

# From Land to Lives: Mapping the Evolution of Border Governance System in the West Bank

Ziwei Jiang <sup>a,b,e</sup>, Xi Tang <sup>c,d,e,\*</sup>, Debin Du <sup>a,b,e,\*</sup>, Hong Zhang <sup>e</sup>

<sup>a</sup> Center for World Geography and Geostrategic Studies, East China Normal University, Shanghai, China, Ziwei Jiang - [ziwei8503@gmail.com](mailto:ziwei8503@gmail.com), Debin Du - [dudb\\_ecnu@163.com](mailto:dudb_ecnu@163.com)

<sup>b</sup> Institute for Global Innovation and Development, East China Normal University, Shanghai, China

<sup>c</sup> Key Laboratory of Geographical Information Science, Ministry of Education, Shanghai, China, Xi Tang - [xtang@geo.ecnu.edu.cn](mailto:xtang@geo.ecnu.edu.cn)

<sup>d</sup> Institute of Cartography, East China Normal University, Shanghai, China

<sup>e</sup> School of Geographic Sciences, East China Normal University, Shanghai, China, Hong Zhang - [h Zhang@re.ecnu.edu.cn](mailto:h Zhang@re.ecnu.edu.cn)

\* Corresponding author

**Keywords:** the West Bank, border mapping, border governance

## Abstract:

Borders are a foundational element of geopolitics, delineating a nation's territory and embodying its sovereignty. In the Israeli-Palestinian conflict, territorial boundaries have been a significant source of contention. Since its establishment, Israel has not clearly defined its borders with the Palestinian territories. The evolving nature of these boundaries is marked by Israel's construction of contested border infrastructure beyond the Green Line, deep within Palestinian territory. These facilities symbolize abstract sovereignty and locally translate national conflicts into tangible, everyday realities (Falah & Newman, 1995). Consequently, borders have become increasingly intricate and dynamic. This complexity underscores the need for innovative methodologies in border visualization.

This article thoroughly analyzes Israel's complex border governance system in the West Bank, focusing on settlements, checkpoints, barriers, and the separation wall and their significant impact on the region's political and physical geography. Through detailed mapping, these boundaries reveal critical intersections where national and daily-life borders converge, exposing the pervasive influence of territorial disputes. The West Bank holds pivotal significance in the Israeli-Palestinian conflict, seen as vital to Palestinians for their future state and as an ancestral homeland by right-wing Israelis. Since the 1967 occupation, Israel has appropriated over two million dunams (200,000 hectares) of land for settlements (B'Tselem, 2021). Data on Jewish settlements were sourced from Americans for Peace Now (<https://peacenow.org/>), while Machsom Watch (<https://www.machsomwatch.org/>) provided definitions and classifications of checkpoints and obstacles, and distribution data accessed through OCHA Services (<https://www.unocha.org/ocha-digital-services/>).

The central part of Figure 1 shows how Jewish settlements in the West Bank define Israel's controlled zones under the Oslo Accords, often encircling major urban centers. Predominantly built during the Likud party's governance from 1977 to 1992, over 70% of these settlements sit at higher elevations than nearby Palestinian villages. They serve to reclaim land, integrate Jewish culture, replace depopulated Palestinian areas, secure Israel's frontier, and aid in nation-building (Falah, 2002; Hasson, 2012). Israel's expansion of settlements resulted in economic hardship and political repression for Palestinians, sparking resentment and uprisings. From September 2000 to August 2003, Israel faced 116 suicide bombings (Mtais, 2021), prompting intensified controls, including checkpoints and the separation wall (depicted in Figure 1). These checkpoints, labeled "crossing points," serve security and border control roles, reflecting Israel's view of the separation wall, stretching about 360 kilometers within the West Bank, as a de facto border. This shift from settlement construction to a regulatory framework in the West Bank marks Israel's evolving approach to border governance, moving from territorial control to population management.

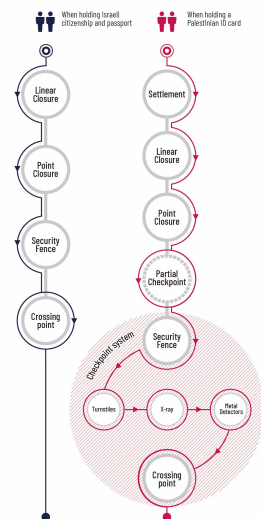
Figure 1 illustrates the evolution of Israel's border governance strategies, transitioning from a predominant emphasis on territorial demarcation to a more nuanced population-centric approach. This paradigmatic shift has resulted in a complex intertwining of geographical spaces between Israel and Palestine, while concurrently reinforcing strict socio-spatial segregation between Jewish and Palestinian populations (Cohen & Gordon, 2018). These borders now serve not merely as images of territorial sovereignty but also encompass multifaceted dimensions such as ideological, historical, cultural, and everyday socio-economic realities, profoundly shaping the lived experiences of both Israeli and Palestinian communities.

