

The ghosts of “internal colonisation”: Anthropogenic impacts of Russian imperial ambitions in Ukraine

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Abstract

The Anthropocene denotes an era of accelerated human impact on the environment. Although discourses of the Anthropocene are often criticized for representing colonial and specifically capitalist interests of economic growth, this paper examines, in the case of Ukraine, how these discourses can be applied to uncover and address social (post) colonial impacts of non-capitalist regimes (those also not classified as “Global North”). In particular, the analysis focuses on the aftermath of the 1986 Chernobyl nuclear plant accident on local communities in Ukraine. As academics of Ukrainian background, authors share their first-hand experiences of such impact on their lives and wellbeing of their families, communities, and land. The narrative research framework is used to engage with the modern Ukrainian community and discuss the implications of geopolitical and cultural proximity of the coloniser, with a particular focus on displacement and forced migration. This is especially relevant as it is reflected in the current refugee crisis and tactics of nuclear terrorism used by the Russian government in the war against Ukraine. This paper is a valuable resource for promoting and giving a voice to the Ukrainian people and potentially other peoples in post-Soviet space to unveil their colonial legacy and utilise the discourses of the Anthropocene to aid more effective decolonisation processes in the future of the region.

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Data Availability Statement included at the end of the article

Keywords

The Anthropocene, (post)colonial, (post)Soviet, displacement, migration, Ukraine, “internal colonisation”, Chernobyl disaster

Introduction

“Worst refugee crisis since WW2 as Ukrainians flee country” (Reuters, 9 Mar 2022)

“Russia Has Sown Ukraine With Land Mines” (The Foreign Policy, 15 Sep 2022)

“Safety of Zaporizhzhia nuclear plant hangs in the balance” (The Guardian, 12 Dec 2022)

“Could the war in Ukraine go nuclear?” (The Economist, 29 Sep 2022)

“The war in Ukraine is a human tragedy. It’s also an environmental disaster.” (The Washington Post, 13 Mar 2023)

These 2022/2023 headlines shocked the world. More than anything, however, the reality of Russia’s full-scale war in Ukraine has had a devastating impact on the local communities, with experts predicting long-lasting effects on the livelihoods, environment, and economy (e.g., [Conflict and Environment Observatory, 2022](#)). According to the UN Environment Program’s evaluation, “multiple air pollution incidents and potentially serious contamination of ground and surface waters” were recorded, including from explosives and damaged housing, industrial objects, and infrastructure ([UNEP, 2023](#), para 11). In 2023, Ukraine was recognised as “one of the most mine-contaminated countries in the world” ([UNICEF, 2023](#), para 10). The World Bank estimates the cost of Ukraine’s reconstruction and recovery, including housing and social protection, at US \$411 billion (The World Bank, as of 23 March 2023). There are also significant global implications. According to the Food and Agriculture Organisation of the United Nations, “Ukraine is among the most important producers of agricultural commodities in the world... The war in Ukraine creates a number of risks for the global agricultural markets” ([FAO, 2022](#): 2). It has also contributed to the large volumes of internal and external displacement, estimated at over 5 million and 8 million people respectively ([UNHCR, 2023](#)).

These are perhaps some of the most horrifying examples of the Anthropocene, or “human-induced planetary change” ([Pennycook, 2018](#): 445). It is concerned with the environmental degradation due to human activity that poses threats to the environmental and social diversity, security, and future ([Greenwood, 2013](#)). Although discourses of the Anthropocene are often criticized for representing colonial and specifically capitalist interests of economic growth, this paper examines, in the case of Ukraine, how these discourses can be applied to uncover and address social impacts of non-capitalist regimes (those not widely seen as colonial and not classified as “Global North”). In particular, the analysis focuses on the aftermath of the infamous 1986 Chernobyl nuclear plant accident in the north of Ukraine, then a Soviet republic, on local communities. In this paper, we qualitatively explore the Ukrainian local communities (LCs)’ experiences and perceptions

of the anthropogenic impacts of the Chernobyl disaster and its colonial nature. In light of the current Russia's war in Ukraine, this has strong implications for the efforts to establish safe livelihoods for Ukraine's LCs and global community in the future. In the context of this special issue, we then discuss the following questions:

1. What are the main social and environmental implications of the colonial Anthropocene from the perspectives of the Ukrainian LCs in (post)Soviet context?
2. Should the discourse of the Anthropocene be considered either hegemonic-dominating or liberating-empowering from a Ukrainian LCs perspective in (post)Soviet context?

Literature review

The Anthropocene as colonial discourse

Saying that we live in the age of the Anthropocene emphasises strong connection and mutual impact of natural and human forces, and in particular, an increased ability of the humankind to alter the environment as a result of globalisation, new technologies, and armed conflicts, which are affecting cultural and biological diversity, and as a result, undermining social security and wellbeing (Greenwood, 2013). In the last two decades, researchers have investigated and discussed the ideological underpinning of such developments, and in particular, "patterns of domination and control that privilege some social groups at the expense of others and that privilege humans at the expense of habitat" (Greenwood, 2013: 283). As Greenwood (2013) argues, colonial impact "is fundamental to understanding socio-ecological relationships in ... any place on earth" with long-term colonial history (p. 286). Hence, focusing on the intersection of Anthropocene and colonisation (Biswas, 2022) can serve as a useful framework to unveil the colonial exploitation of people and land, especially where significant efforts were taken to cover up such influences.

