COMMENTARY

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Imagining post-war futures amid cycles of destruction and efforts of reconstruction

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Abstract

This commentary brings forward Ukrainian voices to this journal's conversation on the invasion of Ukraine and the dilemmas it poses to scholars in geography. We argue that there needs to be space in this discussion for the viewpoints of Ukrainians themselves who are on the ground, confronting the atrocities every day, and who can provide experiential knowledge about (i) the immediate cycles of destruction and efforts of reconstruction; (ii) the systemic impediments to reconstruction; and (iii) the diverse sets of post-war imagined futures. These signpost to scholars the sheer scope of the conflict and the multitude of research avenues to explore in order to understand the realities of the war more deeply. They thus provide information and inspiration to geographers wondering about how to orient and where to respond.

KEYWORDS

digitalisation, Kyiv, reconstruction, resilience, Ukraine

1 | INTRODUCTION

We are grateful to Klinke (2023) for instigating the important dialogue about the dilemmas that the invasion of Ukraine presents to scholars of geography. The collection of papers thus far has exposed crucial shortcomings in Western academia, in particular the limited effectiveness of certain epistemologies in knowing the war (Klinke, 2023). The discussion has also demonstrated the explanatory power of lesser discussed socio-political geographies of Russia and Europe (Bialasiewicz, 2023; Smirnova, 2023a, 2023b). With this commentary, we argue that there also needs to be space for the viewpoints of Ukrainians themselves who are on the ground in Ukraine, confronting the atrocities every day. They can provide experiential knowledge into the immediate cycles of destruction and reconstruction, and explain the impediments to reconstructing their imagined futures.

A key motivation for Klinke (2023) was to address the counter-mapping and whataboutery which proliferated after the invasion. Much of Western coverage of the conflict has been informed by imaginary geographies of grand civilisations and scepticism of NATO (Klinke, 2023), and these epistemologies needed deeper scrutiny and analysis. In response, Smirnova (2023a, 2023b) commented that numerous studies of the invasion have relied on Russia's official version, which, 'systemically disregards the territorial autonomy of its neighbours while demanding recognition of territorial integrity outside the post-Soviet realm and within Russia itself … *whenever suitable*' (Smirnova, 2023a, 2023b, p. 817, our italics). We align with Klinke (2023) that such approaches have led to undue focus on the fragility of the aggressor. In this

vein, we would also refer to Kostelka's (2022) observations about the 'rogue intellectuals'; these are the esteemed scholars who have exploited their platforms to disseminate ill-researched analyses of the aggression (Gorodnichenko, 2022), which have perpetuated misunderstandings about the invasion and impeded appropriate policy responses. By focusing on Western imperialism, understood solely through the lens of North America and Western Europe, the history of imperialism conducted by Russia has largely been ignored. Indeed, it is astounding to contemplate how 'Western scholars have played [a role] in helping to sustain Russia's imperial fantasies' (Dudko, 2023, p. 179). Ultimately, too, it becomes a grotesque form of 'westsplaining' (McCallum, 2022), as the devastation and dispossession of those absent from the conversation persist.

Bialasiewicz (2023) pointed out that narratives of the invasion, 'as a battle for Europe, a battle for democracy, a battle for the survival of the liberal order' (Bialasiewicz, 2023, p. 826), also occlude socio-political divisions across the European Union, and that these fractures are vulnerable to exploitation by illiberal interests if ignored. We concur, and further propose extending similar studies into Anglospheres, coupled with discourse analyses on how particular socio-political narratives are amplified by, and aligned with, political interests. It would also be beneficial to better understand how the new, 'branch of government—social media [...]—has behaved in this war and how it has led us to where we are' (Snyder, 2024).

