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Narrative, Non-Fiction, and the Nuclear Other: Western Representations of Chernobyl in the Works of Adam Higginbotham, Serhii Plokhy, and Kate Brown

The Emmy-winning HBO drama *Chernobyl* (2019) has renewed global interest in one of the most dramatic, and certainly telegenic, human-made catastrophes of the twentieth century. Produced 33 years after the initial explosion at the Chernobyl nuclear power plant near Prypiat, Ukraine¹ on 26 April 1986, the five-part series depicts the conditions in which the disaster occurred and the various measures undertaken by Soviet Party members, scientists, and workers to respond to the crisis. By focusing on two central characters—Valery Legasov, a member of the Soviet Academy of Scientists appointed to investigate the accident, and Ulyana Khomyuk, a fictional Belorussian nuclear physicist whose role is based on the team of scientists who aided Legasov—the series presents the aftermath of the disaster as a veritable race against time engaged in by morally upstanding experts whose efforts are repeatedly stymied by corrupt and scientifically uninformed Soviet officials.

In response to the success of the HBO serial—as well as subsequent debates about its introduction of fictional components—the Russian television channel NTV announced plans to produce its own depiction of the Chernobyl disaster. As Adam Bankhurst states in a recent issue of *ING*, this

¹ Here, as elsewhere, we use original Russian transliterations of Ukrainian names, places, and terms (e.g., "Chernobyl" and "Kiev") rather than their more recent Ukrainian transliterations (e.g., "Chornobyl" and "Kyiv"). We do so, much like the authors of the three texts we examine, to call attention to the Soviet historical and cultural context in which these terms were situated.

Russian version, which will be financed by the Russian Ministry of Culture, is projected to be a 12-episode series that charts the unfolding of events immediately before and after the explosion, from April to December of 1986. Notably, it will emphasize the long-standing interest demonstrated by Western intelligence officers in the daily operations of the plant in the years preceding its collapse. Specifically, according to a 30 May 2019 report by *RBC-Ukraine*, the series will focus on two characters based on historical personages: Albert Lenz, a CIA officer assigned to gather intelligence on the Chernobyl plant, and Andrey Nikolayev, a KGB Lieutenant Colonel of Military Counterintelligence, who suspects that Lenz is meddling in the plant's operation and attempts to thwart an imminent catastrophe. The series' director, Aleksey Muradov, has stated that this production will offer "a hypothesis about American interference in the Chernobyl nuclear power plant's functioning, which resulted in its explosion" (*Vgolos*, 8 June 2019)

Given the present geopolitical climate in which the two series have been produced, it is not entirely surprising that they should offer such startlingly different renditions of the same event. Indeed, their mutual efforts to wrest control over the narrative of an historical trauma places into relief the extent to which Cold War-era tensions not only have reemerged within chilly relations between Russia and the West, but also spilled over into forms of mass entertainment. And yet, just as Cold War-era popular artifacts produced on either side of the proverbial Iron Curtain revealed a curious symmetry,² so too do these two series share an uncannily similar plot structure: one in which daring individuals attempt to take down a formidable adversary. As journalist Masha Gessen argues in a searing review published in the 4 June 2019 issue of *The New Yorker*, the HBO series fails to "accurately portray Soviet relations of power" by featuring noble heroes who draw on their expert knowledge to expose complacent apparatchiks and negligent engineers. This, Gessen maintains, is the stuff of "Hollywood fantasy," not least because it subscribes to the "great-men (and one woman) narrative of history, where it's a few steps, a few decisions, made by a

² See, for example, Susan Buck-Morss's *Dreamworld and Catastrophe* (2002), which juxtaposes images from Soviet and American mass culture in order to explore the affinities of twentieth-century socialist and capitalist utopian projects.

few men that matter, rather than the mess that humans make and from which they suffer." Although it is too soon to judge how the rivaling Russian series might portray Soviet relations of power, it is already evident that its proposed cat-and-mouse conflict between a KGB officer and a CIA agent repeats, rather than challenges, Hollywood tropes.

In the end, Gessen laments that the HBO series will surely install itself into the popular imaginary —an insight the NTV producers seem to share by planning a rival serial—even as global audiences continue to overlook more nuanced written accounts of the Chernobyl disaster. Here, she gestures not only to the Belorussian Nobel Prize recipient Svetlana Alexievich's 1997 oral history of the eventtranslated in English under the alternate titles Voices From Chernobyl or Chernobyl Prayer-but also to accounts produced by Western scholars and journalists. Indeed, Gessen singles out Harvard historian Serhii Plokhy 's Chernobyl: The History of a Nuclear Catastrophe (2018), as a work of non-fiction that effectively dispenses with narratives of individual failures or heroics in order to argue that it was the "Soviet system itself that created Chernobyl and made the explosion inevitable." Texts such as Plokhy's, she suggests, bring readers closer to the "truth" of the disaster than any made-for-TV "disaster movie" ever could. Even so, precisely because these works of non-fiction do the slow, plodding, but ultimately necessary work of exposing the systemic causes and consequences of the Chernobyl crisis, they will surely be eclipsed by televised thrillers produced by HBO-or, for that matter, NTV.

The purpose of this essay, then, is to demonstrate how three recent works of non-fiction authored by Western journalists and scholars— Adam Higginbotham's Midnight in Chernobyl (2019), Plokhy's Chernobyl: The History of a Nuclear Catastrophe (2018), and Kate Brown's Manual For Survival: A Chernobyl Guide to the Future (2019)—resist "great man" modes of historiography in order to expose the underlying structural causes and consequences of the Chernobyl disaster. Insofar as they do so, these texts also posit Chernobyl as an event—a literal and figurative historical flashpoint—that was at once an effect of the Cold War and a cause of its conclusion. And yet, although the three studies uphold the central thesis that

the massive and unwieldy "Soviet system itself" was largely responsible for the Chernobyl event and in turn the unravelling of the Cold War, they nevertheless arrive at this conclusion through discrete narratives and notably different methodologies. Journalist Higginbotham's largely omniscient and chronological account of the catastrophe focuses primarily on the consequences of post-1970's era Soviet "gigantomania" and the subsequent influences of Western "hard" and "soft" diplomacy in mitigating the disaster; Ukrainian-American scholar Plokhy's history of the event, explicitly framed by the perspective of a [post-] Soviet emigré, calls attention to how "eco-nationalist" movements that emerged within the post-Chernobyl Soviet Union contributed to its implosion; and environmental historian Kate Brown's own narrative places into relief her immediate position as an American scholar-traveler in order to expose the relationship between a socio-geographically localized event and Cold War-era nuclear policies that at once were contained by and transgressed geo-political borders. Read together, these three Western works of non-fiction offer a prismatic image of Chernobyl's spatio-temporal role in the proceedings of and ultimate conclusion to the Cold War. Moreover, and just as crucially, these texts also progressively unsettle overdetermined, triumphalist Western narratives of the Cold War that dwell exclusively on the failures of Soviet nuclear ventures and thus posit the USSR as the West's "nuclear Other."