This discussion, we argue, can reach beyond the capitalism-induced colonial impacts of the Global North – a predominant context in academic discussion of the Anthropocene so far (Biswas, 2022; Greenwood, 2013; Henriksen et al., 2022; Moore, 2016; Whyte, 2017; other papers in this issue). The anthropogenic impacts are mostly discussed in the context of the Americas (e.g., Erickson, 2020) or the European nation state (e.g., Greenwood, 2013). As such, the Anthropocene is largely blamed on individualism, Whiteness, push for economic progress and market growth, settler society (Greenwood, 2013) – concepts related to the Western capitalist context and exploitation of the Global South. Discourses of the Anthropocene have even been critiqued for the lack of consideration of colonial influences on the Global South, such as unequal distribution of environmental impact around the world (Simpson, 2020). For instance, Erickson (2020) explains how the discourse of "green" settler colonialism has been used to justify further development of the capitalist economy over Indigenous interests, such as in the case of land rights and land conservation in Canada. Very little is therefore known about the anthropogenic influence of colonial past in the (post)Soviet space (the coloniser and

colonised not fitting within the traditional Global North/Global South dichotomy), where the discussion of the Soviet/Communist rule as colonialism has been rather limited as explained in the following sections.

Locating Ukraine in (post)colonial space

Ukraine is the biggest country by territory that is fully located in Europe. Due to its strategic location between Europe and Asia, on the key ancient trading routes along the Dnipro River, as well as rich mineral resources and world's most fertile soil, it has been subject to numerous invasions throughout history. The external powers, of which the Russian Empire and Soviet Union were the most recent agents, invaded its territories, exploited the lands and peoples, suppressed local cultures, caused massive displacements and at the same time limited social mobility of the local communities (Chernetsky, 2003; Matviyenko, 2022).

In the global socio-political discourse, Ukraine is commonly seen as a post-Soviet rather than post-colonial country as many still remember the dissociation of the Soviet Union and the Communist block in the late 1980s and early 1990s. Whether Soviet rule can be seen as colonial is still debated (Annus, 2012; Spivak et al., 2006), but claims of the colonial nature of Ukraine's past have been occasionally raised in the scholarly discussion post 1991 (e.g., Chernetsky, 2003; Grabowicz, 1995; Matviyenko, 2022; Pavlyshyn, 1993; Spivak et al., 2006; Tlostanova, 2012). Adding to this, according to Mälksoo (2022), Russia's invasion of Ukraine in the 21st century is arguably "an imperial war in the world of nation-states, underpinned by Russia's open denial of Ukraine's political sovereignty and the Ukrainians' right to exist as an independent nation" (p. 1), which she refers to as a "multi-layered postcolonial moment". Grabowicz (1995: 676) maintains that "colonialism – political, economic, cultural and psychological would encompass the entire eighteenth and nineteenth centuries and, with the notable exception of the 1920s, the entire Soviet period – in effect the bulk of modern Ukrainian history".

Colonial oppression was evident in massive repressions and economic exploitation (Grabowicz, 1995: 679), as well as cultural oppression such as heavy censorship of the Ukrainian-language scholarly activities and publications (Shapoval and Olynyk, 2017–2018). It was only with the collapse of the Soviet Union in 1991 that Ukraine gained lasting independent statehood of its own. Although Ukraine has re-established itself as an independent sovereign state, its colonial past has had a lasting and devastating impact on its population and environment. This was exacerbated by the fact that both the Russian Empire and Soviet Union created their own colonial narrative.

The Russian/Soviet empire and the colonial discourse dilemma

Living in the age of colonial empires and working for a country that competed with these empires, leading Russian historians found the language of colonization appropriate and necessary for their work. However, they transformed the Western idea of colonization in quite a radical way. First, in Russia, the process of colonization was construed as self-reflexive and internal, rather than as object-directed and external. Second, we find an

uncritical approval of the processes of colonization, which is different from the British and French historiographical traditions and from the postcolonial approach to colonization.

In fact, Russia's own historiography has been dominated by the concept of so-called "internal colonisation" or "self-colonisation" for noble purposes (Etkind, 2011). Vassily Klyuchevsky, one of the most influential Russian historians of the late 19th century, contended that Russian colonization was distinct from that of other European powers because "the history of Russia is the history of a country that colonizes itself; the area of colonization inside it has grown alongside its [formal] state realm—sometimes shrinking, sometimes expanding, this eternal cycle has continued to the present" (Inozemtsev, 2017, para 2). Others admit that Russians mainly colonized not "their own lands" but rather those belonging to other people, yet still distinguish them from other Europeans (Schimmelpenninck van der Oye, 2014). As the Russian philosopher Georgy Fedotov maintained, "Unlike all the Western powers, [Russia] was built not through violence, but through peaceful expansion; not by conquest, but by colonization" (Fedotov, 1942: 28). Decades and centuries later, modern-day Russia does not display "a critical attitude towards national past, but, to the contrary, a nostalgic glorification of the imperial past" (Annus, 2012: 24). However, Russia resembles the European empires much more than it wants to admit – and it is a comparison that bears on the country's present and future. Notable is also the perpetual lack of voices of the Indigenous peoples of the vast territories it has dominated over in the local and international discourse.

