

PLANNING REGIONAL RECONSTRUCTION AMIDST CONFLICT: BALANCING TERRITORIAL GOVERNANCE IN (POST-)WAR UKRAINE

Daria Malchykova¹

Abstract

This article analyses the challenges of regional reconstruction in scenarios of ongoing conflict and deepens existent understanding of the multivariate patterns of (post-)war spatial policy making. Using a case study approach, the article points to situations where the existing institutional structure of decision-making at the territorial community (hromadas) level cannot overcome all consequences of the war in Ukraine. The paper argues that matching (post-)war reconstruction measures with the new functionalities of hromadas, their institutional capacity, level of destruction, resilience, and subjectivity will maximise support for bottom-up initiatives, while adaptively and flexibly supplementing them, where necessary, with a top-down approach.

Keywords:

War, reconstruction, territorial communities (hromadas), spatial policy, decentralisation.

¹ Professor at the Department of Geography and Ecology,
Kherson State University, 27 Universytets'ka St., Kherson, Ukraine 73003 darina1378@gmail.com
<https://orcid.org/0000-0002-7197-8722>

1. Introduction

Wars and forced conflicts are significant forms of human and spatial disasters as a consequence of their impacts on issues such as: large-scale human suffering, refugee and internal displacement, the destruction of infrastructure, and the economic and environmental transformations that follow within war-torn countries. The large-scale, long-term Russian-Ukrainian war in the heart of Europe crucially changes the dimensions of European spatial development (Mearsheimer, 2022) as well as European global supply chains, energy security and agricultural markets (Hensel, 2024). In this context, the (post-)war reconstruction process in Ukraine has become a key effort at national and European scales, as well as an important research lens through which to understand the planning of regional reconstruction in areas experiencing ongoing conflict.

Planning regional reconstruction in areas experiencing ongoing conflict is a comprehensive research paradigm that focuses on (post-)war social, economic, spatial reconstruction (Hasic, 2004; Castillo, 2008; Jabareen, 2013; Earnest, 2015); crisis management (Rose and Adler, 2024); social cohesion (Fiedler, 2023; Krawchenko, 2023); institutional adaptation (Wang et al, 2005; Assem et al, 2020), post-traumatic urbanism (Wahba et al, 2021), and so on. Research in recent years has demonstrated successful solutions to strategies, policies and programmes for sustainable post-war recovery and ongoing conflict reconstruction (Langer, 2016; Rezk et al., 2025). Nevertheless, many existent studies discuss not only strategies and projects for post-conflict reconstruction, but also the design of decision-making: Commenting further, Earnest (2015) argues for a more participatory approach to territorial community engagement in the identification, planning, and implementation of post-conflict reconstruction projects. The smart governance approach to reconstruction (Assem et al., 2020) proposes the development of intelligent management systems for use by municipal managers and government agencies in post-conflict zones through bottom-up decision-making by engaging citizen participants, especially diaspora populations. The local context of post-conflict reconstruction (D'Alessandro-Scarpari, 2011) defines the complex powers of local territories in their development and reconstruction projects. However, there is research (Saleh et al., 2023) that identifies “strong government leadership” and a top-down approach as the most influential success factors that have successfully helped reconstruction practices as well as resources for recovery.

In this context, post-war spatial policy, as well as planning regional reconstruction and development amidst conflict in Ukraine should be rethought in terms of a rational balance of top-down and bottom-up approaches, as well as centralised and decentralised solutions. It follows, that there is a gap at the regional level which this paper is seeking to address. The article summarises and systematises the challenges of wartime, changes in the governance conditions of territories, and their potential in the context of spatial policy makings amidst conflict and in post-war recovery. In so doing, the following key research questions were formulated:

How does decentralisation help (or not help) hromadas to keep their national and regional subjectivity?

What are the challenges posed by the war to the capacity of hromadas for post-war reconstruction efforts and the preservation of the hromada map?

How does one find a balance between centralised solutions and a ‘bottom-up’ initiative with new hromadas functionality?

The first part of the article outlines the general discourse on (post-)war reconstruction, focusing on Ukraine’s present circumstances and the international paradigms influencing spatial planning in times of war. The second part presents the study’s research methodology. The third part outlines the results of the Kherson region case study, which illustrates the social and spatial transformations of wartime at the regional level. The final section contains reflections on the potential for integrating centralised and decentralised approaches to create new spatial policies.

2. Contextual Background: What is the Theoretical and Regional Context We Are Working with?

2.1. Planning Regional Reconstruction Amidst Conflict

Planning regional reconstruction and development amidst scenarios of war conflict is one of the most serious challenges facing national development (del Castillo, 2008). Nowadays, the main issue on the global development agenda is the development of policies for countries that have come to the end of periods of serious conflicts (Stewart, 2009). This is partly because of the large number of countries where such policies are relevant, and partly because their situations are usually among the most desperate. Actual discourse on post-conflict reconstruction in the Middle East, South Asia, and Africa provides valuable lessons on post-war development. In some cases (Payab, 2014; Isayinka, 2023) it has been shown that even after more than a decade of effort, and billions of dollars and donations from the international community, the governments' post-war reconstruction efforts have not progressed and have not achieved their goals. Successful examples include post-conflict reconstruction based on multidisciplinary and systemic approaches and the SCOPE model (Hasic, 2004); reconstruction in the context of ongoing conflict (Jabareen, 2013); and post-conflict reconstruction interventions based on integrating rebuilding soft and hard infrastructure (Sakalasuriya et al., 2018).

The post-conflict reconstruction case of Ukraine is significantly different, as coupled with the catastrophic wartime losses (World Bank, European Union..., 2025), Ukraine is experiencing fundamental transformations of its civic society (Krawchenko, 2023) and spatial planning (Anisimov et al, 2024). Moreover, Ukraine's experience is contributing to the reconfiguration of the global order (Cox, 2023) and reshaping the strategic landscape of Europe (Götz & Ekman, 2024)

The following factors are the most crucial. The Russian-Ukrainian war is ongoing, with large-scale hostilities having taken place for more than 3 years. The geostrategic significance of Ukraine in the geopolitically diverse Eurasian space, and its European integration progress makes it a key transatlantic partner against Russian aggression in Europe as well as a key element of European security architecture (Rouet and Pascariu, 2025). The accumulated losses and damages since the beginning of the full-scale invasion amount to more than \$750 billion (and the value is growing daily), whilst recovery will require, according to the RDNA4 report, more than \$486 billion for the period 2025-2034 alone (World Bank, European Union, 2025). Despite large-scale losses, Ukraine has a highly skilled labour force, a functioning economy and social resilience (European Commission Directorate, 2024), which should increase the effectiveness of ongoing and post-conflict reconstruction.

