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Narrative, Intermediality and Cultural Memory of a Docu-Fiction

EDITED BY
Nicola Dusi and Charo Lacalle

ARISTOTLE
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THESSALONIKI

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BY: **Nicola Dusi** and **Charo Lacalle**[1]

1. *Chernobyl*:[2] a wake-up call

The miniseries *Chernobyl* (HBO-SKY, 2019), about the disaster that occurred at the nuclear power plant of the same name in 1986, took the viewer back to the horror generated by the largest catastrophe in history caused by the human species to date. Created and written by Craig Mazin and directed by Johan Renck, *Chernobyl* is a fictionalized account of the causes and consequences of the catastrophe. At a time when the dangers of nuclear power seem to have faded in the wake of concerns about other emerging problems – such as climate change and growing water shortages – the meticulous reconstruction of the tragedy was praised even by the global environmental movement Greenpeace: "This was an event never before seen in the history of mankind, impeccably reproduced for television audiences."[3]

The success, with audiences and critics alike, of this mixture of political thriller, catastrophe, and horror film, was absolute from its premiere and corroborated the intermediality of television fiction as well as its capacity to touch the most profound and complex dimensions of our existence (Pallarés-Piquer, Hernández, Castañeda y Osorio 2020). *Chernobyl* also showed fiction's ability to explore cultural memory through the complexities of globally connected technologies and markets, as well as the impact of media on viewers (Gambarato, Heuman, Johannes and Lindberg 2022).

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[1] Although we developed the introduction together, Charo Lacalle wrote the first section and Nicola Dusi the second and third sections. The fourth was written jointly.

[2] In our book, *Chernobyl* in italics indicates the TV series, while Chernobyl in text typeface refers to the nuclear power plant.

[3] See https://n9.cl/oap40

After the broadcast of the fifth and final episode of *Chernobyl*, the prestigious site of recommendation resources for quality entertainment, Rotten Tomatoes assigned the miniseries a 97% critics' score while explaining its attractiveness as follows: "*Chernobyl* rivets with a creeping dread that never dissipates, dramatizing a national tragedy with sterling craft and an intelligent dissection of institutional rot."[3] *The Guardian* journalist Rebecca Nicholson attributed the miniseries' impact to the unflinching and explicit terror it induced in viewers and emphasized the impossibility of hiding images of burned bodies collapsing in putrid decomposition.[4] The *Forbes* TV newsletter considered that the show had "cemented itself a place in the larger scope of TV history" by obtaining the highest score for the television series from IMDB viewers.[5] As for its target, the global data and business intelligence platform Statista situated the audience in the United States at over 1.19 million within the 18 to 49 demographic.[6] In short, *Chernobyl* not only recalled one of the most tragic episodes in recent history but also aired it worldwide, making it a hit.

Russia's invasion of Ukraine and its capture of the Zaporizhzhia nuclear power plant – the largest in the world – in March 2022 converted *Chernobyl* into a wake-up call for fear of another explosion. This concern was expressed by the director general of the International Atomic Energy Agency (IAEA), Rafael Grossi, after visiting the installations at the end of August of the same year. "It could be a bigger disaster than Chernobyl," warned Carlos Umaña, co-chair of International Physicians for the Prevention of Nuclear War (IPPNW).

In line with the stories about the effects of the Anthropocene — mentioned in different chapters of this book — the miniseries' mixture of fiction and facts in its narrative strategies illustrates the horror of a nightmare from which we can never entirely escape because it could happen again. After all, "Russia effectively is using the plant at Zaporizhzhia as a pre-positioned nuclear weapon to threaten and intimidate not only Ukrainians but millions of Europeans across a dozen countries," wrote the Senior Advisor on Russia and Europe at the United States Institute of Peace (USIP), Mary Glantz, after the Russian occupation of the nuclear power station.

In summary, *Chernobyl* appeals to us as much as it overwhelms us because we know we are heading toward a point of no return in safeguarding humanity's future.

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[3] See https://www.rottentomatoes.com/tv/chernobyl/s01

[4] See "Chernobyl: horrifying, masterly television that sears on to your brain". *The Guardian*, 2019, May 29. Available at: https://www.theguardian.com/tv-and-radio/2019/may/29/chernobyl-horrifying-masterful-television-that-sears-on-to-your-brain

[5] See Paul Tassi's "Chernobyl' Ends Its HBO Run As The Highest Audience Rated TV Series In History". *Forbes* 2019, June 4. Available at: https://www.forbes.com/sites/paultassi/2019/06/04/chernobyl-ends-its-hbo-run-as-the-highest-audience-rated-tv-series-in-history/?sh=2e4545b16413.

[6] See Julia Stoll's "'Chernobyl' Season 1 viewer numbers in the U.S". 2021, June 13. Available at: https://www.statista.com/statistics/1013191/chernobyl-series-viewers/

We are doing little to prevent future catastrophes, as Toby Ord points out in his influential book *The Precipice: Existential Risk and the Future of Humanity* (2019). According to the Australian philosopher, there is an urgent need to manage today's risks, avoid tomorrow's, and become the kind of society that will never again pose such risks. To this end, Orb calls for allocating resources among projects and organizations, building and sustaining the research community, and developing a strategy.

The reflection on the risks of nuclear energy structures the different contributions of this work, dedicated to the semiotic and mediological analysis of *Chernobyl* from the necessary distance provided by the five years that have elapsed since its premiere.

2. Semiospheres among media ecosystems, intermediality and transmediality

In today's "post-medial atomization" (Eugeni 2010), a rigid methodology is not sufficient to understand the "collective chainings of enunciation" (Deleuze and Guattari 1980) that constitute the network of discourses, texts, and media connected to a TV miniseries as complex as *Chernobyl*. TV seriality, as *Chernobyl* teaches us, thrives on the intermedial and transmedia relations that are created through the paratexts, the commentaries, the reinterpretations and interpretations that circulate on the web, in the transmedia storytelling of the Western semiosphere (to limit ourselves to this part of the world).

We could argue in terms of a broad and dynamic, extended and time-varying "media ecosystem" (Innocenti, Pescatore and Rosati 2015): a universe containing texts and paratexts, fictional and nonfictional, and media products of different types, from the critical to the more ludic. Concerning the *Chernobyl* miniseries, one should consider not only promotional, paratextual, and commentary texts but every fictional or non-fictional media product, for example, all films dedicated to the Chernobyl tragedy and documentary media products, journalistic reportage, and so on. Speaking of documentary media products related to the Chernobyl disaster, an ecosystem should include, for example, direct visual and audiovisual sources such as photographs or film footage from the time of the disaster or other footage, including television reportage shows and later interviews with direct witnesses, journalistic or investigative literature, or indirect sources such as later scientific articles and historical or more popular books.

We could, however, redefine a media ecosystem semiotically as a sociosemiotic whole in which texts "think about each other" (Landowski 2005; Marrone 2001) or as an open and frayed "life-form" (Fontanille 2015) with vertical logics of coherence between different media objects, comparable with the dynamic relations of Lotman's "semiosphere." Suppose we accept that media products become part of an interpretative and translational chain between texts, discourses, and media. In that case, contemporary media ecosystems are, in fact, coexisting and operating sets of complex and dynamic relationships

between texts, media, and discourses, which produce signification but with very different timescales and ranges of action. Let us think, for instance, of the trailers of a series produced by networks and platforms on the release of a series or for its maintenance on the one hand, and on the other hand of the products of ordinary users, prosumers, or fans who reopen and comment on social media in their communities, or propose reworkings, remixes and mash-ups on video content sharing channels both immediately after the release of the season and in the subsequent years following its evolution.

Understood as part of a "media ecosystem," the texts, paratexts, and various media objects related to the Chernobyl series become "interconnected structures" with internal and external interactions, able to endure in the long run due to their capacity for "resilience" (Innocenti, Pescatore, and Rosati 2015). If conceived as "life forms" instead, they could be studied as layered media objects, linked by a strong internal coherence, with different "situations grouped in series or homogeneous classes" (Fontanille 2015: 142-143; our translation). Media products become part of a process of reworking, translation, and interpretation over a long period, in which a TV miniseries such as *Chernobyl* is recognized as a "life form" that holds together signs, texts, objects, practices and strategies (from logos to theme songs and opening video incipits, from gadgets to related social discourses). Between production strategies and active consumption tactics, the storyworld of a TV series is thus understood as a complex form of life within a media and cultural ecosystem.

When, on the other hand, we reason in terms of a culturally and historically situated "semiosphere" (Lotman 1990), this system of media discourses produced around a miniseries, of which it is a part while encompassing it, becomes a cohesive and delimited cultural space in which communicative processes take place, information is preserved, and new information is processed. This dynamism is brought about by tensions towards preservation and transformation, as well as between continuity and discontinuity, repetition and difference, innovation and reconfiguration. As regards specifically the case of *Chernobyl*, we could speak of a "transmedia semiosphere." A term proposed by Saldre and Torop (2012) to refer to the transmigration of content between different media, i.e., transmedia storytelling (Jenkins 2006), and between "text space, media space, and culture space," because "the space of culture is simultaneously the space of different sign systems (intersemiotic), discursive practices (interdiscursive), and media (intermedial)" (Saldre and Torop 2012: 40). In other words, the episodes of a TV series should be read as matrices of a hybrid or mixed transmedia universe, in which we find reworkings and expansions, negotiations and translations, interpretations and new uses (Dusi 2019).

Therefore, the discussion we open in this book considers the *intermedial* interweaving of footage, allusions, quotations, and translations that the *Chernobyl* series activates, from the writing of the script to the shooting and the postproduction editing. Think, for example, of iconographic sources, literary sources, and historical sources, including written (investigative literature, journalistic reports, historical documents),

visual (photographs, drawings), and audio-visual (footage from the period, interviews, television reports) materials. The comparison and discussion also become a *transmedia* problem, as the series is reopened and discussed weekly (during its airing) through some detailed podcasts by HBO, with interviews with the showrunner Craig Mazin and other members of the production team (Sagal 2019). As Jenkins (2006) argues, this kind of transmedia storytelling features the TV series narration and story world on other platforms, where each medium retells them in the way that suits it best. The transmedia and *crossmedia* products also provide a host of new interpretations, controversies, and discussions about the truthfulness and accuracy of the choices of the *Chernobyl* serial's narrative, which produce new videos, remixes, articles, and statements scrutinizing and discussing the sources and testimonies used in the TV series. Lots of reinterpretations, often critical and highly polemical, are given by web prosumers intent on discussing (even with obviously tendentious purposes) a serial narrative that casts a cold and negative light on the Soviet regime and its manipulative and falsifying handling of the nuclear disaster through the information provided about the catastrophe both as it occurred in 1986 and in the following years. For these reasons, some contributions to the discussion we are presenting will consider intermedial intersections with other media products (other series, films, documentaries, but also novels, documentary photographs, and so forth) on the one hand and, on the other, transmedia and crossmedia overlaps and reinterpretations (through production podcasts, but also the autonomous and grassroots productions of web users).

3. Media memories and archives

A miniseries like *Chernobyl* also teaches us something about the "forms of cultural memory" (Assmann 2011 [1999]), involving the relationship between "storage memory" and "functional memory." Storage memory preserves at a collective level "the repertoire of alternative options and unexploited opportunities." In contrast, functional memory "is a memory structured by a process of choice, of connection, of construction of meaning" (Assmann 2011 [1999]: 120). We could, to some extent, say that in the "storage memory," we find all media, cultural and social products chaotically deposited in the great 'potential' archive that is nowadays constituted by the Net: "Library of Babel" (for Borges) or the archive of archives and rhizomatic "encyclopedia" according to Eco (1984). Instead, in "functional memory," we find media discourses that, like this book, reactivate those memories that are potentially always reopenable, line up discursive and interpretative logics, and organize and actualize those texts in new critical forms, which are still – in their way – narrative. These "activated" and "actualized" memories, to use the terms from Greimas' narrative semiotics (Greimas 1983), become "functional" memories, which produce "realized" and interconnected media products, such as the miniseries *Chernobyl*, its promotional and investigative podcasts, public and critical commentaries, and so forth.

On the other hand, the *Chernobyl* miniseries, starting from its script, attempts to narrativize historical events, i.e., to use a functional memory and give a reconstruction of the past while allowing itself to dramatize and, where necessary, invent. This process is created by emphasizing certain key questions, made explicit by the series creator Craig Mazin in interviews collected in the podcasts and made into thematic cores of the story, for example: how was it possible to have an accident in a power plant deemed safe by its designers? What happened before, during, and after the explosion, how was the emergency managed, along with its communication, and what political strategies and choices were used to stem the catastrophe initiated? And why, two years later, did one of the people responsible for those choices (Valerij Legasov) kill himself? The miniseries' account of the protagonist's (Legasov) painful choice to secretly record magnetic tapes in which to "tell the truth" about the nuclear accident can also be read as one of the "forms of use" of functional memory as defined by Assmann (2011 [1999]). It is that of becoming a "counter-memory" with a "delegitimizing" function concerning a "power experienced as tyrannical" (Assmann 2011 [1999]: 129) – a system (the Soviet one) that in turn constructed an official memory with the function of "legitimizing power" (ibid.) instead.

These are a few examples underlying the Chernobyl miniseries' narrative, thematic, and value mechanisms, which we discuss in this book. After all, the reasoning and suggestions (often interrelated) of the various contributors, opening up different viewpoints and research perspectives on a common media text, bring into play the relations between archives and memory, between latent cultural matters and actual and formed substances, in the enunciative chaining between different semiotic modes of existence.[7]

4. The book's paths

This research stems from a panel discussion that took place at Thessaloniki during the 15th World Semiotics Conference (IASS/AIS) in August-September 2022 (titled "*Chernobyl* calling. Fiction, Non-fiction, Lifeworld") and briefly summarized for the Jenkins 2022 blog,[8] whose interventions and discussions were reopened and reworked by the book's authors for collective and extended reflection. In designing the book, we also wanted to open it up to other scholars and researchers interested in analyzing contemporary television seriality and its psychological, social, and semiotic implications and constructions. The *Chernobyl* TV series opens many possible issues, and in this book, we will address some that are part of our research topics. Like many contemporary TV

[7] See Fontanille and Zilberberg (1988).
[8] See Dusi, Nicola and Charo Lacalle (2023). Remembering (and Refiguring) Chernobyl: What Can be Learned from the HBO (2019) Series? Pop Junctions, in Henry Jenkins' Blog: https://henryjenkins.org/blog/2023/1/19/remembering-and-refiguring-chernobyl-what-can-be-learned-from-the-hbo-2019-series.

series, *Chernobyl* is a case of what Mittell (2015) calls "complex TV." Analyzing a TV series as an isolated and autonomous media product is no longer sufficient. Of course, it will be essential to understand the miniseries' choice of discursive genre and format (see the chapter by Giorgio Grignaffini) and to examine the narrative structure of the script (see the chapter by Paolo Braga) and the construction of male (see the chapter by Andrea Bernardelli) and female characters (see the chapter by Charo Lacalle). An equally important task will be to analyze the collision or interplay in the series between its fictional capacity and its documentary aspirations (see the chapter by Nicola Dusi), as is also evident in the miniseries' finale, where fictional images are replaced by those of iconographic and historical sources. While analyzing the TV series, we will talk about the Chernobyl disaster as a social and cultural trauma and the activation mechanisms of media archives (see the chapter by Antonella Mascio) and about the TV series and the elements of modern sacrifice (see the chapter by Alberto N. García), as well as about the representation of the Cold War and the manipulation of information (see the chapter by Federico Montanari). All this without forgetting 'traditional' viewers and their reactions, for example, in a particular local setting such as Greece (in Europe), verifying with qualitative sociological analysis (interviews) the reception and understanding of the TV series' narrative (see the chapter by Ioanna Vovou).

As can be gathered from these first remarks, we decided to approach the *Chernobyl* miniseries from different theoretical and methodological perspectives to raise issues such as the relationship between fiction and nonfiction, realism constructed through intermedial and transmedia relations, the writing of narrative arcs and the construction of characters in a multi-strand series, with several parallel stories (see the chapter on Héctor J. Pérez). According to Gambarato and Heuman (2022), exceptionally high-quality audiovisual productions with extensive outreach are most likely to remain in the collective cultural memory as a truthful reference to historical events despite the more accurate historical texts. In our book, we have asked Renira Rampazzo Gambarato and Johannes Heuman to resume their research on the miniseries *Chernobyl*, focusing on memory and media oblivion. Still, their chapter also discusses the role of ethics and aesthetics based on Peirce's semiotics.

Let us, therefore, review the various contributions we have just summarized. The chapter "*Chernobyl*: A Miniseries between Fiction and Reality" by **Giorgio Grignaffini** opens the volume with a semiotic perspective on the miniseries format and its suitability for the historical drama genre. Grignaffini questions the fiction products that "take their cue from real life," reflecting on the semiotic status of rewriting documentary sources related to the dramatic accident at the Soviet power plant and proposes a typology that involves both narrative and figurative levels based on a semantic category that opposes "continuity" with the sources to the "discontinuities" that impose production and dramatization choices.

Nicola Dusi, in the chapter titled "History, Drama, Retelling: Intermedial Realism in *Chernobyl*", shows how the documentary approach of the miniseries production is based on archival documents, such as historical photographs, literary texts, and film footage to question the boundaries between fiction and non-fiction and the relations between textual semiotics, memory, and historical reference, between continuity and discontinuity concerning sources. In *Chernobyl*, the 'docu-drama' genre becomes a question of enunciative, textual and metadiscursive choices, and of gradual transitions from "fictional mode" to "documentary mode" (Odin 2013). Dusi suggests speaking of an "intermedial realism" given by the "interweaving of media that constructs reality effects," particularly by considering the episodes and the intermedial editing of the finale.