Nuclear heritage of colonial Anthropocene

As Vardanian (2022) puts it, "The cultural memory of Ukrainians is based on trauma suffered as a result of two terrible experiences in the twentieth century" – 'nuclear holocaust' and 'colonial oppression' (p. 3). This statement ties together the two phenomena: centuries of colonial oppression by the Russian Empire and Soviet Union and the 1986 accident at the Chernobyl nuclear plant located in Ukraine about 20 km south of the border with Belarus, quickly drawing the world's attention as the most serious in the nuclear industry at the time (Berger, 2010). Chernobyl was one of a few nuclear power plants built in the Soviet Union in the 1970s, arguably in an attempt to gain a greater share in the world's nuclear energy market (Matviyenko, 2022). As a result of the accident during an experiment on 26th April 1986, one of the acting reactors was damaged, a fire broke out, and huge amounts of radioactive waste were released into the atmosphere. A vast area of Ukraine was contaminated. As indicated by the World Nuclear Association, the accident was a result of human error and "a flawed Soviet reactor design," which it claims to be "a direct consequence of Cold War isolation and the resulting lack of any safety culture" (WNA, updated April (2022), para 2).

Those most affected by the accident were the plant's staff, the inhabitants of Prypiat town where their families resided, and numerous *liquidators* – people who participated in the clean-up and other emergency support efforts in the immediate hours, days, weeks, and months after the disaster (firefighters, soldiers, engineers, doctors, journalists, and others). About 116,000 people were evacuated from areas surrounding the reactor by mid May 1986 (WNA, updated June (2022)). To this day, the number of deaths resulting from

the accident is unclear and is a subject of considerable controversy. According to the 2006 report of the UN Chernobyl Forum's Health Expert Group, "The actual number of deaths caused by this accident is unlikely ever to be precisely known" (WHO, 2006). Immediate health impacts in the coming few weeks, months, and years included compromised immunity, thyroid cancer, leukemia, damaged intestines and lungs, chromosomal mutations and birth defects, nervous tremors, weight gains, difficulties at childbirth (Brown, 2019), with the increase in thyroid cancers recognised as a significant long-term impact (Cardis et al., 1996). In addition, elevated stress and anxiety due to the speculations about possible health consequences as well as lack of information about the impact in the beginning (also known as the cover-up by the government), and general distrust in the authorities were recorded (Lee, 1996). The impact on flora and fauna included radiation death, contamination of water systems and soil, including pastures, change of biodiversity, loss of reproduction, and genetic anomalies among others (EGE, 2005). Adverse environmental impact of soil contamination with radionuclides was also affecting the produce (Nesterenko et al., 2009). While what happened in 1986 was an accident, the alleged cover-up and large disregard of the local people and land surrounding the accident reflect the colonial Anthropocene. In the 21st-century war offensive on Ukraine to re-establish its influence, the Russian government has turned to nuclear terrorism by occupying Zaporizhzhia nuclear station, the largest in Europe (Matviyenko, 2022).

In this context, it is essential to give the people of Ukraine a space and a voice (Whyte, 2017) to talk about their experiences and uncover the other side of what was once called "internal colonisation" for "noble purposes" (Etkind, 2011) to undermine pathways of control and exploitation. Hence, this study employs narrative research frameworks to engage with the modern Ukrainian community and discuss the implications of geopolitical and cultural proximity of the coloniser. In this sense, such research can be seen as post-humanist, a pursuit of "justice [that] is also material, ecological, geographical, geological, geopolitical, and geophilosophical" (Ulmer, 2017: 833). The following section explains how we do this.

Methodology

Building on a qualitative paradigm, we first explain the authors' positioning as members of Ukrainian LCs and their experiences of growing up in a Soviet and immediate post-Soviet space in the aftermath of the Chernobyl nuclear disaster. Then five narratives of the people who were directly or indirectly affected by the nuclear impacts of colonial Anthropocene are presented. Three interviews with Ukrainian migrants to Australia who arrived between 1991 and 1995 were conducted in March 2016, as part of the University of Technology Sydney funded project on post-independence Ukrainian migration to Australia (1991–2013) (Oleinikova, 2020). In-depth interviews were applied in combination with participants' observations and field notes of their non-verbal behaviour. Such a combination facilitates the reliability, validity, and veracity of qualitative data (Seale and Silverman, 1997; Wengraf, 2001). The other two interviews took place in May 2023 with Ukrainians displaced due to the war in various locations around the world as a

follow-up Curtin University project with a focus on the anthropogenic impacts of the Chernobyl nuclear disaster on the livelihoods of Ukrainian communities. All participants were approached via the researchers' personal networks and were very open and willing to share their stories to assist in the research. Confidentiality of the data was ensured by removing all the identifying details of the participants at the stage of transcription, except where the participants asked us to use their real names. Member checking was used to ensure the stories and interpretations have been presented as intended.

