



## UvA-DARE (Digital Academic Repository)

### The Unknowability of Post-nuclear Landscapes in the Russian Television Series Chernobyl, Exclusion Zone

Souch, I.

**DOI**

[10.15845/slavberg.21.c137](https://doi.org/10.15845/slavberg.21.c137)

**Publication date**

2023

**Document Version**

Final published version

**Published in**

Energy/Waste

**License**

CC BY

[Link to publication](#)

**Citation for published version (APA):**

Souch, I. (2023). The Unknowability of Post-nuclear Landscapes in the Russian Television Series Chernobyl, Exclusion Zone. In M. Hristova, A. DeBlasio, & I. Anisimova (Eds.), *Energy/Waste: Approaches to the Environment in Post-Soviet Cultures* (pp. 183-204). (Slavica Bergensia; Vol. 14). University of Bergen. <https://doi.org/10.15845/slavberg.21.c137>

**General rights**

It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

**Disclaimer/Complaints regulations**

If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: <https://uba.uva.nl/en/contact>, or a letter to: Library of the University of Amsterdam, Secretariat, P.O. Box 19185, 1000 GD Amsterdam, The Netherlands. You will be contacted as soon as possible.

*UvA-DARE is a service provided by the library of the University of Amsterdam (<https://dare.uva.nl>)*

## The Unknowability of Post-nuclear Landscapes in the Russian Television Series *Chernobyl, Exclusion Zone*

Irina Souch

Паша: В день аварии люди с Припяти приходили вот на этот мост смотреть, как станция подыхает.

Настя: Что они, ничего не понимали?

Паша: Нет, никакой тревоги и паники. Они просто стояли на мосту, смотрели на огонь, а ветер гнал на них тонны ядерного топлива. (*Chernobyl, Exclusion Zone*, episode 3)<sup>1</sup>

ACROSS multiple languages, the term *Chernobyl* is shorthand for a “no-man’s land,” an anthropogenic disaster “zone,” and an omen of science gone awry (Saunders 2017, 190). Echoing Jacques Rancière’s contention that “the real must be fictionalized to be thought” (Rancière 2004, 38), the Russian television series *Chernobyl, Exclusion Zone* (*Chernobyl’, Zona otchuzhdeniia*, 2014; 2017), directed by Anders Banke and Pavel Kostomarov, belongs to a gallery of cultural texts that engage with the existing visual imaginary of the Exclusion Zone: the Ukrainian territory surrounding the Chernobyl nuclear power plant contaminated by the April 1986 meltdown.<sup>2</sup> *Chernobyl, Exclusion Zone* (CEZ)—which

---

1 “Pasha: On the day of the catastrophe people from Pripjat came to this bridge to watch the reactor burn.

Nastia: Didn’t they understand what was going on?

Pasha: No, there was no alarm raised and so there was no panic. They just stood on the bridge and looked at the fire while the wind blew tons of radioactive ashes at them.” (Here and below all translations from Russian are mine.)

2 In view of this essay’s engagement with a popular Russian television series, the spelling of geographic locations will be transliterated from Russian throughout.

*Russia Beyond* calls “a crazy mix of genres [which] positions itself as mystery, fantasy, drama, thriller, road-movie, action, disaster and even melodrama” (Egorov 2019)—comprises two seasons aired by popular online television channels. The first season was released by TNT in 2014, while the second season appeared on TV3 in 2017. The show concluded, in 2019, with a three-part feature film of the same title, which was enthusiastically received by audiences and critics alike.<sup>3</sup>

This essay analyzes the series’ first season, which consisted of eight episodes. In these episodes, set in 2013, a group of young Muscovites—Pasha (Konstantin Davidov), Lesha (Sergei Romanovich), Nastia (Valeriia Dmitrieva), Ania (Kristina Kazinskaia), and Gosha (Anvar Khalilulaev)—travel to Chernobyl to find a dodgy internet technician, Igor’ (Il’ia Sherbinin), who has stolen a large sum of money from Pasha. The journey, full of dramatic events and fantastical adventures, takes place both in 2013 and on the eve of the 1986 accident, as the young Muscovites find themselves traveling not only across space—from Moscow to Chernobyl—but also across time. Indeed, the characters travel back and forth repeatedly between the present and the pre-explosion past. In science fiction, time travel “is very much a pop-culture icon [...] mirror[ing] our desire to once and for all rid ourselves of the chains of linear time” (Jones & Flaxman 2012, 12). The characters’ travels across time in *CEZ* are of particular interest here, because each time they return to Chernobyl—whether to 1986 or 2013—they discover a reality nearly identical to the one they left, but changed to the extent that it requires narrative (re)adjustments. To this effect, the series’ epigraph, *Никто не вернётся прежним*, echoes Heraclitus’s famous adage.<sup>4</sup> It appears that the Zone, monumentalized in the concrete sarcophagus that caps Reactor Number Four, the empty buildings and huge Ferris wheel in Pripyat’s deserted central square, is not dead; rather, it constantly mutates as the Muscovites move back and forth through time.

With references to real locations, *CEZ* destabilizes the historical ac-

---

I would also like to note that the representation of Russian-Ukrainian relations in the series will not be considered, since this topic is beyond the scope of the present analysis—the long-term environmental impact of the 1986 nuclear catastrophe.

3 On the popular site Kino-teatr.ru, for example, *CEZ* has a ranking of 7,571 (out of 420 votes) (“Otzyvy”).

4 “No one will return the same.” The quote attributed to Heraclitus goes as follows: “No man ever steps in the same river twice. For it’s not the same river and he’s not the same man.”

counts, scientific reports, and artistic representations on which viewers have relied to understand the effects of radioactive contamination. This is achieved through the series' aforementioned hybrid generic makeup with, however, a strong emphasis on fantasy. In television studies, so-called telefantasy is as an umbrella term for various genres "united by their representation of the otherworldly and unreal" (Johnson 2015, 57).<sup>5</sup> Many contemporary scholars see telefantasy as a potentially subversive genre (Jackson 1981; Neale 2000; Spigel 2001). Steve Neale, for one, maintains that in film (or television) verisimilitude works at two levels: the sociocultural, marking what aligns with lived reality, and the generic, defining what is plausible according to a given genre's conventions. Both levels structure viewers' expectations and understanding (Neale 2000). Through its depiction of other realities that operate according to a given set of rules, telefantasy effectively challenges sociocultural verisimilitude. Yet viewers still invest in fantastic narratives—not only because they engender the pleasure of the unexpected but also because they conform to the principle of generic verisimilitude. The creation of "a story-world that is different from the realities of our everyday world but still convincing and plausible" (Johnson 2015, 57) makes telefantasy exceptionally suitable for cultural critique as it allows imagining things that traditional realistic forms of representation cannot.