Despite the preeminence that most approaches to *Chernobyl* give to Legasov and Shcherbina, **Charo Lacalle**'s essay, "*Chernobyl* Reloaded: Renewing Disaster Fictional Narratives through Female Characters," focuses on the prominence of the female characters Lyudmilla Ignatenko (Jessie Buckley) and Ulana Khomyuk (Emily Watson), who rework the classic Homeric male hero models of Achilles and Hector, respectively. Lacalle analyzes the evolution of both women within the framework of the main genres from which the catastrophe is (re)constructed: disaster movies and documentary. The intersection of both approaches provides the tropes and narrative structures to a post-documentary storytelling aimed at explaining the relationship between individuals and the world through the lens of the apocalyptic: the risks of nuclear energy, in this case.

"Events that Defy Storytelling: Narrative and Dramaturgical Solutions of *Chernobyl*," by **Paolo Braga**, explores the challenge faced by the miniseries in depicting distant historical events already somewhat removed from the viewers' consciousness. Drawing on Wayne C. Booth's theory of narrative rhetoric, Braga's approach to *Chernobyl* narrative techniques analyses the strategies adopted to turn the events concerning the Russian nuclear plant into a compelling screen story – particularly concerning the reasons behind the expressive power of the story. The characterization of the main protagonists, the construction of a narrative structure capable of driving the story without dissipating tension, and the thematic depth are the main qualities of personal but compelling storytelling, elevated by Mazin from a largely forgotten tragedy of modern history to a metaphor for universal values.

Andrea Bernardelli's chapter, "In These Stories, It Doesn't Matter Who the Heroes Are. Characters' Construction in *Chernobyl*," compares the different ways in which protagonists are constructed in Mazin's miniseries and the Danila Kozlovsky-directed film *Chernobyl 1986* (Netflix, 2021). Bernardelli identifies a close relationship between how characters are built and the functionality of the respective narrative structures. The ambiguous construction of the characters in the *Chernobyl* miniseries aims to confront the viewer with the sensation of simultaneously facing a genuine narrative and a fictional reinterpretation. The Netflix film, by contrast, far

exceeds the rational elements and biases the good/evil polarization aspect towards the pole of good by moving the narrative towards a more captivating or emotional impact.

In "*Chernobyl* and the Anthropology of Sacrifice," **Alberto N. García** explores the narrative strategies through which the miniseries triggers an anthropological reflection on the transformative power of sacrifice. The analysis identifies three types of sacrificial acts: 1) that assumed voluntarily by different characters for the sake of the collective (*heroic*); 2) animal sacrifice decreed by the authorities or forced by radioactive toxicity, where immolation has both a literal and a figurative value (*symbolic*); 3) the death of an innocent human being to free others from their hardships and adversities (*redemptive*). García argues that *Chernobyl* transcends simplistic dichotomies of good versus evil, turning the narrative motif of sacrifice into an exploration of heroism and the search for truth.

In the chapter "History, Power, and Narrative. *Chernobyl* Is Still There," **Federico Montanari** questions "the relationship between the fictional dimension and the historical event, and the representation of truth conditions." Montanari talks about the strategic and manipulative capacity of the series to use "veridiction modalities" and how the miniseries becomes "a macro-text that reflects and reshapes societal perceptions of the Chernobyl disaster." This occurs through a remediation of cultural memory, which, according to Montanari, also opens moral questions, but with the risk of platformization and conformism of the serial product, which shows a tendency towards simplification and over-stereotyping, for example, concerning political discourse and the Cold War context.

Antonella Mascio, in the chapter titled "*Chernobyl*: From Nuclear Disaster to the TV series, and Beyond," questions how the Chernobyl catastrophe represents a collective trauma, an "anthropological shock and a global threat." For Mascio, the *Chernobyl* miniseries shows the relationship between archive and trauma, to be investigated from both a conceptual and theoretical point of view: the archive allows for the generation of future stories, and the miniseries activates mechanisms of remediation and mediatization of past and present testimonies, "to achieve the effect of reality." If the story is based on documentary sources, at the same time, "it becomes an example of activation and elaboration of historical materials."

"*Chernobyl*: The Cognitive Value of Multi-plot Aesthetics in Contemporary Television" by **Héctor J. Pérez** attempts to demonstrate that Mazin's miniseries seeks to show the viewer a new form of cognitive access to the complexity of the causes and consequences of the nuclear catastrophe. To this end, Pérez explores those dimensions of the miniseries architecture that contribute to inducing aesthetic experience by facilitating the viewer's cognitive awakening. Based on the cognitive psychology of narrative comprehension, the analysis shows the activation of a complex set of relational elements in the viewers' minds triggered by the evolution of the plots by narrating the events from a cognitively rewarding perspective. And thus, *Chernobyl*'s multiplot structure suggests a network of interconnected constituents intended to induce the viewer to identify their reciprocal interactions.

In the chapter "The 'Lifeworld' Criterion in HBO's *Chernobyl*: An Approach of the Intentio Lectoris," **Ioanna Vovou** asks: "How is the world of life, our experience of the real or the historical real forged through fiction?" Vovou first answers with a semiopragmatic analysis of the oscillation of the miniseries genre (between fiction, documentary, and use of archives), governed by the promise of telling "the untold true story" – a "strong common ideological tendency," claims Vovou, in which both production and audience are confronted with "multiple regimes of truth." Secondly, through qualitative interviews with a selected sample of Greek audiences, Vovou shows that "the truth of fiction should be understood as a perceptual category." The *Chernobyl* miniseries then becomes "a fictional representation of a historical event" and a response "to the ideology of transparency in a context where reality is reduced to the visible."

As closing remarks, **Renira Rampazzo Gambarato** and **Johannes Heuman**, in their chapter titled "Transcending the Blurred Boundaries of *Chernobyl*," state that the *Chernobyl* miniseries "has the potential to influence what is culturally remembered and what is forgotten," acting as "a representation that ingrains memories of the nuclear disaster into the public sphere." Gambarato and Heuman discuss about "transmedia ethics," combining theoretical approaches from transmedia studies, cultural memory, and Peircean semiotics (in which ethics is understood as a connection between aesthetics and logic) to explore how cultural memory becomes "a dynamic and performative process of remembrance across diverse media platforms." In the *Chernobyl* miniseries, audiences actively discuss factual and fictional elements, facing "the ethical implications of the fictionalization of historical events."

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Chernobyl: A miniseries between fiction and reality

BY: **Giorgio Grignaffini**

1. The *Chernobyl* miniseries: format and genre

Chernobyl, HBO/Sky Atlantic's miniseries released in 2019, offers a clear key from its title: it is a story, structured in a limited miniseries format,[1] of the Soviet nuclear reactor explosion in 1986. The first mark of the genre that will guide the audience's viewing is that of a fictional story based on actual events: neither a documentary nor a journalistic investigation, but a drama. The fact that *Chernobyl* belongs to the category of so-called fiction is made clear by several textual markers (such as the presence of actors, directors, scriptwriters, and all professional categories linked to the fictional audiovisual narrative, in addition to the enunciative modalities) and paratextual markers (the brand of the production company of the series - HBO - and the distribution on a channel such as Sky Atlantic, for instance, are both exclusively linked to fictional seriality).

The fact that the miniseries belongs to the macro-genre of fiction implies the observance of certain typical rules: it is, in fact, the macro-genre of television, characterized by a narrative instance in which "characters and events are seen from the outside, from a non-existent fourth wall behind which the camera is placed; [...] looking into the camera is usually forbidden as it undermines the principle of the truthfulness of the events portrayed. In respect of time, it is marked by the rules of narration, with ellipses (we are shown only the salient moments of an event, while everything else is omitted

[1] For more information on the specifics of the miniseries format, see Creeber (2001).

by editing), flashbacks, or flash-forwards (fiction makes us go backward or forwards in narrative time)" (Grignaffini 2021:51, *our translation*).[2]

A distinction can be made between different types of fiction in terms of time format or narrative genre. Temporal format refers to parameters such as "the length of programs (soap operas, sitcoms, and cartoons usually last half an hour), the frequency of transmission (distinguishing between series broadcast once a week and soap operas broadcast every weekday), and the number of episodes in which seriality is structured" (Grignaffini 2022: 140, *our translation*). *Chernobyl* is a miniseries or limited series, a format in which the story comes to an end after a certain (usually not large) number of episodes, in this case, five of about an hour's duration, broadcast once a week or, in the case of Video on Demand (VOD) platforms, distributed in one go. The miniseries is the most suitable format for adaptations of books or graphic novels, biographies, and real-life events characterized by a closure of the narrative arc, as there is a known ending implicit in the premise of the story: "It is also an unusually successful genre for dramatizing major historical events" (Creeber 2001:38).

From the point of view of the narrative genre, i.e., the content attributes that characterize a fictional work, *Chernobyl* belongs to the 'historical' genre. This category includes all serial fiction inspired by actual events, regardless of their chronological distance from the present. It also includes the subcategory of biographies, which have become very popular in the last twenty years.

2. Historical genre and reality

Speaking of audiovisual products (television or film) inspired by or based on facts requires a semiotic premise since the term 'real' is linked to the fundamental question of the sign/reference relationship.[3] From the point of view of generative semiotics,[4] when we speak of 'real,' we are talking about a semiotic effect, called the 'reality effect,' obtained through the adoption of specific textual strategies.

Thus, to speak of a narrative inspired by facts is to talk about a narrative that is not the result of mere creativity (although the strong influence of production models

[2] Other features of fiction macro-genre include certain production aspects such as the use of purpose-built spaces for filming or of external locations but readapted as needed, always with the principle of concealment of filming equipment; the actors involved are usually professionals and follow a script that prescribes their movements and dialogue.

[3] We refer to one of the founding themes of semiotics, in particular, that inspired by Peirce's philosophical reflection (Hoopes 2003). According to Peirce, the sign refers to reality not directly but through an interpretant that is another sign. This chain of references is what Eco calls "unlimited semiosis" (Eco 1979) and shows how at the basis of semiotic activity, one can never draw on ontological reality but only on other signs.

[4] Generative semiotics, unlike the so-called interpretive semiotics developed by Peirce, has a structuralist basis and was initiated by A. J. Greimas (Greimas and Courtés 1992).

and genres should not be forgotten) but of source texts belonging to historical or journalistic reporting, compiled on the basis of direct testimony or the analysis of sources of various kinds relating to events that actually took place. There is, therefore, always a semiotic mediation between phenomenological reality and its representation in history and news reports. So much so that talking about 'historical' audiovisual programs in terms of their adherence or non-adherence to reality means never forgetting that the latter is always a 'reality' as it is presented to us in other texts, which, in this case, function as 'sources.'

Despite this premise, the audience's awareness that a narrative is 'inspired by or based on real facts' immediately establishes a communicative pact with the narrator, in which the stakes are based on questions like: How does what I see resemble the 'real'? Which reconstructions or representations of factual reality are used as a reference? What section or part of factual reality is being reconstructed? What ideological perspective is applied to the re-interpretation of facts?

One of the most common strategies used in audiovisual works (cinema or television) that are "inspired by or based on reality" is to adopt the point of view of a character (as in the case of *Chernobyl*, with the character of Legasov, with whom the miniseries begins and ends) to narrate what has actually happened. In this way, an enunciative instance is applied to the narrated facts, revealing the subjective rewriting of the facts.

In *Chernobyl* this subjective instance, which seems to frame the narrative, is repeatedly counterbalanced using elements that point instead to an objective focalization, such as the frequent use of archive images or signs referring to names of places, people, or dates.[5]

The transposition of actual facts into the audiovisual product (always in the sense of 'textualized' facts, as mentioned above) can lead to an enlargement or a very detailed reconstruction of certain events or, on the contrary, to a compression or elimination of others, or even to a condensation of facts or characters – as in the case of *Chernobyl*, with the character of Dr. Ulana Khomyuk, who never existed as such and whose thematic role includes a plurality of actually existing actors.

Sometimes, it even goes so far as to completely invent specific facts or characters. The reason why these operations are carried out from the "initial reality" is summarized in the expression "narrative effectiveness."[6] In other words, creating a narrative text that is as appealing to the audience as possible and can best reflect the author's or the producer's point of view on the event in question. This has all the consequences we can imagine for the legitimacy or otherwise of bending or taming reality for other purposes, whether purely commercial or, more generally, ideological.

[5] See Nicola Dusi (2023).
[6] In the same volume, see Paolo Braga's article on how the Chernobyl miniseries uses the serial writing techniques most in vogue in the US production system to achieve maximum narrative effectiveness.

As far as *Chernobyl* is concerned, how the authorities recounted the reality of the accident, i.e., how a partial and distorted reading of what was happening was given beforehand, became the central theme of the miniseries. Indeed, in describing the various stages of the accident and the information (or censorship, rather) that was given to both the local and global public, it makes a damning statement about how the Soviet regime "wanted to communicate" what was happening, and how all this led to severe delays and failures in the relief effort.

The miniseries thus works precisely on the theme of how a distorted reading of factual reality can be used for political purposes (as the Soviet authorities did through censorship and concealment of the severity of the accident). Yet the miniseries uses the same methods. It uses the mass of information gathered by journalists and historians over the past 30 years to give us, in turn, a distorted reading of what happened.

The miniseries's operation of rewriting the facts shows us that, in the end, there is no way out of the logic of rewriting the actual data: the crucial difference is that in the case of the Soviet authorities' omissions, there was a direct and dramatic effect on the course of events.

3. The 'reality'/story dialectic on a figurative level

There is, therefore, a dialectical relationship between narrative modes and 'factual reality' that works at all levels, not only the narrative reconstruction but also the figurative level, where the central issue is the search or not for similarity between characters and settings – as known from the available iconographic evidence (videos, photos, etc.) – and what is shown on screen.

To try to structure this relationship in a way that highlights different models (often co-existing within the same television or even film – for miniseries, with their limited structure, they are not too dissimilar to feature films), we can use the semiotic square,[7] which sets out the semantic category of continuity applied to the relationship 'reality'/'audiovisual product' as follows:

[7] The semiotic square refers to Greimas' theory according to which it represents "the visual representation of any semantic category" (Greimas Courtés 1992, p. 265).

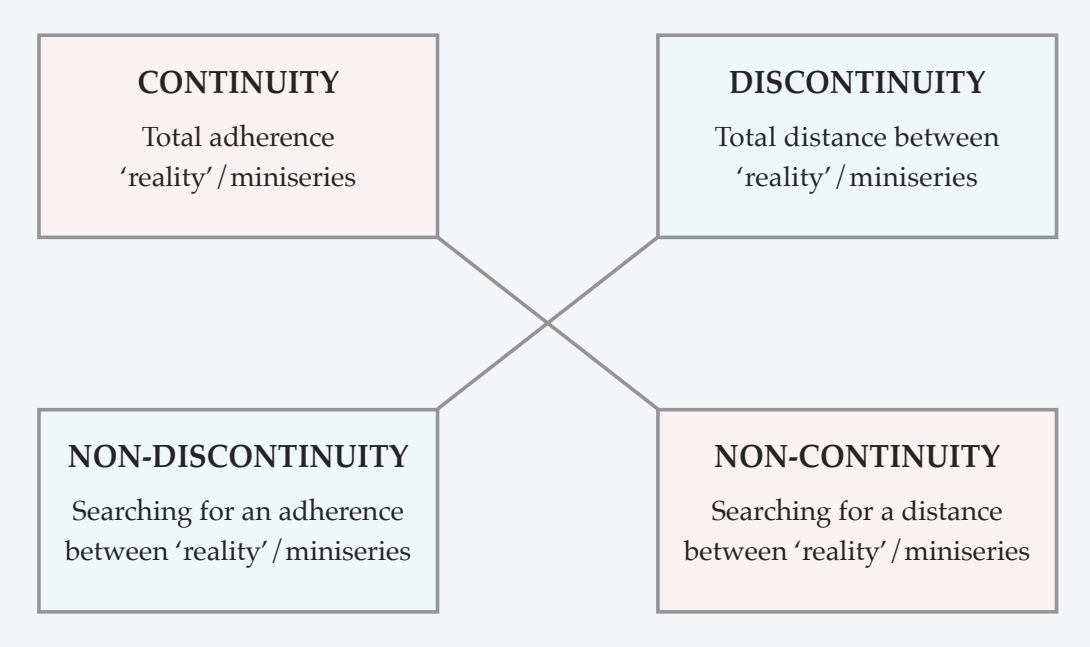

Figure 1. Semiotic square of the semantic category of continuity applied to reality and series.

They can be associated with a relationship between the television narrative and the historical-biographical source data ranging from total adherence (continuity) to total discrepancy (discontinuity). These two conditions are, to a certain extent, 'extreme' and, in principle, never realized: total adherence would occur in the case of a video shot by fixed cameras oriented towards the action since a documentary or a journalistic investigation cannot dispense with its subjectivity, while, on the contrary, total discrepancy would make the matrix of reality from which it originates unrecognizable in the audiovisual product. The audiovisual products realized are thus oscillating between the sub-contrasts' two polarities.

In fact, on the pole of non-discontinuity, we can place those products that tend to bring their narrative and, as we shall see, their figurative dimension closer to the historical-biographical one. In contrast, on the pole of discontinuity, we can place those that distance themselves more from the historical-biographical facts: The result of these two modes of narrative and figurative representation is that the historical-biographical genre is defined precisely by its nature as a hybrid, as a genre that lies somewhere between a mimetic instance of the real and a fictional instance, constantly playing with this proximity-distance between them.

The relationship between the two subcontrary polarities of the category could thus be described as 'elastic,' in the sense that within a series or film, we can find elements that shift more toward one or the other polarity. If we look at *Chernobyl*, we can see the different regimes at work in constructing the characters.