Smirnova (2023a) discussed the indigenous and peasant geographies that constitute counter imaginations of the Russian Federation. She remarked:

> Instead of being preoccupied with the ideas of Dugin and the Eurasianist movement, or other 'Putin philosophers' and other 'Putin philosophies,' a discussion of territorial visions and geographical imaginaries muted by the Russian geographical canon must be undertaken.
>
> (Smirnova, 2023a, 2023b, p. 819)

Contrasting these lesser-known and fractured socio-political geographies with statist conceptions of territory can contextualise the international messaging emanating from the Kremlin, offering insight into how to deconstruct these narratives, also in respect to Ukraine and Ukrainians (Smirnova, 2023b).

Kostelka (2022) criticised the 'rogue intellectuals' for denying the relevance of Ukrainian agency. To some extent, this oversight is unsurprising given the longstanding practice of othering, marginalising, or excluding post-socialist milieux (Chelcea, 2023; Matejskova, 2013). Chelcea (2023) offered a comprehensive overview of the institutionalised routines of dismissing the heterochronic worlds that might be categorised as the 'postsocialist Global East' or '(post)socialist Global'—terms that Chelcea (2023) submitted as uneasy compromises to otherwise prevailing terminologies such as 'post-socialism', 'post-communist', 'post-Soviet', 'post-totalitarian', 'ex-communist' or 'transition countries'. All of these labels imply specific analytical decisions about time and space (Chelcea, 2023).

For Snyder (2024), the invasion was a historical conjuncture when many processes came together. Arguably, the 'gate-crashing' (Dudko, 2023) of Ukrainian studies was one of those:

> Ukrainian studies are the dreaded middle-seat airplane passenger that has squeezed ... between western European studies (widely known simply as 'European studies') and Russian ... 'post-Soviet' studies. To complicate matters further, Ukrainian studies, having abruptly gained prominence, have been assigned the same seat as 'East European' studies, which have not traditionally included former Soviet countries such as Ukraine, Belarus, and Moldova. The Ukrainian studies passenger therefore makes not only itself, but all the passengers in the row, uncomfortable.
>
> (Dudko, 2023, p. 175)

In this entry, we get comfortable taking up both armrests in the cosy middle seat, foregrounding the perspectives of Ukrainians who viscerally confront the war on a daily basis. It is explanatory to 'amplify the voices of Ukrainians and recognise the limits and cultural contingencies inherent in our own systems of knowledge when interpreting Russia's war of aggression in Ukraine' (McCallum, 2022).

Our argument borrows from research that emerged as a direct result of the war—a reminder that research itself is geography dependent. Kryvets (Author Two) arrived in Luxembourg in May 2022 under the European Union's (EU) Temporary Protection Directive after she was uprooted from her life in Ukraine, where she worked at the Taras Shevchenko National University of Kyiv. The Department of Geography and Spatial Planning (DGEO) at the University of Luxembourg became her host institution. In an effort to make the most from the sudden collaboration, we developed a research agenda that aimed at understanding how tech enterprises shaped reconstruction efforts and digital urban

futures in the City of Kyiv. This agenda amalgamated work at DGEO that critically examined the governance of urban digital development (Carr & Hesse, 2020a, 2020b) with Kryvets' prior work on start-up ecosystems in Kyiv. This collaboration thus bridges the gap between critical studies of urban technocracies and techno-managerial optimism, the former scrutinising the political economy of urban digitalisation and the latter confirming that digitalisation can serve resilience, as was observed during COVID for example (Fischer et al., 2022; Rockström et al., 2023). We acknowledge that the subject of digitalisation for resilience invites broad debate (Kuusaana et al., 2023); however, this discussion is beyond the scope of this commentary, because when asking Ukrainians about it, we discovered that our conversations always got stuck, first, in deciphering the context, the war.

We conducted interviews in both English and in Ukrainian with urban planners, architects, NGOs, and representatives of international organisations. These interviewees were identified following a document survey. Despite blackouts and reduced connectivity, response rates were exceptionally high, indicating the eagerness of people in Ukraine to engage in dialogue. Interviews were performed, recorded and transcribed using secure systems provided by the University of Luxembourg. Kryvets also returned briefly to Kyiv in October 2023. For the purposes of this commentary, we present three preliminary directions compiled from these sources, which are useful here because they signpost to scholars the sheer scope of the conflict and moreover the multitude of research avenues to explore in order to more deeply understand the realities of the war.