Significantly, these three texts, once read according to the narrative we have constructed, comprise an increasingly urgent critique of what anthropologist Hugh Gusterson calls discourses of the "Nuclear Other." In an essay published in 1999—in the immediate wake of the first Gulf War and in the very year that India and Pakistan heightened their respective nuclear weapons plans—Gusterson calls attention to the Orientalist discourses that informed the West's alarmist responses to the nuclear armament of the socalled Third World (113). In Western discourse, Gusterson argues, "nuclear weapons are represented so that 'theirs' [ones produced within the Global South] are a problem whereas 'ours' are not" (114). Such claims, he maintains, participate in a larger binary logic, initially identified by Edward Said, that: produce the Orient as the mirror image of the West: where "we" are rational and disciplined, 'they' are impulsive and emotional; where "we" are modern and flexible, "they" are slaves to ancient passions and routines; where "we" are honest and compassionate, "they" are treacherous and uncultivated. (114)

According to this logic, Gusterson maintains, "Third World" countries' claims to nuclear development are immediately subject to the judgment of "First World" nations that presume their own knowledge, rationality, and good will in relation to their ostensibly volatile or, as it were unsettled, global counterparts (114).

Notably, although Gusterson identifies the (former) Soviet Union, a signatory to the Non-Proliferation Treaty of 1970, as one of the developed states privileged in this developed-/ undevelopedworld binary, the three authors we examine here each suggest that, in the immediate fallout of the Chernobyl disaster, Western claims to nuclear responsibility were privileged over those of the Eurasian Soviet Union. After all, as each author suggests, the USSR, once recognized as a flawed and flailing state system, was rendered as the object of-rather than a direct participant in-international (i.e., Western) diplomatic ventures, relief efforts, and regulatory reforms.

And yet, the increasingly widened global perspectives demonstrated by each of these histories of Chernobyl directly complement their respective critiques of such othering, if not orientalist, logic. If, for instance, Higginbotham's history of the disaster largely places its responsibility squarely at the feet of a Soviet state ostensibly more lax or corrupt than its Western nuclear counterparts, Plokhy's own study places pressure on this narrative not only by emphasizing the efficiency of Soviet mass mobilization of relief efforts but also by accentuating the direct agency of eco-nationalist activists who challenged the Soviet system from within, rather than outside, it. Brown, for her part, most emphatically contests conventional narratives that pit the "rational," "modern," and "honest" West against a comparatively retrograde and corrupt USSR by arguing that the very secretive and exploitative measures directed by

Moscow were in fact mirrored by those undertaken in Washington, D.C. (or, for that matter, London or Paris or Bonn). Ultimately, of these three accounts, Brown's is most committed to dismantling discourses that depend on an imagination of the Soviet Union as the West's (or, more specifically, the US's) "nuclear Other" by demonstrating the Cold War-era superpowers' mutual enmeshment within a complex geopolitical ecology that ultimately resists definitive or otherwise absolute truths regarding an event situated within a larger geo-historical continuum.

Curiously, as our study should demonstrate, there appears to be a certain correlation between each text's commitment to critiquing discourses of the "Nuclear Other" in their respective histories and their strategic deployments of narrative voice. That is, it may not be simply coincidental that Higginbotham's purportedly objective account of the Chernobyl disaster, predominately offered through third-person omniscient perspective, largely subscribes to Western narratives of Soviet incompetence—or that Plokhy's minor but nevertheless significant forays into first-person narration substantiate his critiques of those same narratives. Moreover, as we have argued above, Brown's own remarkable destabilization of East-West binaries is predicated on her self-acknowledged position as Western scholar who is deliberately "observant" of her own perceptions and interpretations.

Higginbotham's Midnight in Chernobyl: A Novelistic Depiction of "Soviet Gigantomania"

British journalist Adam Higginbotham's *Midnight in Chernobyl* begins with a "Cast of Characters": a list of the plant engineers, Party and military officials, scientists, and medical professionals who feature prominently in the journalist's subsequent narrative. This "cast list" bears a resemblance to the "family trees" that often accompany translations of lengthy Russian novels such as Tolstoy's *War and Peace*—paratextual materials intended to ease unfamiliar or otherwise uninitiated non-Eastern European readers

into dramas dependent on the complex relationships amongst multiply-named characters.³ To be sure, as Higginbotham's reviewers have observed,⁴ his account of the nuclear disaster at Chernobyl reads much like a novel—and although it may excusably fall short of the literary standards established by the likes of Tolstoy or Turgenev, it nevertheless offers a compelling portrait of human actors enmeshed in historical circumstances that at once influence and transcend their immediate perceptions, actions, and desires. The first half of Higginbotham's book reads much like a thriller: it offers a tense hour-by-hour chronology of the accident itself that begins with engineers' preparation for a routine test on the afternoon of Friday, 25 April; crescendos with an emergency call shortly after midnight on Saturday, 26 April; and concludes with the evacuation of the neighboring city of Prypiat on the afternoon of Sunday, 27 April. The second half, for its part, more resembles a detective procedural: here, Higginbotham investigates both the material and ideological fallout of the event as he traces the efforts made by so-called "liquidators" and "bio-robots" to contain nuclear contamination as well as those made by Communist Party officials to likewise contain sensitive information which might potentially poison the faith of the Soviet citizenry.

In both parts of his text, Higginbotham draws on his immediate sources—namely, first-person interviews with eye-witness narratives and recently declassified Russian-language documents produced by both engineers and Party officials—in order to heighten narrative suspense. For instance, when he

³ These "family tree" paratexts are particularly helpful to non-Russian readers unaccustomed to the distinctions amongst, and variously contextualized uses of, first names, surnames, patronymics, and nicknames (e.g. "Sasha" for "Alexander"). Admittedly, Higginbotham's own "cast of characters" dispenses with these nuances by offering, in the Western tradition, simply the first and last names of his key players. Even so, as we argue here and below, this "cast of characters" places into relief the degree to which human agents were enmeshed in larger systems and historical forces that at once influenced them and transcended their individual (re)actions.

⁴ In a piece for *The New York Times Book Review* published on 3 April, 2019, Robert P. Crease characterizes Higginbotham's account of Chernobyl as a "gripping, miss-your-subway-stop read." Likewise, in a review published in the 6 February 2019 issue of the *New York Times*, Jennifer Szalai states that Higginbotham "marshals the details so meticulously that every step feels spring-loaded with tension." Notably, Szalai places into relief the careful literary construction of Higginbotham's work by noting that his preliminary accounts of "blithe" Soviet "confidence" in 1970's era nuclear projects "show up [...] like Chekhov's gun, waiting to go off."

documents the moment at which an ostensibly routine test began to go awry, he suddenly focalizes the perspective of Leonid Toptunov, the senior reactor control engineer:

Now Toptunov watched in dismay as the glowing gray figures on the reactimeter display began to tumble: 500...400...300...200...100... megawatts. The reactor was slipping away from him. A series of alarms sounded, "Failure in measuring circuits." "Emergency power increase rate protection on." "Water flow decrease." [...] But Toptunov could not stop the numbers from falling. (81)

If textual moments such as this one suggest Higginbotham's sympathy for young engineers caught in the cross-hairs of history, others express his judgment of-if not a certain contempt for-powerful personages who were arguably more complicit in the events leading to and following the disaster at Chernobyl. Indeed, his prologue begins with a profile of Senior Lieutenant Alexander Logachev, a "lead radiation reconnaissance officer" who, although he "loved radiation the way other men loved their wives," (1) nevertheless was left "screaming in panic" once he entered the Chernobyl Zone (3). Likewise, Higginbottham characterizes Anatoly Dyatlov, the deputy chief engineer for operations at the Chernobyl plant, as a "fanatical specialist" (77) whose "Siberian eyes [...] seemed to glint with malice" (76).