The experience of European spatial policy is already being used in the practice of developing the Ukraine Recovery Plan (Ukraine Recovery Plan, 2022). The European Commission's 2024 report (European Commission Directorate., 2024) assesses Ukraine's progress in implementing reforms in the context of its European integration course and post-war recovery. The report highlights that Ukraine has taken steps to integrate multi-level governance and regional development principles in line with the EU's Territorial Agenda 2030, and also recognises Ukraine's progress in the anti-corruption, decentralisation, and digitalisation sectors. The synthetic model developed and used to analyse the transformational changes in the Ukrainian planning system (Anisimov et al, 2024) also demonstrated that the Ukrainian spatial system has undergone multilayered transformation in the direction of prevailing European planning trends.

In April 2022, Ukraine established the National Council for the Recovery of Ukraine from the War (About the National Council, 2022), which has already proposed its first drafts of documents. Analytical academic research (Sakun and Shkola, 2023) provides a vision of post-war territorial hromada development in the context of the European Green Deal and other key priorities. Such documents give us an answer to the question as to which areas and what key results we are striving for. However, there has been insufficient analysis of how we should organise the decision-making process, enable cooperation between different spatial and administrative agents, and what models of local policy should be created amidst existing humanitarian and spatial challenges. Some analytical reviews (Nadin and Stead, 2008) point out that national social model systems may have a certain degree of path-dependency; such as the persistence of institutions and cultures.

Bottom-up and top-down approaches are characterised by different dynamics, and lead to different forms of cooperation between citizens and government. The key pitfalls of citizen participation, co-decision-making, and civic initiatives (Meerkerk, 2019) are determined by the motivations, capacities, and representativeness of the participants' efforts. Scholars embrace multilevel governance as an analytical framework for solving complex problems and identifying the elements necessary for its operational implementation (Homsy et al., 2019). While most scholarship on reconstruction amid conflict centers on the national scale, this approach overlooks the needs of subnational actors. In Ukraine, for example, the Recovery Plan offers only a broad framework, leaving local and regional authorities without concrete guidance. The Recovery Plan was developed as a broad and rather general strategic programme document, but its effectiveness will largely depend on the specific measures that will be implemented under its "umbrella". The main problems might be low institutional capacity and a lack of necessary skills/awareness of project management at the hromada level (European Committee, 2022).

2.2. Ukraine's Modern Context and Global Framework for Spatial Policy during Wartime

Ukraine, one of the largest countries in Europe, is a typically East European nation whose history is marked by a high degree of discontinuity (Rudnytsky, 1963). The country's favorable geographical location between Western Europe and Asia, its rich natural resource potential, and its powerful human resources made Ukraine a priority object of colonial interest for the Russian and Soviet empires. During its 30 years of independence, new institutions have been established, including private property, market economy, free enterprise, multiparty system, pluralistic civil society, freedom of speech and censorship-free media, and so on (Yakymenko et al, 2021). The modern stage of Ukraine's Euro-Atlantic path, despite the large-scale war, envisages the implementation of key European goals, including a Just Europe that offers future perspectives for all places and people, and a Green Europe that protects common livelihoods and shapes societal transition. This is supported by spatial development instruments which were formed following the European Commission's priorities (2019-2024) and within the framework of the EU cohesion policy (since 2007). Such regional policies are based on human-centredness, rational spatial planning, sustainable mobility, inclusiveness, energy efficiency, energy saving, and environmental friendliness. At the local level, they are implemented through a bottom-up approach by engaging citizens and ensuring their participation in the formation of planning policies.

In this framework, Ukraine's modern context forms a challenging basis for spatial policy for several reasons. The colonial experience of Ukraine during the imperial and Soviet periods determined the dominance of the top-down approach in all spheres of life (Motyl, 1993). This trend and the economic imperatives associated with the same persisted, to a large extent, in the first decades of the country's independence. However, since 2015, spatial policy and planning have increasingly emphasized the importance of leveraging local potential as a foundation for territorial development. This was ensured by introducing the concept of functional regions, and was reinforced by implementing decentralisation reforms (2015-2020). The reforms enabled local authorities (hromadas) to gain real powers in their activities, and especially so in the management of territorial resources of hromadas, as well as the activation of civil society in regional initiatives (Ostapenko et al, 2023). A culture of participatory engagement at the level of local hromadas (Malchykova, 2021) emerged in the pre-war years and this also strengthened the bottom-up approach to spatial policy and regional development. The great challenging influence of the large-scale Russian-Ukrainian war over the last three years, has led to numerous global changes, as well as local and large-scale regional destruction (Palekha et al, 2023). Ukraine and the world are also experiencing socio-environmental consequences at various scales after the explosion of the Kakhovka HPP (Pylypenko and Malchykova, 2023).

For all European countries, including Ukraine, the war has accelerated the need for energy transition, as well as the global megatrends of demographic change, biodiversity degradation, whilst the weakening of democratic guarantees has also intensified (Nadin and Fernández-Maldonado, 2023). Given Ukraine's European integration progress, (post-)war regional reconstruction of Ukrainian hromadas should be carried out according to European innovative spatial planning policies as set out in key documents such as the EU territorial development and cohesion policy - Territorial Agenda 2030: A future for all places (2015). This document calls for a strengthening of the territorial dimension of sectoral policies and promoting an inclusive and sustainable future for all places and regions.