# THE BORDER GOVERNANCE SYSTEM

IMPLEMENTED BY ISRAEL IN THE WEST BANK

By delving into the construction process of Israel's long-standing border governance facilities and visually displaying the interconnections between various border elements, we discovered that Israeli-Palestinian border governance measures in the West Bank have evolved from expansive settlement areas to sporadic checkpoints, and eventually to a linear separation wall. These stages constitute the current multidimensional spatial border governance system.

## HOW TO PASS THE BORDER?



## SETTLEMENTS

Data Source: The West Bank Settlements for Peace Now

Legend:  
 - Blue Star: Major Settlement  
 - Blue Circle: Minor Settlement  
 - Red Circle: Disputed/Contested and Unsettled Landmark  
 - Green Circle: Community Type  
 - Blue Circle: City/Town  
 - Red Circle: Village  
 - Blue Circle: Hamlet  
 - Red Circle: Kibbutz  
 - Blue Circle: Moshav  
 - Red Circle: Other

Community Size  
 - 10000+ residents  
 - 5000-10000  
 - 1000-5000  
 - 500-1000  
 - 100-500  
 - 50-100

1967 Major City - the first Jewish settlement  
 1968-1970 For West Bank  
 1971 The Oslo Accords  
 1972-1973 The Oslo Accords  
 1974-1975 The Oslo Accords  
 1976-1977 The Oslo Accords  
 1978-1979 The Oslo Accords  
 1980-1981 The Oslo Accords  
 1982-1983 The Oslo Accords  
 1984-1985 The Oslo Accords  
 1986-1987 The Oslo Accords  
 1988-1989 The Oslo Accords  
 1990-1991 The Oslo Accords  
 1992-1993 The Oslo Accords  
 1994-1995 The Oslo Accords  
 1996-1997 The Oslo Accords  
 1998-1999 The Oslo Accords  
 2000-2001 The Oslo Accords  
 2002-2003 The Oslo Accords  
 2004-2005 The Oslo Accords  
 2006-2007 The Oslo Accords  
 2008-2009 The Oslo Accords  
 2010-2011 The Oslo Accords  
 2012-2013 The Oslo Accords  
 2014-2015 The Oslo Accords  
 2016-2017 The Oslo Accords  
 2018-2019 The Oslo Accords  
 2020-2021 The Oslo Accords  
 2022-2023 The Oslo Accords  
 2024-2025 The Oslo Accords



## CHECKPOINT SYSTEM

Data Source: ICC (2018) and Palestinian Authority (2018)

Full Checkpoint  
 Number of checkpoints: 77  
 An uncontrolled by the security services of Israel road barrier that the pass to enter Israel and return to use for their own cars.

Partial checkpoint  
 Number of partial checkpoints: 145  
 Consist of the same infrastructure as full checkpoints but do not have a permanent staff.

Point Closure  
 Number of road barriers: 165  
 An metal gates used to prevent access to the road.

Number of road barriers: 87  
 Described out of concrete blocks, surrounded by the road.

Number of earth barriers: 93  
 Consist of 100 blocks using linear of concrete blocks.

Linear Closure  
 Number of road barriers: 55  
 Consist of a concrete barrier or fence that are designed in road.

Number of earth walls: 20  
 Consist of a concrete barrier or fence that are designed in road.

Number of trenches: 3  
 An the same as earth wall or alongside a road.

Number of road barriers: 49.12  
 Consist of a concrete barrier or fence that are designed in road.

Number of earth walls: 10.49  
 Consist of a concrete barrier or fence that are designed in road.

Number of trenches: 19.18  
 An the same as earth wall or alongside a road.

Number of road barriers: 55  
 Consist of a concrete barrier or fence that are designed in road.

Number of earth walls: 20  
 Consist of a concrete barrier or fence that are designed in road.

Number of trenches: 3  
 An the same as earth wall or alongside a road.

Number of road barriers: 49.12  
 Consist of a concrete barrier or fence that are designed in road.