Certainly, Higginbotham's propensity for pitting naïve worker-underdogs against malicious bosses and radiation-loving (but ultimately emasculated) military officers should give readers pause. After all, this seems to be the very stuff of melodramatic "disaster movies" on which Gessen hinges her critique of the HBO series. And yet, unlike the script-writer of "Hollywood fantasy," Higginbotham recognizes that heroes like Toptunov might well share the same ignoble destiny as villains such as Dyatlov. If Higginbotham's nonfiction reads like a novel, then, it is not because he has pitted any individual over another—but rather that he has cast the entire Soviet system as both the perpetrator and victim of the Chernobyl event. To this end, his four-page "cast list" does not so much preview a host of characters

whose (inter)actions are propelled by their individual choices as it indexically gestures to the sprawling and complex state system in which they were enmeshed.

In the final analysis, Higginbotham contends, the Chernobyl disaster was a consequence of Cold War-era military competition between the Soviet Union and the United States. Despite Soviet contentions that civilian reactors drew on nuclear energy for peaceful ends—the first reactor, named the "Atom Mirny" literally means "peaceful atom"—the fact of the matter is that they were "copied from those built for the Manhattan project" (37). Such reactors, Higginbotham notes, depended on a "risky combination" of graphite and water: "in graphite, a moderator that burns fiercely at high temperatures, and, in water, a potentially explosive coolant" (37). This graphite-and-water "combination" was present in the RMBK⁵ reactors at the Chernobyl plant, whose graphite-tipped control rods, although they were designed to neutralize a chain reaction caused by growing steam, risked actually accelerating a feedback loop on initial contact with water (38).

Despite this substantial risk, Higginbotham maintains, the Soviet state continued to manufacture them because they were "affordable to build and cheap to run" (43). What is more, these reactors demonstrated the "triumph of Soviet gigantomania" and thus "its creators' unrelenting pursuit of economies of scale." (60). Although these reactors did fail—Chernobyl, while a disaster of epic proportions, was not by any means the first nuclear emergency to occur in the USSR—the "paranoid regime of permanent warfare maintained" by the Soviet state ensured that "any accident [...] was regarded as a state secret, policed by the KGB" (43). In those cases wherein reports of failures were, in effect, leaked, the state dismissed them by contending that they were "irrelevant to the USSR's nuclear industry because its operators were far better trained and its safety standards higher than those in the United States' (69). To this end, it deflected attention from domestic accidents by citing the American "humiliation" of Three Mile Island (69) and rejected debates concerning safety regulation proposed by both the US and

⁵ Or Reaktor Bolshoy Moshchnosti Kanalnyy, "High Power Channel-type Reactor"

internal anti-nuclear movements (33). Consequently, when the graphite-tipped control rods used in a routine test actually did produce, rather than thwart, a nuclear chain reaction at Chernobyl, even many of the plant's engineers immediately believed the resulting explosion was the beginning of a dreaded "war with the Americans" than the consequence of internal flaws in the state-controlled system of nuclear power (81).

According to Higginbotham, then, the Chernobyl disaster was a direct consequence of a martial state's deliberate program of manufacturing enormous, cheaply-produced, and thinly-regulated civilian plants in its bid to compete against its most formidable Western adversary. If, however, the near-meltdown that occurred on 26 April was ultimately influenced by the conditions of the Cold War, it also set off a veritable chain reaction of events that led to the demise of this same decades-long East-West stand-off. Although, for example, U.S. President Ronald Reagan's famous 1987 exhortation at the Berlin Brandenburg Gate⁶ remains in collective memory as the tipping-point of the Cold War, Higginbotham suggests that Reagan's 4 May response to the Chernobyl disaster was no less significant. Reagan's contention that the "Soviets owe the world an explanation" (201) effectively articulated not only Western desires for Soviet accountability and transparency but also those long vocalized by activists and dissidents within the USSR itself-a demand to which General Secretary Mikhail Gorbachev ultimately acquiesced through his program of glasnost, or "openness." As Higginbotham maintains, however, the gradual crumbling of the proverbial Iron Curtain was just as much the consequence of soft diplomacy practiced by US and Soviet civilians. For instance, he accounts for how the UCLA hematologist Robert Gale's travels to Moscow—funded, not insignificantly, by American billionaire and philanthropist Armand Hammer, a renowned Soviet sympathizer-allied US and Soviet doctors and medical researchers in a common battle against radiation poisoning. (228-30, 232-34)

⁶ That is, Reagan's challenge to "Mr. Gorbachev" to "tear down this wall!"

Ultimately, Higginbotham positions Chernobyl as the definitive crisis of the Cold War: one that was caused by Soviet attempts to compete with its American nuclear nemesis in its own game of marshalling the martial atom for energy dominance—and one that in the end resulted in a (if only uneven) settling of scores between two global superpowers. To this end, Higginbotham's title, *Midnight in Chernobyl*, is not insignificant. Although it promises (and certainly delivers) a suspenseful narrative composed of a "cast" of brave workers, negligent apparatchiks, and state spies who scrabbled by cover of night to contain possibly the worst human-created catastrophe in historical record , it more crucially charts the zenith and nadir of a state system enthralled by "gigantomania."

Plokhy's Chernobyl and the Opening Gates of History

If Higginbotham's account of the Chernobyl disaster reads like a novel, it most resembles one whose narrative is delivered by a third-person omniscient narrator. Here, the internationally-acclaimed journalist —whose previous publications range from an account of billionaire Sir Richard Branson's aspirations to space travel to that of Graham Hawkes' submarine adventures—ascribes to the conventions of traditional journalism by largely absenting his subjective voice and position and rather maintaining the illusion of a transparent and largely dispassionate report, mirroring the move from traditional journalism into literary journalism of the mid-20th century. Likewise, historian Serhii Plokhy observes the conventions of his own profession in his own work, *Chernobyl: The History of a Nuclear Catastrophe*—which, as its subtitle indicates, is intended as a "work of history" (xiv). Plokhy's book generally follows the same narrative arc as Higginbotham's: it begins with a preliminary account of the historical and political context in which the accident occurred; breaks the event itself into hour-by-hour narrative segments; recounts the subsequent investigation; and concludes with a study of how the catastrophe, as a consequence of the Cold War, eventually led to the end of a decades-long stand-off between East and West. Like Higginbotham,

moreover, Plokhy occasionally focalizes the perspectives of the witnesses he interviews or whose testimonies he reads in Soviet archives, but nevertheless maintains a detached narrative voice.

Unlike Higginbotham, however, Plokhy does permit his readers a brief glimpse into his subjective position and the personal and professional motives that drove him to construct this history of Chernobyl —and it is this momentary relaxation of professional protocol that places into relief the ultimate stakes of his study. In his preface, Plokhy-a Harvard historian who directs his university's Ukrainian Research Institute-recounts visiting the fallout site in a group composed of mainly of British tourists. The tourists, he recalls, had traveled to this remote region of northern Ukraine with the clear expectation of spectacle: in fact, they were inspired to do so after playing the video game S.T.A.L.K.E.R: Shadow of Chernobyl, a "shooter survival horror game [whose] action takes place in the Chernobyl Exclusion Zone after a fictional second nuclear explosion" (xi).⁷ If Plokhy can barely disguise his disdain for these tourists' willingness to be entertained by the remnants of a global disaster-indeed, one that not only compromised his own health but also cost the livelihood of one of his close colleagues (xiv)- he expresses a similar degree of impatience for the group's tour guide, a young Ukrainian woman named Vita. When, for example, Vita gestures toward signs for "meat" and "cheese" in an abandoned supermarket in order to contest Western claims that "in the Soviet Union there were shortages of everything," Plokhy is compelled to explain to her that, Western propaganda notwithstanding, the inhabitants of the nuclear city of Pripyat enjoyed more privileges than their fellow Soviet citizens-and that, in any case, "the fact that there were signs saying 'meat' or 'cheese' did not mean that these products were actually available" in the heyday of Soviet accelerated economic and technological development (xiii).