3. Methodological approaches

This study was conducted using thematic analysis and adopted a case study methodology which also incorporated online information collection tools, as well as the author's reflections on the experience of being under active hostilities, occupation, and displacement. The thematic analysis of spatial policy making amidst conflict and post-war reconstruction was carried out in three interrelated analytical contexts: (1) institutional capacity - the analysis covered the Ukrainian context of post-conflict reconstruction and transformational changes in the system of administrative and territorial structure; (2) National and regional subjectivity was explored through the ways in which civic actors at the national and regional levels are involved in the formation of spatial policy, in particular through activism, crisis response and adaptation to demographic, social and environmental changes; (3) the new functionality of hromadas – undertaken in order to identify how the war transformed the traditional roles of hromadas with regards to governance, as well as the spatial dimensions of the war's impacts. This made it possible to identify key patterns, new challenges, and trends in the territorial governance system during the war, as well as assessment of the potential to shape post-conflict reconstruction policies that combine top-down and bottom-up approaches. The case study was chosen as the most accepted qualitative research method, and allowed for an in-depth assessment of the situation in the context of real life. The use of a case study enabled an in-depth analysis of the Kherson region, which has experienced occupation, daily shelling, and the devastating consequences of the Kakhovka reservoir disaster. The study systematised the challenges faced by war-torn hromadas, examined the specific features of governance during wartime and post-war recovery, and assessed ongoing trends in balancing centralised and decentralised policy solutions. Statistical observations of demographic changes occurred between 24 February 2022 to 14 September 2023 within 17 territorial hromadas of Kherson region; these were de-occupied in autumn 2022 after a long occupation. The statistics were collected in cooperation with the Kherson Regional Military State Administration. The research uses open data from the Digital Reconstruction Ecosystem for Accountable Management (DREAM, n.d.) and the Clarity Hromada analytical platform (Clarity Hromada, n.d.), as well as the results of surveys conducted by the Kherson Community Foundation 'Zakhyst' (Charitable organisation, n.d.). An integral analysis of the multi-temporal and multi-topical surveys presented on this platform enabled the researcher to establish Kherson residents' assessment of hromadas resilience in various aspects as well as their perceptions of the ongoing recovery process. The study continues the conceptualisation of the assessment of the consequences of Russian military aggression and post-war reconstruction policy at regional and local levels. It also presents conclusions on a new perspective on spatial policy-making in time of war and post-war resurgence.

4. Results and Findings: The case of Ukraine's Regions in the Russo-Ukrainian War and Development Amidst Conflict

4.1. Decentralisation Reform in Ukraine in Wartimes: the Basis for Increased Participation, Civic Activism and Regional Resilience

From the Soviet period, Ukraine inherited a highly bureaucratic and complex administrative-territorial organisation, in which local administrations at the district level had no real tools of local governance and were not capable of addressing economic, social, and cultural development issues (Yakymenko et al, 2021). The rayon as a territorial unit was used more for statistical accounting of regional indicators than for the decentralisation of governance.

The decentralisation reforms that occurred in Ukraine between 2015-2020 were implemented on the principles of decentralisation and subsidiarity, and determined the new administrative and territorial structure of Ukraine at the grassroots and rayon levels (Decentralisation and formation , 2020).

However, the war has led to a new challenge in the system of territorial governance. The Law of Ukraine 'On the Legal Regime of Martial Law' (2015) provides for the possibility of establishing temporary state bodies - military administrations - to ensure the operation of the Constitution and laws of Ukraine so as to ensure, together with the military command, the launch and implementation of martial law measures, defence, civil protection, public safety and order, the protection of critical infrastructure, and the protection of the rights, freedoms and legitimate interests of citizens (Table 1)

Table 1. Administrative and territorial division before, after reform and due the war times.

Administrative territorial division	Before reform	After reform	Military state administrations (after 24 February, 2022)
Intermediate level	24 regions Autonomous Republic of Crimea 2 cities with the status of Regions (Kyiv and Sevastopol)	24 regions Autonomous Republic of Crimea 2 cities with the status of Regions (Kyiv and Sevastopol)	<i>24 regional military state administrations,</i> <i>Kyiv city military administration</i>
Districts	490 districts and 176 cities with district status	136 districts	<i>136 districts military administration</i>
Local units	-	1469 territorial communities (hromadas)	<i>192 military administrations of city and rural settlements in 12 regions</i>
Settlements	279 cities of district subordination, 884 urban municipalities, and 28573 rural settlements	29710 settlements (cities, rural settlements)	

* Developed by the author

European analysts have noted that decentralisation has been one of the most successful reforms in Ukraine since the Revolution of Dignity (Dudley, 2019). In general, among the positive achievements of the reform are the consolidation of rayons, fiscal decentralisation, the revival of economic activity, and the formation of new opportunities for inter-municipal cooperation and capacity building (Kaliuzhnyj et al, 2022). Current research confirms that the capacity of local governance has an overall impact on regional economic resilience (Martin and Sunley, 2020; de Vries and Nemec, 2025). In addition, a territorial hromada's lower dependence on subventions and grants from the state budget has a positive impact on its preparedness for complex, multidimensional shocks (Kurnyshova, 2023).

The decentralisation reforms provided for the strengthening of powers and the expansion of the resource bases of local rather than regional and district self-government bodies while also making inter-budgetary relations more transparent. One year after the full-scale Russian invasion, empirical findings from Ukraine demonstrate that the decentralised system of governance contributed to resilience in the face of a prolonged and extraordinary wartime crisis (Keudel and Hus, 2023). Romanova and Umland (2023) identify three types of contributions of local governments at the territorial hromada level to state capacity building during the Russian full-scale invasion: contribution to the territorial defence of Ukraine, support for IDPs, and assistance in state reconstruction.

The reforms contributed to the modernisation of key instruments for territorial development, particularly the system of spatial planning at the local level. This can be seen as a positive outcome and a continuation of the broader decentralisation reform (Melnichuk et al., 2021). Decentralised solutions and hromada capacities in wartime have been strengthened by the implementation of cross-cutting digitalisation of recovery project activities and accountability (DREAM, n.d.), the dissemination of analytics (Clarity Hromada, n.d.), and the maintenance of a constant dialogue with hromadas (Charitable organisation n.d.). It follows, that a high level of digitalisation of local governance and accountability in post-conflict reconstruction enhances the inclusiveness of regional reconstruction planning processes and also supports civic activism.

4.2. The War-Torn Region: the Challenges of Wartime, and Changes in the Governance Conditions of Territories

This part focuses on context at different scales, as this allows for a better understanding of the multi-dimensionality of the issues and their significance at different spatial levels

4.2.1. Political Challenges

Russia's full-scale military invasion caused the temporary occupation of a large part of Ukraine's territory, led to millions of internally displaced persons, and gave rise to a record decline in Ukraine's economy (World Bank, European Union 2025). The war has led to significant losses of key resources that were crucial for local and regional development including demographic, natural, and infrastructure resources. Since the beginning of the full-scale aggression, almost 4,000 settlements in 231 hromadas in 11 of Ukraine's 24 regions have been temporarily occupied (Barynova, 2024). The most significant political challenges for territorial hromadae's recovery are: (1) destruction and/or complication through the creation of military administrations within the still relatively young governance system at the local level; (2) 'dismantling' of the Ukrainian governance system in the de-occupied hromadas; (3) unevenness with regard to the creation of military administrations at the local level and their existence not for all occupied territories. For example, at the local level only in the Kherson region each hromada has a military administration. The experience of the Kherson region with regard to the activities of the military administrations shows that they can function not only in de-occupied territories and territories near the demarcation line, but also in temporarily occupied territories. This approach has only been implemented in the Kherson region, and makes it possible to manage territories more efficiently.