Again, about the characters, another license concerning historical truth concerns Dr. Ulana Khomyuk, who, as we have seen, is a character specifically created for the miniseries. In her figure, she sums up the many physicists and engineers who did their utmost to mitigate the consequences of the explosion. This decision not to adhere to reality was probably also dictated by the desire to put some female characters on screen in a miniseries where most of the protagonists are men precisely to be historically accurate.

Even in the case of the character of Legasov, the scientist appointed by the government to manage the emergency and who later became one of the main accusers of the same management by the Soviet authorities, although his journey in search of the truth and denunciation is faithfully portrayed, some highly significant elements of the real Valery Legasov's story are omitted, such as the fact that he did not actually attend the trial and that he was married and had children.

Greg Mazin justifies the reasons for these two choices as follows:

> Now, let me just stop and say he was not at the trial. So, an enormous dramatic license here that I take in five out of necessity. I could have absolutely portrayed this trial exactly as it unfolded, with other people, but we wouldn't have known who they were. And we wouldn't have cared. So, this is dramatically licensed. He was not there. Other people handled this.[8]
>
> One thing that I've left out of Legasov's story and it's left out right off the bat, is his family. He had a wife; he had children. I made a choice early on not to include them in the story mostly because... so much of this story was going to be about his efforts in Chernobyl and his relationships with the people that he was fighting this war with. I just didn't wanna have those scenes of...to come home, you know, because the family that's left behind in these sort of wartime movies inevitably descends into a kind of whininess. I didn't wanna do that to them but I do wanna acknowledge of course that they exist.[9]

[8] Craig Mazin, fifth episode of *The Chernobyl Podcast* (2019), May/June. Available at https://open.spotify.com/show/5SSYyVWm0FaY8as96gE3EM.

[9] C. Mazin, first episode of *The Chernobyl Podcast* (2019), op. cit.

This is a telling example of how the effort to reach a broad audience becomes a guiding principle of the work, at least equal if not superior to adhering to historical truth. Such a model shifts the focus of attention from the question of the relationship between truth and fiction – which is central if one believes that it is possible to refer to a referential 'reality,' with the consequence that fiction becomes a more or less faithful reproduction of it – to the question of how the text is situated in relation to the representation of what is diffused in the semiosphere.[10] In other words, continuity and discontinuity and their sub-contraries refer to a relationship between texts (the source texts of the news reports and history) and the final text (in this case, the miniseries).

4. The figurative level: the dissemination of images in the semiosphere

As stated earlier, the same dialectical relationship between 'factual reality' and the produced audiovisual text also manifests itself at the figurative level: here, too, when we speak of reality, we are referring to the diffusion in the semiosphere of images of persons, places, and events – an iconographic repertoire that becomes the 'initial reality' based on which the adherence or divergence of the audiovisual text can be judged.

Therefore, at this level, we can again apply the semiotic square of continuity/discontinuity to assess the series or film's greater or lesser adherence to this iconographic repertoire.

Of course, not all fictional audiovisual products start from the same situation: in some cases, such as the 'biopic' miniseries *The Crown* (Netflix, 2017), dedicated to Queen Elizabeth II, or the film *Bohemian Rapsody* (2018), inspired by the story of the rock band Queen, we can see how the semiosphere, practically at a global level, is saturated, so to speak, by the images of 'royal characters.' Therefore, the transformation into a film or a series must consider the huge popularity of the reference characters (the British royal family or the rock group). Consequently, the criterion for the choice of actors and the consequent makeup work, as well as the reconstruction of environments and costumes, is aimed at staging protagonists with a look that is as similar as possible to the originals (or rather, to the images of the originals circulating in the semiosphere).[11]

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[10] Semiosphere is a concept introduced by the Russian semiotician Jurij M. Lotman, who defines it as follows: "The whole semiotic space can in fact be considered as a single mechanism (if not as an organism). It is then not this or that brick that plays a primary role, but the 'big system' called the semiosphere. The semiosphere is that semiotic space outside of which the existence of semiosis is not possible" (Lotman 1985: 58).

[11] The issue of the resemblance between real characters and the actors who play them is becoming increasingly important from various points of view. From the point of view of filmmaking techniques, the technological potential of increasingly sophisticated special effects, combined with the availability of prosthetic makeup that can change an actor's physiognomy, allows for transformations that were unthinkable just a few years ago, as demonstrated by the increasing number of biopics that achieve a truly impressive degree of accuracy in reproducing the features of real characters.

In contrast to these audiovisual products dedicated to global icons, there are also many TV series devoted to characters who are little known or entirely unknown and whose images are not in the public domain:

- for historical-geographical reasons, as in the case of series or films dedicated to historical figures from distant eras, such as the series devoted to the Tudors (Showtime, 2007) or the Medici family (Rai1, 2016), or to places outside the media cycle to which they belong, such as *The Naked Director* (Netflix, 2019), a Japanese series dedicated to the director who introduced pornography to the screen in Japan in the 1980s.

- for the low level of fame of the character being portrayed, or rather of their image, as in the case of *Z: The Beginning of Everything* (Prime Video, 2015), the miniseries dedicated to Zelda Fitzgerald, played by Christina Ricci, or the Italian TV movie *Una donna contro tutti* [A woman versus all] (Canale5, 2018) dedicated to Renata Fonte, the councilor of the municipality of Nardò in Apulia who was murdered in the 1980s, or the corrupt Baltimore police sergeant Wayne Jenkins, the protagonist of *We Own This City* (HBO, 2022), played by Jon Bernthal. In all these cases, despite the ease with which viewers have found images of the series' characters on the web over the last ten to fifteen years, the lack of knowledge of the characters' visual identities overshadowed the close resemblance of the actor chosen to play them.

From this point of view, the *Chernobyl* miniseries presents an interesting tension: on the one hand, despite the widespread knowledge of the actual event, which is so universally known that any further specification in the title of the miniseries is superfluous, it retells facts and presents characters that have not entered the collective imagination. As the series showrunner Greg Mazin himself states in the making-of podcast,

> I knew that Chernobyl exploded, but I didn't know why! And it struck me as such an odd lapse because if you say to people, "What happened to the Titanic?" They'll tell you it sank. And if you say, "How?" They'll tell you, "Iceberg." Everybody knows it hit an iceberg. Nobody seemed to know offhand why and how Chernobyl blew up.[12]

[12] Craig Mazin *The Chernobyl Podcast* (2019) op. cit. first ep.

It is as if the Chernobyl event, which has significantly impacted public opinion for so many years, is almost unknown in its dynamics and visual dimension. Despite this, the director and the production team have made a great effort to reconstruct the protagonists' events and countenance, adhering as closely as possible to the documents of the time. This is motivated by a moral obligation towards the victims of the tragedy, as Mazin himself explains,

> I was always aware that I was telling a story that meant an enormous amount to the people who lived through it. There are people alive today—thousands, tens of thousands of people alive today—who have lost people they love because of Chernobyl, whose lives have been shortened because of Chernobyl, and people walking around without a thyroid because of Chernobyl. And it was important for me to tell that story accurately.[13]

5. Continuity and discontinuity at the figurative level

Returning to the semiotic square based on the continuity / discontinuity opposition that we have already seen and applying it to the figurative level, we can see a relationship of continuity when the scripted product (series, miniseries, or film) tries to reconstruct as faithfully as possible the known images of facts or characters. A recent cinematic example is the extended sequence in the above-mentioned film *Bohemian Rapsody*, in which the participation of the musical ensemble Queen in the 1985 Live Aid concert is reconstructed in an astonishingly detailed manner. In this case, not only are the protagonists' physiognomies and sets faithfully reproduced, as they are throughout the film but many of the shots broadcast during the live coverage of the event, which became extremely popular in the following years, are recreated in a deliberately mimetic manner (see the video available on YouTube, which juxtaposes images from the concert with those from the film).

[13] Craig Mazin *The Chernobyl Podcast* (2019) op. cit. first ep.

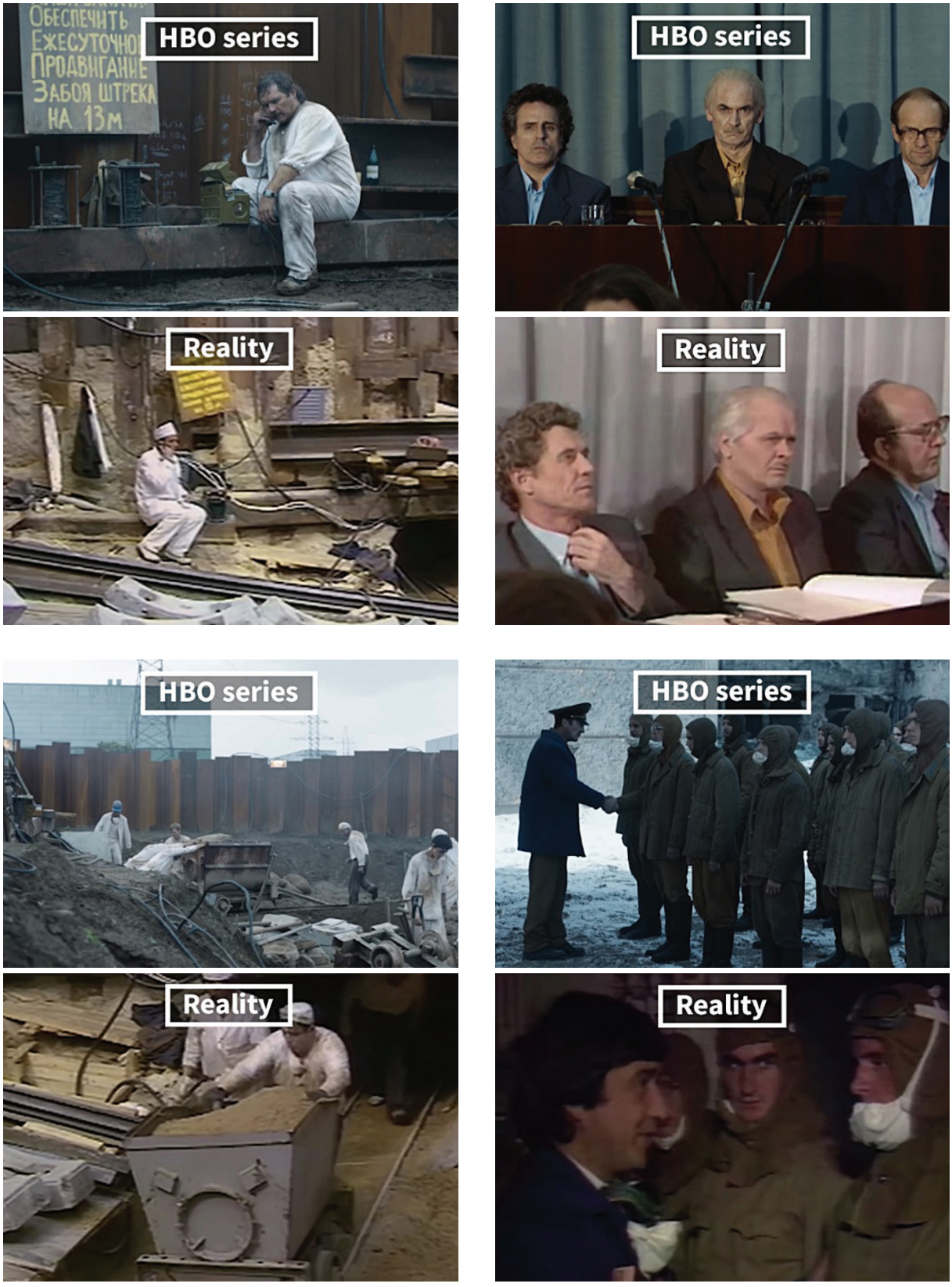

Figure 2. Comparison between archival images of the Chernobyl accident and pictures from the miniseries

In the case of *Chernobyl*, there are few moments in which total continuity is sought between the chronicle's iconography and the series' images. This is also because there are very few images of the event because of both the difficulty of documenting it and the decision by the Soviet authorities to conceal what happened as much as possible. And in this sense, the final sequence of the series, analyzed by Nicola Dusi (2023), is even more powerful. At the end of the fictional series, it re-proposes archival images, thus reinforcing its 'documentary value.

On the other hand, all those series or parts of series in which a figurative resemblance to the 'real' images is sought (similarity of actors, environments, etc.), but without going so far as to seek a perfect coincidence, can be included in the pole of non-discontinuity. In *Chernobyl*, how protagonists and environments were chosen and treated was explicitly designed to achieve a high degree of resemblance to the originals. Still, since these are mostly not particularly well-known characters and environments, known from a few period films and then abandoned after the blast, the perfect resemblance is obviously not the goal (also because very few viewers would be able to grasp the differences fully). What is done, therefore, is to reduce the discontinuities, seeking a convincing closeness to the documentary sources.

In the case of non-continuity, by contrast, we have characters or settings that, based on the search for similarity underlying the figurative project of the film or series, consciously establish a margin of expressive freedom. In the case of *Chernobyl*, for example, the decision was made to stage the radiation emitted by the reactor explosion as a kind of luminescent dust swirling in the night, illuminated by the glow of the fire. The radiation is not visible, but its transfiguration in this magical snowfall, before which the population remains almost spellbound, serves to stage in a particularly evocative and tangible way the mortal danger to which people are exposed and, at the same time, indirectly, the culpable negligence of the authorities who, in an attempt to conceal the accident, did not warn the inhabitants of the dangers they were running.

On the pole of total discontinuity, on the other hand, we can place those historical and biographical series or films that freely reinterpret faces and environments voluntarily, even rewriting history to bend it to an autonomous expressive will. We can think, for example, of a film such as *Marie Antoinette* (2006) by Sofia Coppola or a series such as *Versailles* (Canal +) where the degree of freedom sought is very high. The viewer is therefore asked to work on the interpretation of the text not so much based on similarity but on other requirements, first and foremost, that of maximizing its attraction on the audience, relying on elements of intense spectacle (in the case of the film, the music component and costumes, and in the series, a crude development of the plot) instead of adhering to the historical sources relating to the French court in the 18th century. This is a rather extreme choice since, in these cases, one is working paradoxically from reality – there is a reference to a specific 18th century iconography

in the sets and the protagonists' faces – but the intention to go beyond this, to use it almost as a pretext to carry out an operation with aims other than that of reconstructing historical facts, is evident.

In such cases, what is interesting is precisely the dialectic between the recognizability of the matrix of reality and its transformation into something different, which operates at all levels, from value to narrative to image, and which ultimately contaminates the "historical and biographical" genre with other genres (in the case of the film *Marie Antoinette*, for instance, the musical genre).

As happens on the narrative level, these four regimes are sometimes interwoven within the same product. However, it should be noted that on the figurative level, too, most series move between the poles of non-discontinuity and non-continuity, on the one hand, because it is very difficult to achieve perfect continuity, and on the other hand because discontinuity seems to be a rather extreme choice. To return to *Chernobyl*, this alternation of regimes can be seen in the opening sequence of the miniseries, in which the moment of the protagonist's suicide is reconstructed in his home. In a podcast dedicated to the making of the series, the show's director, Greg Mazin, explains how the series is less about being true to life than about conveying emotional truths (the loneliness of the main character, whose choice to oppose the regime is punished by being isolated, yet who makes the extreme choice of killing himself as the only means of breaking the regime's silence with his version of the facts).

> Legasov, in fact, does not commit suicide without having attempted it prior. He makes an attempt; he ends up in the hospital. He's now, again, I think a combination of the stress of the rejection of the scientific community.
> Talking about what's real and what's not. Legasov does, in fact, hang himself two years to the day after the explosion. Does he hang himself at exactly that time? Which, we'll come to understand why that time is so important. No one can say.
> The date couldn't have been an accident. He did record his memoirs on audio tapes.
> They were not quite as flowery and thematic as the dialogue I've given here. [...] The dissemination of his memoirs, his tape memoirs, essentially gave everybody the courage to stand up and start talking about this, but only in combination with his suicide. That it was his suicide that was just not possible to ignore. Somebody like Legasov should not commit suicide in the Soviet Union. And that statement was not something you could repress.[14]

[14] Craig Mazin *The Chernobyl Podcast* (2019) op. cit. fifth ep.

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History, drama, retelling: Intermedial realism in *Chernobyl*

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BY: **Nicola Dusi**

La refiguration effective du temps, devenu ainsi temps humain, par l'entrecroisement de l'histoire et de la fiction
(Ricoeur 1985: 264).

1. History in TV series: a fictionally created 'probable' past

According to Ricoeur's phenomenological hermeneutics (in *Time and Narrative* I), there is a difference, related to the referentiality of the facts narrated, between fictional and historical narratives. While the fictional story can also be constructed as totally unrelated to the world of our everyday experience, or when it is realistic, it implements a poetic and metaphorical reference, Ricoeur speaks of a "reference by trace" for the historical narration and suggests a "cross-reference" between fiction and historiography (1983: 122, *our translation*).

In the third volume of *Time and Narrative*, Ricoeur investigates "The actual refiguration of time, now become human time through the interweaving of history and fiction" (1988 [1985]: 180). Ricoeur considers two ways of "refiguring time" (for the reader) through hybridization. On the one hand, he posits historiography as a narrative that can produce fictional effects with its own codes and strategies of imagination. Speaking about the 'fictionalizing' of history, Ricoeur also addresses recent tragedies such as the Holocaust, and we could extend his ethical reflection to the Chernobyl tragedy: "Horror attaches to events that must *never be forgotten*. It constitutes the ultimate ethical motivation for the history of victims" (1988 [1985]: 187).