Through stories, people make sense of the world (Dwyer et al., 2017). In our collaborative narration, we are trying to make sense of the experiences we had as Ukrainian LCs of both the nuclear anthropogenic impacts as well as their colonial nature. In other words, we follow the narrative approach as "a scheme ... to give meaning to [our] experience" (Vienna and McAllister, 2001: 391) as Ukrainians living in a post-colonial world with heavy and largely unaccounted-for colonial bequest. The discussion then helps us reflect on these experiences in light of current socio-political developments and future implications. It is designed in a way to weave all the stories into the reflection about the past, present, and future of post-colonial Ukraine and Ukrainians as well as the wider global community within the framework of global Anthropocene.

Narrating colonial-anthropogenic experiences

Tetiana's (author I) positioning

Born in Kyiv in the mid-1980s, I identify myself with the generation living in the post-Soviet chain of change, such as perestroika, independence, state building, revolutions, international travel, and professional migration. One of my few living memories of the Soviet Union was a red Communist youngster star badge on my cousin brother's school jacket. I did not inherit such paraphernalia as went to school in the independent Ukraine after the fall of the 'iron curtain' in 1991. Many years later, as international students in Australia we were asked in one of the workshops to share how our background shaped us, which encouraged me to think about my cultural heritage more deeply and critically. As the generation who witnessed the regime change, two decades later I felt the change was still scant in many areas of life in Ukraine (see, e.g., Bogachenko and Perry (2013, 2015) for teacher education). I wrote a short sketch to present to my fellow groupmates:

"A red star. A red star on my brother's badge. He is big now and goes to school.

Will I have the star, too?

I am 4. And I won't. Times change, countries change, schools change. No more red stars, no red ties, no Lenin's portraits on the walls.

It is gone... or maybe it is still there? Invisible but clingy, like Chernobyl radiation, deep in our minds, hidden in our thoughts and deeds... Or like a smoke from a big truck. The truck has disappeared in the horizon, but you can

still see the smoke in the air...

We need it fresh. We need to breathe.” (Private notes, 2013)

A piglet with two heads – this image is still in front of my eyes. I was almost 12 months old at the time of the Chernobyl nuclear plant accident, but the legacy of Chernobyl would haunt me and my generation for many years. I saw that piglet in the museum of Chernobyl on a school excursion. I had heard about such deformities before, but seeing it in a jar right in front of my eyes was very different. It was also difficult for a child to understand how this happens. Why exactly did two heads grow up on a pig and not one, how does the mutation develop? How can you ensure you do not grow another head overnight? Another image that will stay with me forever was that of the empty and eroded Ferris Wheel in the abandoned city of Pripyat as a symbol of disrupted childhood. Ironically, the word “chernbyl”, or “chornobyl” in Ukrainian, means wormwood. Native to Ukraine and growing on a wide range of landscapes, it has been traditionally used in medicine and cuisine, including to treat indigestion, nervous system, and hormonal disbalances. Colonial use of the land has turned a word that stands for remedy into a word standing for disaster, with long-term implications for the LCs like me. This reflects what [Smith \(2017–2018\)](#) aptly refers to as the Soviet ‘Empire of substitutions,’ where meanings of everyday words such as “union” (as in the “Soviet Union”) become corrupted and turned around to serve the regime at the expense of peoples and lands.

Olga’s (author 2) positioning

I was born in 1988 in Kyiv. I grew up in independent Ukraine. I feel I am the product of independent Ukraine – I have the freedom of free movement, speak English, and am backed by good social and economic capital. I must admit I never thought about Ukraine as a Russian colony. Yes, I know history well, there was a long period of Russian empire and Ukraine was a big part of it. But in my head “colonisation” and Ukraine were never in one sentence. And I was not alone in this – none of my academic friends or family/friends in Ukraine has ever used the terms “colonisation” or “colony” when talking about Russia’s influence in Ukraine. Transformation happened with me in 2017. It was then when I started teaching a subject at the University of Technology Sydney called “Sex, race and empire,” where I taught students about the continuing impact of the flows of people, ideas and trades, as well as the conflict and wars, generated by colonial power relations in the Indian and Pacific Oceans, Middle East, South Asia, and Africa. The comparison between the colonised states and Ukraine were constantly emerging in my head. Then why don’t we call what happened to Ukraine as a “colonisation.” I started reading more on this topic and understood that the fact that we, Ukrainians in Ukraine, never used the term “colonisation” is a result of the post-colonial era we were living through in Ukraine. Under the influence of Russia’s academic thought, Ukraine always avoided to name things for real, absorbing the consequences colonisation had on our people, culture, and land. In recent years I see more and more articles in the media, more academic papers

talking about Ukraine as a colonised state, which struggles to break through from the neo-imperial tentacles of modern Russia.