As a fantastic narrative *CEZ* remains mindful of the challenges that conventional screen media face in dealing with various environmental phenomena—phenomena that, owing to their scale or duration, overwhelm human perceptual capacities, and therefore cannot be narrativized in familiar linear time-space trajectories. The series rearranges existing interpretations and visual idioms in accordance with its sci-fi aesthetics to point to the limits of our ability to grasp Chernobyl's consequences. In what follows I focus on how these consequences (which often cannot be directly seen, felt, smelled, or heard) are rendered intelligible—but not exhaustively knowable—through engagement with the Zone's ever-evolving post-nuclear landscapes.

### *The Nuclear Disaster and the (Visual) Narratives of Its Aftermath*

Before conducting a close reading of the series, we might turn to the existing cultural documents to consider how they envisage the Exclusion

5 According to this definition, science fiction can be considered a subcategory of telefantasy.

Zone as a location either of abandonment or nature's vengeful return. Such an overview will allow us to identify the main trends that inform CEZ's visual and narrative choices. Until today, the explosion of Reactor Number Four that took place at Chernobyl on April 26, 1986, blasting a radioactive cloud across the Soviet Union and a large swath of Europe, is commonly referred to as "the world's greatest nuclear disaster" (Lindbladh 2019, 240), accompanied by непредвиденные колоссальные политические, экономические, социальные и [...] экологические и медико-биологические последствия (Drokonova 2015, 8).<sup>6</sup> Over the years, the Chernobyl tragedy has elicited multiple interpretations, growing into what Sarah Phillips has astutely termed a "polysemous symbol" (Phillips 2004, 159). As anthropologist Adriana Petryna claims, "the blinding and incomprehensible light delivered by Chernobyl [...] has become a consuming hole in the present, a rupture in historic time, systems of belief, and representation (Petryna 1995, 197). The catastrophe has been associated with the decline of the Communist order (Bryukovetska 2016; Remnick 1994; Volkogonov 1998); Ukraine's secession from the Soviet Union (Riabchuk 2009, 96); the heroism of the clean-up workers (equated with the heroism of Soviet soldiers during World War II) (Bryukovetska 2016, Johnson 2020; Marples 1993); Judgement Day (Phillips 2004, 163; Lindbladh 2019, 241); the failure of Soviet science (Saunders 2017, 200); and, more generally, "the dangers of technology and the incompatibility of science and nature" (Phillips 2004, 164). Ultimately, "Chernobyl exemplifies a moment when scientific knowability collapsed and new maps and categories of entitlement emerged" (Petryna 2004, 250). The catastrophe disrupted global atomic discourse, forcing scientific and technological utopias to give way to a mindfulness of the biopolitical effects of nuclear radiation (Petryna 2002). In the USSR, Chernobyl transformed Soviet "nuclear optimism" into post-Soviet radiophobia (Mirnyi 2009).

Shortly after the explosion, areas of northern Ukraine and Belarus were evacuated. The depopulated territory, a 30-kilometer radius known as the Exclusion Zone—or simply "the Zone"—was left to decay, becoming "a monument to the secrecy and failings of the Cold War, a warning from history of a nuclear energy utopia, and [...] a place misaligned with respect to normal or everyday practice" (Stone 2013, 79).

6 "unforeseen, colossal political, economic, social, as well as [...] ecological, medical and biological consequences."

Throughout the years, the almost total absence of human activity has transformed the space into something of a nature reserve (Mycio 2005). The post-catastrophe Zone consists of the reactor site, the satellite city of Pripyat, and the surrounding rural area populated illegally by several hundred returnees, for whom Chernobyl's "deindustrial landscape" is infused with lived experiences and memory (Davies 2013, 124).<sup>7</sup> Encircled by barbed-wire fencing and controlled by border guards, the Zone is still restricted access; to enter one needs special permission. The restrictions, however, have not precluded the emergence of "dark tourism," as masses of people are attracted to the "near-mythic bleakness of this fascinating post-apocalyptic landscape" (Roalstraete 2009).<sup>8</sup> Dark tourism to the site—from both Western and post-socialist countries—started in the early 2000s and reached its peak in the summer of 2019, after the release of the internationally acclaimed HBO television series *Chernobyl*.<sup>9</sup> Jeff Goatcher and Viv Brunsdon argue that instead of a place, Chernobyl has become the name of an event, comparable to 9/11 (2011, 115–16). Parallel to this is the "stalker" subculture: young Ukrainian men who clandestinely visit the contaminated area to explore the wilderness.<sup>10</sup> The most enterprising among them offer "illegal tours" to thrill-seeking visitors (Balakjian 2019).

7 Located close to the Belarusian border, Chernobyl was one of the first Ukrainian sites occupied by Russian troops on February 24, 2022. On March 31, however, it was reported that most Russian troops had withdrawn, as Russia abandoned the Kyiv offensive to focus on operations in eastern Ukraine. The "dark tourism" (see below) and archive of Chernobyl images and narratives referred to in this section concern the period prior to the current military conflict, which undeniably creates another dimension to the site.

8 In 2019, the *Chernobyl Exclusion Zone* was mentioned by *Forbes* as the year's "surprise hit tourist destination" (Madden 2019). For insight on the background and meaning of Chernobyl's "dark tourism" see, for instance, Dobraszczyk (2010), Goatcher and Brunsdon (2011), Stone (2013), Yankovska and Hannam (2014), and Hutchings and Linden (2018).

9 *Chernobyl* attracted an audience of eight million viewers within a month of its release in May 2019 and caused an increase of forty percent in tour bookings to the Zone (D'alessandro 2019). Contrary to the Russian series under discussion—which primarily focuses on the longitudinal effects of Reactor Number Four's disastrous explosion—the HBO project aimed to provide a "realist" reconstruction of events that took place before, during, and directly after the catastrophe.

10 This name clearly refers to Andrei Tarkovskii's famous 1979 film, *Stalker* (*Stalker*), based on the Strugatskii brothers' novel *Roadside Picnic* (*Piknik na obochine*, 1972), in which "stalker" is a nickname for men who illegally prospect for and smuggle alien artifacts out of the Zone.