2 | CYCLES OF DESTRUCTION AND RECONSTRUCTION

Ruin is ongoing, with missile attacks from the Black Sea, Crimea, Belarus, as well as from the Ukrainian Oblasts of Luhansk and Donetsk targeting eastern and western regions of the country. As both residences and infrastructures are hit—frequently after midnight to sustain uncertainty—civilians and military personnel alike are murdered, permanently disfigured, tired out, traumatised and inflicted with permanent psychological stress.

Characterising and quantifying the war is difficult because of the changing character of the situation. Also, as destruction continues, so do rapid responses aimed at mitigating, safe-guarding and/or repairing immediate damages. In this sense, reconstruction moves at multiple speeds, reflecting the multitude of priorities at various scales. 'The war evolves, because the nature of the warfare is changing drastically every half year' (Zykova, 2024). Zykova, the Deputy Minister of Finance in Ukraine, was referring to the unpredictability of hostilities, the varying levels of military aid and deliveries of armaments, and how they restricted not only quartal financial budgeting and defence planning, but also Ukraine's ability to achieve internal and international development goals.

After the first year of war, a comprehensive collaboration of the World Bank (WB), the Government of Ukraine (GU), the European Union (EU) and the United Nations (UN) (2024) produced a staggering report on damages affecting housing, education, health, tourism, transport, sanitation, agriculture, natural resource management, hazards management and industry. Levels of poverty were increasing, a brain drain was diminishing future economic prospects, gender inequality was worsening, and progress towards development goals were falling behind (WB et al., 2024).

The Kyiv School of Economics (KSE 2023, 2024) has become a key source. To visualise: by January 2024, Ukraine suffered damages to more than 344 bridges, 19 airports, 126 railway stations, 595 administrative buildings, over 25,000 km of roads, 27,000 high-rise buildings, 167,200 houses, 400 businesses, 84,300 units of agricultural machinery, 3000 shops, 223,400 cars, 1280 medical facilities, 3500 educational facilities, and 1804 cultural buildings/sites. Before the Nova Kakhovka Hydroelectric Plant Dam exploded in June 2023, drone photography already revealed staggering destruction at sites of commerce, gastronomy, education, sports facilities, churches, hotels, recycling, water and heating infrastructure, and housing (RebuildUA, 2024). Destruction of the Dam caused further unprecedented flooding of villages and industries, causing further human displacement, damages to business and industrial operations, and widespread environmental contamination (Zharova, 2023). Concerning the city and region of Kyiv, 252 settlements across the area were occupied (Kyiv Regional Military Administration, 2022); and while many have been liberated back to Ukraine, they are now full of landmines (Rybalska, 2023).

Monetary estimates vary widely. In July 2022, the GU presented a 10-year recovery plan requiring US$750 billion (National Recovery Council, 2022). The WB, GU, EU and UN (2024) estimated costs at around US$486 billion as of 31 December 2023. The KSE (2024) estimated the costs at US$157.2 billion as of January 2024. Variation aside, what is certain when speaking with Ukrainians on the ground: they are already footing the bill, replacing everything from personal items stolen by Russian soldiers, to repairing properties and public infrastructures and daily maintenance of systems. And, none of this accounts for the occupied regions where Russia has waged an undeclared war since 2014 (Kuznetsova et al., 2018). For this, Mykhnenko (2020) has also written about the levels of damage inflicted prior to February 2022.

3 | SYSTEMIC IMPEDIMENTS TO RECONSTRUCTION

Today, the war persists unabated. Ukrainian forces are confronting mounting casualties and the military and civilian populations are facing ongoing humanitarian and environmental disaster. Meanwhile support from Western nations and NATO is minimal, encumbered by their own internal politics that are also linked to disinformation campaigns. Nevertheless, 'reconstruction often commences while destruction is still ongoing' (Bădescu, 2023).