Chernobyl explosion has significantly changed the life of my family. And we are still absorbing the consequences. I was born in 1988, 2 years later after the Chernobyl explosion. But my cousin was born before the catastrophe and lived in Pripyat, now an abandoned city in northern Ukraine, located near the border with Belarus. Pripyat was officially proclaimed a city in 1979 and had grown to a population of 49,360 by the time it was evacuated on the afternoon of 27 April 1986, one day after the Chernobyl disaster. Since then she has been living in Kyiv. Three years ago she visited her abandoned apartment in Pripyat as a part of the tour to Chernobyl, now a popular touristic route to explore the abandonnness of post-nuclear explosion sites (which got especially popular after the HBO series Chernobyl). My cousin and her dad, who served as a liquidator, don't talk much about it. It's a very dark page of my family history threaded with pain and death. We lost family members because of illnesses they've developed as a result of the high concentration of radiation in their bodies. My story is not unique. Millions of lives have been impacted by this environmental catastrophe, and more than one million of new lives were disrupted due to the massive abortions that were undertaken in the Soviet Union and Europe in the fear of radiation exposure and birth defects following the accident (Folkers and Gunter, 2022).

A rush to safety

For Ukrainians, the nuclear disaster in their “backyard” meant the need for urgent action. For many, it led to relocation, loss of home, and sporadic search for safer places. Not everyone could leave their city or country, but for all this presented a significant disruption to their life and wellbeing. At that time, families were left to deal with the consequences in the conditions of economic stagnation and limited mobility (Kuzio, 2016). We learn about these impacts from the stories of Nina and her daughter Kateryna who lost their home in Prypiat, and Olena who was desperate for opportunities to take her baby out of Kyiv (only some 90 kms from Chernobyl) in the weeks following the accident.

Nina and Kateryna. At the time of Chernobyl disaster, Nina and her young family – a husband and children just two and eight years old – lived in Pripyat. She worked in the Chief Constructor Office of a radio factory, while her husband was an engineer at the Chernobyl nuclear power plant. They'd lived in Pripyat for 4 years and Nina recollects how good their life was there, with state-of-the-art facilities and beautiful nature around. There were lush forests full of mushrooms and a lot of fish in the Prypiat River that gave the town its name. The town was modern, clean, and designed for young families. The week of the accident Nina's husband was away on a work trip. Not informed about what happened, children were playing outside in hot late spring weather, and Nina's son went to school. The next day, Prypiat dwellers were told to urgently pack and evacuate. So did Nina (“*what could you take... children, documents, a few precious items, ...food*”), jumping on a train to a nearby town of Chernihiv one hour away where her parents lived. She remembers families with prams, the train braking to allow for a sudden influx of

passengers to get on, and the “*deformed*” building of the damaged nuclear plant block with the smoke coming out of it – the train full of evacuees rolled right past it. But even this evacuation could not have happened: “*There are some assumptions... if not for Europe, if they did not raise the alarm, no one would have evacuated us from Pripjat.*” At that time, however, they were just puzzled by how a nuclear power station that could create such a disastrous situation was built so close to the Ukrainian capital. “*We were taught that we had the best life, ... and so we thought*” – Nina says. Later, the government provided them with an apartment in Kyiv, but the family found it hard to accept they will never go back to live in their home in Pripjat. As a part of the organised tour, Kateryna visited their abandoned home a few years ago, where she saw some remnants of her baby clothing and Nina’s hair curlers, and trees growing in the buildings. Wild deer are now coming back to the area, she says. There is still a feeling of loss and sadness this had happened, she adds.

Both the mother and daughter identify themselves as being Ukrainian. Nina says: “*Of course I am Ukrainian, my parents were Ukrainian, and I grew up in my babusia (grandma)’s village and there we did speak Ukrainian – but it was laughed at in the cities back then... When I was growing up, everyone in the city spoke Russian, not like today.*” “*Ukrainian language was oppressed back then*” – adds Kateryna. “*But we didn’t think about it that way back then, we thought that was the way it should be*” – comments Nina.

*Olena*¹. In April 1986, Olena was a young professional in her late 20ies on a maternity leave in Kyiv. She recollects a relative’s birthday on the day of Chernobyl explosion when they had a celebratory picnic in the forest. The international Peace Race cycling competition also went ahead in Kyiv the next day and there were no signs of danger. It was a call from a close friend (whose husband worked in a hospital) in a few days’ time that urged her to close the windows and do wet floor cleaning every day. What followed was a nightmare: lack of official communication, rumours of possible evacuation of the capital and health impacts of radiation. Average citizens could not afford to relocate or get an extended leave from work. Life was being managed “*from paycheck to paycheck,*” with little to no savings – leading to restricted mobility. To take her child further from the nuclear danger, Olena managed to go to Kryvyi Rih in the south-east of Ukraine for three weeks where they got sick due to the industrial iron ore pollution – hardly a healthy environment for the evacuees. Upon return, they were home-ridden for a few months in the remainder of maternity leave to avoid further radiation exposure. No visitors were welcomed in homes and outdoor play was a forbidden pleasure for around two years. There was confusion as to what produce and where can be deemed safe to buy. Berries in the open market were a risky deal as they could come from the contaminated forests, while market shelves were affected by ‘deficit’ – lack of many everyday food items. An engineer, Olena remembers there were no Geiger counters available for lay people to buy in order to measure radiation levels in the markets and homes. The rumours held that radiation was clustering on large rugs, a very popular floor and wall decoration in Soviet homes. “*The USSR sent rockets to space*” – Olena recounts – “*But did not supply us with those counters. That was appalling. Noone cared for people.*” Olena’s cousin was a

liquidator – in charge of a drivers' division, he facilitated some vital transportations. He soon developed kidney cysts and lived with a disability for the rest of his life.