A subject of fascination, incomprehension, and anxiety for several decades, and continuously photographed and filmed by reporters, artists, and tourists alike, the Zone's landscape is almost impossible to misrecognize.<sup>11</sup> Along with photographs and documentary footage, the area has repeatedly served as a stage for popular cinema. Two well-known Hollywood productions are *Chernobyl Diaries* by Bradley Parker (2012) and *A Good Day to Die Hard* by John Moore (2013). In the former, a group of teenagers travel to Pripyat, where they are confronted by supernatural creatures lurking in the town's ruins; in the latter, Pripyat is the setting for exposing corruption in Soviet and post-Soviet Russia. There has also been a steady production of films on Chernobyl in Ukraine, Belarus, and Russia. These projects have been extensively discussed by Lindbladh (2019) and Bryukhovetska (2009, 2016). The most recent production is the Russian feature-length film *Chernobyl: Abyss* (*Chernobyl'*, 2021), directed by Danila Kozlovskii and available on the streaming platform Netflix.

The spectrum of Chernobyl post-disaster narratives is structured by a divide between the dystopic outlook on further use of nuclear energy, and theories about nature's ability not only to recover from but also to thrive in the face of environmental contamination (Byshniou 2006; Phillips & Ostaszewski 2012). The first tendency aligns with the representation of the Zone as a site of intangible, terrifying dangers. *The Guardian* reporter Kim Willsher, for instance, reminisces about her experience at the explosion's epicenter shortly after the event in the following way:

The first time we visited [Pripyat], it seemed post-apocalyptic. We found homes still furnished, with personal belongings lying around. [...] It looked as if [people] had just vanished into thin air. Outside, the public-address system was still playing maudlin music and the funfair, with its bumper cars and brightly-coloured ferris wheel, was beginning to rust. [...] Scientists estimate the contaminated area

---

11 The most prominent examples of the Zone's depictions are Nikolaus Geyrhalter's 1999 documentary *Pripyat*, Maryann DeLeo and Christophe Bisson's short documentary *White Horse* (2008), and Holly Morris and Anne Bogart's production *The Babushkas of Chernobyl* (2015). There also are extensive photographic collections by Igor Kostin, Robert Polidori, Rüdiger Lubricht, Andrej Kremetschouk, David McMillan, and Alice Miceli; and well-known conceptual art works by Kenji Yanobe.

will not be safe for 24,000 years, give or take a thousand. (Willsher 2019)

In contrast to Willsher's descriptions of the glowing "red forest," saplings "with needles growing backwards," and "mice with six toes and deformed teeth" (Willsher 2019), observers who have visited the site since its opening to the public in the early 2000s have produced stories about a seemingly jubilant natural resurgence. Thus, a participant in an illegal "stalker" expedition defines the Zone as a "natural utopia" where "every corner is brimming with life. Eagles swoop low, deer run freely, wild boar grunt, and insects bustle" (Balakjian 2019). Meanwhile, a visitor on a regular Chernobyl tour reports:

Everywhere nature can be seen to be taking back its territory. Trees have erupted through the thick concrete steps of Pripyat's central plaza, while the surrounding woods—which now provide homes for healthy populations of wolves, deer and boar—have spread over every piece of open ground. (McKie 2011)<sup>12</sup>

Yet, exposing the instabilities of both physical and epistemological infrastructures, each of these accounts testifies to the respective author's desire to grasp the effects of the invisible "blinding light" (Petryna 2002, 75) through identifying concrete, material markers, which by now have become recognizable visual tropes.<sup>13</sup> As Daniel Bürkner rightly suggests, "iconographic indicators lend context and make visible the otherwise hidden impact of contamination" (Bürkner 2014, 24). As Chernobyl "has come to have an iconic life beyond its physical reality," articulating "cultural anxiety about technology and nuclear power in particular" (Goatcher and Brunson 2011, 115), its landscape acquires special meaning only when combined with images of the thick concrete shell that covers Reactor Number Four (the so-called sarcophagus),

12 This view of the Zone as a reemergent, ostensibly harmonic wilderness encouraged James Lovelock to champion increased use of nuclear energy. In his book *The Revenge of Gaia*, Lovelock claims rather controversially that the aftermath of the catastrophe has demonstrated nuclear waste's beneficial impact on the natural world (Lovelock 2007, 127–32).

13 Radiation's "blinding light" in Petryna's formulation echoes the international atomic science discourse of a "sunshine unit," a measure for the amount of strontium in a human organism (Orlova 2019, 90).

the empty buildings, and the remnants of the amusement park with the huge Ferris wheel in its center. These images, Bürkner argues, are necessary in order to “mark [...] the topography and its landscape as a lethal space” (Bürkner 2014, 24). Indeed, over the years the very status of Chernobyl as a geographic location has changed: suspended in time, the ruins surrounded by mutating, regenerating nature, now pertain to “the realm of the symbolic as a token of loss [...] for it is no longer, and never will be, as it once was” (Todkill 2001, 1605).

*CEZ*'s opening sequence demonstrates the series' own rich intertextual legacy, for it reproduces the best-known images of Chernobyl's hazardous environment: a bird's-eye view of the sprawling concrete apartment buildings; littered, shadowy passages; indoor spaces with sagging floors, mildew, peeling paint, and a wall drawing of a child's silhouette carrying a butterfly net; classrooms with scattered furniture, papers, posters, broken geometric models, and toys; a blackened monumental statue of Prometheus; a playground swing; scraggly leafless trees; barbed wire wound around electricity poles; and windswept clouds of heavy smoke. The colors of the objects and environment are a murky grey, blue, and yellow. Most images in the sequence are icons of the disaster's aftermath. The next section considers how engagement with the Zone's iconography allows *CEZ* to show the many ways in which radioactive fallout manifests in the Zone's landscapes and lifeworlds.