⁷ Not insignificantly, Kate Brown's chapter on Chernobyl in *Dispatches From Dystopia* – a text we will presently discuss – begins with an allusion to Andrei Tarkovsky's film, *Stalker* (1979) whose protagonist "secretly leads adventurers" for a "small fee" into an "abandoned, fenced-off, and guarded" territory – or "Zone" (38). It is precisely this film, which so uncannily foretells the Chernobyl disaster and the subsequent cordoning off of a "Zone of Contamination", that inspires the video game S.T.A.L.K.E.R. that Plokhy discusses. Notably, the film's critical depiction of disaster adventurism is unironically replicated by the S.T.A.L.K.E.R. enthusiasts Plokhy meets in his sojourn to northern Ukraine.

In this brief anecdote, Plokhy calls attention to his unique subject position. On the one hand, as a Russian-born ethnic Ukrainian whose student years in Moscow and Kiev coincided with the Chernobyl disaster, he is deeply suspicious of Western tendencies to reduce the event to a sensational one whose causes might be easily explained away with references at once to Soviet over-confidence and incompetence. On the other hand, however, as an émigré historian of Eastern Europe, he is likewise skeptical of nostalgic narratives, such as those espoused by the young Vita, which might cast the Chernobyl nuclear accident as an unforeseen or otherwise tragic curtailment of a utopian state. If Plokhy initially drew on this ambivalent subject position to critique his fellow tour-members who were culturally and affectively separated from this event—as well as his tour-guide, who clearly perceived it from the other end of a generational divide-his subsequent book-length history of Chernobyl follows similar impulses. "The further we move in time from the disaster," he states in his prologue, "the more it seems like a myth—and the more difficult it becomes to grasp its real-life roots and consequences" (xv). To this end, then, he claims his status "both as a historian and a contemporary of the events being discussed" (xiv) to authorize his shattering of myths that have calcified narratives offered on both sides of the fallen Iron Curtain. Moreover, and perhaps just as crucially, he draws on his mediating role as a member of two spatially- and temporally-dependent cultures in order to offer a more nuanced account of the Chernobyl catastrophe and its aftermath.

As Gessen contends in her reference to Plokhy's book within her review of the HBO series, the historian ultimately concludes that it was the "Soviet system itself that created Chernobyl and made the explosion inevitable." Indeed, his first chapter begins with an account of the 27th Congress of the Communist Party of the Soviet Union, held in Moscow on 25 February, 1986, in which the new Party secretary, Mikhail Gorbachev, delivered a six-hour-long speech in which he maintained that the long period of Brezhnev-era "stagnation" could be countered through a program of *uskorenie*, or "acceleration" (9). "It was believed," Plokhy maintains, "that the system was basically sound and simply needed a boost by means

of 'scientific and technical progress,' the term for Soviet technological innovation" (9-10). Of course, Plokhy's chapter is laden with irony. Both he and his readers know, as Gorbachev and his audience did not, that this very investment in "accelerating" Soviet infrastructure-even at the risk of relaxing regulatory controls—would eventually result in a near-meltdown caused in part by the lowering of antiquated graphite-tipped control rods. To this end, then, Plokhy—much like Higginbotham—identifies the Soviet state's insatiable urge to compete with its American adversary as the primary cause of the technological and regulatory oversights that eventually led to nuclear disaster.

And yet, precisely because Plokhy is a former Soviet citizen, he offers insights into the causes and consequences of the event that a Westerner like Higginbotham cannot. For instance, although he, like Higginbotham, recognizes the roles played by Western individuals such as the hematologist Robert Gale and the nuclear inspector Hans Blix in attending to the disaster, Plokhy is also careful to emphasize the equally productive intervention of the Soviet state in marshalling a cadre of engineers, soldiers, nuclear scientists, and medical professionals to respond immediately to the catastrophe. If the "militarized economy" of the USSR had "produced the Chernobyl disaster," he maintains, it nevertheless was also "mobilized to clean up its consequences" (265). Contentions such as this one, which simultaneously critique and affirm the Soviet system, may well disconcert those of Plokhy's Western readers who come to his text expecting a drama that definitively pits an ideologically-captive East against a comparatively freethinking West. To be sure, Plokhy continues to up-end his Western readers' expectations. For example, he accounts for how Valery Legasov-the eventual hero of the HBO series- "became an instant celebrity" in the West for his "apparent openness about the causes and consequences of the Chernobyl disaster" even as he was suspected of "divulg[ing] too much" by "Moscow's nuclear establishment" (263). And yet, lest his Western readers claim Legasov as a hero-dissident on par with the likes of Andrei Sakharov, Plokhy makes clear that the physicist continued to embrace the "rule and ideals" of the Soviet regime (268). Cases such as Legasov's, Plokhy suggests, are indicative of a specific Soviet psychology that may seem

impenetrable to those raised outside the system. To this end, the most he can do is to translate and annotate 1980's-era jokes and colloquialisms that might indicate the ambivalent attitudes of Soviet citizens to the "acceleration" of nuclear power and the state system that supported it.⁸

Most crucially, however, Plokhy's self-purported myth-breaking historical account counters Western narratives—including those espoused by Higginbotham—that US and Western European responses to the Chernobyl catastrophe ultimately influenced Moscow's new policy of openness and, in turn, most directly hastened the conclusion of the Cold War. As a Ukrainian-American scholar whose popular and critically-acclaimed history, *The Gates of Europe: A History of Ukraine* (2015) immediately preceded his account of Chernobyl, Plokhy is particularly mindful of how the disaster's occurrence within Ukraine—a Soviet republic with an enduring nationalist movement and a long history of resistance to Soviet oppression—mobilized internal eco-national movements that were just as instrumental in imploding a gargantuan yet nevertheless flaccid and vulnerable communist state. To this end, Plokhy profiles an unexpected demographic: authors and poets who, despite (or perhaps precisely because of)

⁸ For instance, in his preface, Plokhy counters his young tour-guide's expression of nostalgia by retelling a late-Soviet-era joke – a discursive form, he explains, that offered a sole bridge over the "gap between the image projected by government propaganda and reality" (xiii). The joke precedes as follows: "If you want to fill your fridge with food, plug the fridge into the radio outlet" (xiii). As Plokhy exposits, the "radio was telling the story of ever-improving living standards; the empty fridge had its own story to tell" (xiii). Other moments of Plokhy's narrative, however, are not only more sobering but also comparatively more opaque to Western readers. For example, he explains how the term *khokhly* – a "derogatory term to refer to [...] Ukrainians" (253) that is analogous to those used in the US to refer to Black Americans or those used in the UK to refer to those of South Asian descent – was strategically used in state investigations of Ukrainian Chernobyl engineers in order to target their "institutional rather than ethnic" positions in the Soviet system (252). If this latter example seems especially confusing and convoluted, then it all the more illustrates Plokhy's implicit claim that a history of the Chernobyl event is predicated on a rich understanding of the contents and discontents of Soviet discourse and ideology.