Born in Soviet Kyiv and having spent most of her life in the Soviet Union, with Russian-language secondary and higher education, Olena proudly calls herself Ukrainian. She identifies with and supports independent Ukraine's strive to break away from oppression and develop towards greater freedom, democracy, and support for human rights.

Ukrainian migrants to Australia

For LCs, the disaster also meant the need for mass emigration from Ukraine. Three narratives of Ukrainians from white-collar working-class backgrounds who migrated to Australia in the period between 1991 and 1995 highlight the serious health consequences of the 1986 Chernobyl disaster as the key push factor behind their emigration from Ukraine (Oleinikova, 2020). They all talked about their 'environmental needs' under which they meant the necessity of an ecologically healthy environment. They emphasised the negative impact of the Chernobyl explosion on people's health in Ukraine and the government's disregard for the terrifying consequences. Three professionals who left Ukraine in the period between 1991 and 1995 (Kostyantyn, Vasylyna, Oleksiy – stories above) were extremely concerned with the health situation in the country and highlighted the careless attitude of *"the Soviet Government which still hides the actual number of Chernobyl victims and does not invest money to support research and the health of Ukrainians who struggle with Chernobyl's consequences"* (Vasylyna). Oleksiy's life strategy – a plan related to the pursuing of conscious, rationally chosen, long-term planned goals (Crow, 1989: 2) – was to migrate to Australia with all his family *"in order to live in an ecologically healthy environment."* He said he was escaping the unsafe ecological situation in Ukraine and its increasing instability. He explained that he *"had been involved with the study of environmental emergencies while in Ukraine, and even in the first days of the explosion it was clear what the implications for the industry and the population of Ukraine would be."* The environmental situation worsened, and the authorities' attitude was *"somewhat inadequate. I had several sufficiently strong conversations with the Ministry of Health, but they had no result,"* said Oleksiy. He also mentioned *"...I always felt I was not good enough, I felt I lived somewhere on periphery,... I felt Ukrainian was the language of villagers and all urbanised developed people always talked Russian."*

Vasylyna. The main push factor motivating Vasylyna's immigration to Australia was the poor living standards in Ukraine and the health risks associated with the effects of the Chernobyl disaster. Migration was not an easy decision for Vasylyna, as she held a professorship in one of the best universities in Ukraine and had a happy family life. After her husband died due to health issues he developed after being a liquidator at Chernobyl nuclear plant, she decided to visit her daughter, who immigrated to Australia in 1994. While travelling, she met her future husband in Melbourne. Several years later they got married and Vasylyna permanently moved to Australia.

Oleksij. Oleksij is in his mid-50s. Raised in a family of academics, he decided to pursue an academic and research career. He received his PhD in Medicine from the Ukrainian University. He came to Australia in 1994. He had insider access to the medical situation in Ukraine post-Chernobyl explosion and couldn't deal with the "silencing" tactics of the Soviet government, "silencing" of real health situation in Ukraine after the ecological catastrophe and the authorities' passivity in addressing real life-threatening conditions. He is now an Associate Professor at Sydney's top medical school and supervising pathologist at one of Sydney's Hospitals.

Kostyantyn. Kostyantyn came to Australia in 1995. He is in his mid-50s. Skilled migration to Australia was not an easy choice, despite the fact that he had a guaranteed position in Australia in the same engineering company he worked for in Ukraine. Over 18 years of employment in the same company, he worked his way up from Service Engineer to Head of the Service Department, Head of Sales, Sales Director, and now Director of Representative Office in Australia. Among the core reasons for his migration to Australia was the health risks and the experience of death in the family associated with illness caused by the nuclear explosion. He was the only participant who used the word "colonisation" to the ongoing Russia's influence and power in Ukraine.

Discussion and conclusions

What are the main social, cultural, linguistic, and environmental implications of the Anthropocene from the perspectives of the Ukrainian LCs in post-Soviet context?

Traditionally, for Ukrainians the land and harvest have always been inseparable from the cultural imagery of the family, community, and wellbeing. People would live mostly in the villages and off the land, working it and caring for it. The fields, forests, and rivers were places to work, rest, and enjoy. Proverbs encapsulated people's wisdom of working the land to pass on from generation to generation, for example, "Хто землю удобрює, тому й земля повертає" (The one who fertilizes the land will profit from it) (Fomenko et al., 2020: 160). The generosity of the Ukrainian land extended far beyond its own people. Have you heard of the 'breadbasket of Europe'? Spanning across Ukraine are vast fields of crops – some of the largest world sources of cereals and oilseeds such as wheat and sunflower – as well as orchards, gardens, and forests full of fruit, vegetables, and berries. One third of the world's reserves of *chernozem* (the black soil with high levels of organic matter giving it exceptional fertility rates), added to the favourable geographical location and climate conditions (Fillecia et al., 2014), create a recipe for high fertility. Ukraine's harvest exports reach many parts of the world, including Europe, Asia, Middle East, and Africa, and are key in facilitating the global food security (Fillecia et al., 2014). However, colonial powers make their own goals a priority – they exploit the lands, try to cover up adverse impacts, or attempt to restore their spheres of control by inflicting violence.