### *Intertextual Imaginations of the Zone in CEZ*

The introductory video Pasha and his companions watch on Igor's VKontakte page in an attempt to locate his whereabouts shows him donning a flashy white leather biker outfit.<sup>14</sup> Smiling broadly, the thief leans against a gleaming motorbike with the famous Worker and Kolkhoz Woman monumental statue in the background. Then the video suddenly switches to a nightmarish animation reel of Chernobyl's Reactor Number Four meltdown followed again by Igor' brightly announcing that he is undertaking a journey to the Exclusion Zone and will be reporting on his adventures in a daily vlog. (*Chernobyl, Exclusion Zone*, episode 1)

14 VKontakte (VK) is a Russian social media and social networking service based in St. Petersburg.

In line with the promise that Igor' has made of a genuine, real-life experience, CEZ's page on the TNT website states that the series' central episodes were recorded on location to ensure maximum authenticity. The website also informs viewers that most scenes were shot elsewhere to mitigate the actors' exposure to ionizing radiation.<sup>15</sup> At first glance, this is not surprising; contemporary television studies show that settings are important factors in targeting audiences and attracting tourist attention to specific areas. However, in the case of the Exclusion Zone, the claim to authenticity has an additional purpose: it prompts recollections structured by particular emotions. The Zone thus functions as a chronotope, as theorized by Mikhail Bakhtin. According to Bakhtin, for each genre a unique intersection of time and space not only defines literary narratives but also indicates how people give meaning to their real-life experiences (Bakhtin 1996). In other words, the real-life aspects of a geographic setting influence the ways in which readers or viewers make sense of the experience of place and space, be that experience actual or mediated.<sup>16</sup> CEZ's chronotopic presentations of the Exclusion Zone attest that its factual and fictional accounts have become inseparably intertwined. Its interpretation of the Zone equally relies on the authentic fragments of cultural memory and fantastic images of mutated plant and animal life, sterile wastelands, and decaying former cities. CEZ fits perfectly within both archives by screening a variety of scenes set in "the abandoned villages and overgrown industrial graveyards of the Exclusion Zone" (Davies 2013, 116) and by offering shots of the "nature flourishing free from human effect" (Bürkner 2014, 24).

One of the texts the series draws on is a photographic diary from the "land of radiation, wolves and wormwood" started in 2004 by the Ukrainian photographer and biker Elena Filatova on her website [www.kiddofspeed.com](http://www.kiddofspeed.com), later published as *Chernobyl Surfing* (2011).<sup>17</sup> The series seems to reproduce Filatova's sensationalizing approach when Igor' heads for the Zone on a motorbike and extensively vlogs about his ad-

15 The series was primarily shot on sites in the vicinity of Moscow and architectonically similar to Pripyat as well as on built film sets ("Sozdanie").

16 Elaborating on Bakhtin's emphatic acknowledgement of the existence of "textual," i.e., "reflected and created" and "actual" chronotopes (Bakhtin 1996, 84), Barry Sandywell suggests the term "social chronotope" for those spatiotemporal constellations that inform "the imagining systems of whole societies" and "organize the world into space-time grammars" (Sandywell 1998, 206–207).

17 At the moment of this essay's completion Filatova's webpage was no longer online.

ventures. In pursuing Igor', the heroes drive through the checkpoint at the Russian-Ukrainian border, enter the Zone, and then move along an endless single-lane road through uncultivated land, abandoned farms, and a thick, decrepit forest. It is in this dark silent density of dead firs covered by moss and creeping ivy that they stumble upon a military bunker containing sophisticated nuclear engineering equipment, a map of the polluted area, and a time machine.

The second notable image assemblage is Pripjat. Starting with the opening sequence, the view of Chernobyl's satellite city relies on the large cinematic and photographic archive of its post-apocalyptic spaces. The series presents an overview of the spectral ruins of Pripjat's "blocky architectural Brezhnev baroque" (Stone 2013, 82)—neglected, vegetation-covered edifices; dilapidated housing; an empty central boulevard with plants growing haphazardly on the tarmac; the remnants of the amusement park with its corroding bumper cars; and the huge "catatonic with disuse" Ferris wheel (Trigg 2006, 206), with its rusty yellow gondolas amidst the thicket of young birches and cottonwood trees. One of the most photographed cities in the world, and dubbed the "modern Pompeii" (Todkill 2001, 1604), Pripjat is inconceivable without its ruins, usually portrayed in the style of so-called ruin porn. This concept, referring to the aestheticization of urban and industrial decay, has roots in the nineteenth-century aesthetic the "lower picturesque," which art theorist John Ruskin described as art that depicts charming rustic scenes marked by age, ruggedness, and decline. For Ruskin, this "heartless" picturesque indulged in a "delight in ruin," which allowed spectators to suspend concern for a scene's human implications.<sup>18</sup> In the same vein, it has been argued that ruin porn bears a risk of creating shocking photographs only to generate a detached sense of aesthetic contemplation, obscuring suffering and complexity.<sup>19</sup> In the case of Chernobyl, the very authenticity of its ruin porn has been seriously questioned.<sup>20</sup> Reminiscing on his visit to Pripjat, architect Will Wiles puts this in the following way:

We all felt we knew the place before we travelled. Photographers and

18 For a detailed analysis of Ruskin's theory of the picturesque, see Macarthur (1997).

19 For a comprehensive discussion of ruin porn, see Lyons (2015, 2018).

20 Photographer Darmon Richter, for one, writes about visitors at the site moving objects in order to produce a compelling shot (Richter 2014).

the urban explorers have saturated the internet with images of the city, part of a fairly recent mania for picturesque desuetude referred to as “ruin porn.” Seeing its points of interest—those must-see attractions—for oneself has an unreal sense of heightened reality that leads to a nagging case of authenticity anxiety. (Wiles 2012)

Criticism further suggests that while “the same tired photographic clichés” (Davies 2013, 122) are constantly reiterated, the wish to understand the real political, social, and environmental impact of the disaster is overshadowed by the search for a thrilling visual experience, often achieved through conscious manipulation and replication of iconic shots of the site. I am interested in this discussion because, whereas the *CEZ*’s makers are keen to emphasize the authenticity of shooting on location, the aesthetic employed (not least because of the series’ sci-fi qualities) appears to be (self-)conscious of its staged, artificial nature and even to delight in playfully copying clichés and invoking the widely known canon of Chernobyl-related texts.

Apart from the abovementioned examples, such artifice is most clearly seen in *CEZ*’s association with the award-winning multiplayer computer game series *S.T.A.L.K.E.R.*, released by the Ukrainian studio GSC Game World.<sup>21</sup> The *S.T.A.L.K.E.R.* trilogy is inspired by the abovementioned Tarkovskii classic, *Stalker*, loosely based on the popular science-fiction novel *Roadside Picnic* by Arkadii and Boris Strugatskii. Tarkovskii’s film depicts a perilous journey of three men, Writer, Professor, and Stalker, to a mysterious derelict wasteland called the Zone. Although released long before the explosion of Reactor Number Four, *Stalker* has gained cult status as prophetic of the later disaster (Bryukovetska 2016; Burlacu 2015; Dalton 2018; Riley 2017; Stone 2013). Changing the setting of the unspecified “Zone” to the Chernobyl area, the *S.T.A.L.K.E.R.* game series “merg[es] Tarkovsky’s science fiction with authentic photographs of Pripyat to create a landscape of ‘wonder and death’” (Dobraszczyk 2010, 385).<sup>22</sup> In his discussion of *S.T.A.L.K.E.R.*, Daniil Leiderman argues that the game’s moral is “to critique the dam-

21 Although *S.T.A.L.K.E.R.* is the best-known game that prominently features the Zone, the Activision 2007 video game *Call of Duty 4: Modern Warfare* is also situated in Pripyat, and offers an accurate replication of the city’s iconic sites.