Early on, Ukrainian authorities set priorities for reconstruction (Ministry of Reintegration of the Temporarily Occupied Territories of Ukraine, 2023). These include achieving energy autonomy, clearing landmines, providing housing for internally displaced persons (IDPs), eradicating corruption, and pursuing European integration (President of Ukraine, 2023). Since the Orange Revolution of 2004/2005, the Ukrainian Parliament (Verkhovna Rada) has repeatedly and consistently identified Euro-Atlantic integration as a cornerstone of Ukraine's foreign policy. Constitutional amendments in 2019 also confirmed, 'the European identity of the Ukrainian people and the irreversibility of Ukraine's European and Euro-Atlantic course' (Rada, 2019), and this commitment is reflected in ongoing communications between the GU and the European Commission (Blanc, 2024).

Interviewees identified several immediate obstacles to the multitude of multi-scalar means of reconstruction, which can be summarised into six general and overlapping categories. The first was fighting and preventing corruption. Several framed this topic by the events unfolding around 'The Revolution' or 'after The Revolution of 2014...', referring to the Revolution of Dignity in 2014 that 'was very much a revolt against political corruption' (Harasymiw, 2019). People we spoke with in Ukraine understood that transparency and accountability, a functioning court system, press freedom and political competition were central tenets of functioning democracy, and necessary for European integration. Many also noted that overcoming corruption was extra difficult during a war, confirming observations that anti-corruption agencies that were set up before the invasion have suffered diminished resources (WB et al., 2024).

A second problem concerned the question of who will return to the cities. As of October 2024, the UN Nations Office for the Coordination of Humanitarian Affairs (UNOCHA, 2024) recorded 3.67 million IDPs and 6.2 million refugees across Europe. While mass movement has placed logistical and infrastructural pressure on receiver cities, it is also difficult to predict the return of IDPs or levels of further population shrinkage (Kuznetsova et al., 2018). Uncertainty makes urban development difficult to plan.

Third, while many expressed a renewed solidarity across their social networks, a synergy important for the reconstruction process, they were also concerned that momentum would wane. Andrusevych and Kozak (2023) argued that citizen involvement was an important means of improving transparency in reconstruction processes. Affirming this, there are also thousands of reconstruction efforts, responding to all sorts of problems, demanding inputs or interventions from diverse sets of actors. Several interviewees wondered how the unity of local authorities, residents and investors could be maintained and steered.

Fourth, there was uncertainty around deciding where to invest, and what to prioritise. Housing was repeatedly mentioned as a key priority, especially in respect to IDPs. At the same time, investors needed reliable information to estimate investment risks. The 'State Register of Property Damaged and Destroyed as a Result of Hostilities, Terrorist Acts and Sabotage Caused by the Armed Aggression of the Russian Federation against Ukraine' was created as a unified geoinformation system for collecting, accumulating, recording, storing and protecting data on damaged properties (GU, 2023a, 2023b). It was also made available to citizens to register damaged properties and initiate procedures for assistance or compensation. This was also part of the state-of-the-art (USAID, 2023) e-governance app 'Diia' available to Ukrainian citizens. In addition, in response to the WB, GU, EU and UN (2024) price tag of US$486 billion for reconstruction, the GU (2024) set up the Digital Restoration Ecosystem for Accountable Management (DREAM) as a digital means of restoration management. DREAM is a platform where communities can submit their projects and show the stages of their implementation, while investors and Ukrainian authorities can verify the flow of funds.

Similarly, and fifth, many were concerned about predicting and planning business development. The tremendous migration flows both domestically and internationally—that is, the emptying out of cities on one hand, inward migration towards safer cities on the other—impacted economic development. The National Bank of Ukraine (NBU) (2024) published monthly surveys, tracking how attitudes towards the economy were changing, as well as predictions of economic growth in various sectors. Production costs, drops in output, changing exchange rates, combined with general rapid change obstructed planning and development.

