Richmond, Oliver P. 'The Dilemmas of a Hybrid Peace: Negative or Positive?' *Cooperation and Conflict* 50, no. 1 (March 2015): 50–68. <https://doi.org/10.1177/0010836714537053>.
- Rikhye, Indar Jit. 'The United Nations Operation in the Congo: Peacekeeping, Peacemaking and Peacebuilding'. In *Beyond Traditional Peacekeeping*, edited by Donald C. F. Daniel and Bradd C. Hayes. London: Palgrave Macmillan UK, 1995. <https://doi.org/10.1007/978-1-349-23855-2>.
- Rodgers, Dennis, and Bruce O'Neill. 'Infrastructural Violence: Introduction to the Special Issue'. *Ethnography* 13, no. 4 (1 December 2012): 401–12. <https://doi.org/10.1177/1466138111435738>.
- Ryan, Jordan. 'Infrastructures for Peace as a Path to Resilient Societies: An Institutional Perspective'. *Journal of Peacebuilding & Development* 7, no. 3 (1 December 2012): 14–24. <https://doi.org/10.1080/15423166.2013.774806>.
- Sabaratnam, Meera. 'Avatars of Eurocentrism in the Critique of the Liberal Peace'. *Security Dialogue* 44, no. 3 (June 2013): 259–78. <https://doi.org/10.1177/0967010613485870>.
- Saldarriaga, Juan Francisco, Laura Kurgan, and Dare Brawley. 'Visualizing Conflict: Possibilities for Urban Research'. *Urban Planning* 2, no. 1 (4 April 2017): 100–107.
- Sanyal, Bishwapriya, Lawrence J. Vale, and Christina Rosan, eds. *Planning Ideas That Matter: Livability, Territoriality, Governance, and Reflective Practice*. Cambridge, MA: MIT Press, 2012. <https://lib.mit.edu/record/cat00916a/mit.002084635>.
- Sauter, Melanie. 'A Shrinking Humanitarian Space: Peacekeeping Stabilization Projects and Violence in Mali'. *International Peacekeeping* 0, no. 0 (28 June 2022): 1–26. <https://doi.org/10.1080/13533312.2022.2089875>.

- Schia, Niels Nagelhus, and John Karlsrud. “‘Where the Rubber Meets the Road’: Friction Sites and Local-Level Peacebuilding in Haiti, Liberia and South Sudan’. *International Peacekeeping* 20, no. 2 (April 2013): 233–48. <https://doi.org/10.1080/13533312.2013.791581>.
- Schnitzler, Antina von. *Democracy’s Infrastructure: Techno-Politics and Protest after Apartheid*. Princeton, NJ: Princeton University Press, 2016.
- Scott, Felicity Dale Elliston. *Outlaw Territories: Environments of Insecurity/Architectures of Counterinsurgency*, 2016. <http://mitpress-ebooks.mit.edu/product/outlaw-territories>.
- Scott, James C. *Seeing like a State: How Certain Schemes to Improve the Human Condition Have Failed*. New Haven, CT: Yale University Press, 1998.
- Secretary-General, Un. ‘Report by the Secretary-General on the United Nations Operation in Cyprus (S/7611)’. UN, 8 December 1966. <https://digitallibrary.un.org/record/523936>.
- Shetler-Jones, Philip. ‘Intelligence in Integrated UN Peacekeeping Missions: The Joint Mission Analysis Centre’. *International Peacekeeping* 15, no. 4 (1 August 2008): 517–27. <https://doi.org/10.1080/13533310802239741>.
- Shoshan, Malkit. ‘UN Peacekeeping Missions in Urban Environments and the Legacy of UNMIL’, 2018. https://issuu.com/seamlessterritory/docs/un_peacekeeping_missions_in_urban_e/20.
- Simone, AbdouMaliq. ‘People as Infrastructure: Intersecting Fragments in Johannesburg’. *Public Culture* 16, no. 3 (2004): 407–29.
- Small, Mario L., and Jenna M. Cook. ‘Using Interviews to Understand Why: Challenges and Strategies in the Study of Motivated Action’. *Sociological Methods & Research*, 17 March 2021, 004912412199555. <https://doi.org/10.1177/0049124121995552>.
- Smirl, Lisa. *Spaces of Aid: How Cars, Compounds and Hotels Shape Humanitarianism*. London, UK: Zed Books Ltd., 2015.
- Soja, Edward W. *Postmodern Geographies: The Reassertion of Space in Critical Social Theory*. London; New York: Verso, 1989. <http://archive.org/details/postmoderngeogra0000soja>.
- Star, Susan Leigh. ‘The Ethnography of Infrastructure’. *American Behavioral Scientist* 43, no. 3 (1 November 1999): 377–91. <https://doi.org/10.1177/00027649921955326>.
- Steenkamp, Chrissie. ‘The Legacy of War: Conceptualizing a “Culture of Violence” to Explain Violence after Peace Accords’. *The Round Table* 94, no. 379 (1 April 2005): 253–67. <https://doi.org/10.1080/00358530500082775>.