22 There are also narrative similarities between the game and the series in that the protagonists come across mutant zombies and other monstrous figures before they reach the centre of the Zone and confront its ghosts.

age caused by the realisation of utopian social projects” (Leiderman 2016, 22), thus situating nuclear technologies in the larger project of sociopolitical transformation. While *CEZ* indeed follows the game’s narrative clues in its engagement with the notions of violence, survival, and nostalgia for the Communist past, the series’ fascination with nature’s spectral mutations, waste, and ruins diverges from the game’s ultimate purpose of exposing the destruction inherent in the Soviet utopian experiment. Instead, it uses similar aesthetic devices once again to explore, within the obvious limitations of the genre, the structural impossibility of fully grasping the effects of radiation on different forms of life and their mutual involvements.

### *The Zone’s Ghostly Manifestations*

Upon their arrival to Pripyat, the heroes watch the latest entry on Igor’s video blog. In it, a dirty door frame opens a view on Igor’s motorbike, parked against the background of inky, moonless skies. The camera jerkily zooms in on the blogger’s panicked, contorted face, with tears and dirt smeared over it. In a whining voice he pleads: Бензина нет. Теперь только пешком. Короче, хотите верьте, хотите нет. Я решил вернуться обратно. Еду, еду, и Припячь снова. То есть, я выехал из города, прямо еду и опять приехал в то же место. Я второй раз поехал: дорога, лес, столбы эти. Дорога прямо, не загнутая никакая. Да тут таких нет вообще. И опять Припячь. Lesha says: Чего он несёт? Типа, он уехать отсюда не может? In the blog, Igor’ continues: И ещё эта собака. Я уезжал от неё на мотоцикле, но она все время оказывается рядом. Все как бред. Помогите мне!<sup>23</sup>

The camera briskly changes the angle to show a corner of an abandoned classroom, with crumpled, moldy papers scattered everywhere; a cluster of smashed chairs; and propped against the wall—a

23 “I have run out of petrol. I can only continue on foot. In short, believe it or not. I decided to go back. I drive, and drive, and here is Pripyat again. That is, I leave the city, I go straight but arrive at the same spot again. I go for the second time—the same road, forest, those poles. The road is straight, not curvy, there are no curvy roads here, but here it is again—Pripyat!” Lesha says: “What is he going on about? He means he can’t leave this place?” In the blog, Igor’ continues: “And there is this dog, I tried to escape from it on the motorbike, but each time it keeps reappearing right at my side. This feels like delirium. Help me!”

large “board of honor” featuring smiling young children in school uniforms. In the middle, stands an enormous, aggressive-looking dog with tangled rusty brown fur and a broken chain around its neck, snarling terrifyingly. (Chernobyl, Exclusion Zone, episode 3)

Pasha and his friends finally find Igor’ wandering in the dark woods outside Pripyat. The once cheeky thief now looks exhausted, famished, and terrified. He constantly repeats: *Зона живая! Это зона не отпускает меня. И вам уже не выбраться отсюда!*<sup>24</sup> Indeed, as the narrative unfolds further, the Muscovites realize that what they initially perceived to be the Zone’s dead and emptied-out landscape is in fact a living organism full of undefinable sounds and sinister presences. What is more, the Zone itself appears to possess a spectral agency of sorts. Having crossed its formal border, the group enter inhospitable and dangerous spaces. The atmosphere of uneasy strangeness already sets in when they start discerning, as they drive towards Pripyat, a series of memorial signs of the once vibrant but now nonexistent settlements demolished and buried as hazardous radioactive sites shortly after the explosion. Incongruent with the desolate rusty brown natural panoramas, these original place names are more than simple commemorative symbols. They are reminiscent of how these spaces, once densely populated and full of lived histories, have been pushed away by something that could be conceived as an anti-place par excellence—the demarcated abstract area of the Zone.<sup>25</sup>

The journey towards Pripyat comes to a sudden halt when Gosha’s ancient Lada car unexplainably breaks down. A young man materializes to assist and direct the party to the closest auto shop. Following his advice, they pass a gloomy graveyard overhung with weeping trees, and arrive in an eerie village with a wedding party in full swing.<sup>26</sup> When the Muscovites offer the bride what they think is a present from their new

24 “The Zone is alive! It is the Zone that keeps me captured, and you too, will never get away from here!”

25 For an extensive discussion of the concept of (anti-)place in relation to ruins and decay, see Trigg (2006).

26 This episode references another real-life phenomenon, largely unacknowledged by the authorities: the inhabitation of the zone by a community of Chernobyl-affected citizens who, as Thom Davies argues, “are compelled to employ unofficial understandings of space, and enact informal activities which circumvent their bio-political status of bare life” (Davies 2015, 229).

acquaintance, she suddenly faints. After a brief scuffle with the villagers, it transpires that their helper was the woman's first fiancé, killed in a car crash some time ago. Significantly, he was buried near his father who worked as a Chernobyl ликвидатор<sup>27</sup> dealing with the consequences of the nuclear catastrophe immediately after the event.

The confrontations with the Zone's ghosts continue when, at the next stage of the expedition, the road passes through a wasteland littered with pieces of rusty scrap metal, decaying parts of forgotten agricultural machinery, and tangles of rotten wood. The wasteland, again, appears familiar given the numerous archival photographs and tourist snapshots in the genre of "toxic sublime"—an aesthetic that purports to generate "transformative" emotions, such as amazement and fascination, to make spectators aware of environmental injustice (Balayannis 2019, 574). Similar to ruin porn, the political impact of this reassemblage of representations of toxic landscapes has been interrogated for naturalizing the effects of industrial contamination (Rosenfeld et al. 2018). Yet, regardless of whether this type of photography has ecocritical potential, the series' primary concern here is merely to ensure that viewers are prepared for the next part of the adventure. The narrative is fast-paced, not pausing to contemplate the particularities of the damaged landscape. Rather, the landscape is important for setting up the next scene, in which the travelers approach a cluster of crumbling brick buildings in the middle of a field and become a target for a group of unhinged and heavily armed hunters who appear out of nowhere.