their membership in Soviet writers' unions, used their esteemed positions to explore both the utopian and dystopic potential of civilian nuclear power in the Ukrainian SSR.⁹

Initially, Plokhy notes, many Ukrainian writer-activists greeted nuclear energy programs with the hope that they might lead to a veritable Ukrainianization of Soviet technological advancement. For example, in the "spring of 1974, two years before the construction of the [Chernobyl] plant, a leading Kyiv [sic] theater staged [Oleksandr] Levada's play Hello Prypiat," a "cultural idyll" that explored "conflicts between modernity and tradition, industrialization and the environment" within an ethnically and linguistically Ukrainian setting (290). Such paens to the potential coexistence of nature and technology were swiftly curtailed, however, by the 1986 accident, not least because these writer-activists witnessed the poisoning of their family members and national brethren. The poet Ivan Drach, who had once personified the Prypiat River as a comely Ukrainian maiden who "marries a newcomer to the area called Atom" (292) immediately responded to the catastrophe by composing a verse-novel, The Madonna of Chernobyl, which envisioned a sacrificial victim in whose hands "atomic nails have been driven" (292). Writers such as Drach, who had long maintained Ukraine's national consciousness, soon spearheaded ecological movements such as Zeleny Svit (Green World) and the democratic revolutionary organization Rukh (Movement) (293). According to Plokhy, it was these writers-activists' "efforts to break into the public sphere with their concerns about the harmful effects of the Chernobyl disaster on public health and the environment" that informed Gorbachev's convening of the "Nineteenth Communist Party Conference which adopted a program of political reform" (293). Moreover, it was the "issue of Chernobyl that allowed the dissidents and rebel intellectuals to wreak the common front of communist authorities, pitting regional elites against their bosses in Moscow" and thus intensifying internal pressure within a bloated empire (299).

⁹ For a more detailed account of the writers and movements addressed below, see Inna Sukhenko's chapter on the "Eco-Imperatives of Ukrainian Consciousness" in *Ecoambiguity, Community, and Development: Toward a Politicized Ecocriticism* (2014).

"Years later," Plokhy reports, Drach contested that "Chernobyl was the stimulus of all the democratic processes in Ukraine" (298). Although Plokhy remains wary of categorically affirming this statement-it "would be wrong," he states, "to attribute the development of glasnost in the Soviet Union, or the rise of national movements in Ukraine and other republics, to the Chernobyl accident alone"—he nevertheless insists that "the disaster's impact on those interrelated processes can hardly be overstated" (xvi). It is in this respect that, despite his caveats, Plokhy's narrative of Chernobyl most dramatically differs from but also enriches Higginbotham's own. If, according to Higginbotham, Chernobyl was at once the consequence of a faltering Soviet system and a major contributor to its downfall, Plokhy extends this thesis by offering a post-colonial narrative that recognizes the influence of immanent, emergent conditions within the Soviet Union that led to its implosion and in turn to the conclusion of the Cold War. Plokhy's account, then, is implicitly informed by discourses of scale: its focus shuttles between the machinations of a gargantuan and unwieldy empire and the localized interventions of citizens of a discrete republic that not only comprised the setting of the disaster but was also, after the dissolution of the Soviet state in 1991, left with its "unpaid bill" (329). Moreover, in something of a rhetorical telescopy, Plokhy's narrative emplots this intra-state drama within an even larger one in which Western scientists, NGOs, charitable organizations, and even members of the Ukrainian diaspora¹⁰ scrambled to respond to an initially Soviet nuclear crisis. Not insignificantly, Plokhy's brief but nevertheless crucial revelation of his own spatio-temporal subject position as a Ukrainian-American scholar located precariously between the pre-Chernobyl Soviet Union and the post-Chernobyl West identifies him as a veritable node in a sprawling, if not sublime, global network of relations. Indeed, if, in his previous monograph, Plokhy identified Ukraine-a nation whose name literally means "borderland"-as a former

¹⁰ To be sure, North American Ukrainian diasporic communities with long-standing interests in Ukrainian nationalism immediately responded to the Chernobyl event with anti-Soviet sentiment. For this reason, Plokhy states, the KGB particularly monitored the activities of Ukrainian-Americans such as Tania D'Avignon, a photographer and interpreter who contributed to a special issue of *National Geographic* on the Chernobyl disaster (287).

Russian/Soviet colony poised both perilously and potently at the "gates of Europe," then his account of Chernobyl likewise situates the nuclear disaster as the liminal event of Cold War history and Ukraine as its auspicious setting.

Kate Brown's Manual For Survival and the Writer in Place

Whereas a concern with place, scale, and positionality implicitly underlies Plokhy's history of the Chernobyl disaster, it is the explicit focus of Kate Brown's Manual For Survival: A Chernobyl Guide to the *Future*. Here, the MIT environmental historian attends not only to how the disaster occurred within established Cold War-era geo-political borders, but also to how its manifestation within a specific ecosystem inherently transgressed them and thus challenged the narratives produced by the states that both sanctioned and contested them. To this end, Brown extends and strategically deploys Plokhy's initial (yet admittedly limited) impulse to introduce first-person voice within a scholarly history in order to demonstrate how a writer's necessary emplotment in time and space dramatically influences the scope and constraints of any account of historical trauma.

Notably, this is not Brown's first monograph to address the Chernobyl event or Cold War-era nuclear programs more generally: her earlier books, A Biography of No Place (2004), Plutopia (2013) and Dispatches from Dystopia (2015) each address the Soviet Ukrainian setting of the Chernobyl disaster within the greater context of twentieth-century East-West political, cultural, and ideological relations. Thus, it is important to consider how her earlier engagements inform the methodology she employs in this most recent and popularly received history of Chernobyl. Brown's penultimate book, Dispatches from Dystopia: Histories of Places Not Yet Forgotten, is particularly relevant. Here, the self-proclaimed "professional disaster tourist" (1) narrates her exploration of "places [that] are often forgotten in non-fiction prose" (2): for example, the basement of a Seattle hotel that stores the personal effects of Second World War-era Japanese-Americans deported to U.S. internment camps; an abandoned SuperFund site in Montana; a

similarly deserted mining town in Kazakhstan; a remaining but dwindling Hasidic Jewish community in Ukraine; and indeed, the veritable ghost-town of Prypiat that abuts the failed Chernobyl nuclear power plant. Unlike the thrill-seeking tourists whom Plokhy encounters during one of his own research trips, however, Brown's visits to these abandoned and largely forgotten sites of historical trauma are not (entirely¹¹) motivated by prurient curiosity, but rather inspired by her theoretical interests in the spatial dimensions of history. History, Brown maintains in her introduction to this monograph, "occurs in place, not, as historians commonly believe, in time. Or, rather, time and place have been mixed together metaphorically so that everything, past and present, takes place in a particular space of time" (6, emphasis in original). Indeed, she continues, "geographers argue that humans cannot create anything without first being in place, that place is essential to the construction of meaning and society, and, I would add, of history, sociology, literary criticism, and anthropology" (6). Thus, plotting the past "temporally only from sources in an archive is one of those movements that cloud the work of invisibility" (6). To this end, Brown's attempt to re-narrativize specific traumatic events by emphasizing their literal emplotment is part of a larger project to render visible not only their largely-forgotten geo-political historical significance, but also-especially with respect to the 1986 Chernobyl disaster-to expose how their occurrence within time was in effect rooted in the complex interactions between humans and nature in precise socio-political places.