1986 Chernobyl nuclear plant disaster is one of the most world-known anthropogenic footprints of all times. In addition to catastrophic health implications for the local

communities and those involved in the efforts to contain further contamination, it meant that millions of the LCs had to relocate their entire livelihoods in search for safer places. For many, it was an emergency internal displacement within the country, while for some it led to relocation as far as other parts of the world. Chernobyl-related domestic forced displacement is a result of a long history of colonial rule in Ukraine and falls in line with other consequences of dislocations that happened on the territory of Ukraine under the threat of war, poverty, and environmental disasters. Images, books, and TV documentaries describing and showing people surging in search for survival and safe environment have become an accepted “norm” in the years following April 1986, and they would even travel internationally if they had connections and opportunity to go overseas (Oleinikova, 2023).

There were many families like Olga’s cousin or Nina’s family, on the move, but no one was told what will happen next and what’s the future. The Soviet government went silent. Only years after the Soviet Union collapse doctors, victims, and displaced people started their reflection back on their past and the discourse about the Chernobyl consequences emerged in the public and media space. The voice was not very loud, but there were more and more people sharing their experiences of feeling displaced, alienated, and silenced by colonialism. When we look back – it took Ukraine around 15 years to just start reflecting on the past, open about the truth of what has happened, and face the consequences.

The international migration – postcolonial legacy nexus is real. A close analysis of forced migration flows demonstrates that they overwhelmingly occur in countries that emerged from imperial and colonial rule (Fargues, 2013; Vezzoli and Flahaux, 2017). Ukraine is no exception. Weak institutional capacity, de-territorialised identities, non-secure border system, lack of citizenship norms that aim to address colonial and/or imperial injustices, complete absence of decolonialisation discourse make Ukraine a “post-colonial migration state” (Sadiq and Tsurapas, 2021), a state that becomes the source of mass emigration and expulsions of people. The poverty, ongoing struggle for economic survival and bad ecological situation, as the consequences of colonialism, stimulated more than 6 million Ukrainians to migrate overseas. Ukraine is now one of eight countries in the world with the greatest number of people living outside the country’s borders (‘diaspora’) (others being India, Mexico, the Russian Federation, China, Bangladesh, Syrian Arab Republic, and Pakistan), as well as being the European country with the largest number of people living in other European countries (5.9 million) (Ahmadov and Sasse, 2016). Prior to the 2022 war-induced displacement, the largest Ukrainian communities outside the former Soviet Union were found in Canada, the United States, Brazil, Argentina, and more recently in Poland, Italy, and Spain (Oleinikova and Bayeh, 2019). Australia has emerged as a new destination for Ukrainian migration since 1990s. The 1990s saw a third wave of Ukrainian immigration to Australia (Oleinikova, 2017). Since February 2022 when Ukraine became a new refugee-sending country, Australia has experienced another (fourth wave) of Ukrainian migration.

The stories of Ukrainians who migrated to Australia in the 1990s provided in this paper show that the ideology of colonialism has lingered in the identity of migrants within the general cultural sphere as well as their social practices (Oleinikova, 2020). The way a person sees the world, both geographically and culturally, is dictated by their abstract understanding of the world. And the way people understand the world is dictated by the

situations they live through, by their lived experiences. When talking about their identities, the interviewed Ukrainians mentioned dependency complex (such as Oleksiy's example in the narratives above), which emerges when "the colonizing states exploit their colonizing regions that enhance their own development and accumulation of capital" (Kortright, 2003, para 17). As evident in his narrative, as well as those of Nina, Kateryna, and Olena, "[t]he Russian imperial concept of 'Slavic brotherhood'" (Fournier, 2002: 415) and both linguistic and cultural proximity between the two nations (Bidochko, 2023) also caused disruption in the linguistic ecology (Mühlhäusler, 1995) in Ukraine.

Such "forced assimilation or the destruction of group identity" is "the legacy of many colonial regimes" (Zwisler, 2021: 43). Russian colonialism endorsed ethno-political domination (Chayinska et al., 2022), following the other colonial powers of the time in the discourse of the 'centre' and 'periphery' (Smith, 2017–2018). To exploit the lands and resources, colonisers use a common practice of "erasing the cultural and historical past of the indigenous communities and impressing new meanings on the place and the surviving population" (Biswas, 2022: 907). While efforts were directed to erase the cultural boundaries between the nations, the Russians posed as 'older brothers' and other nations as lacking independence and in need of affiliation, so the hierarchical relationships were established (Fournier, 2002). The Soviets developed an ideologically new education system that aimed to create a "new Soviet man" (not Ukrainian or Georgian or Kazakh etc.), endorsing it through the centralised system that kept character and personality development under strict control through *vospitanie*, or upbringing, which the schools were mandated with (see Bogachenko and Perry, 2013, 2015). The language was abused as a symbol of unity and high levels of literacy served as a vehicle of further assimilation through establishing Russian as the language of the Union (Smith, 2017–2018). The goal of the politics of assimilation, rather than strengthening the local communities, is "to devour population and territories" (Bidochko, 2023, para 8). From this, we can see that the Anthropocene is closely connected to the practices of the colonial regime – covertly or overtly colonial – in many intricate ways.