The closer the protagonists get to their destination the less the landscape is animated. At first glance, Prip'yat emanates a sense of abandonment. Yet, in its shadows, the city harbors many monsters. When the party arrives at a multistory flat, where Ania's parents and sister lived in 1986, another of the Zone's many anomalies becomes evident: the ability to produce phantoms, malign copies of people with their individual psychological and physical features.<sup>28</sup> And so, the Zone conjures phantoms of Ania, Gosha, and Nastia, who try to create a rift among the

27 "liquidator," or "cleanup worker." For a detailed history of the liquidators' role in mitigating the damage and their position in contemporary cultural memory, see Johnson (2020).

28 Before the friends set out for Chernobyl, Ania, initially not part of the group, receives a mysterious letter containing an old photograph of her sister, who disappeared on the day of the explosion. The back of the photograph contains a message "Спаси" ("Save me")—ultimately what motivates Ania to travel to the Zone.

friends, in order to imprison and, ultimately, destroy them. Although all these encounters follow classic conventions of video games, the figures of the friendly zombie, deranged shooters, and malicious phantoms do not simply present obstacles for players aiming to reach the next level; they also show that the Zone is the site of the fantastical and its emptiness is a sign of potential monstrosity.

From this vantage point, the procession of spectral apparitions is representative of the Zone's unexpected agency and influence on forms of existence. Together with images of neglect, garbage, and decay, the ghosts portray the Zone as a haunted place, the location of unspeakable cataclysmic events, of abandoned homes and forgotten buildings. The place emerges as full of recollections of, or encounters with, past events. Instead of mere objects of aesthetic appreciation, the ghostly ruins are immediate reminders of human and environmental losses. The city comes to life, frustrating the characters' (and viewers') attempts to understand or resolve spaces forever altered by nuclear disaster.

### *Conclusion, or the Unknowable Space/Time of the Zone*

A video recording of a scientific laboratory, richly equipped and full of maps and graphs, shows a middle-aged man who introduces himself as physicist Andrei Sergeev and proceeds to explain: В Чернобыльской зоне нами обнаружена временная аномалия. Это что-то типа перемещающегося сгустка повышенной радиации. [...] Прибор, который мы собрали в этой лаборатории позволяет перемещать через эту аномалию материальные предметы. И сегодня мы поняли, что это такое. Это такой коридор. Это червоточина, которая движется во времени параллельно с нашим временем. [...] Я считаю, что через эту аномалию может пройти человек, но я не знаю, что с ним сделает Зона.<sup>29</sup>

*(Chernobyl, Exclusion Zone, episode 5)*

The otherworldly experiences the group undergoes teach them that

---

29 "We have discovered a temporal anomaly in the Chernobyl Zone. It is something like a moving cluster of high radioactivity. [...] The device that we constructed in our laboratory allows to move material objects through this anomaly. And today, we finally understood what it is. It is a kind of a corridor. It is a wormhole that moves through time in a dimension parallel to the present. [...] I think a human being can get through it but I don't know what the Zone would do to them."

their sense of safety and risk does not have a stable meaning, as the dangerously pervasive nuclear agency has no respect for the borders that are supposed to define the Zone. The recurring motifs of ruin, disorder, decomposition, and wilderness suggest that the lines between the human constructions at Chernobyl and its natural surroundings are not definitive. While radiation seeps into the buildings and transforms life forms, the natural environment has also been altered by ionic charges. Thus, the wilderness takes possession of formerly domesticated locations. Without its human inhabitants, the landscape of *CEZ*'s Chernobyl creates new pictures of extinction: empty squares, vacant houses, abandoned buildings, the laughterless fairground and its corroded immobile Ferris wheel, and the empty and dusty void of a swimming pool. Each marks the invisible presence of radioactive monstrosity. The recognizable yet ungraspable landscape changes our perception of the relationship between natural and supernatural forces, thus rattling our sense of reality.

The most profound feeling of disorientation occurs when Igor', and later his pursuers, fail to exit Pripjat, because the only road leaving the city leads them back—again and again—to their point of departure. And so the characters' experience of the Zone destabilizes their understanding of time's presence in space. Given the radioactivity, the Zone's chronotope continuously frustrates the diegetic (but also the viewers' real-life) interpretation of who and what belongs not only where, but also when. This unpredictability is most clearly illustrated by the figure of Andrei Sergeev's colleague (we do not learn his name), whom the travelers find in the forest. The man is semiconscious and bleeding heavily, and a tall fir tree grows through his body because (as later revealed) of the badly synchronized location and moment of his time-travel experiment.

Time travel—thanks to the discovery of the time machine in the bunker—becomes central to *CEZ*'s second part. A question thus emerges: Can spaces affected by radioactive fallout become unstuck historically? The series poses this question by allowing the characters to return repeatedly to 1986 in an attempt to avert the explosion of Reactor Number Four. They know where they have returned, yet time and again the familiar space appears altered, thereby prompting them to find new ways of navigating it. The differences are accentuated by the contrast to the gloomy reality of the heroes' contemporary world. The pre-cat-

astrophic landscape is depicted—in cheerful pastels—as undamaged, inhabited, and sun-drenched. And so, while they are aware of the time in which they find themselves, they do not know how a given present aligns with other presents, or the past or future. This juxtaposition of bright visions of the past with the somber scenery of the post-atomic present, and of “genuine” geographical shots with digitalized and simulated landscape images, does more than augment the sense of mystery and the macabre of the fantastic genre. By creating disorienting temporal and spatial perspectives, *CEZ* allows for a chronotropic reading of Chernobyl’s spectral environments, which more realistic modes of representation might foreclose. The visual collage ultimately works to signify the collapse of scientific knowability—to recall Petryna’s claim (2004, 250)—to highlight the impossibility of fully comprehending the effects of the catastrophe, and to represent the invisible (radioactive) threats hidden in the architectural remains that have been overtaken by wastelands. Metaphorized in the petrified ruins of the Zone, the hostile forces provoke further reflection not only on the landscapes of radioactive contamination, but also on the uncertain futures of mankind’s technological advancement.