Sixth, uncertainty around environmental concerns such as the stability of the nuclear power plants in Zaporizhzhia and Chornobyl, or the ability to remove landmines, raised deep and concerning questions about the future habitability of these places.

4 | IMAGINED FUTURES

Despite the ongoing cycles of destruction and reconstruction, there was a lot of optimism about the future. First, many interviewees imagined post-war Ukrainian cities as modern cities, with modern amenities and infrastructures, including digital infrastructures. Microsoft, Google and Amazon had won peace prizes for their contributions to resiliency during the war (donations, cloud services, cybersecurity, skills training). Given the scrutiny that exists across scholarship in regards to Big Tech, one might have expected to hear misgivings about such modes of reconstruction engaging these companies; however, interviewees retained a pragmatic tone, noting that both bigger and smaller scale digital interventions alike were significant and welcome in order to provide and sustain a variety of services. For example, open data platforms and open maps boost communication and they aid governments in maintaining transparency and accountability to the residents—especially during emergencies, and constant attacks.

Second, many imagined their post-war cities to be built with a vision. Interviewees noted a need for master development plans that could function to maintain synergies across actors at the local levels, reflecting local needs. Many imagined post-war cities to be those of a new generation—namely, green and democratic. These comments reflected an optimism for Western modes of urban planning (as diverse as these might be), that disconnected land use and property development from corrupt actors and reconnected these to institutions of democracy.

Third, many envisioned post-war cities to be for the communities who live in them. In the short term, immediate needs would be addressed, such as access to heat, electricity and the internet. In the long term, cities would be safe, energy efficient, energy independent, democratic and free of corruption. Our interviewees were aware of the diversity of needs across the different cities of Ukraine: There might be cities that were symbolic cities, such as Kherson, Bakhmut or Mariupol (for example, Mariupol Reborn, 2024). They also recognised that it made little sense to restore cities to the state they were before; rather, new cities would need to reflect the new realities of a closed border to the east, and a persistent threat of hostilities.

In this context, many interviewees also saw new cities as opportunities to, fourth, rebuild with love and solidarity. Many dreamed of building comfortable cities; welcoming, inclusive, safe and sustainable cities in the environmental sense; and cities that reflected a belonging to the European community.

5 | CONCLUSIONS

We support the assertion that more work is needed 'to unpack the spatial politics of this war' (Klinke, 2023, p. 813). With this entry, we aimed to amplify Ukrainian voices in this conversation, countering in particular the narratives of 'rogue scholars' (Kostelka, 2022). Our interviewees were not confused about the identity of the aggressor; rather, they have become reluctant experts in Russian tactical aggression, the destruction it causes, and the negligible value for human life it reserves. Our interviewees can explain the visceral realities of the aggression: the losses it incurs, the work it generates, the open questions it raises, and the concrete pathways available to ending it. At the same time, they articulated aspirations of sustainable peacetime, in an independent, post-war Ukraine that is part of an international community.

The war must stop: no one is more articulate and clear-eyed about this than the Ukrainians we spoke to. They are not distracted by abstract conversations about the aggressor's possible intentions, American foreign policy or NATO, nor are they muddled and confused by disinformation emanating from the Kremlin. Ukrainians are busy defending themselves against a warmonger, and they can spell out the consequences—and the probable objectives—of the aggression: it hampers research, budgeting and economic planning, urban development (e.g., housing and related infrastructures for IDPs), citizen participation, the fight against corruption, progress towards European integration, and independence.

The consequences of the attacks are, first and foremost, human lives—deaths, permanent physical disability, trauma, divided families. Despite this, our interviews revealed optimism for the future, with visions of post-war cities as modern, green, democratic, entrepreneurial and corruption free. They also tell of the thousand ways to show solidarity, from technical knowhow for emergency response and building platforms of transparency, to providing hospital equipment, housing for IDPs, laptops for students, road repairs, ambulances, prosthetics, de-mining robots, generators and flashlights, or just building systems of collaboration and co-operation in any one of these or other domains.