Should the discourses of the Anthropocene be considered either hegemonic-dominating or liberating-empowering from an LCs perspective?

They say one of the biggest dangers of nuclear contamination is that it is invisible. It is impossible to locate and assess its levels unless one is armed with special gear. Similarly, it is not everyday, mundane colonial practices, but rather large disasters with wide-scale implications that can serve as a wake-up call and decolonisation tool for the oppressed. Opening her history book chapter on the Chernobyl nuclear disaster, Anna Reid uses a juxtaposition of the Soviet Union national anthem proclaiming 'the free union of the free people' with the quote from one of the Ukrainian national leaders as of April 1991: "Chernobyl helped us understand that we are a colony" (Reid, 2015: 191). The local impact was so significant that it is believed to be among the key forces behind the fall of the USSR (McTernan, 2022), in particular for its contribution to further mistrust in the authorities and significant economic cost of dealing with its consequences (Carlson, 2019). This accident was arguably one of the forces behind the international ecological

movement at the end of the 20th century (Greenwood, 2013). This is where the post-humanism becomes relevant, reminding us that we as human beings are entangled with (rather than separate from) machines (Haraway, 1992). In our context, a post humanist perspective helps us to link the disaster management or its preventions with the role of new technologies and human agency of the decolonised.

However, the LCs are still coming to terms with the discourses of (post)colonialism. It needs to be taken into account that “[p]ost-Soviet Russia is a unique postcolonial (and arguably still colonial) oppressor that refuses to acknowledge its colonial past” (Annus, 2012: 24; see also Thompson, 2008). The numerous LCs of the Russian Empire are still struggling to have their voices heard. As Williamson (2022) points out, “[t]he ongoing colonisation of indigenous territories within Russia has manifested itself in the silencing of anticolonial voices that were already struggling to fight to be seen and heard, both in the local and the global contexts” (p. 5). Current authoritarian regime, it is argued, further endangers “the colonised people who reside in the vulnerable geopolitical location” (Williamson, 2022: 5). This supports the theoretical discussion around how “...much of postcolonial theory is concerned with the lingering forms of colonial authority after the formal end of Empire” (Elam, 2019, para 1). Russia, as the successor of the imperial rule, performs the neo-imperial aspirations for the ex-Soviet countries in the European region. Thus, the modern Russian neo-imperialism finds its ways through the strategies of economic and cultural hegemony, and war. The current threat of another nuclear plant disaster in Ukraine’s Zaporizhzhia region due to Russia’s war on Ukraine calls for continuous efforts to address subtle colonial ways of controlling this part of the world and reduce their anthropogenic impacts in the future.

Colonisation disrupts and can erase one’s identity, affecting generations; to counter this impact, ‘decolonised spaces’ need to be created (Garcia-Olp, 2018) and voice given to the Indigenous peoples to protect their lands, cultures, and futures (Gower et al., 2022; Steele et al., 2022; Whyte, 2017). In our narratives, the accident provoked these Ukrainian LCs to question, for instance, why a nuclear power station was built so close to Ukraine’s capital Kyiv? Why did the Soviet Union send humans to space but exercised such disregard for the local communities impacted by the nuclear contamination? Why did the authorities fail to act at levels appropriate to the scientific evidence? Why did people only start to publicly address these issues upon the fall of the Soviet empire, and still struggle in finding their voice and place in the discourses of colonialism, post colonialism, and colonial anthropogenic impacts? It is the latter that is now serving a pathway of the outcry for those who experienced significant disruption to their lives and futures.

Hence, we argue that the discourses of the Anthropocene can play a major role in the processes of de-colonisation. It places people’s cultural stories in their wider socio-ecological contexts (Greenwood, 2013), to make evident the colonial impacts on territories, livelihoods, and cultures. This is the force able to create a so-called “*boomerang effect*” of resistance and restoration for the LCs: more recently, Russia’s war in Ukraine catalysed native voices actively resisting Russian imperial ambitions (Bidochko, 2023). Just like the impact of Chernobyl in the stories presented here, the reality of war brought back strong awareness about the value of human rights and one’s cultural identity: “The survey conducted [in Ukraine] by the Sociological Group ‘Rating’ on 6 April, 2022,

showed a significant increase in pride regarding Ukraine” and in numbers of those identifying themselves as Ukrainians among the respondents (Rating, 2022, paras 1–3). Thus, in the uncertain (post)colonial space, the discourses of the Anthropocene can be used as liberating force to empower the native peoples in gaining ground and standing up for their rights and their land.

Finally, this endorses Erickson’s call (2020) to keep in mind that while the discussion of the human-induced change of the environment is gaining momentum, these developments are not free of the political agenda and ideology, which must be considered to help address perpetual injustices in the future.

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Data sharing not applicable to this article as no datasets were generated or analyzed during the current study.

Note

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