In these circumstances spatial policy can be cumbersome and difficult to adapt or update to the realities of either decentralisation or post-war development contexts. To achieve a common vision in decision-making and in order to find the optimal combination of top-down and bottom-up approaches, it is necessary to take into account the basic capacity of the individual hromada, its existing demographic potential, the level of physical destruction caused by the hostilities, and the geospatial scope of its coverage. In order to garner territorial hromadas' perspectives on the problems or goals of post-war recovery, it was important to organise a dialogue on the following questions:

Who is affected/what is affected?

What are the consequences of the problem and how do they affect the well-being of the hromadas?

How many people are affected by a particular problem (within 1 hromadas, group of hromadas, region)?

Which ethnic, cultural, gender communities are particularly affected by the problem?

Can the problem be addressed at the hromadas level?

Which people, institutions (or other change agents) can create (or block) solutions to the problem?

In the context of the analysis "What Kind ... and for Whom?" (Pike et al, 2007), such a dialogue enables a better analytical assessment of the objects, subjects and dimensions of social well-being, as well as an understanding of who benefits and loses from specific forms of local and regional development and where. Answers to these questions allow for a more informed balance to be achieved between top-down and bottom-up approaches, as well as the development of a common conceptual framework for regional and local policies.

One of the key challenges in the recovery process of de-occupied hromadas and war-torn territories is ensuring transparency and clarity of regional and local development for all actors involved (Balagna et al, 2024). Openness and accessibility of information contribute to trust, public engagement, and efficient resource allocation, whilst the most affected hromadas lose their ability to compete for resources and attention, putting them in an extremely vulnerable position. This raises a dilemma: how to ensure a level playing field when the starting point is so unequal? In such contexts there is a need for radical institutional solutions and large-scale financial support to compensate for losses and create conditions for the recovery of the subjectivity of such hromadas. Transparency should be combined with targeted support to avoid deepening spatial inequalities in post-war periods.

4.2.2. Spatial Challenges

The active hostilities have caused significant changes in the functionality and suitability of the territories with regards to economic use. The research, conducted within 17 de-occupied hromadas in Kherson region between 24 February 2022 and 14 September, 2023, showed damage to 14953 objects, including 12626 (84.5%) private residential buildings, 950 (6%) apartment buildings and 1377 (9.5%) communal, social, transport and industrial infrastructure. Thousands of hectares of land have now become militarised badlands which are uninhabitable due to dangers including, amongst others, hazardous substances, radiation leakage, and mined areas. Even when the spatial resource is not lost or the territories are de-occupied, their functionality and content have changed radically. In total, 69 percent of the damage was caused by ammunition, 4.5 percent by rocket fire, and 26.5 percent by other actions undertaken by Russian troops.

The Kakhovka Reservoir disaster on 06 June 2023, - a case of complex socio-environmental military aggression by the occupiers - has led to numerous local, regional, and national consequences as well as global challenges. The direct and horrific impacts of the disaster included flooding, deaths, the destruction of homes and infrastructure, water shortages, pollution, the extinction of rare species of flora and fauna, and the dewatering of the reservoir basin amongst others. The long-term consequences of this disaster related to the unique role of the Kakhovka reservoir for the Ukrainian economy and society (Pylypenko and Malchykova, 2023). The global challenges include environmental and food security as well as direct threats to nuclear safety.

The Kherson region is also a prime example of a territory in which the occupiers destroyed key transport and logistics elements, drastically changing the communication connectivity of the area and the transport accessibility of its hromadas. Kakhovka hydroelectric power plant dam, the railway bridge and Antonivskiy bridge within the Kherson Urban Territorial Hromada had, hitherto, increased the region's communication connectivity, effectively created a "new" transport and geographical location for hromadas and ensured increased regional resilience. However, the destruction of all bridge crossings by the occupiers within the region has created significant problems for warfare strategy and tactics. It has also made it virtually impossible for sustainable social communications to exist between the hromadas on the left and right banks of the Dnipro.

4.2.3. Geodemographic Challenges

The large-scale military invasion of 2022 created entirely new dimensions for spatial functionality in Ukraine and Europe as a whole. The scale of war refugees from Ukraine is incredible: there are more than 6.3 million refugees from Ukraine, including 5.9 million in Europe, and internal displacement within Ukraine is estimated to be more than 3.7 million. In reality, one in four Ukrainians has been displaced and has moved either abroad or to another region of Ukraine (Malchykova and Pylypenko, 2023). The demographic changes observed in Ukraine, whether in the whole country, in de-occupied hromadas, or in areas where ongoing hostilities are taking place, pose significant challenges for post-war reconstruction efforts. Analysis of the demographic situation within the de-occupied hromadas of the Kherson region reveals the following key findings.

Table 2. Demographic indicators in the de-occupied hromadas (case study of Kherson region, as at 01.01.2022 and 01.09.2023) *

Hromada	Type **	Share of available population compared to the pre-war period, %	Population density, persons/km ² ,		Average population of settlements,	
			01.01.2022	01.09.2023	01.01.2022	01.09.2023
Tyaginskaya	RH	25.9	23.4	6.0	902	233
Beryslavskaya	UH	26.9	39.9	10.7	1827	491
Khersonska	UH	29.0	720.1	209.1	20378	5917
Mylivska	RH	31.6	12.5	4.0	690	218
Novooleksandrivska	RH	32.8	14.9	4.9	673	221
Novorayskaya	RH	40.6	16.8	6.8	656	266
Kalynivska	RH	41.2	17.6	7.2	289	119
Novovorontsovskaya	RH	45.5	27.0	12.3	1255	571
Stanislavskaya	RH	46.1	24.3	11.2	2501	1153
Chernobaevskaya	RH	49.5	62.2	30.8	1504	745
Vysokopilska	RH	50.6	22.6	11.4	507	257
Darievskaya	RH	50.9	31.7	16.1	934	476
Belozerskaya	RH	51.7	54.3	28.0	886	458
Borozenskaya	RH	62.7	11.5	7.2	373	234
Kochubeevskaya	RH	65.1	14.3	9.3	211	137
Velykoaleksandrovskaya	RH	67.4	19.0	12.8	484	326
Muzykivska	RH	84.3	29.3	24.7	743	627
De-occupied hromadas together		34.9	71.5	25.0	2161	755