Given Brown's earlier focus on place in *Dispatches From Dystopia*, it is not entirely surprising that her history of Chernobyl in *Manual for Survival* considerably departs from the methods of chronological

¹¹ Despite her ultimate objective of re-orienting historical theory and praxis with respect to rhetorics of space, Brown readily confesses that her research travels occasionally permitted her to indulge in base acts of voyeurism, schadenfreude, and sentimentality. In fact, her chapter on the Chernobyl Zone is predicated on her self-admitted naïve credence in a Ukrainian internet celebrity's fake reconstructions of abandoned domestic scenes in Prypiat – which the sadder-but-wiser Brown is in turn impelled to deconstruct and analyze within a larger meditation on history and nostalgia. As we will presently argue, Brown's deliberate use of first-person narration, which at once testifies to her authority and exposes her vulnerability, is crucial to the historical account of Chernobyl she offers in *Manual For Survival*.

narration deployed by Higginbotham and Plokhy. To be sure, the first section of Brown's seven-part history of the disaster offers a preliminary account of the material causes of the catastrophe as well as the subsequent responses of Soviet workers, military officials, and scientists to its consequences. And yet, her following sections are arranged thematically in order to focus on how both Soviet and non-Soviet entities and individuals (e.g., scientists, medical professionals, activists, and bureaucrats) reacted to this nuclear chain reaction—and how, ultimately, they participated in an historical drama that was ultimately influenced by (but by no means determined) by interconnected and dynamically scalar conceptions of place and space. For example, although, like Plokhy, Brown emphasizes the significance of the accident's immediate occurrence in the Soviet republic of Ukraine—and, for this reason, is equally attentive to how this nation's colonial past influenced its political responses to the disaster and ultimately its role in the disintegration of the USSR—she is in the final analysis more invested in how the distinctive geographical features of the north-central Ukrainian region in which the plant was located contributes simultaneously to intensive and expansive histories of trauma.

In her third section, entitled "Man-Made Nature," Brown first establishes that the Chernobyl plant was constructed precisely on the sprawling terrain of marshland that, while largely inhospitable to human inhabitance¹² had for this exact reason played a hidden but significant role in key events in Soviet history. For example, it served as a refuge for Civil War-era civilians fleeing the conflict between the Russian White Army and the "ragtag Bolshevist army"; Ukrainian peasants seeking nourishment during the Stalinist-era

¹² Notably, with the exception of indigenous Ukrainian and Belarusian marshland villagers, a slim number of whom still live within the contaminated Zone and speak a distinct Polesian dialect (121). Brown begins her section, "Man-Made Nature" by profiling one such "swamp dweller," a nonagenarian named Halia, who witnessed the course of Soviet history from the Russian civil war to the collapse of the Soviet Union. "How did you survive all that?" Brown asks her aged interlocutor – to which Halia simply responds, "Live! I just wanted to live, live!" (125).

artificial famine of 1932-1933¹³; and Second World War-era partisans engaged in guerilla warfare against Nazi occupation during the Soviet Great Patriotic War¹⁴ (122). In this way, then, Brown contests that the Chernobyl disaster was by no means an isolated catastrophe, but rather one that occurred within a series of interrelated twentieth-century traumas that occurred within a particular socio-geographical space. In turn, she demonstrates the relevance of this boggy region in relation to the specific occurrence of the Chernobyl event. Since the northern Ukrainian marshland regions in which the Chernobyl plant was situated extended into southern Belarusian territories that were the sites of covert Soviet nuclear tests conducted both before and after the disaster, it became difficult for researchers to distinguish the effects of discrete martial and civilian nuclear events on the especially radiation-absorbing peat bog-lands (141). Meditating on a "crippled pine" she discovered in her sojourns in this region, Brown writes:

I realized that the perforations of radioactive nucleides into the cellular structures of organisms of the swamp long predated the Chernobyl explosions and continued after the accident. Soviet propagandists and international agencies honed a public information campaign that repeatedly insisted the danger was over; the Chernobyl disaster was closed, but not quite. *Chernobyl was not a single event but a continuum*; the radioactive contamination of Polesia lasted more than three decades. (141).

¹³ The Stalinist-era artificial famine – officially named by Ukrainian writer-activist Ivan Drach (see below) as the *Holodomor* or, literally, the "Murder By Hunger" – was intended to literally starve off the ethic Ukrainian peasantry. In 1953, the Polish-Jewish intellectual Raphael Lemkin advanced his neologism, "genocide," by directly citing Stalin's intentional starvation of Ukrainian peasants; since then, this event has been officially recognized as a genocide by such nations as the U.S., Canada, Israel, Finland, France, and Mexico. For a recent and nuanced history of this event, see Anne Appelbaum's *Red Famine: Stalin's War on Ukraine* (2017).

¹⁴ Brown's account of the northern Ukrainian marshes is focalized through the perspective of her interlocutor, Halia – ostensibly a nominal Orthodox Christian whose beliefs and practices nevertheless most effectively represent local indigenous folkways. What Halia's account does not mention – but what Brown certainly recognizes in both this present study and her other histories of nuclear-era Ukraine – is that these marshes also served as a refuge for Jews fleeing from pogroms.

Here, Brown's characterization of Chernobyl as a "continuum" rather than an event pertains to both its temporal and spatial dimensions, insofar as its inextricable relationship to earlier historical events is literally grounded in the land itself.

In the end, Brown suggests, the Chernobyl disaster was not an entirely "Ukrainian" catastrophe nor was it, for that matter, a "Belarusian" one. Rather, it was an event that occurred within a larger ecosystem that, although it exceeded specific human-created temporal and spatial boundaries, was nevertheless exploited by a Soviet empire that strategically demarcated colonized locales for both martial and civilian nuclear projects and thus depended on these artificial boundaries in the first place. To be sure, Brown addresses comparable Soviet nuclear undertakings—and failures—in similarly ethnically and biologically diverse regions of the massive state. In fact, she begins her narrative with a brief profile of Angelina Gus'kova, a Soviet doctor who effectively treated Chernobyl patients by drawing on her experiences of working with radiation victims at the Mayak Plutonium Plant in Siberia (13-14).

However, precisely because Brown's study of the 1986 nuclear disaster is focused on an ecological terrain that ultimately exceeded human-created, Soviet-era political demarcations, she is also able to locate Chernobyl within a larger—and in fact global—ecology of Cold War-era nuclear experiments and catastrophes that in the end destabilizes binary narratives that pit the loosely regulated, martial nuclear program of the East against the comparatively prudent civilian programs of the West. Although, like Higginbotham, Brown recognizes that Soviet propaganda efforts to celebrate the "peaceful atom" through civilian energy production disguised on-going military testing, she is also careful to address corresponding measures taken by the USSR's chief rival, the United States. "Without the Cold War," she argues, "civilian nuclear power reactors like Chernobyl"—and by extension, those constructed in Europe and North America—"would never have made sense" (218).