- Stegenga, James A. ‘UN Peace-Keeping: The Cyprus Venture’. *Journal of Peace Research* 7, no. 1 (March 1970): 1–16. <https://doi.org/10.1177/002234337000700101>.
- Stoler, Ann Laura. ‘Colonial Archives and the Arts of Governance’. *Archival Science* 2, no. 1–2 (March 2002): 87–109. <https://doi.org/10.1007/BF02435632>.
- Suhrke, Astri, and Mats Berdal. *The Peace in between: Post-War Violence and Peacebuilding*. London; New York: Routledge, 2012.
- Swyngedouw, Erik, Frank Moulaert, and Arantxa Rodriguez. ‘Neoliberal Urbanization in Europe: Large-Scale Urban Development Projects and the New Urban Policy’. *Antipode* 34, no. 3 (2002): 542–77. <https://doi.org/10.1111/1467-8330.00254>.
- ‘The Evolving Landscape of Infrastructures for Peace’. *Journal of Peacebuilding & Development* 7, no. 3 (1 December 2012): 1–7. <https://doi.org/10.1080/15423166.2013.774793>.
- Toft, Monica Duffy. *The Geography of Ethnic Violence: Identity, Interests, and the Indivisibility of Territory*. Princeton, N.J: Princeton University Press, 2003.

- UN Secretary-General. 'Further Report on Developments in Cyprus: By the Secretary-General (S/11353/Add.4)'. UN, 23 July 1974. <https://digitallibrary.un.org/record/484451>.
- . 'Report by the Secretary-General on the United Nations Operation in Cyprus : For the Period 10 September to 12 December 1964 (S/6102)'. UN, 12 December 1964. <https://digitallibrary.un.org/record/539124>.
- . 'Report of the Secretary-General on the United Nations Operation in Cyprus (S/6426)'. UN, 10 June 1965. <https://digitallibrary.un.org/record/605944>.
- . 'Report on the United Nations Operation in Cyprus : Addendum Covering the Developments from 10 to 15 September 1964 / by the Secretary-General (S/5950/Add.2)'. UN, 15 September 1964. <https://digitallibrary.un.org/record/538513>.
- . 'Report on the United Nations Operation in Cyprus: For the Period 13 December 1964 to 10 March 1965 (S/6228)'. UN, 11 March 1965. <https://digitallibrary.un.org/record/573131>.
- . 'Report on the United Nations Operation in Cyprus (S/5950)'. UN, 10 September 1964. <https://digitallibrary.un.org/record/538505>.
- . 'Report to the Security Council on the Operations of the United Nations Peace-Keeping Force in Cyprus (S/5671)'. UN, 29 April 1964. <https://digitallibrary.un.org/record/573107>.
- UN Security Council. 'Report of the Secretary-General on the United Nations Stabilization Mission in Haiti (S/2010/446)', 1 September 2010. <https://undocs.org/pdf?symbol=en/S/2010/446>.
- . 'Report of the Secretary-General on the United Nations Stabilization Mission in Haiti (S/2011/540)', 25 August 2011. <https://undocs.org/pdf?symbol=en/S/2011/540>.
- . 'Resolution S/5575 (1964)', 4 March 1964. [https://undocs.org/S/RES/186\(1964\)](https://undocs.org/S/RES/186(1964)).
- . 'Resolution S/RES/1702 (2006)', 15 August 2006.
- UNDPKO. 'Policy: Quick Impact Projects (QIPs)', 2013. https://www.unocha.org/sites/unocha/files/dms/Documents/DPKO_DFS_revised_QIPs_2013.pdf.
- . 'Quick Impacts Projects (Guidelines)', 2017. https://unmil.unmissions.org/sites/default/files/new_dpko_qip_guidelines.pdf.
- . 'Quick Impacts Projects (Policy)', 1 October 2017. <http://dag.un.org/handle/11176/400678>.
- UNEP. *Greening the Blue Helmets: Environment, Natural Resources and UN Peacekeeping Operations*. Nairobi, Kenya: United Nations Environment Programme, 2012. http://postconflict.unep.ch/publications/UNEP_greening_blue_helmets.pdf.
- Unger, Barbara, Stina Lundström, Katrin Planta, and Beatrix Austin, eds. *Peace Infrastructures: Assessing Concept and Practice*. 1. Aufl. Berghof Handbook Dialogue Series 10. Berlin: Berghof Foundation, 2013.
- UN-Habitat. 'Press Release: First Ever World Urban Forum Begins in Nairobi', 30 April 2002. <https://www.un.org/press/en/2002/hab180.doc.htm>.
- . 'Report of the Second Session of the World Urban Forum'. Barcelona, September 2004. https://mirror.unhabitat.org/downloads/docs/3065_91300_WUF-FINAL_Report.pdf.
- United Nations. 'Report of the Panel on United Nations Peace Operations ('Brahimi Report')', 2000. <https://undocs.org/A/55/305>.
- UNOPS. 'Infrastructure for Peacebuilding: The Role of Infrastructure in Tackling the Underlying Drivers of Fragility'. UNOPS, September 2020. https://content.unops.org/publications/Infrastructure_Peacebuilding_EN_Web.pdf.