* Developed by the author based on data from Kherson Regional Military State Administration

** Type of hromada: RH – Rural Hromada; UH – Urban Hromada

On average, the population of the de-occupied hromadas has declined by about 65 percent compared to the pre-war period, with fluctuations ranging from 15 percent to 74 percent within individual hromadas. The population density within the de-occupied hromadas has decreased by almost three times, from 71.5 persons/km² to 25 persons/km². In some rural hromadas, the population density as of 01 September, 2023 had dropped to 10 persons/km² or less; in eight out of the 17 de-occupied hromadas. The average population of settlements in the de-occupied hromadas has decreased three times, and within rural hromadas it has halved (from 720 to 355).

The war has had a significant impact on the demographics of the region and has highlighted issues with hromadas' capacities. It may, as a result, be necessary to reconsider the network of hromadas. The conflict has also caused damage to important transport infrastructure, such as bridges, railways, and roads; altering the socio-geographical landscape of the area. With regard to the Kherson region we can discuss that the existing scale of demographic losses, the multi-vector and multi-scale consequences of infrastructure destruction, and the Kakhovka reservoir disaster may be the basis for rethinking the capability of hromadas, revise the network of the territorial structure of hromadas, increased centralization in the post-war reconstruction.

4.3. The New (Post-)War Reality and Functionality of Hromadas: Finding a Balance in Territorial Governance

In the field of planning theory, two major strategies exist: the top-down and the bottom-up approach. These approaches have been widely used in reforming the administrative and territorial structure in many European countries (Centre of Expertise, 2017). The top-down approach is initiated by the highest level of territorial government, while the bottom-up approach depends on initiatives from regional or local governments. The choice between top-down and bottom-up approaches to planning and implementing policies is a subject of active discussion. As Sabatier (1986), Pissourios (2014) show, each approach has its advantages depending on the scale, context, and number of actors involved. The centralised (top-down) approach is effective in cases where there is a clear government programme or legislative framework and the number of actors involved is limited, whereas a bottom-up approach works better in a multi-stakeholder environment, where it is important to take into account local differences, social dynamics, and community needs.

Within the modern digitalisation framework, these approaches not only coexist, but also enter into new forms of interaction - sometimes conflicting, sometimes complementary. While digital tools increase the transparency and accountability of centralised solutions, they also open up space for local initiative, civil society mobilisation, and the formation of a smart bottom-up approach (Zhou et al., 2023). This context that embraces a combination of approaches is well demonstrated in Ukraine, and has mobilised hromadas and civic engagement as part of an inclusive process of shaping the post-war reconstruction agenda (Rzegocki et al., 2024).

War-affected hromadas face challenges of post-war development and reconstruction that do not fit into the concept of the dominance of any one approach. A striking example is the formation of spatial policy at the local and regional levels after the Kakhovka hydroelectric dam was blown up. In keeping with current legislation, the use of the Kakhovka reservoir bottom was prohibited until the war is resolved, and a pilot project being developed to restore the hydroelectric power plant and water supply system in the southern and eastern regions of Ukraine after de-occupation. There is no alternative to this spatial development strategy due to it being implemented by a top-down approach. At the same time, hromadas in the areas adjacent to the reservoir are already demonstrating flexible and adaptive solutions using bottom-up methods. Community participation and consideration of their interests is a priority, and it is important to engage in dialogue with hromadas whilst also ensuring that civil society is widely involved in discussions of all general strategy and centralised solutions.

A Ukrainian example, the Digital Reconstruction Ecosystem for Accountable Management (DREAM, n.d.), illustrates how digital solutions can bridge these two alternate governance logics. It not only ensures transparency in resource allocation, but also increases community participation in shaping the recovery agenda. In this way, digitalisation creates the conditions for a flexible combination of centralised coordination and local subjectivity, especially important in the (post-)war reconstruction period.

An effective balance between centralised solutions and bottom-up initiatives should be built through synergies and integration, adaptation to the consequences of war in particular hromadas, and also embrace a tailored approach to governance. Centralisation ensures strategic coordination, resource mobilisation and legislative security; all critical in crisis situations. At the same time, bottom-up initiatives, which have intensified in times of war, are the basis for strengthening national identity and subjectivity based on horizontal social organisation (Krawchenko, 2023). In cases where centralised decisions become necessary, they should not displace local participation. Rather, even if centralised approaches are temporarily reinforced, it is important to ensure that hromadas (including temporarily displaced residents) remain active participants in processes of reconstruction, the preservation of regional identities, and the restoration of institutional capacity.

5. Conclusions

Planning for regional reconstruction amidst ongoing conflicts is always a challenge. All war-torn countries experience similarities in overcoming the large-scale physical destruction of infrastructure, the emergence of new demographic patterns, and increasing inequality and polarisation of socio-spatial systems at all levels; but outcomes and successes of post-war reconstruction efforts vary considerably. Ukraine's experience is often overlooked in international discussions, but it provides a valuable contribution to understanding how the changing conditions of territorial governance affect social resilience and cohesion, as well as deepening understanding of the multivariate patterns of spatial policy-making in times of war and post-war reconstruction.

Drawing on a comprehensive analysis of Ukraine's contemporary context, the heritage of administrative centralism, and the success of the decentralisation reform at the national level, this article has shown that administrative and financial decentralisations transform the logic and patterns of territorial governance, and become indicators of societies' ability to adapt to crises while also striving to achieve democratic governance standards. A high level of digitalisation of local governance and accountability in post-conflict reconstruction enhances the inclusiveness of regional reconstruction planning processes and supports civic activism.

Focusing on the regional level of the case study, the article has consistently shown that the multi-vector and multi-scale impacts of the war can serve as a basis for rethinking the capacity of hromadas and revising their territorial structures. Using this case study, it has been argued that the development of a new spatial policy for the post-war reconstruction of war-torn hromadas and regions (especially for the de-occupied territories) should be guided by assessment of such components as: institutional capacity, national and regional subjectivity, and new hromadas' functionality.