Ukrainian voices of the 'postsocialist Global East' or '(post)socialist Global' (Chelcea, 2023) retain knowledges that can provide a lot of answers to inform and inspire Western thinkers. Their perspective also challenges Western scholars of geography to critically reflect on their own knowledge production processes (epistemologies), potential limitations (language?), the routines and practices through which their knowledges are (re)produced (such as the availability of research funding or departmental expertise; Chelcea, 2023), and maybe—just maybe—the exploitable geographies of their

own fragility. The invasion reveals that the war is not a lofty scholarly subject for the armchair, but a geographical matter of life and death.

CONFLICT OF INTEREST STATEMENT

We have no conflicts of interest.

DATA AVAILABILITY STATEMENT

Textural data are not available to the public.

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REFERENCES

Andrusevych, A. & Kozak, Z. (2023) *Public access to decision-making regarding Ukraine's recovery in the context of environmental protection and climate change mitigation*. Available from: https://ua.boell.org/sites/default/files/2023-03/report_public-access-to-decision-making_2023.pdf [Accessed 16th October 2024].

Bădescu, G. (2023) *Comparison and its discontents - reconstruction*. E-Flux Architecture. Available from: https://www.e-flux.com/architecture/reconstruction/560316/comparison-and-its-discontents/ [Accessed 16th October 2024].

Bialasiewicz, L. (2023) What's 'left' for a 'geopolitical Europe'? *Transactions of the Institute of British Geographers*, 48, 826–831. Available from: https://doi.org/10.1111/tran.12636

Blanc, G. (2024) Panel input on "Ukraine's EU accession – Outlook and opportunities". Luxembourg-Ukraine Chamber of Commerce.

Carr, C. & Hesse, M. (2020a) When alphabet Inc. plans Toronto's waterfront: New post-political modes of urban governance. *Urban Planning*, 5(1), 69–83. Available from: https://doi.org/10.17645/up.v5i1.2519

Carr, C. & Hesse, M. (2020b) *Sidewalk labs closed down – Whither Google's smart city?* The Region https://doi.org/10.1080/13673882.2020.00001070

Chelcea, L. (2023) Goodbye, post-socialism? Stranger things beyond the Global East. *Eurasian Geography and Economics*, 1–27. Available from: https://doi.org/10.1080/15387216.2023.2236126

Dudko, O. (2023) Gate-crashing "European" and "Slavic" area studies: Can Ukrainian studies transform the fields? *Canadian Slavonic Papers*, 65(2), 174–189. Available from: https://doi.org/10.1080/00085006.2023.2202565

Fischer, C., Siegel, J., Propeller, I. & Drathschmidt, N. (2022) Resilience through digitalisation: How individual and organisational resources affect public employees working from home during the COVID-19 pandemic. *Public Management Review*, 25(4), 808–835. Available from: https://doi.org/10.1080/14719037.2022.2037014

Gorodnichenko, Y. (2022) *Open letter to Jeffrey Sachs on the Russia-Ukraine war*. Available from: https://news.berkeley.edu/2023/03/20/open-letter-to-jeffrey-sachs-on-the-russia-ukraine-war/ [Accessed 31st May 2024].

GU. (2023a) *Кабінет Міністрів України Постанова від 13 червня 2023 р. № 624*. [Cabinet of Ukraine Decree dated June 13, 2023, No. 624]. Available from: https://www.kmu.gov.ua/npas/deiaki-pytannia-zabezpechennia-funktsionuvannia-derzhavnoho-reiestru-maina-624-130623 [Accessed 16th October 2024].

GU. (2023b) *Державний реєстр майна, пошкодженого та знищеного внаслідок бойових дій, терористичних актів, диверсій, спричинених збройною агресією Російської Федерації проти України [State register of property damaged and destroyed as a result of hostilities, terrorist acts, sabotage caused by the armed aggression of the Russian Federation against Ukraine]*. Available from: https://ips.ligazakon.net/document/TM071314 [Accessed 31st May 2024].