- . ‘Infrastructure: Underpinning Sustainable Development’. Copenhagen: UNOPS, 2018.
- Verdeil, Eric. ‘Expertises Nomades Au Sud. Eclairages Sur La Circulation Des Modèles Urbains’. *Géocarrefour* 80 (1 July 2005).
- Verner, Dorte, and Willy Egset. ‘Social Resilience and State Fragility in Haiti, A Country Social Analysis’. Washington, D.C.: World Bank, 27 April 2006.
<https://documents1.worldbank.org/curated/en/533491468257084108/pdf/360690HT.pdf>.
- Vlassenroot, Koen, and Karen Büscher. ‘The City as Frontier: Urban Development and Identity Processes in Goma’, *Crisis States Working Papers Series*, no. 61 (2009): 22.
- Wall, Michael. ‘Cyprus - Island of Hate and Fear’. *New York Times*. 1964, sec. Magazine.
- Walter, Barbara F., Lise Morje Howard, and V. Page Fortna. ‘The Extraordinary Relationship between Peacekeeping and Peace’. *British Journal of Political Science* 51, no. 4 (October 2021): 1705–22. <https://doi.org/10.1017/S000712342000023X>.
- Ward, Stephen. ‘Transnational Planners in a Postcolonial World’. In *Crossing Borders: International Exchange and Planning Practices.*, edited by Patsy Healey and Robert Upton, 2010. <https://lib.mit.edu/record/cat00916a/mit.001728013>.
- Watson, Vanessa. ‘Conflicting Rationalities: Implications for Planning Theory and Ethics’. *Planning Theory & Practice* 4, no. 4 (December 2003): 395–407.
<https://doi.org/10.1080/1464935032000146318>.
- Weiss, Robert Stuart. *Learning from Strangers: The Art and Method of Qualitative Interview Studies*. New York: Free Press, 1994.
- Weiss, Thomas G. ‘Learning from Military-civilian Interactions in Peace Operations’. *International Peacekeeping* 6, no. 2 (2007): 112–28.
<https://doi.org/10.1080/13533319908413774>.
- Weizman, Eyal. *The Least of All Possible Evils: Humanitarian Violence from Arendt to Gaza*. London; New York: Verso, 2011.
- Wendel, Delia Duong Ba. ‘Infrastructure’. In *The SAGE Handbook of Architectural Theory*, edited by Greig C. Crysler, Stephen Cairns, and Hilde Heynen, 534–50. London: Sage, 2012.
- . ‘Introduction: Toward a Spatial Epistemology of Politics’. In *Spatializing Politics: Essays on Power and Place*, edited by Delia Duong Ba Wendel and Fallon Samuels Aidoo, 3–13. Cambridge, MA: Harvard University Graduate School of Design, 2015.
- Whitman, Jim. *Peacekeeping and the UN Agencies*. Psychology Press, 1999.
- Williams, Garland H. *Engineering Peace: The Military Role in Postconflict Reconstruction*. Washington, D.C.: United States Institute of Peace Press, 2005.
<http://archive.org/details/engineeringpeace0000will>.
- Williams, Philippa, Nick Megoran, and Fiona McConnell. ‘Introduction: Geographical Approaches to Peace’. In *Geographies of Peace*, 1–27, 2015. <https://mit-illiad-oclc-org.libproxy.mit.edu/illiad/illiad.dll?Action=10&Form=75&Value=627587>.
- Wills, Siobhan. ‘Use of Deadly Force by Peacekeepers Operating Outside of Armed Conflict Situations: What Laws Apply?’ *Human Rights Quarterly* 40, no. 3 (2018): 663–702.
- Wilson, Gordon. ‘Beyond the Technocrat? The Professional Expert in Development Practice’. *Development and Change* 37, no. 3 (2006): 501–23. <https://doi.org/10.1111/j.0012-155X.2006.00488.x>.
- Winner, Langdon. ‘Do Artifacts Have Politics?’ *Daedalus*, 1980, 121–36.

- Wood, Reed M., and Christopher Sullivan. 'Doing Harm by Doing Good? The Negative Externalities of Humanitarian Aid Provision during Civil Conflict'. *The Journal of Politics* 77, no. 3 (July 2015): 736–48. <https://doi.org/10.1086/681239>.
- World Bank. *Building Safer Cities: The Future of Disaster Risk*. Edited by Alcira Kreimer, Margaret Arnold, and Anne Carlin. The World Bank, 2003. <https://doi.org/10.1596/0-8213-5497-3>.
- Yiftachel, Oren. 'Planning and Social Control: Exploring the Dark Side'. *Journal of Planning Literature* 12, no. 4 (1 May 1998): 395–406. <https://doi.org/10.1177/088541229801200401>.
- Zweig, Patricia, and Robyn Pharoah. 'Unique in Their Complexity: Conceptualising Everyday Risk in Urban Communities in the Western Cape, South Africa'. *International Journal of Disaster Risk Reduction, Africa's Urban Risk and Resilience*, 26 (1 December 2017): 51–56. <https://doi.org/10.1016/j.ijdr.2017.09.042>.