Against the backdrop of the ongoing war, national identity and subjectivity are being strengthened through bottom-up social organisation (Krawchenko, 2023). However, for local and regional development, the war has led to significant spatial inequalities, direct and indirect losses of key resources, and dependence on centralised coordination for recovery efforts. Therefore, it is important to ensure that war-torn hromadas (including internally and externally displaced residents) remain inclusive participants in the process of post-conflict reconstruction, the preservation of regional identity, and the restoration of capacity and that they work alongside the temporary strengthening of top-down approaches.

An additional challenge of territorial governance amidst ongoing conflict is the establishment of temporary military administrations. On the one hand, the further complicating of the decision-making system at different administrative levels correlates with the emergence of a new functionality of hromadas and regions in terms of new institutional and social roles - in service delivery, resilience, post-war reconstruction, and national security. However, in de-occupied hromadas there has been varying degrees of 'dismantling' of the Ukrainian governance system depending on the length of the occupation and the depth of destruction of the public service delivery system. In the process of overcoming dysfunctionality, such hromadas demonstrate trends of increasing centralisation.

Reconstruction can catalyse processes of decentralisation and strengthen national and regional subjectivity through an integrated, participatory approach to reconstruction and a recovery that invests in people and place rather than simply rebuilding the physical elements of pre-conflict conditions (Wahba et al, 2021). At the same time, Ukraine's heavily war-affected municipalities indicate that the critical loss of human, spatial and infrastructural resources has facilitated increased centralisation in post-war reconstruction, as the capacity of local institutions to effectively manage, deliver services and respond to wartime challenges has decreased.

Matching (post-)war reconstruction measures with the results of the assessment of institutional capacity, levels of destruction, national and regional subjectivity, and the new functionality of hromadas will maximise support for bottom-up initiatives; this should be supplemented, where needed, by adaptively and flexibly supplementing them with a top-down approach. The findings of the study have also led to further rethinking of decentralisation processes and the effectiveness of centralised solutions in the context of regional and sectoral differences with regards to the impacts of the war's consequences.

Acknowledgments

The author wishes to express the sincere gratitude to the UK Academic Mentoring program (2023-2024) and deeply appreciates the cooperation of Andy Pike, Henry Daysh Professor of Regional Development Studies, Centre for Urban and Regional Development Studies (CURDS), Newcastle University, UK. His ideas and insights were valuable for this research and will become a reliable basis for further investigations on planning regional post-war reconstruction processes.

Research for this article was supported in part by the 2024 BridgeUSA Ukrainian Academic Fellows Program, a program funded by the U.S. Department of State's Bureau of Educational and Cultural Affairs, with additional funding provided by Harvard University and administered by American Councils for International Education. The opinions expressed herein are the author's own and do not necessarily express the views of either the Bridge USA or American Councils.

References

- About the National Council for the Recovery of Ukraine from the War (2022). Presidential Decree № 266/2022 as of April, 21, 2022. [Online] Available from: <https://www.president.gov.ua/documents/2662022-42225> [13/10/2024]
- Anisimov, Oleksandr, Maria Smirnova, and Ievgeniia Dulko (2024). Establishment of a New Planning System in Ukraine: Institutional Change Between Europeanization and Post-Socialist Path Dependence. *Planning Theory & Practice*, 25(4), pp. 482–501. <https://doi.org/10.1080/14649357.2024.2414973>
- Assem, Ayman, Sherif Abdelmohsen, and Mohamed Ezzeldin (2020). Smart Management of the Reconstruction Process of Post-Conflict Cities. *ArchNet-IJAR* 14 (2), pp. 325–43. <https://doi.org/10.1108/ARCH-04-2019-0099>.
- Balagna, Jay, Khrystyna Holynska, and Krystyna Marcinek (2024). Trade-Offs of Reconstruction in a Post-Conflict Environment. In: *Enhancing Stabilization and Strategic Partnership in a Post-Conflict Environment: A Comprehensive Approach to Human Security*, P. II, Chapter IV, pp. 89–109.
- Barynova, Diana (2024) Recovery and development of de-occupied territorial communities: reality and prospects. National News Agency of Ukraine - Ukrinform, 01 March 2024. [Online] Available from: <https://www.ukrinform.ua/rubric-politics/3834546-vidnovlenna-ta-rozvitok-deokupovanih-teritorialnih-gromad-realnist-ta-perspektivi.html#> [10/10/2024]
- Castillo, Graciana del (2008) *Rebuilding War-Torn States: The Challenge of Post Conflict Economic Reconstruction*. Oxford, 2008; online ed., <https://doi.org/10.1093/acprof:oso/9780199237739.001.0001>
- Charitable organisation 'Kherson Community Foundation "Zakhyst"' (n.d.) <https://pochuty.ks.ua/vasha-dumka/> [02/05/2025]
- Clarity Hromada (n.d.) <https://clarity-project.info/hromada> [02/05/2025]
- Cox, Michael (2023) *Ukraine: Russia's War and the Future of the Global Order*. OAPEN (Open Access Publishing in European Networks). London: LSE Press.
- D'Alessandro-Scarpari, Cristina (2011) Local territories, their power and their actions: Development as a weapon for peace, *World Journal of Science, Technology and Sustainable Development*, 8(2/3), pp. 263–275. <https://doi.org/10.1108/20425945201100014>
- Decentralisation and formation of regional development policy in Ukraine: scientific reports (2020) Shevchenko O. V., Romanova V. V., Zhalilo Y. A. et al. 153 p. [Online] Available from: https://niss.gov.ua/sites/default/files/2020-09/decentralizatsiya-i-formuvannya-polityky-regionalnogo-rozvytku-v-ukraini_0.pdf [10/10/2024]
- DREAM, Digital Restoration Ecosystem for Accountable Management (n.d.) <https://dream.gov.ua/> [02/05/2025]
- Dudley, William (2019) *Ukraine's Decentralization Reform*. Berlin: SWP, Research Division Eastern Europe and Eurasia. [Online] Available from: https://www.swp-berlin.org/publications/products/arbeitspapiere/Ukraine_Decentralization_Dudley.pdf [05/10/2024]
- Earnest, James (2015) Post-conflict reconstruction – a case study in Kosovo: The complexity of planning and implementing infrastructure projects, *International Journal of Emergency Services*, 4 (1), pp. 103–128. <https://doi.org/10.1108/IJES-02-2015-0009>
- European Commission Directorate-General for Neighbourhood and Enlargement Negotiations (2024) *Ukraine 2024 Report: Commission Staff Working Document*. Brussels: European Commission. https://neighbourhood-enlargement.ec.europa.eu/ukraine-report-2024_en.
- European Committee of the Regions, Commission for Citizenship, Governance, Institutional and External Affairs, Anakina, T., Salek-Lipcean, P., Kovalchuk, H. (2022) *Challenges and opportunities of LRAs' involvement in the reconstruction of Ukraine*. European Committee of the Regions. <https://data.europa.eu/doi/10.2863/08584>