GU. (2024) *Digital restoration ecosystem for accountable management*. Available from: https://dream.gov.ua/info/legal-framework [Accessed 16th October 2024].

Harasymiw, B. (2019) Civil society as an anti-corruption actor in post-Euromaidan Ukraine. *Canadian Slavonic Papers*, 6(3), 288–320. Available from: https://doi.org/10.1080/00085006.2019.1636630

Klinke, I. (2023) Of tanks and tankies What's 'left' for geography after the invasion of Ukraine. *Transactions of the Institute of British Geographers*, 48(4), 811–815. Available from: https://doi.org/10.1111/tran.12627

Kostelka, F. (2022) Russia and the rogue intellectuals one must think twice before legitimizing a criminal invasion–Inroads. *The Canadian Journal of Opinion*. Winter/Spring 2023 (52). Available from: https://inroadsjournal.ca/russia-and-the-rogue-intellectuals/

KSE. (2023) *The total amount of damage caused to Ukraine's infrastructure due to the war has increased to almost $138 billion*. Available from: https://kse.ua/about-the-school/news/the-total-amount-of-damage-caused-to-ukraine-s-infrastructure-due-to-the-war-has-increased-to-almost-138-billion/ [Accessed 16th October 2024].

KSE. (2024) *Report on damages to infrastructure from the destruction caused by Russia's military aggression against Ukraine as of January 2024*. Available from: https://kse.ua/wp-content/uploads/2024/05/Eng_01.01.24_Damages_Report.pdf [Accessed 16th October 2024].

Kuusaana, J.A., Monstadt, J. & Smith, S. (2023) Toward urban resilience? Coping with blackouts in Dar es Salaam, Tanzania. *Journal of Urban Technology*, 30(2), 79–101. Available from: https://doi.org/10.1080/10630732.2022.2153318

Kuznetsova, I., Mikheieva, O., Gulyieva, G., Dragneva, R. & Mykhnenko, V. (2018) *The social consequences of population displacement in Ukraine: The risks of marginalization and social exclusion*. Available from: https://ora.ox.ac.uk/objects/uuid:79275e24-d26b-46e9-a970-710638b2f814/files/mec044b4cadb57250c0729357ae61a534 [Accessed 16th October 2024].

Kyiv Regional Military Administration. (2022) *ОПЕРАТИВНА СИТУАЦІЯ В КИЇВСЬКІЙ ОБЛАСТІ СТАНОМ НА 10.00 6 КВІТНЯ*. [Operational situation in the Kyiv Region as of 10:00 a.m. April 6]. Available from: https://koda.gov.ua/operatyvna-sytuacziya-v-kyyivskij-oblasti-stanom-na-10-00-6-kvitnya [Accessed 16th October 2024].

Matejskova, T. (2013) The unbearable closeness of the east: Embodied micro-economies of difference, belonging, and intersecting marginalities in post-socialist Berlin. *Urban Geography*, 34(1), 30–52. Available from: https://doi.org/10.1080/02723638.2013.778630

McCallum, A. (2022) *What we lose by 'Westsplaining' the Russian invasion of Ukraine*. Lens – Politics and Society. Available from: https://lens.monash.edu/@politics-society/2022/04/13/1384606/what-we-lose-by-westsplaining-the-russian-invasion-of-ukraine [Accessed 16th October 2024].

Ministry of Reintegration of the Temporarily Occupied Territories of Ukraine. (2023) *Government determined 10 priorities for 2023: citizens' security and restoration of Ukraine are among those 2023*. Available from: https://www.kmu.gov.ua/en/news/uriad-vyznachyv-10-priorytetiv-na-2023-rik-sered-nykh-humanitarna-bezpeka-ta-vidnovlennia-ukrainy [Accessed 16th October 2024].