Number of earth walls: 10.49  
 Consist of a concrete barrier or fence that are designed in road.

Number of trenches: 19.18  
 An the same as earth wall or alongside a road.

Number of road barriers: 55  
 Consist of a concrete barrier or fence that are designed in road.

Number of earth walls: 20  
 Consist of a concrete barrier or fence that are designed in road.

Number of trenches: 3  
 An the same as earth wall or alongside a road.

Number of road barriers: 49.12  
 Consist of a concrete barrier or fence that are designed in road.

Number of earth walls: 10.49  
 Consist of a concrete barrier or fence that are designed in road.

Number of trenches: 19.18  
 An the same as earth wall or alongside a road.

Number of road barriers: 55  
 Consist of a concrete barrier or fence that are designed in road.

Number of earth walls: 20  
 Consist of a concrete barrier or fence that are designed in road.

Number of trenches: 3  
 An the same as earth wall or alongside a road.

Number of road barriers: 49.12  
 Consist of a concrete barrier or fence that are designed in road.

Number of earth walls: 10.49  
 Consist of a concrete barrier or fence that are designed in road.

Number of trenches: 19.18  
 An the same as earth wall or alongside a road.

Number of road barriers: 55  
 Consist of a concrete barrier or fence that are designed in road.

Number of earth walls: 20  
 Consist of a concrete barrier or fence that are designed in road.

Number of trenches: 3  
 An the same as earth wall or alongside a road.

Number of road barriers: 49.12  
 Consist of a concrete barrier or fence that are designed in road.

Number of earth walls: 10.49  
 Consist of a concrete barrier or fence that are designed in road.

Number of trenches: 19.18  
 An the same as earth wall or alongside a road.

Number of road barriers: 55  
 Consist of a concrete barrier or fence that are designed in road.

Number of earth walls: 20  
 Consist of a concrete barrier or fence that are designed in road.

Number of trenches: 3  
 An the same as earth wall or alongside a road.

Number of road barriers: 49.12  
 Consist of a concrete barrier or fence that are designed in road.

Number of earth walls: 10.49  
 Consist of a concrete barrier or fence that are designed in road.

Number of trenches: 19.18  
 An the same as earth wall or alongside a road.

Number of road barriers: 55  
 Consist of a concrete barrier or fence that are designed in road.

Number of earth walls: 20  
 Consist of a concrete barrier or fence that are designed in road.

Number of trenches: 3  
 An the same as earth wall or alongside a road.

Number of road barriers: 49.12  
 Consist of a concrete barrier or fence that are designed in road.

Number of earth walls: 10.49  
 Consist of a concrete barrier or fence that are designed in road.

Number of trenches: 19.18  
 An the same as earth wall or alongside a road.

Number of road barriers: 55  
 Consist of a concrete barrier or fence that are designed in road.

Number of earth walls: 20  
 Consist of a concrete barrier or fence that are designed in road.

Number of trenches: 3  
 An the same as earth wall or alongside a road.

Number of road barriers: 49.12  
 Consist of a concrete barrier or fence that are designed in road.

Number of earth walls: 10.49  
 Consist of a concrete barrier or fence that are designed in road.

Number of trenches: 19.18  
 An the same as earth wall or alongside a road.

Number of road barriers: 55  
 Consist of a concrete barrier or fence that are designed in road.

Number of earth walls: 20  
 Consist of a concrete barrier or fence that are designed in road.

Number of trenches: 3  
 An the same as earth wall or alongside a road.

Number of road barriers: 49.12  
 Consist of a concrete barrier or fence that are designed in road.

Number of earth walls: 10.49  
 Consist of a concrete barrier or fence that are designed in road.

Number of trenches: 19.18  
 An the same as earth wall or alongside a road.

Number of road barriers: 55  
 Consist of a concrete barrier or fence that are designed in road.

Number of earth walls: 20  
 Consist of a concrete barrier or fence that are designed in road.

Number of trenches: 3  
 An the same as earth wall or alongside a road.

Number of road barriers: 49.12  
 Consist of a concrete barrier or fence that are designed in road.

Number of earth walls: 10.49  
 Consist of a concrete barrier or fence that are designed in road.

Number of trenches: 19.18  
 An the same as earth wall or alongside a road.

Number of road barriers: 55  
 Consist of a concrete barrier or fence that are designed in road.

Number of earth walls: 20  
 Consist of a concrete barrier or fence that are designed in road.