On the other hand, Ricoeur investigates "the historization of fiction" (1988: 189): in the belief pact between the author and the implied reader, it is not a matter of falling into the error of naive realism, which seeks a simulation of the past (that is "a mode of resemblance to the real that places fiction on the same plane as history," ibid.), but to search for the construction of an effective "verisimilitude," for which Ricoeur quotes Aristotle: "for us to be disposed to believe, the probable must have a relation of verisimilitude to what has been" (1988 [1985]: 191).[1]

In this way, fiction, freed from the constraints of "documentary proof," can explore the "probable" aspect of an event or action, using imagination to resolve (through free interpretation) unfamiliar or still obscure passages. These are what Ricoeur calls "the imaginative variations of fiction" (1988 [1985]: 192), which bring what he calls an "iconic augmentation" to the historical discourse.[2]

2. TV series, referentiality, veridical effects

In post-structuralist semiotics, particularly that of the Greimasian school and, in a different way, also that of Lotman, the external world is thought of as a 'macrosemiotic,' within which people and cultures, beliefs, objects or animals and plants live (Greimas and Courtés 1979; Lotman 1990). The referent, the direct world, and the experiential reality are analyzable only as symbolic and discursive constructions or rather as intersemiotic translations between languages and worlds, cultures, and sign systems.

From the perspective of the media semiotics proposed by Ruggero Eugeni (2010), the world represented and referred to in fictional and documentary audiovisual products is always an "indirect world," which relates more or less strongly to the "direct world" of phenomenological experience. It is precisely this connection that is the problem since there is never an unambiguous and immediate relationship between them but always a layered mediation that is both perceptual and multisensory, narrative, and discursive.

What settles the issue, in my view, is Roger Odin's semiopragmatic approach (2013), which considers pragmatic differences in the communicative pact and the axis

[1] "It is not when the novel has a *direct* historical or sociological role, combined with its aesthetic role, that it poses the most interesting problem with respect to its verisimilitude. The true *mimesis* of action is to be found in the works of art least concerned with reflecting their epoch. *Imitation, in the usual sense of the term, is here the unparalleled enemy of mimesis*. It is precisely when a work of art breaks with this sort of verisimilitude that it displays its true mimetic function. The quasi-past of the narrative voice is then entirely different from the past of historical consciousness. It is, however identified with the probable in the sense of what might have been. This is the *pastlike* note that resonates in every claim to verisimilitude, outside of any mirroring of the past" (Ricoeur 1988 [1985]: 191).

[2] "If it is true that one of the functions of fiction bound up with history is to free, retrospectively, certain possibilities that were not actualized in the historical past, it is owing to its quasi-historical character that fiction itself is able, after the fact, to perform its liberating function. The quasi-past of fiction in this way becomes the detector of possibilities buried in the actual past. What 'might have been' – the possible in Aristotle's terms – includes both the potentialities of the 'real' past and the 'unreal' possibilities of pure fiction" (1988 [1985]: 191-192).

of communication between the audiovisual product and viewers. According to Odin, the documentary reading pact is a framework, an orientation of viewing and media experience whereby we see a documentary film and accept that it concerns us in a different (and direct) way than a fictional story. A *documentary narrative* opens a pact of the questionability of its enunciator concerning the 'truth' and reliability of what is being told, which can be verified or falsified by intersubjective evidence. And a warning: even a *fictional film* can activate a documentary reading, enhancing its verisimilitude by providing circumstantial evidence, testimonies, and historical documents.

Many contemporary TV series play on the boundary of these cross-references and hybridize genres with crossovers in the extratextual reference, the documentary reading, and the fictional story. This hybridization demonstrates that realism is a discursive and cultural construction with different degrees and varying forms of effectiveness, resulting from narrative and interpretive choices as well as from intermedial translations and remediations. Sometimes, as in TV series like *Narcos* (Netflix, Gaumont Television 2015-2016), *Gomorrah* (Sky Italia, Cattleya, Fandango 2014-2021) or *House of Cards* (MRC, Netflix 2013-2018), hybridization between worlds succeeds in enhancing the fiction of the TV series as highly verisimilar, almost as if it were a possible alternative, or parallel, world to the real one (Dusi 2019; Dusi and Grignaffini 2020).

In *Television Studies*, Bruun Vaage (2013: 237) speaks more simply of a "reality check." Considering TV series, a reality check would be that touch of 'reality' given by archival documents used in a work of fiction that "reminds the spectator of the real-life moral and political consequences of his or her engagement." A kind of fact-checking, or rather a textual device for cognitively and affectively orienting the viewer's reactions. From the perspective of a sociosemiotics of media, we are talking about media constructions that punctuate discursive and gendered frames to produce veridical effects.

3. Intermedial realism

The persuasive effectiveness of the miniseries *Chernobyl* (HBO-SKY, 2019)[3] comes from its documentary approach (Odin 2013). It is not just about historical accuracy in representing places and people, furnishings, clothing, and technology in the fictional reconstruction of a narrative possible world (Eco 1979). The 'figures' of death from invisible radiation are achieved through a sound design that remixes Geiger counters; the scenes of contaminated urban spaces and forests are based on iconographic sources from photo reports at the disaster site; characters and narrative situations (e.g., the death of the young firefighter) are created using investigative literature of interviews

[3] The *Chernobyl* miniseries is directed by Johan Renck and written by Craig Mazin, who also serves as creator and executive producer, or show runner.

with survivors and their families as source texts. And after the fictional finale, *Chernobyl* features a long documentary sequence, with photos and archive footage, that offers an ethical and political commentary on the nuclear disaster and its management.

I will call 'intermedial realism' the result of the textual construction of the realistic effects considered together with the finale's intermedial montage. It means thinking of a world constantly remediated between transparency or hypermediation effects (Bolter and Grusin 1999; Pethö 2009) or, according to Christopher Rowe, who draws on Deleuze, of an "intermedial void" that "expresses the profoundly fractured and mediated reality of contemporary life" (2017: 209).[4] From a sociosemiotic perspective, those mechanisms are all translational, and the fiction-nonfiction distinction is problematic because these media products often exhibit graduality and overlap genre boundaries. Furthermore, referentiality is never given as absolute because it is discursively and narratively intertwined in intertextual, intermedial, and transmedial ways.

Hence, 'intermedial realism' in contemporary TV series means that the interweaving of media builds the truthfulness or veridical effect linked to historical reality. To construct a media experience for the viewer as verisimilar or realistic means using intermedial fusion and continuous cross-reference between the fictitious and the verisimilar, invention and remix of documentary sources.

So, what does it mean for a TV series like *Chernobyl* to draw on an archive of documentary photographic images and film footage to build its visual coherence and texture, with a precise temporality, spatially and historically related to the April 1986 nuclear catastrophe? In other words, to write the script, construct sets, and provide costumes for the narrative possible world of the series, starting from historical documents?

Photographic and audiovisual sources become *source texts* that are copied, translated, and reinterpreted in the new textual project of serial fiction, building similarities and cross-references through a reconstruction of urban and private spaces with their furnishings, objects, and technologies (including telephones and cars) circulating in the possible world of the past. The narrative possible world is figuratively and plastically structured from earlier historically reliable texts. We will thus find architecture, interiors, streets and buildings, and spatial situations in a historical-social-cultural context, recognizable in broad strokes for those who have not experienced it (today's viewers), comparable in detail for those who know it first-hand from direct experience or, more efficiently, comparable for those who have 'already seen it': that is, have already experienced it through films and photos of the time (in a sort of "pre-mediation," according to Grusin 2010).

[4] "Intermedial realism suggests that 'this world' can no longer be defined without making recourse to the audiovisual media that structure our perceptual and affective apprehension of it, and to the transformations these media effect on sensation itself. A new and necessary mode of realism […] is thus uncovered by an intermedial cinema that expresses the profoundly fractured and mediated reality of contemporary life" (Rowe 2017: 209).

Because of the 'accuracy' exhibited by the fictional story, but mainly because of the fierce criticism of the Soviet handling of the nuclear disaster by an American television series, *Chernobyl* has generated, among other things, the so-called *forensic fandom* (Mittell 2015) of curious and critical viewers who search for old footage and photos online to compare them with scenes from the series. Fans and prosumers argue online whether the work done by set, costume, and sound designers is true or false. They even produce interviews and video essays to glorify the work's seriousness or de-legitimize it. This fandom triggered by the *Chernobyl* series also draws on paratextual top-down materials, such as the series discussion podcasts that circulated immediately after the airing of TV episodes, featuring interviews with the showrunner Craig Mazin, who is also the author of the script.

4. Retelling

In the HBO podcast,[5] Mazin stresses the accuracy of historical reconstruction for what he calls a *docu-drama*, a "dramatic retelling of history." These three words – 'history,' 'drama,' and 'retelling' – condense the problems the *Chernobyl* series poses. Mazin says that he would have liked to shoot directly in Chernobyl if there had been no Exclusion Zone (for radiation). Instead, they shot primarily "in Lithuania and a little bit in Ukraine," finding a town with the same Soviet-era concrete buildings as Prypiat. At the same time, a decommissioned Lithuanian power plant was reconstructed as a set like the one in Chernobyl, using visual effects to enhance the similarities.

Mazin, the production and costume designer, "became obsessed in showing things as they were [...] the 'Sovietness' of things, the Soviet specificity of things." They checked historical photos and blueprints to build the set, costumes (uniforms, helmets, work suits, clothes, and furniture), and ordinary and technological objects (the control room and nuclear power plant are accurately reconstructed). This accuracy "is a sign of respect," Mazin claims, toward the thousands of people involved in the disaster, to show to the witnesses or to the hundreds of relatives of the victims that we cared about "telling the truth" (Craig Mazin seems to have read Ricoeur, out of respect for the victims' story). But then he clarifies, "there are a number of things here that are absolutely accurate history and some things that I had to change to be able to tell the story." For example, the suicide of the main

[5] Craig Mazin in the first episode of *The Chernobyl Podcast* (Sagal 2019), May/June. Available at https://open.spotify.com/show/5SSYyVWm0FaY8as96gE3EM. The promotional and commentary podcast is directed by Peter Sagal, produced by HBO and Sky, distributed by HBO International (cable TV and streaming as HBO Nordic, HBO Go, HBO Max).

character, Legasov, and his secretly recorded tapes to denounce the regime are real, but the way he got them out of his house is an invention of the story.[6]

In the podcast, Mazin introduces a gradualness and a kind of classification that appears very useful in semiotic terms, distinguishing four modes of reconstruction in relation to historical sources: that which is done 'accurately,' that which stands 'a little bit sideways,' the narrative elements (e.g., actions and characters) that have been 'compressed,' and those that have been totally 'changed.'[7] We could hypothesize logical relations placed in a semiotic square, related to these considerations by the screenwriter and showrunner of *Chernobyl*, and perhaps also applying them to other audiovisual products that retell and rework historical figures. Thus, we are not dealing with amorphous reality but with translative relations between a fictional representation aiming at historical verisimilitude and a semiosphere (or ecosystem) composed of many mismatched historical sources, to a greater or lesser extent verifiable and reliable.[8] The translational and interpretive relationship is semantically organized by the continuity with the historical sources (we can talk here of a complex term like 'truth' or 'reality' or think of a documentary communicative pact) and the *discontinuity* with the sources (we can call it 'invention' or 'fiction' or think of a fictional communicative pact);[9] in this tension, we could put at least two conflicting semantic pairs.

(A) *the accurate reconstruction* Vs. (B) *the reconstruction that radically changes and transforms*

(not B) *the reconstruction in which events, actions, and characters in the historical narrative are compressed or displaced* Vs. (not A) *the fictional reconstruction that invents but parallels the directions given by the sources*

While the promotion of the series and many critical articles praise its accuracy, the lengthy podcasts commenting on each episode do not forget to explain what was left out: first and foremost, Russian as the speaking language, opting for only English spoken with no Russian accents (although Cyrillic appears on all writing media inserted in the story); also, the family of the protagonist Legasov (who had a wife and children)

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[6] For more details on the building of characters in scriptwriting, see the essay by Paolo Braga in this book.

[7] Mazin claims: "we had a chance to set a record straight about: what we do that is very accurate; what we do that is a little bit sideways to it; what we do compressed or changed".

[8] The documentary ecosystem or semiosphere related to the Chernobyl disaster includes direct visual and audiovisual sources such as photographs or film footage from the time or other footage including television reportage shows, but also later interviews with direct witnesses, whether journalistic or investigative literature, or indirect sources such as later scientific articles and historical or more popular books. In a broader ecosystem we would also have to consider all fictional films dedicated to the Chernobyl tragedy (Lindbladh 2019) and every fictional or non-fictional media product whether paratextual or not.

[9] To explore the problem of "continuity – discontinuity" between reality and fiction, see Giorgio Grignaffini's proposal about the miniseries genre in this book.

was cut out completely, and he appears as a lonely hero,[10] initially complicit with the Soviet system, then argumentative and finally defiant but lucidly critical.

Instead, some testimonies, such as those collected in Svetlana Alexievich's book *Chernobyl Prayer: Voices from Chernobyl* (2005), as we shall see, were accurately captured, and the screenplay also uses accounts of scientists who were with Legasov and wrote books about the accident, even re-enacting some dialogues that have actually taken place in the control room, such as the denial of what was happening by Deputy Chief Engineer Anatoly Dhyalov. Immediately after the explosion, this character denies the evidence and downplays the severity of the accident by shifting it to other areas of the nuclear plant. The TV series production uses historical sources, even for how firefighters were initially sent to put out a simple rooftop fire and that many were not adequately equipped.

By contrast, some elements are compressed or shifted chronologically. Mazin explains that all the people in the control room featured in the TV series with their first and last names were actually there, but some were left out of the narrative. We also know from the intertitles of the final documentary sequence that the invention of the figure of the female nuclear physicist scientist, who helps Legasov in the series, is the result of the choice to compress and roll into a single character the many scientists, both men and women, who were part of Legasov's team and who, in turn, denounced the acts of falsification and were persecuted by the Soviet regime for it.

5. Controversy and fake news

However, this claim to accuracy, and especially the explicit attack on Soviet disinformation policy at the time of the disaster, is not without controversial consequences. One can easily find on the web a YouTube video interview striving to prove the unfoundedness of many passages in the series. The video, titled *Chernobyl Doctor Fact Checks the HBO Series*, was released on Vanity Fair's website in 2019. A Ukrainian woman doctor, who claims to have worked in a hospital in Kiev at the time of the nuclear power plant accident, explains in excellent English how the audiovisual reconstruction of death from "acute radiation syndrome" is inaccurate and unscientific. In her opinion, the miniseries uses 'zombie movie' horror tones. Even the way radioactive patients are treated seems the result of unscientific bias, as she explains that a washed body whose contaminated clothes have been removed is not contagious to others.

However, an authoritative source such as the investigative book by Nobel Prize winner Svetlana Alexievich (2005), used by the miniseries, contains the account of the

[10] Or better a "sacrificial hero" according to Alberto N. García in this book.

firefighter's young wife who gives a detailed testimony of her husband's gradual death by body disintegration. Who should we believe? The interviewed doctor seems to be in good faith. Indeed, she acknowledges the lack of any scientific training of Soviet doctors at the time of the nuclear accident on radiation damage and recalls that every book on the subject had even been expunged from the university library. That is perhaps the point: the fireman's wife claims that, like her, no one had ever known anything about nuclear radiation, and at first, everyone (even in the hospital) treated the sick as if they were burn victims. So, while keeping the prejudice about body contagion alive in the viewer's mind, the TV series does nothing more than restore the knowledge of the time in the Soviet context.

A more serious accusation is made by a very long article that polemicizes right from the title, *How Accurate is Chernobyl? True Story is Far Cry from HBO Miniseries*.[11] The anonymous journalist's bombastic rhetoric introduces his or her version by saying, "What we know from a simple fact check is that…," or by quoting sources such as *Midnight in Chernobyl: The Untold Story of the World's Greatest Nuclear Disaster* by Adam Higginbotham (released in 2019, perhaps following the success of the HBO series). Among the inaccuracies detected, the article claims that Legasov was not only not an expert on the type of reactors at Chernobyl (something easily disproved by comparing scientific sources, even though it is true that he was not a nuclear physicist) but also that he never played any part in the trial over the accident. Yet, in the series, the trial is featured in an extended final sequence in the fifth episode. This sequence glorifies the character of Legasov, who decides to denounce the real reasons for the accident, losing all his privileges as a result. His role here is also very didactic for the audience because, through it, the dynamics of the accident and the causes of the reactor's explosion are simplified (Laugier 2019). In the fifth episode of the podcast, the showrunner Mazin clarifies that, in fact, Legasov was not present at the actual trial and calls it an "enormous dramatic license" made out of narrative necessity. A trial lasting for weeks in real life is reduced to a few key scenes, using the main character to conclude Legasov's story by dramatizing the choices he made in real life in a different context.

We should recall that the series opens with Legasov's suicide, after recording tapes on which he recounts his entire handling of the accident and its causes, tapes that - we are told in the finale - were eventually leaked by Soviet scientists close to him and led the Soviet state to agree to overhaul all reactors like the one at Chernobyl still operating in Russia. According to the anonymous writer of the article, the miniseries makes Legasov a fictional character far removed from the real one to build a 'martyr' and a hero in the tradition of American TV drama (complete with catharsis in the final trial). Again, who should we believe?

[11] Read on May 2022 on the website: www.HistoryvsHollywood.com.

In real life, Legasov not only committed suicide two years after the Chernobyl accident but left behind a lengthy article of denunciation that was published in Pravda after his death and translated into English in a 2000 scientific volume. Opinions about the mythologized construction of the character in the TV series, therefore, while acceptable in terms of the rhetorical construction of a hero of the story, appear as clever *fake news*, perhaps one of the products of Russian propaganda against the American series.