- Fiedler, Charlotte (2023) What Do We Know about How Armed Conflict Affects Social Cohesion? A Review of the Empirical Literature. *International Studies Review* 25 (3). <https://doi.org/10.1093/isr/viad030>.
- Götz, Elias, and Per Ekman. (2024). Russia's War against Ukraine: Context, Causes, and Consequences. *Problems of Post-Communism* 71 (3), pp. 193–205. <https://doi.org/10.1080/10758216.2024.2343640>.
- Hasic, Tigran (2004) *Reconstruction Planning in Post-conflict Zones: Bosnia and Herzegovina and the International Community*, Royal Institute of Technology, 63 p. <https://www.diva-portal.org/smash/get/diva2:14256/FULLTEXT02.pdf>
- Hensel, Nanyantara (2024) The Russia-Ukraine Crisis: How Regional Conflicts Impact the Global Economy. *PRISM* 10, 4, pp. 102–22. <https://www.jstor.org/stable/48785858>.
- Homsy, G. C., Liu, Z., and Warner, M. E. (2019). Multilevel Governance: Framing the Integration of Top-Down and Bottom-Up Policymaking. *International Journal of Public Administration*, 42(7), 572–582. <https://doi.org/10.1080/01900692.2018.1491597>
- Isayinka, Stephen (2023) The Complexities of Post-War development: A Critical Analysis. *The Complexities of Post-War Development: A Critical Analysis*. [Online] Available from: https://www.academia.edu/114210548/The_Complexities_of_Post_War_development_A_Critical_Analysis [05/10/2024]
- Jabareen, Yosef (2013) Conceptualizing “Post-Conflict Reconstruction” and “Ongoing Conflict Reconstruction” of Failed States. *International Journal of Politics, Culture, and Society*, 26(2), pp. 107–125. <https://doi.org/10.1007/s10767-012-9118-3>
- Keudel, Oleksandra, and Oksana Hus (2023). Polycentric governance in practice: the case of Ukraine's decentralised crisis response during the Russo-Ukrainian war. *Journal of Public Finance and Public Choice*, 39(1), pp. 10–35. <https://doi.org/10.1332/25156918Y2023D000000002>
- Krawchenko, Tamara (2023) Ukraine's Decentralisation Reforms and the Path to Reconstruction, Recovery and European Integration. *LSE Public Policy Review* 3 (1). <https://doi.org/10.31389/lseppr.87>.
- Kurnyshova, Yulia (2023) Ukraine at War: Resilience and Normative Agency. *Central European Journal of International and Security Studies*, 17(2), pp. 80–110. <https://doi.org/10.51870/UXXZ5757>
- Langer, Arnim, and Graham K. Brown, eds. (2016). *Building Sustainable Peace: Timing and Sequencing of Post-Conflict Reconstruction and Peacebuilding*. New York, NY: Oxford University Press.
- Malchykova, Daria (2021) Participatory budgeting practices and civic activism for urban space renovation: the case of Kherson. *Ekonomichna ta Sotsialna Geografiya*, 85, pp. 38–48, <https://doi.org/10.17721/2413-7154/2021.85.38-48>
- Malchykova, Daria and Ihor Pylypenko (2023) War-Torn Territories and Society: Migration Processes, Cases, Contexts of Ukraine. *Europa XXI*, 45, pp. 21–36. <https://doi.org/10.7163/Eu21.2023.45.6>
- Martin, Ron, and Peter Sunley (2020) Regional economic resilience: evolution and evaluation, in: Gillian Bristow and Adrian Healy (eds), *Handbook on Regional Economic Resilience*, chapter 2, pp. 10–35, United Kingdom: Edward Elgar Publishing. https://ideas.repec.org/h/elg/eechap/16700_2.html
- Mearsheimer, John J. (2022). The Causes and Consequences of the Ukraine War. *Horizons: Journal of International Relations and Sustainable Development*, 21, pp. 12–27. <https://www.jstor.org/stable/48686693>.
- Meerkerk, Ingmar van (2019) Top-down versus bottom-up pathways to collaboration between governments and citizens: reflecting on different participation traps. In Anka Kekez, Michael Howlett, and Mishra Ramesh (eds) *Collaboration in Public Service Delivery*, pp. 149–67. United Kingdom: Edward Elgar Publishing. <https://doi.org/10.4337/9781788978583.00019>.
- Melnychuk, Anatolii, Olena Denysenko, and Pavlo Ostapenko (2021) *New tools for new urban spaces? Analyses of planning and participation tools and their performance in (post)transitional perspective*. *Ekonomichna ta Sotsialna Geografiya*, 85, pp. 11–22. <https://doi.org/10.17721/2413-7154/2021.85.11-22>
- Motyl, Alexander J. (1993) *Dilemmas of independence. Ukraine After Totalitarianism*. New York: Council on Foreign Relations Press, 217 p.
- Nadin, Vincent, and Ana Maria Fernández-Maldonado (2023) Spatial planning systems in Europe: multiple trajectories, *Planning Practice and Research*, 38 (5), pp. 625–638, <https://doi.org/10.1080/02697459.2023.2258568>
- Nadin, Vincent, and Dominic Stead (2008) European Spatial Planning Systems, Social Models and Learning. *DISP*, 44(172), pp. 35–47. <https://doi.org/10.1080/02513625.2008.10557001>
- Ostapenko, Pavlo, Daria Malchykova, Ihor Pylypenko, Anatolii Melnychuk, and Stas Ostapenko (2023) Project ‘Kherson region geoinformation portal’: Initiatives of civil society to support regional development. *Ukrainian Geographical Journal*, 2023(1), pp. 54–66. <https://doi.org/10.15407/ugz2023.01.054>
- Palekha, Yurii, Daria Malchykova, Nadiia Antonenko, and Ihor Pylypenko (2023). Approaches to the Territorial Communities' Typification of Ukraine as a Result of the Russian Military Aggression. *Ukrainian Geographical Journal*. 2023(4), pp. 36–43. <https://doi.org/10.15407/ugz2023.04.036>
- Payab, Mohammad Ilyas (2014) *Post-conflict reconstruction: Impediments and challenges in the process of sustainable reconstruction and development in post-2014 Afghanistan*. Open Access Theses. 665. [Online] Available from: https://docs.lib.purdue.edu/open_access_theses/665 [10/10/2024]
- Pike, Andy, Andrés Rodríguez-Pose, and John Tomaney (2007) What Kind of Local and Regional Development and for Whom? *Regional Studies*, 41(9), pp. 1253–1269, <https://doi.org/10.1080/00343400701543355>