### *Bibliography*

- Bakhtin, Mikhail 1996, “Forms of Time and of the Chronotope in the Novel,” *The Dialogic Imagination: Four Essays by M.M. Bakhtin*, ed. Michael Holquist, trans. Caryl Emerson and Michael Holquist, Austin, Tex., 84–258.
- Balakjian, Aram 2019, “Into the Zone: 4 Days inside Chernobyl’s Secretive ‘Stalker’ Subculture,” *The Calvert Journal*, 8 January, <https://www.calvertjournal.com/features/show/10946/into-the-zone-4-days-inside-chernobyls-secretive-stalker-subculture> (last accessed 10 September 2021).
- Balayannis, Angeliki 2019, “Routine Exposures: Reimagining the Visual Politics of Hazardous Sites,” *GeoHumanities* 5 (2), 572–90.
- Bryukhovetska, Olga 2009, “Chernobyl Films: Half-Life of the Soviet Imaginary,” “Ukrainian Cinema,” ed. Vitaly Chernetsky, *KinoKultura*, special issue 9, <http://www.kinokultura.com/specials/9/bryukhovetska.shtml> (last accessed 15 October 2021).
- Bryukhovetska, Olga 2016, “Nuclear Belonging: ‘Chernobyl’ in Belarusian, Ukrainian (and Russian) Films,” *Contested Interpretations of*

- the Past in Polish, Russian and Ukrainian Film: Screen as Battlefield*, ed. Sander Brouwer, Leiden, 95–121.
- Burlacu, Mihai 2015, “The ‘Zone’ as Heterotopia in Andrei Tarkovsky’s *Stalker*,” *Bulletin of the Transilvania University of Braşov* 8 (57), 69–76.
- Bürkner, Daniel 2014, “The Chernobyl Landscape and the Aesthetics of Invisibility,” *Photography and Culture* 7 (1), 21–39.
- Byshniou, Ihar 2006, “Forest Diary,” *Index on Censorship* 35 (2), 44–53.
- D’Alessandro, Maria Michela 2019, “Radioactive ‘Adventure’: Chernobyl Tourism Surges after HBO Series,” *The Globe Post*, 20 August, <http://theglobepost.com/2019/08/20/chernobyl-tourism-hbo/> (last accessed 10 February 2020).
- Dalton, Stephen 2018, “Tarkovsky, *Solaris*, and *Stalker*,” *Russian Science Fiction Literature and Cinema: A Critical Reader*, ed. Anindita Banerjee, Boston, 281–89.
- Davies, Thom 2013, “A Visual Geography of Chernobyl: Double Exposure,” *International Labour and Working Class History* 84, 116–39.
- Davies, Thom 2015, “Nuclear Borders: Informally Negotiating the Chernobyl Exclusion Zone,” *Informal Economies in Post-Socialist Spaces: Practices, Institutions and Networks*, eds. Jeremy Morris and Abel Polese, London, 225–44.
- DeLeo, Maryann & Christophe Bisson 2008, *White Horse*, New York.
- Dobraszczyk, Paul 2010, “Petrified Ruin: Chernobyl and Pripjat and the Death of the City,” *City* 14 (4), 370–89.
- Drokonova, Olga N. 2015, *Kognitivnaia istoriia sotvoreniiia bedy (1970–1976 gg.): Monografiia*, Tiumen’, Russ.
- Egorov, Boris 2019, “10 Movies and TV Series about Chernobyl (beside HBO’s),” *Russia Beyond*, 13 June, <https://www.rbth.com/arts/330507-10-movies-about-chernobyl> (last accessed 15 March 2020).
- Filatova, Elena 2011, *Chernobyl Surfing: Report from the Exclusion Zone 25 Years After*, Mantua.
- Geyrhalter, Nikolaus 1999, *Pripjat*, Vienna.
- Goatcher, Jeff & Viv Brunnsden 2011, “Chernobyl and the Sublime Tourist,” *Tourist Studies* 11 (2), 115–37.
- GSC Game World 2007, *S.T.A.L.K.E.R.*, Kyiv.
- Hutchings, Tim & Katya Linden 2018, “Tourists at Chernobyl: Existential Meaning and Digital Media,” *Heritage of Death: Landscapes of Emotion, Memory and Practice*, eds. Mattias Frihammar and Hela-

- nie Silverman, Abingdon, Va., 209–22.
- Infinity Ward 2007, *Call of Duty 4: Modern Warfare*, Woodland Hills, Cal.
- Jackson, Rosemary 1981, *Fantasy: The Literature of Subversion*, London.
- Johnson, Catherine 2015, “Telefantasy,” *The Television Genre Book*, ed. Glen Creeber, London, 56–59.
- Johnson, Emily D. 2020, “Remembering Chernobyl through the Lens of Post-Soviet Nostalgia,” *Post-Soviet Nostalgia: Confronting the Empire’s Legacies*, eds. Otto Boele, Boris Noordenbos & Ksenia Robbe, New York, 115–32.
- Jones, Marie D. & Larry Flaxman 2012, *This Book Is from the Future: A Journey through Portals, Relativity, Worm Holes, and Other Adventures in Time Travel*, Pompton Plains, N.J.
- Kozlovskii, Danila 2021, *Chernobyl*, Moscow.
- Leiderman, Daniil 2016, “Zombies, Russians, Plague: Eastern Europe as a Sandbox for Utopia,” *Digital Icons: Studies in Russian, Eurasian and Central European New Media* (15), 21–36.
- Lindbladh, Johanna 2019, “Representations of the Chernobyl Catastrophe in Soviet and Post-Soviet Cinema: The Narratives of Apocalypse,” *Studies in Eastern European Cinema* 10 (3), 240–56.
- Lovelock, James 2007, *The Revenge of Gaia*, London.
- Lyons, Siobhan 2015, “Debbie Does Decay: What ‘Ruin Porn’ Tells Us about Ruins—and Porn,” *The Conversations*, 18 August, <https://the-conversation.com/debbie-does-decay-what-ruin-porn-tells-us-about-ruins-and-porn-45776> (last accessed 6 May 2022).
- Lyons, Siobhan 2018, “Introduction: Ruin Porn, Capitalism, and the Anthropocene,” *Ruin Porn and the Obsession with Decay*, ed. Siobhan Lyons, London, 1–10.
- Macarthur, John 1997, “The Heartlessness of the Picturesque: Sympathy and Disgust in Ruskin’s Aesthetics,” *Assemblage* (32), 126–41.
- Madden, Duncan 2019, “Dark Tourism: Are These the World’s Most Macabre Tourist Attractions?” *Forbes*, 25 September, <https://www.forbes.com/sites/duncanmadden/2019/09/25/dark-tourism-eight-of-the-worlds-most-gruesome-tourist-attractions/#2695bfc83590> (last accessed 15 March 2020).
- Marples, David 1993, “Chernobyl’s Lengthening Shadow,” *Bulletin of the Atomic Scientists*, <http://www.thebulletin.org/issues/1993/s93/s93Marples.html> (last accessed 20 August 2021).