There are also those who, instead, work to confirm the accuracy of the series' figurative choices, for example, the leading video essayist Thomas Flight, who made a video with professional editing (by MUBI production) comparing scenes from the series and footage from the time, though without stating the sources.[12] Controversial stances, denials, fake news, comparisons: it seems interesting to me that a docu-drama can trigger all these social discourses of verification or delegitimization, proving that contemporary television productions have to deal with audiences that can be very critical in their forms of appropriation, resistance, and participation (Jenkins 2006).

6. The assemblage of memory

I want to set aside the controversy and point out that what the *Chernobyl* miniseries produces is a compelling narrative, tied to the narrative logic of dramatization, with suspense climaxes and relaxing moments, and with the use of cliffhangers at the end of each episode, given that it is delivered weekly on such an important TV channel as HBO. But as I said earlier, it is also a narrative with a documentary aim, thus with operations of reworking and transformation concerning the historical elements and memory of the catastrophe, which has been selected and collected from books, photographs, and films. Speaking of the relationship between history and memory, I recall Didi-Huberman's position (in his *L'Image survivante*):

> Memory is an editing machine: it connects heterogeneous elements (<details>), it digs faults in the continuum of history (<intervals>) in order to create, among all this, circulations [...] All memory phenomena present themselves as entanglements – of fields, of meaning, of times. [...] This means that differences – and the polarities, even the contradictions they presuppose – release [intervals] in which one can detect the transition, the possible conversion from one order of reality to another. (Didi-Huberman 2002: 460-461, *our translation*)

[12] *Chernobyl Show vs Reality - Footage Comparison* - June 2019 on MUBI.

Didi-Huberman is talking here about Aby Warburg's Atlas, that is, the *Mnemosyne* project, but it can be applied to our case study as well. First, memory as montage: I will explain later what it means to speak of intermedial montage. In *Chernobyl*, this comparison is made between the fictional episodes and the long final documentary sequence, to which I will return in the conclusions. Then, the idea of 'entanglement': for the *Chernobyl* miniseries, we speak of a docu-drama, that is, a textual hybrid (as defined by Giorgio Grignaffini in this book): it is, in fact, neither a drama nor a documentary, but a fusion of two very different strains.

Chernobyl mixes the dramatic narrative form and the construction of a documentary mode, which seeks to deliver to the viewer a media product based on reliable sources. We thus have a hybrid genre that, while paying attention to the logic of the main historical facts (the dynamics of the accident, Legasov's posthumous denunciation and his suicide), can nevertheless afford to invent and fictitiously recreate situations, dialogues, and even the actions of the main characters, for narrative effectiveness. Didi-Huberman's proposals suggest that between reality and fiction, or rather, between the fictional communicative pact and the documentary communicative pact (as Odin calls it), "contradictions" can also be played out, allowing "the possible conversion from one order of reality to another" (ibid.).

Thus, the docu-drama of the *Chernobyl* miniseries plays with the "fractures of history," the "texture of memory holes" (ibid.: 464), by activating a logic of intermedial editing, where the interval between the said and the unsaid and the gap from verisimilitude also counts, to highlight the archaeological layers of which our cultural memory is made, to reactivate them in the relation (which can also be conflictual) between historical reality and the re-figuration of fiction.[13] This happens precisely because external paratexts such as the series podcast enable us to observe it critically. Still, it happens even more explicitly and inside the media product in the relationship between the fictional ending and the long intermedial and documentary closing sequence of the series. I will return to that for my conclusions.

7. Photographic sources

To better explain what we mean by 'intermedial realism,' let us consider the first photographs taken the day after the Chernobyl reactor's explosion by Ukrainian reporter Igor Kostin (along with some taken on his visits in the months and years afterward) and the photographs by Canadian Robert Polidori taken in 2001 (Komska 2019: 1377).

[13] See on these aspects the article by Gambarato, Heuman and Lindberg (2022) and the contribution by Gambarato and Heuman in this book.

Kostin took photos from a helicopter flying over the nuclear power plant and frontal photographs of firefighters, soldiers, and technicians at work at the disaster sites. Polidori focuses on the interiors of empty and devastated homes and schools, in which the passing of time has not affected the bleak truth of the spaces and the abandoned objects of daily life. Some of these photos feature in the editing of the final documentary sequence, while others are the basis of the series for silent scenes of explorations of the emptied spaces of the city after the forced exodus of the population. Though discursive constructions, even in Polidori's case with an aesthetic aim, these photographs become visual documents on which the set and costume designers rely for the fictional recreation of the figurative world of the series to create a setting resembling a Soviet cityscape of 1986, with its devastation by blast and radiation. The fictional world thus translates a reality mediated by photography; in other words, the first discursive construction of photographs, layered between levels of perceptions and sensations, narrative and enunciative mediation (following Eugeni 2010), is used as a set of instructions to build a different media experience, which in turn is layered between perception and sensations, narrative and enunciative strategies. A translation and reinterpretation in which the historical source becomes a matrix of invariance.

We could also speak of 'grafts,' that is narrative situations that reconstruct an event from its documentation, using it as an iconographic and figurative frame of reference (Dinoi 2008; Taviani 2007). The series' realism constructs a way of questioning the experience of the Soviet world of the 1980s with a hermeneutic gaze concerning the traces of the extra-textual historical world gathered from the photographic medium.[14]

8. A literary source: *Chernobyl Prayer*

As suggested earlier, one of the sources not cited in the credits yet repeatedly mentioned in the podcast in connection to Mazin's portrayal of the young firefighter's death from radiation poisoning is the collection of survivors' testimonies that make up the book *Chernobyl Prayer: Voices from Chernobyl* by Svetlana Alexievich (2005). The account of the young firefighter's wife, from whom one of the lead roles of the series is carved out (as Charo Lacalle in this book reminds us), opens Alexievich's volume with a full twenty-one-page long testimony. She traces the catastrophe from the moment immediately after the explosion, which occurred in the middle of the night, saying of

[14] Among scholars of transmedia worlds, Ryan would say that they are "inter-universe relations", to explain "the resemblances between the actual world and the world projected by a fiction text", resemblances which in turn "influence its accessibility" (Ryan 1991: 5). In media studies, Bruun Vaage would probably call *Chernobyl* a "socially realistic fiction" that "will be evaluated with regard to its truthfulness and standards of evidence for making such claims about the real world" (Bruun Vaage 2013: 232).

the firemen: "They weren't wearing their canvas gear. They went off just as they were, in their shirt sleeves. No one told them. They had been called for a fire, that was it" (Alexievich 2005: 17).[15] And regarding the firefighter's death, here is the account of his gradual, very painful, death by decomposition, through the gradual disintegration of his sick body, with stages described as sudden:

> He started to change; every day, I met a brand-new person. The burns started to come to the surface. In his mouth, on his tongue, his cheeks - at first, there were little lesions, and then they grew. It came off in layers – as a white film... the color of his face... his body... blue, red, grey-brown. [...] The only thing that saved me was, it happened so fast [...] It was a hospital for people with serious radiation poisoning. Fourteen days. In 14 days a person dies. (Alexievich 2005: 24)

The disease manifests itself through sudden transformations in the shape and color of the body (the "body-involucre" according to Fontanille 2004), while the internal organs (the 'flesh') decompose or come out of the mouth in bits.

In the series, this description is intersemiotically translated very pointedly in the extended scene, accused by some critics of having horror fiction overtones, in which we witness the firefighter's death. The choice to narrate this particular death in the miniseries lies perhaps in the power of an exemplary (and documented) case, combined with a tender and sensitive love story, as a way to simultaneously remember the victims of Chernobyl and their families and to thematize the sacrifice of thousands of people who served to stem the catastrophe.

In the literary account, the funeral is very quick, and the woman, with her husband's parents, are the only witnesses:

> No one was allowed in. It was just us. They covered him with earth in a minute. "Faster! Faster!" the officer was yelling. They didn't even let me hug the coffin. (Alexievich 2005: 32)

The witness account also mentions "slabs of concrete" in the pit, which help shield against radiation. The fiction production dwells instead on the funeral of the young firefighters who died from radiation, with their wives at the cemetery in front of the mass grave, while the images are accompanied by lyrical and sad choral music. In the

[15] We are quoting from S. Alexievich, *Voices from Chernobyl. The oral history of a nuclear disaster*, translated by Keith Gessen, New York: Picador, 2006.

burial scene, a truck arrives in the cemetery: it is a cement mixer that begins unloading fresh cement onto the zinc coffins. The end of the sequence (which also closes the episode) alternates shots of the dripping concrete with a detail of the face of the young woman, who is holding back tears: we watch (in slow motion) the filling of the pit with the thick, grey liquid, which first encircles then slowly submerges the coffins.

This figure of the flow of concrete becomes a key isotopy in the series. It is helpful to recall, in this regard, Ricoeur's remarks on the "metaphorical reference" (Ricoeur 1983). The slow flow of the grey concrete that covers everything appears, in fact, as a good metaphor for the strategy of the Soviet Union narrated by the miniseries concerning the nuclear accident – not telling and lying, deception and concealment, attempting to make inviolable the secret related to the disaster and to construct an official truth that reassures public opinion, making the surface as smooth as a tombstone slab.

9. Figures of the invisible death: sound design

Some figures give material form to the invisible threat of radioactivity to our gaze as viewers: not only trivially, through the hands of meters and detectors, but more powerfully through some of the images on which the camera lingers. For example, a bird falls dead to the ground suddenly, just after a group of children pass by on their way home from school. Or a dead deer, half burned by radiation in the woods near the nuclear power plant. And again, more cruelly because it is implied: in the first phase of the explosion, radioactive ash falls copiously on the faces and hair of the small families gathered on a bridge from which they can watch what everyone thinks is a harmless fire.

But from the very beginning of the catastrophe, close attention must be paid to the use of music or sound design. The soundtrack (composed by Icelandic composer Hildur Guðnadóttir) creates moments of lyricism aimed at emphasizing (with classical music or choral and vocal arrangements) the heroism or desperate attempt by some characters to stem the damage and alternates these with a less perceptible but often present background sound composed of mild distortions and broken tones: a kind of background buzz taken up (and remixed) by the noise of Geiger counters for radiation. It's a sonic continuum of rarefaction and swarming, constantly commenting on human situations and bleak images of lifeless worlds among emptied buildings, classrooms full of books and rubble on desolate desks, and deserted streets: a visual power that comes from the audiovisual remake or rework of the reportage photos by Igor Kostin (for the Novosti Press Agency in Kiev), and the more recent ones by Polidori. The pervasive noise of Geiger counters is a purely aural dysphoric enhancement, metaphorizing the silent and inexorable poisoning of places and people, of buildings and objects and animals, affected by something invisible, pervasive, and yet - in this mode – 'noticeable,' that is, audibly perceptible by the viewer.

10. The fictional ending

Immediately raising the dramatic tension, the series challenges the viewer from just a few minutes after the beginning: the main character is introduced and, shortly after that, commits suicide, and we will not find him again until the end of the first episode.

The opening of the first episode of *Chernobyl* gives the viewer an anticipation of the protagonist's suicide, which will only become apparent in the fifth and final episode. Telling by starting with a "prolexis" (Genette 1966), i.e., a distressing and effective flash-forward that takes us two years ahead of the series finale, forces the viewer to immediately understand the extent of the nuclear scientist's lucid despair and to shift the focus to the totality of the factors being told, rather than to the twists and turns in the individual character's story. It is also a way of giving a kind of ethical shield to the protagonist (Bernardelli 2016), exempting us from worrying about his fate (Smith 1995).[16]

The choice of suicide is echoed in the documentary part of the series finale: the comments of the written intertitles emphasize how this death, for the real Valery Legasov, achieved the effect of enhancing the importance of the tapes he recorded, containing his scientific and political analysis of the reasons for and the extent of the nuclear disaster with a denunciation of the censorship tactics of the Soviet leadership. We learn that Legasov's words will be crucial in keeping the scientists' demands alive with respect to securing other similar power plants in the USSR.

Let's go back and view the incipit of the series after watching the sequence that we will call the 'fictional ending' of the story. Everything seems to arise from a later editing strategy, played on continuity and chiasmus between incipit and ending. There is the link of the protagonist's voice off recording his tapes, which in the incipit seems to answer (in advance) the questions that the same voice off will ask through the recorded confession we will hear in the fictional ending.

In the fifth and final episode of *Chernobyl*, after the public trial and Legasov's revelations accusing the Soviet state of keeping silent about the problems of nuclear reactors of that model, the head of the KGB informs him that from now on his social and professional life will be reset to zero. The episode's ending is silent: Legasov is escorted out of the building where the trial took place and taken away. Before getting into the car, there is one last parting glance between him, the scientist's friend, and the politician he defended against all charges. The camera frames Legasov from below and to the side, inside the car: his head droops weakly as if a weight has been lifted. Now, the vision becomes aerial: in a very long shot, we see the black car racing along a road out of Chernobyl through tenements and woods, which we know are contaminated and lost. In voice off, the voice of the character recordings, Legasov takes leave of the viewer with some final words:

[16] See also the chapter by Andrea Bernardelli in this book.

> To be a scientist is to be naïve. We are so focused on our search for truth, we fail to consider how few actually want us to find it. But it is always there, whether we see it or not, whether we choose to or not. The truth does not care about our needs or wants, it doesn't care about our governments, our ideologies, our religions. It will lie in wait for all time. And this, at last, is the gift of Chernobyl. Where once I fear the cost of truth, now I only ask: what is the cost of lies?

Just before the final question, the image fades into a black cut-off that lasts a few seconds, accompanied by a somber background buzz that we now recognize as the noise of radiation. It is the story's conclusion, marked by an explicit threshold of suspension since we already know what the character's bitter end will be from the first images of the first episode. But it is not, yet, the miniseries finale.

11. The miniseries finale

The discourse expands, moving out of the 'fictional' pact and into the 'documentary' one (Odin 2013). After the black cut, and for a few seconds in sonic overlap with the noise, a sequence of archival materials begins, accompanied by elegiac background music. The musical commentary keeps the affective level high by stitching the images and written comments together with a single soundscape, at once powerful and mournful. We see historical footage of the real Valery Legasov as he talks to students and colleagues and looks towards Chernobyl out an airplane window. At the same time, overlay scripts inform us about the historical fate of the real-life protagonists of the story:

> Valery Legasov took his own life at the age of 51 on April 26, 1988, exactly two years after the explosion at Chernobyl. The audio tapes of Legasov's memoirs were circulated among the Soviet scientific community. His suicide made it impossible for them to be ignored. In the aftermath of his death, Soviet officials finally acknowledged the design flaws in the RBMK nuclear reactor. The reactors were retrofitted to prevent any accidents like Chernobyl from happening again.

Over the archival footage of Legasov and a group of researchers arguing or traveling on a bus wearing overalls and masks (that is a famous photo by Igor Kostin), the overlay writing changes from metanarrative to metadiscursive, while earlier fiction gave way to historical narrative, now it is the writing and production mechanism of the miniseries that takes over:

> Legasov was aided by dozens of scientists who worked tirelessly alongside him at Chernobyl. Some spoke against the official account of events and were subject to denunciation, arrest, and imprisonment. The character of Ulana Khomyuk was created to represent them all and to honor their dedication and service to truth and humanity.

The enunciation that characterizes the overlay comments marks its impersonality (Metz 1991) as if it were the voice of the series itself: a kind of 'great enunciator' or discursive mechanism that sets up the narrative unfolded so far. A speech-taking that begins by using the documentary mode and can now take a further leap forward becomes a reflection on the choices of production, writing, and directing. Actually, it is a reflection that is not only metadiscursive but truly metafilmic. The TV series reflects on itself and enunciates its construction strategies.

Thanks to more photos and new archival footage, we are informed about the fate of the guilty technicians and other characters in the series. Some documentary images show Gorbachev greeting the cheering crowd at a public event. Here, the voice of the miniseries (with the intertitles) comments with an interesting historical-political point:

> Mikhail Gorbachev presided over the Soviet Union until its dissolution in 1991. In 2006, he wrote: the nuclear meltdown at Chernobyl... was perhaps the true cause of the collapse of the Soviet Union.

The discursive construction of the sequence has thus shifted from giving an account of the extratextual, historical fate of the individual protagonists of the fictional narrative (the nuclear physicist, the politician, the firefighter's wife) to a gradually more collective consideration of the local population and the environment, to the multitude of individuals employed to cope with the radiological emergency on the ground, and finally to an epochal judgment on the tragedy through the Gorbachev quotation. As the documentary narrative progresses, it gradually becomes more critical, for example, with the reporting of rising cases of cancer among children in Ukraine and Belarus and the (unofficial) estimates of deaths from the nuclear accident ("from 4 thousand to 93 thousand deaths").

The final documentary threshold of the *Chernobyl* series constructs an authoritative narrative that stands as an ethical and political commentary on what happened. Data are introduced as objective elements, in contrast to the 'official truth' provided by the former Soviet regime. In effect, it is more than a simple appendix aimed

at demonstrating verisimilitude with historical facts. Elements of evidence-based veracity are introduced, not only through photos and archival footage of the real protagonists but also with forays into the actuality of the landscape or even with a short video shot entering the basement of the Pripyat hospital. They are documentary marks, offering viewers a 'reality check' (Brun Vaage 2013).

The documentary sequence becomes long and elaborate, and the narrative never ends because, in the long minutes that follow and expand the fictional narrative, the very credibility of the production and artistic operation of the miniseries is being reinforced. Thus, if the ending of the fictional narrative remains suspended because it is, in fact, already known thanks to the flashforward with the shock sequence of the protagonist's suicide, the ending of the miniseries is understood as a product of a communicative relationship with the viewer, and becomes an intermedial expansion, creating a second finale. We have defined this simultaneously informational and assertive sequence as 'meta-filmic' and 'meta-discursive': a discursive mechanism of folding and enunciational splitting (Metz 1991), reflecting on the just concluded narrative.