The technology for nuclear power generators was borrowed from bomb-producing reactors, yet even with free, army-issue designs, the reactors were pricey to build and risky to operate. The rationale to construct expensive power reactors at a time when oil was flowing cheaply from the Middle East makes sense only if you factor in the Cold War. Bomb-producing nations sought a peaceful atom as an antidote to the skin-melting horrors that nuclear war presented.

"Peaceful" nuclear power made for good public relations. (218).

To this end, Brown maintains that, beginning with President Dwight Eisenhower's unveiling of an "Atoms for Peace" program in 1953—in which the US "offered to share American nuclear technology with other [ideologically allied] countries"—a "race began between the Cold War superpowers to outproduce each other not only in first-strike capability but also in civilian nuclear reactors for electric power and nuclear medicine" (219). Such a "race," she continues, produced as many nuclear catastrophes caused by Western competitors as it did by Soviet ones. Here, Brown notes not only the infamous nuclear meltdown that took place in 1979 at the Three Mile Island Nuclear Generating Station in central Pennsylvania (59-60) but also the fallout from US nuclear testing in the Bikini Atoll¹⁵ (219-220); the covert use of Marshall Islanders in human radiation experiments by US officials following military nuclear tests (244); and the sky-rocketing rates of cancer throughout the southwestern regions of the United States following the detonation of "a hundred nuclear bombs in Nevada"¹⁶ (246). In fact, Brown contends, fallout of "radioactive iodine from atmospheric detonations of nuclear bombs in Nevada *dwarfed Chernolyl emissions three times over*" (246, emphasis added). If, she concludes, most of the world is aware of the Chernobyl disaster but relatively ignorant of the ultimately more costlier consequences of US domestic experiments, this is in part due to American systems of secrecy and surveillance that rivalled those of the Soviet KGB (228). Ultimately,

¹⁵ Significantly, Brown notes, the "antinuclear film *Godzilla* hit Japanese theatres" only months after the contamination of a Japanese fishing vessel, the Lucky Dragon, as a result of US testing in the Bikini Atoll (219-220).

¹⁶ Although Brown does not cite Rob Nixon's influential study, *Slow Violence and the Environmentalism of the Poor* (2011), these moments in her book corroborate Nixon's contention that spectacular and historically momentous events such as Chernobyl have overshadowed gradually unfolding environmental catastrophes – especially those that have occurred in the hidden corners of US and Soviet empires (e.g. Western Shoshone territories and the lands traversed by nomads of the Semipalatinsk, respectively).

Brown states, "Chernobyl wasn't the largest nuclear emergency in human history. It was just a waving red flag pointing to other disasters hidden by Cold War national security regimes" (5).

By arguing that Chernobyl was not merely a consequence of "the Soviet system itself"—as Gessen, Higginbotham, and Plokhy insist—but rather a much larger network of "Cold War national security regimes," Brown is in turn able to demonstrate how its role in the conclusion of a decades-long geo-political stand-off was much more complex and nuanced than scholars have previously recognized. Although she, like the authors, acknowledges the role of Western medical professionals, charities, and nongovernmental organizations in facilitating "soft" diplomatic relations between the twin superpowers, Brown nevertheless calls into question their ultimate motives and practices. For example, she notes that, a year before he treated Chernobyl firemen and operators, the celebrated American hematologist Robert Gale had already been "severely reprimanded" by US federal regulators for performing bone marrow transplants on children "without the approval of a faculty committee responsible for protecting the rights of patients"; thus, she intimates that Gale's offer to treat Chernobyl survivors with a yet-untested drug was not so much an altruistic endeavor than an opportunistic one which might benefit the doctor and the Swiss pharmaceutical company with which he was working (19). Likewise, she suggests that Western charities, ostensibly organized to provide relief to survivors and goodwill amongst political rivals, emphasized Chernobyl victims' "helplessness" and thus compounded the "assumption of Western superiority and former¹⁷ Soviet citizens' humiliation" (288). Even the "foreign scientists, journalists, and Soviet scientific elite" who participated in the "first international conference on the medical consequences of Chernobyl" in Kiev in 1988 remained under significant pressure by their respective states: just as Soviet participants were closely monitored by the KGB, US contributors funded by the Department of Energy

¹⁷ Here, Brown directly addresses the influence of Western triumphalism on charity endeavors established during the immediate aftermath of the Cold War. However, throughout her narrative, Brown is equally attentive to the political motivations of international charities and relief efforts that were founded before the collapse of the Soviet Union and the ostensible conclusion of the Cold War.

(151) were well aware that their "career trajectories" depended on their willingness not to "ask uncomfortable questions or raise objections" (152). In the end, then, Brown gestures toward a certain irony that underlay post-Chernobyl international efforts: even as they purported to soften, or even end, a decades-long stand-off between East and West, they were actually motivated by the very Cold War-era interests and allegiances they professed to neutralize. If there was one exception to this general rule, it was an "unholy alliance" that took place between a minority of Soviet and American scientists who "became partners on Chernobyl research" (179). Even so, Brown does not make any bold claims regarding these scientists' contributions to the end of the Cold War: in fact, she suggests that this conflict ended *despite* rather than because of both Soviet and Western responses to the catastrophe.

Of these three accounts, then, Brown's is most invested in challenging the conventional narratives that have shaped both Western and post-Soviet collective memory of the Chernobyl disaster—cultural myths that are particularly demonstrable in the HBO series and the rival NTV program. Crucially, her commitment to deconstructing such myths is informed not only by her attention to ever-widening socio-geographical ecologies, but also by her mindfulness of how she— as a traveler, scholar, and author of non-fiction—is necessarily emplotted within the account she offers. Indeed, in her earlier work, *Dispatches From Dystopia*, Brown cites the "observer effect" recognized by both natural and social scientists—whereby the observer, "in the act of watching, alter[s] the state of the object being studied" (12) in order to declare her own unabashed attention to "put [her]self in the story" (11) and locate herself "in place" (12). Although she recognizes how "academics recoil from the first-person narrative [...] because to confess to being there is to call into doubt one's objectivity and legitimacy" she nevertheless contends that authors' self-erasure dangerously contributes to what Donna Haraway has called the "god-trick"—a "disembodied ('one would think…') or multibodied ('we know that') [...] narrative mode [that] glosses over the fact that the writer, like everyone else, is rooted in time and place, which greatly constrains what the researcher can see and how he or she sees it" (11). Brown insists, moreover, that such "writing in place" generatively

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becomes "writing-as-thinking, an exploration of places and people and the complexities of recovering them from the past" (13, emphasis added).

As Brown writes in Dispatches, her commitment to announcing and in turn reflecting on her subjective positions vis-à-vis the places she researches have an ethical and political objective: to "provoke Americans to think of their history on a different plane, alongside, rather than against, Russian history" (3). To be sure, the author renews this commitment in her later history of Chernobyl-and thus it is in part because she does so that she so critically complicates received memories of this event. At the very outset of Manual For Survival, in fact, she declares that, although, when she "first started working on this book, [she] was no stranger to nuclear disaster zones or to northern Ukraine where the Chernobyl disaster took place," she was nevertheless:

a classic Western traveler in Eastern Europe, confident in the superiority of my society, sure of the natural, beneficial qualities of democracy and capitalism, and suspicious of Soviet truths in whatever form they took. These assumptions often made me, like many Westerners breaching the Iron Curtain, a poor listener and myopic observer. On the trips I took researching this book I tried to be more observant. (9)

It is precisely because Brown pledges to be "more observant" that she more carefully attends— as she began to do in her former book-to how her position as a Westerner influences her conduction of interviews and archival research, and how in turn her study might reveal Soviet narratives of Chernobyl "alongside" rather than "against" those produced in the West.