- Pissourios, Ioannis (2014) Top-down and Bottom-up Urban and Regional Planning: Towards a Framework for the Use of Planning Standards. *European Spatial Research and Policy*, 21(1), pp. 83–99. <https://doi.org/10.2478/esrp-2014-0007>
- Pylypenko, Ihor, and Daria Malchykova (2023) Der Kachovka-Stausee Wirtschaftsmotor und Kriegsschauplatz. *Osteuropa*, 73(1-2), pp. 53–60 <https://doi.org/10.35998/oe-2023-006>
- Rezk, Josephin, Oriol Pons-Valladares, and Carlos Muñoz-Blanc. (2025) Evaluating Sustainability in Post-Conflict Reconstruction: A Case Study of Blast-Damaged Buildings without Structural Collapse Risk in Syria. *Buildings*, 15 (3), pp. 369. <https://doi.org/10.3390/buildings15030369>.
- Romanova, Valentyna, and Andreas Umland (2023) Centre-periphery relations: means for advancing state resilience. *Political Studies*, 2(6), pp. 103-122, <https://doi.org/10.53317/2786-4774-2023-2-5>
- Rose, Jo, and Claudia Milena Adler. (2024). A Framework for Effective Collaboration with Crisis-Affected Communities. *Challenges*, 15(1), pp. 13. <https://doi.org/10.3390/challe15010013>
- Rouet, Gilles, and Gabriela Carmen Pascariu, (eds) (2025) *Resilience and the EU's Eastern Neighbourhood Countries: Crisis, Transformations and Policies*. Second edition 2025. Cham: Palgrave Macmillan. <https://doi.org/10.1007/978-3-031-73379-6>.
- Rudnytsky, Ivan L. (1963) The Role of the Ukraine in Modern History. *Slavic Review*, 22(2), pp. 199–216. <https://doi.org/doi:10.2307/3000671>
- Rzegocki, SaraJane, and Kyiv School of Economics (2024) *Resilience, Reconstruction, Recovery: The Path Ahead for Ukraine*. Edited by Sam Greene and Elina Ribakova. Washington, DC: Center for European Policy Analysis. <https://cepa.org/wp-content/uploads/2024/04/Ukraine-Resilience-Reconstruction-Recovery.pdf>.
- Sabatier, Paul A. (1986) Top-Down and Bottom-Up Approaches to Implementation Research: a Critical Analysis and Suggested Synthesis. *Journal of Public Policy*, 6(1), pp. 21–48. <https://doi.org/10.1017/S0143814X00003846>
- Sakalasuriya, Maheshika M, Richard P Haigh, and Dilanthi Amaratunga (2018) A Conceptual framework to analyse consequences of post conflict reconstruction interventions. *Procedia Engineering*, 212, pp. 894-901. <https://doi.org/10.1016/j.proeng.2018.01.115>
- Sakun, Oleksandra, and Viktoriia Shkola (2023) The peculiarities of the reconstruction of Ukrainian territorial communities in the context of the European Green Deal. *Socio-Economic Relations in the Digital Society*, 4(50), pp. 51-60. <https://doi.org/10.55643/ser.4.50.2023.535>
- Saleh, Nour, Adnan Enshassi, and Matthias Sundermeier (2023) Factors influencing resource availability for post-disaster housing reconstruction: the case of Gaza Strip-Palestine. *International Journal of Construction Management*, 24 (12), pp. 1364–1374. <https://doi.org/10.1080/15623599.2023.2174654>
- Stewart, Frances (2009) Policies towards Horizontal Inequalities in Post-Conflict Reconstruction. In *Making Peace Work* (pp. 136–174). Palgrave Macmillan UK. https://doi.org/10.1057/9780230595194_7
- Territorial reforms in Europe: Does size matter? Territorial Amalgamation Toolkit. (2017) Centre of Expertise for Local Government Reform, Council of Europe. [Online] Available from: <https://rm.coe.int/territorial-reforms-in-europe-does-size-matter-territorial-amalgamation/168076cf16> [05/10/2024]
- The bottom-up approach, in: LEADER teaching kit - Booklets, chapter IV (2020). [Online] Available from: https://ec.europa.eu/enrd/sites/default/files/leaderii_teaching-kit_booklet-chap4.pdf [08/10/2024]
- Vries, Michiel S. de, and Juraj Nemec (2025) *35 Years of Public Sector Reform in Central Europe*. Cham: Palgrave Macmillan. <https://doi.org/10.1007/978-3-031-80668-1>.
- Wahba, Sameh, Maitreyi Bordia Das, and Yuna Chun (2021) Building Back Stronger Urban Resilience through Post-Conflict Reconstruction. *Journal of International Affairs*, 74 (1), pp. 227–42.
- Wang, Vibeke, Astri Suhrke and Elling N. Tjønneland (2005) *Governance Interventions in Post-war Situations: Lessons Learned*. Bergen: Chr. Michelsen Institute (CMI Report R 2005: 1).
- World Bank, European Union, Government of Ukraine, and United Nations. (2025) *Ukraine Fourth Rapid Damage and Needs Assessment (RDNA4), February 2022 – December 2024*. <https://hdl.handle.net/10986/42908>.
- Yakymenko, Yuriy, et al. (2021) Ukraine: 30 Years on the European Path. The Ukrainian Centre for Economic and Political Studies named after Olexander Razumkov, Kyiv, «Zapovit» Publishing House, 392 p. [Online] Available from: <https://razumkov.org.ua/uploads/2021-independence-30.pdf> [28/09/2024]
- Zhou, Shuwen, Haokun Fu, Shanshan Tao, Yanan Han, and Mingrui Mao. (2023). Bridging the Top-down and Bottom-up Approaches to Smart Urbanization? A Reflection on Beijing's Shuangjing International Sustainable Development Community Pilot. *International Journal of Urban Sciences*, 27 (S1), pp. 101–23. <https://doi.org/10.1080/12265934.2021.2014939>.