- McKie, Robin 2011, "Chernobyl 25 Years On: A Poisoned Landscape," *Guardian*, 27 March, <https://www.theguardian.com/world/2011/mar/27/chernobyl-disaster-anniversary-japan> (last accessed 20 March 2020).
- Mirnyi, Sergei 2009, "Chernobyl' kak infotravma," *Travma: punkty*, eds. Serguei Oushakine and Elena Trubina, Moscow, 209–47.
- Moore, John 2013, *A Good Day to Die Hard*, Los Angeles.
- Morris, Holly & Anne Bogart 2015, *The Babushkas of Chernobyl*, New York and San Francisco.
- Mycio, Mary 2005, *Wormwood Forest: A Natural History of Chernobyl*, Washington, D.C.
- Neale, Steve 2000, *Genre and Hollywood*, London.
- Orlova, Galina 2019, "Diskursivnoe dozirovanie radiatsii," *Laboratorium: zhurnal sotsial'nykh issledovaniï* 11 (1), 82–119.
- "Otzyvy," "Chernobyl'. Zona otchuzhdeniia," *Kino-teatr.ru*, <https://www.kino-teatr.ru/kino/movie/ros/101233/forum/f1/> (last accessed 16 April 2020).
- Parker, Bradley 2012, *Chernobyl Diaries*, Burbank, Cal.
- Petryna, Adriana 1995, "Sarcophagus: Chernobyl in Historical Light," *Cultural Anthropology* 10 (2), 196–220.
- Petryna, Adriana 2002, *Life Exposed: Biological Citizenship after Chernobyl*, Princeton, N.J.
- Petryna, Adriana 2004, "Biological Citizenship: The Science and Politics of Chernobyl-Exposed Populations," *Osiris* 19 (1), 250–65.
- Phillips, Sarah D. 2004, "Chernobyl's Sixth Sense: The Symbolism of an Ever-Present Awareness," *Anthropology and Humanism* 29 (2), 159–85.
- Phillips, Sarah D. & Sarah Ostraczewski 2012, "An Illustrated Guide to the Post-catastrophe Future," *Anthropology of East Europe Review* 30 (1), 127–40.
- Rancière, Jacques 2002, *The Politics of Aesthetics: The Distribution of the Sensible*, London and New York.
- Remnick, David 1994, *Lenin's Tomb: The Last Days of the Soviet Empire*, New York.
- Riabchuk, Mykola 2009, "Ukraine's Nuclear Nostalgia," *World Policy Journal* 10 (4), 95–105.
- Richter, Darmon 2014, "What It's Like to Spend 32 Hours in the Chernobyl Exclusion Zone," *Exutopia*, 12 September, <https://www.exu->

- topia.com/what-its-like-to-spend-32-hours-in-the-chernobyl-exclusion-zone* (last accessed 1 October 2021).
- Riley, John A. 2017, "Hauntology, Ruins, and the Failure of the Future in Andrei Tarkovsky's *Stalker*," *Journal of Film and Video* 69 (1), 18–26.
- Roalstraete, Dieter 2009, "On Catastrophilia," *Afterall* 15, 1 May, <https://www.afterall.org/article/catastrophilia> (last accessed 1 October 2021).
- Rosenfeld, Heather, Sarah Moore, Eric Nost, Robert E. Roth & Kristen Vincent 2018, "Hazardous Aesthetics: A 'Merely Interesting' Toxic Tour of Waste Management Data," *GeoHumanities* 4 (1), 262–81.
- Sandywell, Barry 1998, "The Shock of the Old: Mikhail Bakhtin's Contributions to the Theory of Time and Alterity," *Bakhtin and the Human Sciences: No Last Words*, eds. Michael M. Bell and Michael Gardiner, London, 196–211.
- Saunders, Robert A. 2017, *Popular Geopolitics and Nation Branding in the Post-Soviet Realm*, London.
- "Sozdanie," "Chernobyl': Zona otchuzhdeniia," *Kinorium.ru*, <http://ru.kinorium.com/732380/info/> (last accessed 30 September 2022).
- Spigel, Lynn 2001, *Welcome to the Dreamhouse: Popular Media and Postwar Suburbs*, Durham, N.C.
- Stone, Philip 2013, "Dark Tourism, Heterotopias and Post-Apocalyptic Places: The Case of Chernobyl," *Dark Tourism and Place Identity: Managing and Interpreting Dark Places*, eds. Leanne White and Elspeth Frew, Abingdon, Va., 79–93.
- Strugatskie, Arkadii & Boris 1972, *Piknik na obochine*, Moscow.
- Tarkovskii, Andrei 1979, *Stalker*, Moscow.
- Todkill, Anne Marie 2001, "Overexposure: The Chernobyl Photographs of David McMillan," *Canadian Medical Association Journal CMAJ/JAMC* 164 (11), 1604–5.
- Trigg, Dylan 2006, *The Aesthetic of Decay: Nothingness, Nostalgia, and the Absence of Reason*, New York.
- Volkogonov, Dmitrii 1998, *The Rise and Fall of the Soviet Empire: Political Leaders From Lenin to Gorbachev*, ed. Harold Shukman, New York.
- Wiles, Will 2012, "Chernobyl: Atomic City," *Icon*, 1 March, [www.icon-eye.com/architecture/features/item/10501-chernobyl-atomic-city](http://www.icon-eye.com/architecture/features/item/10501-chernobyl-atomic-city) (last accessed 20 March 2020).
- Willsher, Kim 2019, "The Truth about Chernobyl? I Saw It with My

Own Eyes...” *Guardian*, 16 June, <https://www.theguardian.com/environment/2019/jun/16/chernobyl-was-even-worse-than-tv-series-kim-willsher> (last accessed 20 March 2020).

Yankovska, Ganna & Kevin Hannam 2014, “Dark and Toxic Tourism in the Chernobyl Exclusion Zone,” *Current Issues in Tourism* 17 (10), 929–39.