Number of trenches: 3  
 An the same as earth wall or alongside a road.

Number of road barriers: 49.12  
 Consist of a concrete barrier or fence that are designed in road.

Number of earth walls: 10.49  
 Consist of a concrete barrier or fence that are designed in road.

Number of trenches: 19.18  
 An the same as earth wall or alongside a road.

Number of road barriers: 55  
 Consist of a concrete barrier or fence that are designed in road.

Number of earth walls: 20  
 Consist of a concrete barrier or fence that are designed in road.

Number of trenches: 3  
 An the same as earth wall or alongside a road.

## THE WEST BANK BARRIER

Data Source: The West Bank Barrier for Peace Now

Legend:  
 - Red Line: The West Bank Barrier  
 - Blue Line: The Green Line  
 - Red Circle: Checkpoint  
 - Blue Circle: Settlement  
 - Red Circle: Linear Closure  
 - Blue Circle: Crossing Point

Length of the whole Wall: 712 km  
 Length of the Wall Inside the West Bank: 360 km

Length of the Green Line: 202 km  
 Length of the Wall Inside Jerusalem: 320 km

Since isolation walls and fences couldn't stop planes or tanks, they were necessary for the previous use of borders as protective military boundaries or administrative divisions. They served as one of a tangible representation of the abstract ideas of sovereignty.

Security Fence  
 The majority of the West Bank Barrier is made up of chain fences, which are only 3 meters tall but can be up to 50 meters wide, and include subsoil and remote sensors, unmanned aerial vehicles, trenches, landmines, and police roadways.

Concrete Wall  
 Solid concrete walls, which make up around 6% of the West Bank Barrier, are primarily found in the Jerusalem, Tel Aviv, and Qalqilya regions. These walls can reach a height of eight meters but are only one to two meters thick.

Qalqilya  
 Jerusalem

Jerusalem

Jerusalem

Jerusalem

Jerusalem

Jerusalem

Jerusalem

Jerusalem

Jerusalem

Jerusalem

Jerusalem

Jerusalem

Jerusalem

Jerusalem

Jerusalem

Jerusalem

Jerusalem

Jerusalem

Jerusalem

Jerusalem

Jerusalem

Jerusalem

Jerusalem

Jerusalem

Jerusalem

Jerusalem

Jerusalem

Jerusalem

Jerusalem

Jerusalem

Jerusalem

Jerusalem

Jerusalem

Jerusalem

Jerusalem

Jerusalem

Jerusalem

Jerusalem

Jerusalem

Jerusalem

Jerusalem

Jerusalem

Jerusalem

Jerusalem

Jerusalem

Jerusalem

Jerusalem

Jerusalem

Jerusalem

Figure 1. The Border Governance System in the West Bank.

## Acknowledgements

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: The work was supported by the National Natural Science Foundation of China (grant number 41871374).

## References

- Cohen, Y. and Gordon, N. 2018. Israel's Biospatial Politics: Territory, Demography, and Effective Control. *Public Culture*, 30 (2), 199-220.
- Falah, G. and Newman, D., 1995. The spatial manifestation of threat: Israelis and Palestinians seek a 'good' border. *Political Geography*, 14 (8), 689-706.
- Falah, G., 2002. The 'Green Line' Revisited: October 2000. In: *The Razor's Edge: International Boundaries and Political Geography: Essays in Honour of Professor Gerald Blake*. London: Kluwer Law International, 493-511.
- Hasson, S., 2012. *The Production of Space in Israel: The Map of Settlement and Land*. Jerusalem: Keter (in Hebrew).
- Métais, I., 2021. West Bank Barrier: Origins, Implementation, and Consequences. *Flux: International Relations Review*, 1 (11), 72-79.
- Samman, M., 2020. From moments to durations: the impact of Israeli checkpoints on Palestinian everyday life in Jerusalem. *International Journal of Urban Sciences*, 25 (1), 124-148.
- The Israeli Information Center for Human Rights in the Occupied Territories, 2021. *Settler Violence = State Violence*. Available at: [www.btselem.org/settler\\_violence](http://www.btselem.org/settler_violence) (accessed 15 July 2024).
- The Office for the Coordination of Humanitarian Affairs, 2018. *The Monthly Humanitarian Bulletin*. Available at: [www.ochaopt.org/content/monthly-humanitarian-bulletin-september-2018](http://www.ochaopt.org/content/monthly-humanitarian-bulletin-september-2018) (accessed 15 July 2024).