Thus, we have a dual strategy (enunciative and enunciational): on the one hand, the narrative with archival images commented on by the intertitles informs and, at the same time, constructs historical knowledge. On the other hand, it seeks to establish a documentary complicity with the viewer, tending to reset the media filter to bring the discourse to historical and phenomenological life. Of course, it is a discursive construct. Still, it creates a different kind of experience in the viewer: not only 'factual,' more directly related to everyday life (Eugeni 2010), but also, in some way, ethical.

If the documentary mode sets up a discursive pact whereby what is being told "directly concerns me" (Odin 2013), conveying historical-economic as well as biographical and generational knowledge, the 'factual' media experience produced serves the miniseries to attest itself as truthful ('veridical' for Greimas 1983), demonstrating how the fictional narrative is based on intersubjectively verifiable historical sources. Furthermore, the ethical position results from the rhetorical construction that denigrates the use of information in totalitarian regimes.

This is the effect sought by the metadiscursive construction: what we have seen and experienced through the narrative and the fictional characters bends and doubles thanks to the final documentary discourse, which, by placing itself alongside the fictional narrative, makes us reflect on the miniseries and then engage in a powerful criticism of the systematic disinformation constructed by the Soviet Union.

12. Conclusions

What happens to the viewer watching the documentary images after the fictional story is over is part of an 'intermedial montage.' We can now define it using Montani's words:

> The one who shows [...] becomes involved, reflexively, in the act of showing [...]. The viewer [...] is invited to perform comparative work between the different forms of the audiovisual image. (Montani 2010: 9, *our translation*)

It is also about constructing a reality effect, or rather an 'intermedial realism.' The contrast produces an *authentication effect* because it activates in the viewer a form of "referential performance" (ibid.), which does not act by showing the difference between the image and the world but rather by showing the *relationship between images*, that is, "between the different media components and the different technical formats of the audiovisual image" (Montani 2010: 23-24, our translation). In short, there is a transition between "configuration" and "refiguration": Ricoeur (1983) would say that the viewer is led to "re-figure" or "re-configure" the film through the new interpretations proposed (Montani 1999: 50).

To summarize, we have seen how the documentary approach of the series production is based on archival documents such as historical photographs, literary texts, and film footage. At the same time, the pervasiveness of radiation is rendered in the series with the crackling sound of Geiger counters and a soundtrack marked by realism but also metaphorical. The intermedial realism of the *Chernobyl* series is thus given not only by the attention paid to the characters' stories, the sets, and the costumes but also by the interweaving of media that builds 'reality effects.' It is the intermedial fusion of the fictional and the verisimilar, the invented and the documented, which convinces and moves the viewer, constructing an effective media discourse.

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Chernobyl reloaded: Renewing disaster fictional narratives through female characters

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BY: **Charo Lacalle**

I believe that fiction helps to understand reality. You see Chernobyl and you believe it more than the thousands and thousands of articles that have been written on the subject. Because there are emotions, there are characters, there is no obvious discourse, you let the viewer draw conclusions. This makes me think a lot about the responsibility we have. Aitor Gabilondo, Spanish screenwriter).[1]

1. Introduction

The premiere of the acclaimed *Chernobyl* miniseries (HBO-SKY 2019), some thirty-odd years after the nuclear accident, recalled the greatest human-made catastrophe that had never happened before. This miniseries, defined by critics as a 'historical drama,' refocused public attention on nuclear energy risks, minimized now by the complex reordering of the dangers that stalk humanity: "One hazardous product might be defended by dramatizing the risks of the others (for example, the dramatization of climatic consequences 'minimizes' the risk of nuclear energy)" (Beck 1996:31).

Created by experienced scriptwriter Craig Mazin, *Chernobyl* vindicates the recovery and circulation of historical and cultural memory through fiction based on real events (Gambarato, Heuman and Lindberg 2022) while exemplifying the social role played by those television narratives "that touch

[1] "Creo que la ficción ayuda a entender la realidad. Tú ves Chernóbil y te lo crees más que los miles y miles de artículos que se han escrito sobre el tema. Porque hay emociones, hay personajes, no hay discurso evidente, dejas que el espectador saque conclusiones. Esto me hace pensar mucho en la responsabilidad que tenemos." Aitor Gabilondo interviewed at *El País*, May 20, 2023. Available at: https://elpais.com/television/2023-05-20/aitor-gabilondo-aun-dudo-de-si-patria-valio-la-pena.html

the deepest and most complex dimensions of our existence" (Pallarés-Piquer et al. 2020). Moreover, the miniseries questions controversial political choices, such as the decision of the European Union to classify nuclear power as 'green' energy at least until 2025 under the premise of its compatibility with EU climate and environmental objectives:

> The gas and nuclear activities selected are in line with the EU's climate and environmental objectives and will allow us to accelerate the shift from more polluting activities, such as coal generation, towards a climate-neutral future, mostly based on renewable energy sources.[2]

Along five stunning episodes, "*Chernobyl* creator Craig Mazin jumps from comedies to a real-life horror show"[3] to narrate the causes and illustrate the consequences of the catastrophe. The miniseries mixes fiction and facts, narrative techniques and expressive resources of disaster films and documentaries in reconstructing the tragedy through "a discourse that feigns to make the world speak itself and speak itself as a story" (White 1980:7). A game of mirrors between reality and representations, which displays the ability of dystopias to reflect upon the causes of social and ecological evil as systemic:

> Dystopian foremost truth lies in its ability to reflect upon the causes of social and ecological evil as systemic. Its very textual machinery invites the creation of alternative worlds in which the historical spacetime of the author can be re-presented in a way that foregrounds the articulation of its economic, political, and cultural dimensions. (Moylan 2000: xii)

As highlighted in various studies on the miniseries, the tragic fate of scientist Valery Legasov (Jared Harris) and politician Boris Shcherbina (Stellan Skarsgård) grants them an absolute pre-eminence in *Chernobyl*. Our essay, however, vindicates the narrative prominence of the two female characters who rework the male Homeric classic models of heroism: Lyudmilla Ignatenko (Jessie Buckley) and Ulana Khomyuk (Emily Watson). Free from the servitude to the power governing the destinies of Legasov and Shcherbina, the two women endow the miniseries with the necessary 'moralizing impulse' of reality-based narratives. At the same time, our essay highlights the influence of disaster films in reconstructing the catastrophe.

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[2] See the UE press release https://ec.europa.eu/commission/presscorner/detail/en/ip_22_711
[3] Cfr. The interview of Christina Radish to Craig Mazin, *Chernobyl* Creator Craig Mazin on Jumping from Comedies to a Real-Life Horror Show. Available at: https://collider.com/chernobyl-interview-craig-mazin/

2. The risk society

The concept of risk society was introduced by modernity sociologists Ulrich Beck and Anthony Giddens to express the anthropogenic manipulation of nature and the concern for the future of humanity at a time when risks depend fundamentally on the decisions taken by social agents:

> In contrast to all earlier epochs (including industrial society), the risk society is characterized essentially by a Jack: the impossibility of an external attribution of hazards. In other words, risks depend on decisions; they are industrially produced and in this sense, politically reflexive. While all earlier cultures and phases of social development confronted threats in various ways, society today is confronted by itself through its dealings with risks. (Beck 1992[1986]:183)

The health side-effects of anthropogenic manipulation are a major concern of the risk society, such as the constant threat of catastrophes, loss of confidence in safety, and disagreement among experts on how to deal with ecological disasters. Risk society theory also points to the impact of human agency in what is referred to as the Anthropocene: a new stage of the current Quaternary period succeeding the Holocene or post-glacial period, shaped by the actions of humankind (Boyd 2009; Crutzen 2002). Anthropocene scholars argue that the overwhelming changes introduced in the terrestrial ecosystem by the abusive use of fossil fuels since the mid-nineteenth century have turned the human species into a new geological force:

> Without really intending to, we have introduced rapid and massive changes that our species has become the equivalent of a new geological force. That is why many scholars have begun to argue that the planet Earth has entered a new geological age, the Anthropocene epoch. (Christian 2018:70)

The growing energy demand is precisely the trigger for the catastrophe in the *Chernobyl* narrative, as the miniseries itself highlights through an internal *débrayage* in the final episode. The chief architect of Chornobyl's construction, Viktor Bryukhanov, regrets the order he received to wait ten hours to carry out the planned safety test because of the need to supply electricity. However, he agrees with chief engineer Nicolai Fomin and deputy chief engineer Anatoli Diatlov to proceed, despite being aware of the risks involved in keeping the reactor at low power for such a long time:

> Bryukhanov: I've been trying to finish this test for three years. Three years! I just got a call from the grid controller in Kiev. He says we can't lower power any further – not for another ten hours.
> Diatlov: A grid controller? Where does he get off telling us…
> Bryukhanov: It's not the grid controller's decision, Dyatlov… It's the end of the month. All the productivity quotas? Everyone's working overtime; the factories need power, and someone's pushing down from above. Not that we'll ever know who. So, do we have to scrap it or what?
> Fomin: No. I don't think so. If we need to wait ten hours, we wait.
> Bryukhanov: Running at half power? Aren't we going to have stability issues?
> Fomin: No, I should think…
> Bryukhanov: I'm not asking you.
> Fomin: As you wish, sir.
> Dyatlov: It's safe. We'll maintain at 1600. I'll go home, get some sleep, and come back tonight. We'll proceed then. I'll personally supervise the test. And it will be completed.

In addition to reshaping our understanding of contemporary narratives on disasters, the hypothesis of the Anthropocene provides the chance to show humanity's visible impact on the earth's ecosystems (Peterson and Ulhin 2019:144). Thus, stories about the Anthropocene's effects try to lead viewers to think about the real world and, therefore, rework their anxieties about anthropogenic ecological degradation (Geal 2021:235; Moylan 2000; von Mossner 2012 and 2016). This purpose is served in *Chernobyl* through the description of the measures needed to decontaminate the area exposed to radioactivity, listed by Legasov in the third episode:

> Legasov: There is an enormous amount of radioactive debris and contamination spread across a zone of approximately 2,600 square kilometers. This entire region must be completely evacuated. Men must go to every town, every village, to ensure this. All animals still surviving within the zone -domesticated or wild- must be presumed contaminated and will have to be destroyed to prevent the spread of radiation and disease. In the immediate area around Chernobyl, every tree, every rock... The ground has absorbed dangerous amounts of radionuclides, which will be carried by the wind or rain if left exposed. We will have to raze forests. And we will have to rip up the top layer of earth and bury it under itself. Approximately 100 square kilometers. Finally, we will need to construct a containment structure around the power plant itself, which, of course, is still extremely… There will be deaths.

Russia's invasion of Ukraine in March 2022 and Putin's threats to resort to nuclear weapons made *Chernobyl* an *exemplary text* for at least two reasons: its pragmatic character and its willingness to confront the *model reader* with the dangers of the risk society. But the *exemplary* nature of the miniseries in the representation of reality lies also in its moralizing impulse, the only possible way – according to Hyden White – to tell a true story:

> Where, in any account of reality, narrativity is present, we can be sure that morality or moralizing impulse is present too. There is no other way that reality can be endowed with the kind of meaning that both displays itself in its consummation and withholds itself by its displacement to another story 'waiting to be told' just beyond the confines of 'the end.' (White 1980:26)

Chernobyl endorses the thesis of Australian philosopher Toby Ord (2019) on the certainty that we are at a turning point in the history of our species, whose greatest challenge – safeguarding the future of humanity – fatally clashes with the lack of maturity, coordination, and perspective necessary to avoid disasters. That's why we need to look to the past not only to disclose currently relevant social issues but also – and even more importantly – to provide instruments for understanding action (Boyd 2009:166). In short, it is not merely a question of evoking a past that can no longer be changed "in a risk society, where history offers no guarantees" (Giddens and Pierson 1998:157) but to appeal to human responsibility so that this type of catastrophe never happens again:

> *Chernobyl*, based on true events, is not just a historical blockbuster about a past that cannot be changed and about a country that doesn't exist anymore. It is an attempt to analyze society's and individuals' readiness to take responsibility for their actions and mistakes. It's about the past, which affects our present and future.[4]

3. Framing *Chernobyl*: The disaster films

Film historians trace the origin of disaster films back to an accident that occurred during the filming of a Melies movie when one of his cameras was run over by a truck. The anecdote is said to have inspired his *Collision et naufrage en mer* (1898), the movie that inaugurated a genre whose popularity from the 1950s onwards lies in its ability to

[4] Cfr. "HBO Chernobyl series real facts and myths". Available at https://greentourua.com/hbo-chernobyl/

adapt to each crisis (Glawson 2014; Keane 2001). Susan Sontag attributes the interest in disaster films to the interaction between commercial interests and the profound dilemmas of today's world: "The interest of the [disaster] films, aside from their considerable amount of cinematic charm, consists in this intersection between a naively and largely debased commercial art product and the most profound dilemmas of the contemporary situation" (Sontag 1990[1965]:48).

Mazin shows reluctance to frame *Chernobyl* in this genre ("I didn't want to do anything structurally the way that disaster shows do"[5]), despite recognizing the hybridization of the miniseries: "It's a political thriller. It's a horror movie. It's a scientific inquiry. It's a courtroom drama. It's pretty much everything, and that's because that's kind of how it worked out in real life."[6] The connection is nevertheless inevitable, considering that disaster films are not so much defined by their structure or their imagery as by the issues they deal with: (1) a situation of normality that erupts into a persuasive image of death (Yacowar 2012); (2) the appeal to both rational thinking and emotions as it tells its tale (Weik von Mossner 2012).

Highlighting the importance of situating and analyzing individual texts in the context of their genre, Maurice Yacowar (2012) classifies disaster films into eight groups. Atomic mutations and radioactive effects – the first group of Yacowar's typology – include six distinctive features detected in *Chernobyl*: (l) the relevance given to the helplessness of the characters and their efforts to survive; (2) the representation of different social classes; (3) the isolation of the environment and the victims; (4) the prominence of experts; (5) the corruption of political systems; (6) the drama of love stories.

The miniseries also evokes other characteristics from disaster films, such as the responsibility attributed to human errors and the solidarity among people (Quarantelli 1985), as well as the pragmatic functions that Wynn Hamonic (2017) attributes to this genre: (1) making sense of the world and ordering chaos; (2) rethinking historical traumas and our stance on the horrors committed by human beings; (3) documenting our hopes, fears, discourses, ideologies, and socio-political conflicts; (4) criticizing the existing social order; (5) warning people of the need to change to avoid an imminent apocalypse.

Chi-Ying Yu (2021) outlines the evolution of nuclear disaster films in three major waves. In the first, from the 1970s and 1980s, the popularity of human-caused disaster

[5] Cfr. Will Thorne, "Listen: 'Chernobyl' EP Craig Mazin on Making a 'Non-Traditional' Disaster Show. Available at: https://variety.com/2019/tv/news/listen-chernobyl-ep-craig-mazin-on-making-a-non-traditional-disaster-show-1203204493/

[6] Cfr. The interview of Fred Tope to Craig Mazin, "'Chernobyl' Creator Craig Mazin On His New HBO Miniseries And The Debt We Owe To The Truth". Disponible en https://www.slashfilm.com/566226/craig-mazin-interview-chernobyl/

films coincided with the domestic and diplomatic challenges faced by American society at that time. Stories depicting nuclear disasters from that period include titles such as *The China Syndrome* (James Bridges 1979), *The Day After* (Nicholas Meyer 1982), and *Dead Man's Letters* (Konstantin Lopushanksy 1986). The second wave, inaugurated in the 1990s, was driven by heightened environmental consciousness and millennial anxiety, which inspired *Crimson Tide* (Tony Scott 1995), *Godzilla* (Roland Emmerich 1998), and *Thirteen Days* (Roger Donaldson 2000). Following the September 2001 attacks, the third wave reproduced past nuclear catastrophes with the utmost authenticity, as in K-19: *The Widowmaker* (Kathryn Bigelow 2002), *The Day After Tomorrow* (Roland Emmerich 2004), and 2012 (Roland Emmerich 2009). More recently, the third season of the unclassifiable *Twin Peaks* (David Lynch 2017) attributed "the origin of Evil" to a nuclear bomb that exploded in the Mexican desert before the final tests of Hiroshima and Nagasaki.

The evolution of disaster films is in line with a growing trend aimed at explaining the relationship between individuals and the world through the lens of the apocalyptic: "More than at any other time in history, people tend to understand the world and their place in it through the lens of the apocalyptic" (DiTommaso 2014:2014). Thus, just as apocalyptic thinking allowed biblical authors to make claims about what salvation was, disaster narratives could demonstrate what social conditions remain in need of remediation today (Montevecchio 2012).

The new narratives about catastrophes revolve around the representation of humanity's most common collective fears, figurativized through images from the Bible that have been secularized over time (Thompson 2006). But unlike the idea of *rebirth* that permeates much of the transformative archetypes in American post-apocalyptic narratives, *Chernobyl*'s pessimism is consistent with its documentary vocation because the past is there and can't be changed. The only thing that can be changed "is the way we interpret events, and we feel about" (Moritz et al. 2018:81). And that is precisely what the miniseries aims for, despite the "simplification of characters" (Schmid 2020:1158) and of insufficient research into "the health effects of radiation exposure" (Wakeford 2020:355). After all, as Corner notes:

> […] documentary filmmakers have the social obligation not to be objective. The concept of objectivity, inappropriately borrowed from natural sciences, has little support from the social sciences: both social scientists and documentary filmmakers are interpreters of the world (Corner 2005[1988]:45).