Mykhnenko, V. (2020) Causes and consequences of the war in eastern Ukraine: An economic geography perspective. *Europe-Asia Studies*, 72(3), 528–560.

National Bank of Ukraine. (2024) *Monthly business outlook survey*. Available from: https://bank.gov.ua/admin_uploads/article/Business_survey_m_2024_09_eng.pdf?v 9 [Accessed 16th October 2024].

National Recovery Council. (2022) *Ukraine's recovery plan blueprint*. Available from: https://www.urc-international.com/urc2022-recovery-plan [Accessed 16th October 2024].

Rada, V. (2019) *Набув чинності Закон України «Про внесення змін до Конституції України (щодо стратегічного курсу держави на набуття повноправного членства України в Європейському Союзі та в Організації Північноатлантичного договору)»* [The Law of Ukraine "On Amendments to the Constitution of Ukraine (Regarding the State's Strategic Course for Ukraine's Full Membership in the European Union and the North Atlantic Treaty Organization)" entered into force]. Available from: https://www.rada.gov.ua/news/Novyny/167564.html [Accessed 16th October 2024].

Reborn, M. (2024) *4 teams of architects and urban planners are working on city revival projects*. Available from: https://remariupol.com/en/visions

RebuildUA. (2024) *Support for Ukraine's recovery. We digitize, analyze and visualize Ukraine's infrastructure devastated by Russian forces*. Available from: https://eng.rebuildua.net/ [Accessed 16th October 2024].

Rockström, J., Norström, A.V., Matthews, N., Biggs, O., Folke, C., Harikishun, A. et al. (2023) Shaping a resilient future in response to COVID-19. *Nature Sustainability*, 6, 897–907. Available from: https://doi.org/10.1038/s41893-023-01105-9

Rybalska, A. (2023) У Броварському районі трактор підірвався на протитанковій міні [Tractor hits an anti-tank mine in Brovary district.]. Available from: https://suspilne.media/440007-u-brovarskomu-rajoni-traktor-pidirvavsa-na-protitankovij-mini/ [Accessed October 16, 2024].

Smirnova, V. (2023a) Russia's spatial anxiety and the construction of geographical knowledge. *Transactions of the Institute of British Geographers*, 48(4), 671–834. Available from: https://doi.org/10.1111/tran.12638

Smirnova, V. (2023b) More-than-state ontologies of territory: Commoning, assembling, peopling. *Annals of the American Association of Geographers*, 113(6), 1444–1460. Available from: https://doi.org/10.1080/24694452.2023.2184765

Snyder, T. (2024) *The peril of slowness: American mistakes during Russia's war of aggression in Ukraine*. [video file]. Available from: https://www.youtube.com/watch?v JVs2y-YeiFM [Accessed 16th October 2024].

UNOCHA. (2024) *Ukraine situation report*. Last Update 7 October 2024. Available from: https://reports.unocha.org/en/country/ukraine [Accessed 16th October 2024].

USAID. (2023) *A U.S. supported E-government app accelerated the digital transformation of Ukraine; now Ukraine is working to scale the solution to more countries*. Available from: https://www.usaid.gov/news-information/press-releases/jan-18-2023-us-supported-e-government-app-accelerated-digital-transformation-ukraine-now-ukraine-working-scale-solution-more-countries [Accessed 16th October 2024].

WB, GU, EU & UN. (2024) *Ukraine rapid damage and needs assessment RDNA3, February 2022–December 2023*. Available from: https://documents1.worldbank.org/curated/en/099021324115085807/pdf/P1801741bea12c012189ca16d95d8c2556a.pdf [Accessed 16th October 2024].

Zharova, L. (2023) *Panellist input to "Mission to defend planetary futures: A Ukrainian perspective" deutsche Gesellschaft für Geographie*, September 20, 2023.

Zykova, O. (2024) *Panellist input to "Ukraine's EU accession – Outlook and opportunities."* Luxembourg-Ukraine Chamber of Commerce.