For example, although Brown certainly does not deny the machinations of the Soviet state in producing the nuclear catastrophe and subsequently suppressing information about its effects-in fact, she declares that, as an American researcher, she was "one of those foreigners in the KGB daily tally" (228)she nevertheless concedes that CIA agents and other foreign operatives equally "trolled for compromising information" in the aftermath of the event (156). Brown's commitment to observance and personal

reflection also permits her to be more relatively circumspect about the subsequent conclusion of the Cold War. In one memorable passage, for instance, she profiles the disastrous effect of agribusiness buy-outs of American small farms such as those operated by her grandfather, and thus questions the "progress" promised to "sleepy farm communities of northern Ukraine" by post-Chernobyl-era Soviet agronomists enthralled by Western -style capitalism. In yet another, she recognizes the influence of post-Soviet nostalgia on the testimony offered by one of her interviewees, a survivor named Nadia, but also admits feeling "envious" of the "inviting, even festive" Prypiat schools and day-cares that Nadia's children enjoyed: "light-filled, spacious chateaux for children" that contrasted dramatically with the overpriced "preschool in a dark church basement in Washington, DC" to which Brown had sent her own son (38).

Crucially, Brown's interjections of first-person narration are not merely ruminative or speculative. Rather, they are constructed to prompt the critical capacities of a reader who is invited to think with the author through a literal and metaphoric journey that begins with and eventually goes beyond the Chernobyl Exclusion Zone. When, for instance, Brown locates a wool factory in the northern Ukrainian city of Chernihiv as one source of contaminated goods circulated globally after the initial fallout, she is careful to account for the interpersonal dynamics that shaped her interviews with various witnesses; in this way, she acknowledges the "difference between the stories that managers tell and the stories that workers tell"¹⁸ (84). If Brown is mindful of contextualizing her interviews with first-hand witnesses, she is likewise alert to qualifying her archival sources. For example, even as she confidently avows that she was the "first Western historian to work in the [post-Soviet Ukrainian] Ministry of Health archives" (309), she is just as candid in admitting the scholarly and ethical problems that this position invited:

Truckers hauling boxes of paper later shuttled the mistruths written into official records to archival repositories, where they were catalogued, filed, and ossified as "fact." Historians later

¹⁸ The former adhere, defensively, to officially tabulated details, whereas the latter – mostly women – "acted as if they had been waiting these three decades for someone to turn up to record their story (85).

unearth these documents and try to sort through a mist of facts and fabrication. That was my problem as I worked through thousands of pages in the Ukrainian Ministry of Health archives. Who was right? The people who at first said there were no health problems or the people who later said there were? And what about the individuals, like the Belarussian minister of health, who said both things? [...] What can a researcher do when facing this kind of controversy? (165)

Notably, Brown does not give any definitive answers to these questions, not least because she realizes that it is beyond her personal and professional capacity to do so. What she does do, however, is draw on her scholarly training as an environmental historian to incorporate those reports to which she could give "more credence" into her narrative (166). Even so, she continually gestures toward the constructed, and thus inherently limited, character of her own narrative by puncturing it with personal anecdotes, questions to the reader that effectively break the proverbial fourth wall¹⁹, and references to her own research and methodology.²⁰

In the end, although Higginbotham, Plokhy, and Brown each effectively dramatize the enormity of the Chernobyl disaster, it is ultimately Brown's account that presents it most fully within the geo-politicalhistorical context in which it took place. It is able to do so—paradoxically, perhaps—because its narrative

¹⁹ As Brown states in her introduction to *Dispatches from Dystopia*, she is dedicated to putting herself "in the story, akin to a stage actor turning to the audience and talking through the imaginary fourth wall of the set (11). Although Brown never mentions Brechtian epic theatre, her method is notably similar to early 20th century projects which bid audiences to recognize the staging and conditions in which a performed piece took place -- and it also should be mentioned that her work appears to be influenced by American New Journalists of the 1960s who deliberately emplotted themselves in the subjects and settings they investigated.

²⁰ Notably, Brown concludes a chapter on the (un)documented effects of Chernobyl on women and children by explicitly directing her readers to a footnote that offers an exhaustive account of pediatric studies. "Even if you are not one to look at footnotes," she writes, "you might turn your attention to this one. [...] It is just a footnote, and it is a nightmare. The leaping, bounding galloping rates of maladies took shape, a dark horseman riding wild across the Chernobyl territories" (195). Here, Brown's direct address of the reader – a "you" who should turn "your" attention to a footnote – not only underscores the importance of details she could not fit into the formal body of her account, but also makes clear that this "you" should be aware of, and more actively investigate, the research Brown conducted to construct her larger narrative.

is organized around the perceptions, questions, and self-acknowledged perspectives of a single author "writing in place" rather than on the promise of a singular, totalizing account authorized by detached and purportedly objective prose. In other words, it is precisely because Brown suggests that her contingent spatio-temporal position with respect to the Chernobyl crisis is only one of a multitude that readers might best appreciate the veritable sublimity of this world-historical event.

Conclusion: Nonfiction and the Nuclear Other

In the conclusion to her review of *Chernobyl*, Gessen remarks on the final few moments of the HBO series:

Legasov gets the last word. He speaks of "the gift of Chernobyl: where I would once fear the cost of truth, I only ask"-the screen fades to black-"what is the cost of lies?" One might say that the cost of lies is more lies. One might say that these are fantasies, embellishments, shortcuts, and even translations. Whatever they are, they are not the truth.

The truth, Gessen insists, rather inheres in the recognition that it was the Soviet "system, made up primarily of pliant men and women, that cut its own corners, ignored its own precautions, and ultimately blew up its own nuclear reactor for no good reason except that this was how things were done."

Certainly, Gessen's interpretation of the "truth" of Chernobyl is one that Higginbotham, Plokhy, and Brown demonstrate within their respective histories. Significantly, however, this is not the only ostensible truth of Chernobyl—or rather, if it constitutes a truth, then it is one that is ultimately folded into larger, telescopic pursuits of the actual causes and consequences of this nuclear disaster. As the account we have constructed within this essay should suggest, these three texts dramatize a gradual widening of perspective: from Higginbotham's immediate focus on the machinations of the Soviet state to Plokhy's attention to the (post-)colonial discontents of larger Soviet history to Brown's contention that the

structural causes of the event and its immediate response were not limited solely to the Soviet system but rather enmeshed within a complex network of Cold War-era national security regimes.

Of course, by noting such correlative relationships, we do not at all intend to state categorically that works of non-fiction grounded in first-person narration are more effective in puncturing cultural myths or otherwise exposing the "truth" of historical events. In fact, we recognize that we are not in any position to do so: after all, the three texts we profile here are merely case studies in an exhaustive field of literary non-fiction. Even so, the progression we trace amongst these three texts should invite further exploration of the relationship between narrative voice and the construction (or contestation) of historical truth. At the very least, it should demonstrate how contemporary works of non-fiction, insofar as they do the slow, plodding work of exposing the complex and vexed machinations of interrelated state structures, have the potential to counter easily digestible historical fantasies produced at both ends of a gradually (re-) rising Iron Curtain.

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