The influence of horror films on *Chernobyl* is evident in the shadowy atmosphere (darkness, abandonment), the display of tormented and maimed bodies, and a color palette dominated by faded green, brown, and gray, crossed by a few bursts of white:

a combination very much to the taste of director Johan Renck.[7] However, the originality of *Chernobyl* in comparison to Hollywood disaster films does not lie solely in its unique combination of real facts, genre tropes, and paratextual information. Beyond the references to declassified archives, the reliability of survivors' *Voices from Chernobyl* (Alexievich 2005[1997]) that inspired Mazin, and the precision of its *chronotopes* (Bajtin 1989[1975]), the didactic nature of miniseries unfolds in the ability of fiction to cultivate "our sympathetic imagination by prompting us to see from the perspective of character after character" (Boyd 2009:197).

4. From heroes to heroines

Legasov's suicide in the opening of the miniseries and his relationship with the rest of the characters catalyze the complex enunciative structure of *Chernobyl*. Mazin consciously constructs this narrative strategy to enhance the documentary effect through the multiplicity of perspectives adopted to narrate the suffering:

> […] While the story of the explosion is fascinating, and we make it really clear exactly why and how it happened, what really grabbed me and held me were the incredible stories of the human beings who lived through it and who suffered and sacrificed to save the people that they loved, to save their countrymen and to save a continent and continued to do so, against odds that were startling and kept getting worse. I was so moved by it. It was like I had discovered a war that people just hadn't really depicted, and I became obsessed.[8]

Chernobyl recreates Legasov's character quite faithfully, drawing inspiration from the real person called upon to lead the government commission due to his position in the Communist Party hierarchy. His enormous legacy is acknowledged in the paratext of the final episode: "Following his death, Soviet officials acknowledged the failures of the RBMK reactors." However, his testimony in the trial against Bryukhanov, Fomin, and Dyatlov serves as a fictional narrative device to endow him with the heroism he would otherwise lack as a member of the political apparatus. Charkov, the director of the KGB, reminds Legasov of his allegiance with power before announcing his punishment for not adhering to the official version of the catastrophe (episode five):

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[7] "I'm drawn to stuff with a certain darkness, and darkness with beauty within it. As a Scandinavian, I like hopelessness and the weird austerity in the hopelessness of things. I'm very much drawn to melancholy and those kinds of emotions". See the interview of Johan Renck in "'Chernobyl' Director Johan Renck on Shooting the HBO Miniseries Like a Movie". Avalable at: https://collider.com/chernobyl-interview-director-johan-renck/#hbo

[8] Cfr. Christina Radish, "'Chernobyl' Creator Craig Mazin on Jumping from Comedies to a Real-Life Horror Show". https://collider.com/chernobyl-interview-craig-mazin/

Charkov: Valery Alexeyevich Legasov. Son of Alexei Legasov, Head of Ideological Compliance, Central Committee. Do you know what your father did there?
Legasov: Yes.
Charkov: As a student, you had a leadership position in Komsomol. Communist Youth. Correct?
Legasov: You already know
Charkov: Answer the question.
Legasov: Yes.
Charkov: At the Kurchatov Institute, you were the Communist Party secretary. In that position, you limited the promotion of Jewish scientists.
Legasov: Yes.
Charkov: To curry favor with Kremlin officials?
Legasov: Yes
Charkov: This is how they break you. With the sins of your father. With your own.
Charkov: You're one of us, Legasov. You've always been one of us. I can do anything I want with you, anything, but what I want the most is for you to know that I know. You're not brave. You're not heroic. You're just a dying man who forgot himself.
Legasov: I know who I am, and I know what I've done. In a just world, I would be shot for my lies. But not for this. Not for the truth.
Charkov: Scientists... and your idiot obsession with reasons. When the bullet hits your skull, what will it matter why?

The mixing of disaster films' subjectivizing perspective and the documentary's objectifying gaze – from which the 'moral sense' of Chernobyl emerges – is constructed mainly through the point of view of the two main female characters: Lyudmilla, wife of one of the radiation victims, and Ulana, the scientist who travels from Belarus to Ukraine to investigate the causes of the explosion. Both women, initially helpers of firefighter Ignatenko and scientist Legasov, respectively, become addressees and subjects of their own narrative programs: Lyudmilla's struggle to find her husband and accompany him in his agony, and Ulana's quest for truth. Yet, their narrative relevance is ignored by most critics and researchers, in line with the habit – consolidated since Antiquity – of eclipsing female characters or placing them on the margins of stories, as classics scholar Nathalie Heynes (2019) points out.

Lyudmilla constitutes one of the most shocking voices of the survivors recounted by Nobel laureate Svetlana Alexievich (2005). Beyond Luydmilla's characterization as a wife, her primary narrative function consists of developing a sentimental subplot aimed at "suturing" (Mulvey 1989) from the emotional dimension of the distance between the viewer and the documentary exposition of the events. Ludymilla's love

for her husband drives her to disobey the prohibition on approaching or coming into physical contact with him, to the point of risking her own life and even that of the unborn child she carries to be with him in his death throes. By contrast, the fictional character of Ulana is based on an amalgamation of many unnamed scientists who struggled to unravel the true causes of the catastrophe and "to honor their dedication and service to truth and humanity," as the miniseries credits inform the viewers.

Adam Higginbotham, a former British correspondent in the USSR and author of *Midnight in Chernobyl*, which won the 2020 Andrew Carnegie Medal for Excellence, criticizes Mazin's miniseries on the premise that there was no need for a crusading whistleblower to uncover the causes of the catastrophe: "The nuclear scientists investigating the causes of the accident were well aware of the faults of the RBMK reactor years before the accident." [9] The journalist also questions the plausibility of Ulana's character as not reflecting reality in terms of the position of women in power-appointed bodies in the Soviet Union in 1986:

> Although she's a wonderful device to guide the viewer through complex events, I'm really not sure of which scientists Emily Watson's character might be a composite. There were several women in senior positions in the real drama who appear in *Midnight In Chernobyl*, but I know of no women involved at that level of the government commission.[10]

Sonja Schmid (2020: 1161) praises Higginbotham's book but argues that the miniseries should be enjoyed for what it is: "an engaging storytelling with extremely felicitous reconstructions of the accident and Soviet material life." She considers that while Ulana effectively erases the names and efforts of many other people, her character illustrates that Soviet women were top scientists and fearless investigators at that time, a statement confirmed by Mazin himself:

> In the 1980s, it was difficult, almost impossible, to find women in political positions in the Soviet Union, yet they were at the forefront in the medical and scientific fields. Since the late 1950s, 70% of the country's doctors and scientists were women. I wanted such an important female presence to be reflected in Chernobyl. Thus, the character of Ulana was born.[11]

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[9] Cfr. Nick Luchessi, "Chernobyl on HBO. Author of Midnight on Chernobyl separates facts from fiction." Available at: https://www.inverse.com/article/56132-chernobyl-hbo-true-story-miners-legasov-location

[10] Cfr. Nick Luchessi, "Chernobyl on HBO. Author of Midnight on Chernobyl separates facts from fiction." Available at: https://www.inverse.com/article/56132-chernobyl-hbo-true-story-miners-legasov-location

[11] "Cfr. "Los personajes de 'Chernobyl' son reales: así fue su vida en el infierno." Available at: https://www.elconfidencial.com/television/series-tv/2019-06-03/chernobyl-accidente-hbo-personajes-muertos_2049430/

Emily Watson, the actress who plays Ulana, goes further by considering *Chernobyl* a politically astute and essential piece of work, and attributes her character to a hypothetical past, anchored in Ukrainian history to justify her inclusion in the miniseries:

> My character would've been a child during World War II and from Belarus – one of the worst places on the planet to be in the 20th century. Just astonishing. Horrific treatment from every direction. She would've grown up incredibly tough […] As a child, she lived through extraordinary brutality and was probably witness to appalling acts. She developed a 'don't trust anybody' mentality. (Watson in Nicolau 2019).

Be that as it may, it is worth recalling at this point that the number of Soviet women in the field of STEM (Science, Technology, Engineering, and Mathematics) in the USSR exceeded the average for Western countries in the eighties, despite the difficulties to pursue their profession and conciliate it with their family life (Evans 2012). At any rate, the discussion of plausibility should not overshadow the need to highlight the achievements of women scientists because disregarding their achievements stimulates the creation of negative myths and misconceptions and, therefore, contributes to their social discrimination (Filipova 2017; Flicker 2003; Javed 2015). As Jocelyn Steinke (2005) points out, images of female scientists and engineers in popular films are symbolic models that serve as sources of information about women and gender roles.

The contrast between the *ideal* (Ulana) and the *real* (Lyudmilla) characters installs in *Chernobyl*'s narrative logic an opposition between reason and emotion around which the text's axiological system is articulated. The conciliation of the two opposing dimensions adopts the textual strategy of *polémisation*, "which results in a syntagmatic splitting of cognitive discourse, giving rise successively to a narrative of failure and then a narrative of success" (Greimas and Landoski 1979:14). In the first narrative of failure [*récit d'échec*], Ulana assumes the role of anti-subject to hinder the realization of Lyudmilla's narrative program, to make her leave the room where her dying husband is exposing her to contamination:

> Ulana: Get up!
> Vasily: Lyusya?
> Lyudmilla: Let me go!
> Vasily: Lyusya?
> Lyudmilla: Stop it! Stop it!
> Ulana: You let her in that room? Inside the plastic? Touching him?
> Dr. Vetrova: What did I tell you?
> Lyudmilla: It's not true!

> Ulana: Did you know she's pregnant?
> Dr. Vetrova: What have you done?
> Lyudmilla: No. Nothing. Nothing...
> Vetrova: What have you done?
> Ulana: What kind of place is this? Where is her protection? Do you have ANY IDEA what you're dealing with?
> Dr. Vetrova: Of course I do. Please, I don't want…
> Ulana: No. People are going to hear about this.
> Vetrova: Wait…
> Ulana: People are going to hear! You understand? Everyone is going to hear!

The second narrative of success [*récit de réussite*] of the conciliation program redeems Ulana's confrontation with Lyudmilla by turning the Ignatenkos into a paradigmatic example of the catastrophe to induce Legasov to declare the truth in court:

> Ulana: Do you know the name Vasily Ignatenko? He was a fireman. He died two weeks after the accident. I've been looking in on his widow. She gave birth today. A girl. The baby lived four hours. She had 28 roentgen. They said the radiation would have killed the mother, but the baby absorbed it instead. Her baby. We live in a country where children must die to save their mothers. The hell with our names and the hell with your deals. Someone has to start telling the truth.

What is more, Ulana's mention of the death of Lyudmilla's daughter four hours after birth narratively connects the miniseries with the 'birth strike' undertaken by numerous women in Germany and Eastern Europe in the late 1980s. This strike was aimed at raising awareness among politicians and society about the dangers of radioactivity:

> The reactor accident at Chernobyl, USSR, in 1986 alerted women to the lack of accountability in capitalism and socialism alike. Across Germany and Eastern Europe, a 'birth strike' expressed outrage, as governments from Turkey to France suppressed vital facts about environmental radiation levels for fear of damaging national economies. (Salleh 2017[1997]: 23)[12]

The narrative of failure, constructed to justify Ulana's arrest by the KGB agent who spies on her, constitutes the vanishing point of the storytelling where the two

[12] The effects of Chernobyl's catastrophe have been the subject of countless ecofeminist representations. For instance, in relation to its impact on fetus, Raina Lai-Lin Grigg exhibited paintings of mothers marching with photographs of their deformed Chernobyl children in a 1994 paintings and sculptures exhibition at the Queen Emma Gallery, Honolulu [Salleh, 2017[1997].

classical versions of heroism converge, which Mark Edmunson (2015) identifies with the figures of the warrior and the citizen soldier: Achilles and Hector, embodied respectively in the miniseries by Ulana and Lyudmilla.

Like Achilles, Ulana chooses to set off to war from the Nuclear Energy Institute in Minsk, where she works. This fictional character, whose sole dimension explored in *Chernobyl* is her portrayal as a scientist (everything concerning her personal sphere is unknown), embodies the ideal of perfection in that she will not be fulfilled until she has completed her quest for truth. Ulana has pride and self-confidence, which Edmunson attributes to Achilles, which places her beyond fear and weariness. Aware of the limits imposed on Legasov by his Communist Party membership but also that those in power will never hear her own voice, Ulana urges him to take on the system to defend the truth under the premise that women and people who do not orbit around power will never be considered (episode five):

> Legasov: Do you know what happened to Volkov? The man who wrote the report you found? They just removed him from his position at the Institute. Sacked for the crime of knowing. And you think these scientists, handpicked to witness a show trial, will somehow be stirred to action? By me? Because of some heroic stand I take in defiance of the State?
> Ulana: Yes.
> Legasov: Why?
> Ulana: Because you're Legasov. And you mean something. I'd like to think if I spoke out, it would be enough. But as I said, I know how the world works.

Unlike Ulana/Achilles, Lyudmilla is forced to acquire the fighting spirit that is natural to a warrior. Lyudmilla/Hector is the citizen soldier who fights to defend what she loves; although she does not fear death, she must learn heroism. Hence, like the hero who inspires her, this female character is both the brave fighter and the *pater familias*. Her journey from Pripyat – the city where the Chernobyl power plant is located – to the Moscow hospital room where her husband is dying constitutes the heroine's journey of a woman who, like Ulana, rebels against impositions.

The parallel construction of Ulana and Lyudmilla's respective heroine's journeys – except for their brief encounter in the hospital scene mentioned earlier – and the introduction of many other subplots give *Chernobyl* a kind of *collage effect*, perhaps the most criticized aspect of a narrative that lacks unity in some of its parts. At any rate, the interweaving of *cardinal* and *catalytic functions* (Barthes 1964) increases the suspense of the numerous cliffhangers spread across the miniseries. This is the more characteristic feature of the post-documentary trend that the *Chernobyl* is aligned with: the complex combination of fictional and non-fictional modes of representation and comprehension (Thon 2019:271).

2. Conclusions

Chernobyl brings the nuclear risk back into the public spotlight, which had been minimized in the risk society due to environmental disasters resulting from climate change. The miniseries proved prophetic of Russia's taking control of the Zaporiyia power plant three years after. In accordance with the stories about the effects of the Anthropocene, *Chernobyl* mixes fiction and facts to illustrate the magnitudes of a nightmare from which we can never entirely escape because "Something like it will happen again, if not in a power station, then in one of the nuclear-weapons systems that are stacked up around the world" (Braithwaite 2019:156). Disaster films contribute the tropes and structures to a post-documentary narrative, which imposes its "engaging storytelling and extremely felicitous reconstructions of the catastrophe and Soviet material life" (Schmid 2020). Despite criticism of its *collage effect*, the mastery of cinematic codes and character design compensates for the articulation of a story affected by a marked *structural limping*, as Roland Barthes describes the difficulties of embedding the different parts of the récit:

> […] le récit se présénte ainsi comme une suite d'éléments médiats e immédiats, fortement imbriqués: la 'dystasie' oriente une lecture 'horizontal,' mais à l'intégration le superpose une lecture 'vertical': il y a une sorte de boitement structural, comme un jeu incessant de potentiels. (Barthes 1981[1966]:32)[13]

As the narrative unfolds and Ulana and Lyudmilla come to the fore, the viewer empathizes with their respective points of view. Impervious to the constrictions of the rise and fall of tragic heroes, the warrior Ulana/Achilles and the citizen soldier Lyudmila/Hector represent the characters through whom the miniseries pays homage to the bond between women and nature. Both archetypes thus evince *Chernobyl*'s alignment with today's eco-feminist sensibility, which calls for women's involvement in environmental issues and their refusal of traditional dualisms (male/female, nature/culture, mind/body) (Plumwood 2003; Rigby 2018). In so doing, the conciliation between heroism – a characteristic associated by dualism with masculinity – and compassion – traditionally attributed to femininity – merge into a message of hope, transcending desolation to penetrate the spectators' sensibility and alert them to the nuclear risk.

[13] "[…] the narrative is thus presented as a sequence of mediate or immediate elements, strongly interwoven; the 'dystaxia' orients a horizontal reading, but the orientation superimposes a vertical reading on it; there is a kind of structural 'limping,' like an incessant play of potentials."

In an article published on March 4, 2022, *Financial Times* columnist Tim Harford expressed concern about Putin's threats to use nuclear weapons in the following terms: "I am 99 percent sure that Putin is bluffing, but a 1 percent chance of the end of the world is and should be more than enough to worry about." He referred to a sophisticated dialogue from *The Maltese Falcon* (John Huston 1941), between protagonist Sam Spade and antagonist Kaspar Gutman, to illustrate the need to offset threats through deterrence:

> Spade: If you kill me, how are you gonna get the bird? If I know you can't afford to kill me, how'll you scare me into giving it to you?
> Gutman: Well, sir, there are other means of persuasion besides killing and threatening to kill.
> Spade: Yes, that's... That's true. But none of them are any good unless the threat of death is behind them. See what I mean? If you start something, I'll make it a matter of your having to kill me or call it off.
> Gutman: That's an attitude, sir, that calls for the most delicate judgment on both sides. Because, as you know, in the heat of action... men are likely to forget where their best interests lie...and let their emotions carry them away.
> Spade: The trick from my angle is to make my play strong enough to tie you up, yet not make you mad enough to bump me off... against your better judgement.

In the case of *Chernobyl*, the ability of both female characters to move us, yet not make viewers mad enough to bump them off from the consequences of the catastrophe, is the real trick of the miniseries as well as its pragmatic legacy.

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Events that defy storytelling: Narrative and dramaturgical solutions in *Chernobyl*

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BY: **Paolo Braga**

1. Introduction

Chernobyl achieved considerable success with critics and audiences – albeit within the scope of a cable TV production. It was a gamble that paid off, a gamble difficult and daring when considering its content: historical events have grown somewhat dim, and the depiction of figures, facts, and particularly a social context – the Soviet Union of the 1980s – that, if not too distant from the tastes of Western TV viewers, is at the very least uninviting. The author of the series, Craig Mazin, noted that: "Nobody was asking for a story about Chernobyl. Nobody" (Mazin et al. 2020). In the same vein, a *Sunday Times* critic pointed out that the distressing tone of the narrative (its tragic nature, the hundreds of deaths) would have warranted doubts from anyone (Armstrong 2020). It's also worth noting that Mazin, with his background in comedy screenwriting (*Scary Movie 3* and *4*; *The Hangover 2* and *3*), had a less-than-ideal curriculum for a project of this sort.

To overcome these obstacles – and, as such, turn them into opportunities – Mazin found creative solutions in the arena of narrative rhetoric. He elaborated on the historical material and found effective ways to make the audience feel close to it. Mazin managed to make the content interesting in three dimensions. The same three that Wayne C. Booth (1983: 125-133) indicates as crucial: the intellectual, the aesthetic, and the practical (i.e., moral). In other words, he invited the viewer to engage in interpretative cooperation (Eco 1979), which would gradually turn into an enriching experience.

This article will analyze this narrative rhetoric according to categories of screenplay technique. Among the focal areas in Screenwriting Studies (Maras 2011) are the rhetorical solutions available to an author to engage the audience. The theoretical-practical texts reflecting on the forms for a successful screen story have blossomed from Booth's perspective (Braga and Fumagalli 2016) and the Aristotelian dramaturgical approach (Aristotle 2018). They comprise instructions applicable to both writing and textual analysis. I have consulted the guidance of leading script doctors and theorists (McKee 1997; Marks 2006; Truby 2007) to highlight how *Chernobyl*'s success was due to intelligent character development, narrative structure, and theme choices. Our guiding assumption is that screenwriting based on actual events is an exercise in adaptation, similar to screenwriting based on original literary works. As such, the process involves a series of modifications of the original content to meet the needs of the medium, the narrative format, and the target audience (Fumagalli 2020: 164-174).

Before delving into these insights, I will outline how Mazin conceived the concept for the miniseries. Having already mentioned the challenges he had to face, I will also identify the strengths the screenwriter perceived in the subject matter. These aspects ultimately served as general coordinates for the writing process. Story development – which will only be touched on in this essay – is highly significant in Screenwriting Studies as a critical resource for understanding narrative choices (Price 2017).

2. The narrative potential of a historical event

Mazin convinced HBO of the merits of his miniseries through the superb quality of his pitches (greenlighted at every stage), ultimately garnering endorsement at the highest levels of the company (Andreeva 2019). The screenwriter successfully leveraged his extensive research on the topic, which began when a 2013 *New York Times* feature caught his eye. The article about constructing the massive sarcophagus to secure the Chernobyl reactor sparked an idea in Mazin. Based on his numerous interviews promoting the series, in which he explains what he felt were the strengths of the project, it's evident that this 'spark' was the catalyst for his talks with the HBO executives: "We know how World War I happened, someone shot Archduke Ferdinand. The Titanic hit an iceberg and Lee Harvey Oswald took a shot at JFK. We all know Chernobyl blew up, but we don't know why" (Fleishman 2019).

As Mazin suspected, the proposal piqued curiosity and suggested elements of mystery (an essential goal in story development). Further exploration only confirmed his suspicions and added to the project's manifold attractions (Sagal 2019). The reactor had exploded during a safety test. This detail breathed new life into the question posed by Mazin: why was there such a vast discrepancy between the anticipated and ultimate result? Then Mazin unearthed another detail that made the concept of a Chernobyl series

even more alluring: Legasov, the scientist tasked with managing the emergency, committed suicide on the anniversary of the reactor explosion, precisely two years later. *Why?*

In his research, Mazin found other significant points of strength to the story – enough to ignite a keen interest in the proposal for the series at HBO. Firstly, the events played a hefty role in exposing the worst face of the Soviet regime – seen in the negligence and obstinacy of those who caused and concealed the disaster – with far-reaching repercussions. Secondly, the story contained unsung heroes, people seeking to prevent the catastrophe's escalation to apocalyptic proportions through courageous efforts. Screenwriter Mazin points this out:

> […] mostly the stories of war that we hear are stories from the perspective of the West, whether it's the Americans or the British, but here was a war that we didn't even know happened, and it happened in the nation that we considered our enemy, and it happened with people that we consider to be foreign to us, and it turns out they were not foreign to us, and the citizens themselves were not our enemy, and the heroism that they showed not just rivals, but I think exceeds so much of what we have seen on screen from, you know, our representations of history […]. (Mazin et al. 2020)

3. The dramatic arcs of the main characters

According to a central tenet of screenplay theory, the viewer's deepest emotions arise from their engagement with the characters' inner transformative journey. We will focus here on how the protagonists of the series have been crafted via their 'dramatic arcs,' which is also known as 'character development.'

Chernobyl is chiefly the story of Valerij Legasov (played by Jared Harris). An introverted intellectual. A man of the laboratory. Circumstances force him to step forward for the common good and become a voice of reckoning against the authorities. First, against leaders who are determined that news of the disaster – and its public health implications – not spread; and later, against those eager to pass off a controlled version of the tragedy – attributing it to human error alone. Suppressed data had, in fact, found flaws in the plant's design. This was thanks to cost-cutting on safety features – a rather poor calling card for the global superpower and its regime.

In Episode One, the chemist Legasov, a prominent figure in the Soviet scientific community, is recruited by the Central Committee to assess the reactor accident and recommend countermeasures. He assumes the responsibility of guiding politicians in mitigating the disaster as its initial staggering dimensions threaten to multiply. Within the operational task lies a moral one: an investigation and exposure of the causes of the disaster – to prevent its recurrence.

Legasov is a respectable and sensitive hero. He's the stereotypical introverted scholar. He is transparent and naive before his political counterparts, who expertly navigate the seas of power. The essence of his action lies not in a display of leadership or diplomatic prowess but rather in the courage of his testimony. His character ultimately comes through in his provocative statements in the service of the truth. Legasov becomes 'that scientist' who points to the evidence the authorities prefer not to see. His manifestation of competence – evinced in his directives regarding the proper emergency procedures – reveals not only ingenuity but, especially, honesty. The chemist does not shy away from vilifying himself by prescribing costly measures – exposing men to radiation – and politically uncomfortable ones – ordering evacuations when concealing the disaster is in the government's favor. This is the only path Legasov may choose in good conscience in light of the rapidly deteriorating situation.

The narrative arc of Legasov is that of a man who fulfills his duty to the fullest. Throughout the series, the protagonist will be tested to remain true (a scientist is, by definition, a devotee of the truth) by saying exactly what he mustn't say in the spirit of duty. Compelled by this experience to make his voice heard, he transitions from a state of knowledge to revelation.

The circumstances that bookend his story establish the extremes of this arc of maturation. At the beginning of the series, when summoned to the Kremlin on a phone call, Legasov struggles to find his footing in the conversation. His initial doubts and his request for more information are instantly quashed by the caller. They assign him his consultancy post for the fallout, with the expectation – or rather stipulation – that the issue will be of minor importance. By the finale's climax, Legasov is portrayed very differently. He is assertive. We see him in a courtroom, explaining the dynamics of the catastrophic night and unreservedly accusing the guilty.

However, the screenplay adds, almost peripherally, another dimension to Legasov's character arc. The epilogue unveils his personal history of complicity with the regime: agreeing to censor data that may have averted the Chernobyl disaster and stifled the careers of Jewish scientists. The sacrifice (career, reputation) Legasov is forced to make by confessing in the courtroom gives his fight an air of desolate redemption, keenly felt in the seeming futility of the gesture (Legasov's testimony was initially suppressed from the record, although scientists present at the trial would eventually disseminate his message). In denouncing the system, Legasov regains his good conscience – and cements his own exile.

According to some critics (Cross 2019), the series would have been more potent had it stressed how deeply Legasov was enmeshed within the corrupt system. Mazin's story does bear the traits of a simplistic heroic pattern, with a protagonist who changes relatively little throughout the plot. At least onscreen, he doesn't appear to undergo the struggle of distancing himself from political ideologies he's held for

years, as likely occurred in the man's biography. Nevertheless, the revelation about the man's questionable past – strategically withheld until the series' critical climax – still packs a punch. Further delving into the ways that obedience to the regime permeated the world of Soviet research might have diverted attention from the core of the story, which is the management of the emergency.

Superimposed on Legasov's story, the series tells a second one. That of the friendship that develops between him and Boris Ščerbina (Stellan Skarsgård). He, too, was a real figure – the Vice President of the Council of Ministers overseeing the anti-disaster operation on-site. As the rep for the Central Committee, Ščerbina's task is to approve Legasov's proposed solutions, make them acceptable to Soviet leaders, secure the practical means to implement them, and oversee their execution. Part of this means convincing men (volunteers, miners) to work in the radioactive environment.

Ščerbina possesses the right constitution to achieve all this, distinct from Legasov's. He is pragmatic, determined, irascible, and seasoned. A man of power. Alongside Legasov (once he overcomes his initial skepticism), Ščerbina's mandate is containment and minimization. Ultimately, he will open his eyes to the many faults of the communist party. While a rapport grows between the two men, eliciting smiles from the audience due to the stark character contrast, Ščerbina becomes progressively disillusioned, losing faith in the system where he occupies a top position. His transformational arc, both in premise and outcome, mirrors that of the Stasi spy in *The Lives of Others* (2006). He transitions from a believer – albeit politically jaded – to a betrayed man who rejects the system.

Ščerbina's transformational arc is exemplified by the contrast between his debut – his curt phone call to summon Legasov – and his attitude in the finale. In the trial concocted by the regime, Ščerbina does not rudely cut off the scientist, as he did when they first met. Instead, he pointedly asks the judge to let his friend speak so that Legasov can level his accusations against the regime. The politician transforms from deafness to receptiveness – seen in his ultimate willingness to hear Legasov's testimony. In a meaningful last conversation between them, Legasov reassures Ščerbina, thanking him for his conduct, so markedly distinct from that of the 'entire congregation of obedient fools' from which the politician emerged.

Intertwined with the stories of Legasov and Ščerbina is that of a third protagonist: nuclear physicist Ulana Jurivna Khomjuk (Emily Watson), a character Mazin created to embody an array of scientists who worked together with Legasov. Khomjuk is the only figure in the series with unwavering morality, i.e., the mentor. From start to finish, she is driven by the ethical imperative to look beyond the convenient answers that explain the accident.

While leading the investigation that will provide the basis for Legasov's courtroom reconstruction of Chernobyl's events, Khomjuk undergoes no transformational

arc. She has no internal weaknesses to heal. She remains consistent in the principles and professional decorousness that have characterized her from the outset. She is a foreign element within the system everyone else bows to, somehow unstifled by the cloak of the apparatus. Her role is as a force of change upon Legasov and Ščerbina. A dramatic catalyst that pushes the two men to fully commit to what they, in good conscience, must do and must become. Khomjuk's firmness and dignity, however, do not harden her nature. In fact, these traits hardly manifest separately from her innate sensitivity and feminine compassion in the face of suffering. Questioning a witness from the reactor control room on his deathbed, she gently wipes the sweat from his radiation-ravaged face, keenly aware of the painful exertion she is asking of him.

It is key to note that the arcs of the three main characters generate drama both when considered individually and in their interactions. Legasov's honesty confronts Ščerbina's conscience, while Ščerbina's competence and exposé of the less-than-noble mechanisms of Soviet power put a strain on Legasov's naivety. At the same time, Khomjuk works to deprive the two men of easy moral excuses and loopholes, pressing them to follow the only truly ethical path, of course, the most challenging one.

4. Supporting characters to stress the gravity of the disaster

Around the three main characters, the series sketches out the lives of ordinary men and women who must bear the weight of the catastrophe. Mazin accomplished this in two ways. Firstly, he added subplots that follow exemplary individuals. Stand-out instances that are poignant and relatable to the audience. Mazin knew that the mind and heart like to focus on individual stories. Otherwise, the vast landscape of phenomena remains distant and abstract. In the news coverage of a disaster, the story of an individual who has suffered resonates far more deeply with viewers than the total number of victims ever does. Seemingly in this vein, Mazin follows the character of Lyudmilla Ignatenko for several episodes. Her story is based on one of the testimonies collected by Svetlana Alexievich in *Voices from Chernobyl: The Oral History of a Nuclear Disaster*, published ten years after the events. In the series, Lyudmilla is the wife of a firefighter who is hospitalized and transported to Moscow – condemned to death by radiation. Lyudmilla insists on being with him. She searches for him, locates him, and rushes to his bedside (despite being discouraged from doing so). While his condition makes any proximity to him exceedingly dangerous, the doctors – on government orders – do not explain the risks to her. What's more, she is pregnant. Lyudmilla remains by her spouse's side till the end, unaware of the consequences. Mazin portrays Lyudmilla as a heart-wrenching figure of love. When the series leaves her, she has become the cry of the innocent. Her pain is one that defies every piece of propaganda.

In Episode Four, Mazin tells the story of a young man named Pavel. His mission is to help a Soviet-Afghan War veteran shoot contaminated dogs – abandoned pets and strays – in the emptied cities within the exclusion zone. This allows the screenwriter to showcase the massive military camps set up for decontaminating the area. With this massive mobilization of men as a backdrop, Pavel's story, that of a conscript, is one of bitter coming-of-age and loss of innocence. As the adage claims, *killing changes a person* – and it certainly changes Pavel. Mazin has stated that through Pavel, he could better illustrate the internal impact of Chernobyl, the sense of hopelessness it gave rise to, and not just its physical effects.

Apart from individual cases, other methods used to portray the real-life situation onscreen are montages of the horrors and the brave efforts of the Russian people, displaying self-sacrifice through life-threatening actions. Those who perform them know that they will likely develop cancer. The series presents group sequences: teams of technicians, soldiers, and sometimes volunteers carrying out their deadly work – inadequately protected or downright unprotected (i.e., the miners who work naked due to the heat in the tunnel).

Rather than admiration, the audience feels pity, witnessing the fragility of lives offered up, without hesitation, by a nation accustomed to history's harsh blows. The emphasis here is not on heroism but on obedience to a deeply rooted inner sense of serving the homeland. The most impressive example of this, in the fourth episode, is the soldiers who, one by one, go up onto the roof of the plant – for only ninety seconds each – to clear it of debris that renders the place worse than Hiroshima after the bomb. As the series informs us in conclusion, more than 3,800 soldiers took turns shoveling graphite.

According to Mazin, through these and other examples, *Chernobyl* sought to express the specificity of a culture in which people were raised to internalize the value of collectivity and the common good over the individual. Of course, Mazin didn't ignore the sentiment of love for one's homeland – which the screenwriter pays homage to at the beginning of Episode Two, as the verses of Russian poet Konstantin Simonov warble from a radio: "[…] but when, for the third time, my life seemed to end, I yet still felt proud of the dearest of countries, the great bitter land I was born to defend."

5. A subtle aesthetic amplified by an efficient narrative structure

Chernobyl proves to be a TV show with meticulous aesthetics. The production design pays attention to the smallest details in a Soviet-era Russia of the 1980s. The series offers views of quiet and depopulated landscapes inspired by the photography of Alexander Gronsky. Prypyat, the city nearest the plant, is filmed in the reportage style of Gerd Ludwig (Carponen). The cinematography is cold and subtly desaturated. The

sources of light radiate unevenly across the scene, dynamically and erratically – slightly flickering or varying in color and intensity to convey a sense of insecurity. Whenever possible, fluorescent bulbs are used indoors instead of incandescent ones to create unwelcoming and sickly atmospheres. Outdoors, powerful rays turn the sun into a metaphor for the atomic threat. Additionally striking are the stark images, succinct renderings of alienating unease. For example, the gas masks make the soldiers appear as "strange nightmarish birds" (Mazin 2018). Equally impactful is the dystopian picture of tankers spraying their decontaminating foam onto deserted streets.

This elegantly subtle aesthetic complements an efficient narrative structure, the result of clear choices made by the writer to avoid dips in tension. Plot construction plays a significant role in making the remote historical events gripping – and bingeable.

To start with, Mazin shapes the structure of the story quite masterfully so that the series may capture the unfolding of numerous events: the reactor accident, its initial concealment and subsequent acknowledgment of the emergency by authorities; the efforts to contain the explosion's effects; the reclamation of an entire region; the investigation into the causes; the identification of responsibilities; and the broader political and historical implications of the catastrophe. All of this is narrated by a solid and clear storyline that keeps the audience engaged up to a satisfying conclusion. Thanks to this well-crafted "spine" (Mckee 1997: 194-196), a complex picture of the Soviet regime and Russian society is painted – with variations in pace and atmosphere, secondary character detours, and moments of somber reflection on the aberrations of power and propaganda.

Mazin achieves this result almost to perfection by applying the formula of the "rising action," where a series of escalating complications ensue. It seems like an obvious choice, a classic feature of any well-written script, especially disaster stories like *Chernobyl*. Yet here, greater skill was required. The chain of complications needed to progressively widen the story's scope to encompass a cascade of consequences stemming from the accident, happening across a lengthy period, a vast landscape, and multiple layers of political power systems. And it had to be done seamlessly, with a judicious dosing of events across all five episodes, without breaking the narrative flow. This way, viewers could grasp a complete picture of the facts, beginning with the fateful night of the explosion all the way through to the weighty historical repercussions on the Soviet regime. Structurally, this resulted in the following timeline (Morgan and Mazin 2020): Episode One takes place in the course of a single night, covering the events of the accident almost in real time; Episode Two happens over two days, it's about characters becoming aware that something is gravely, horribly wrong; Episode Three spans weeks, as "chickens come home to roost, and people start dying"; Episode Four, spanning several months, relates "a war" which has the entire population mobilized; Episode Five covers the trial and the historical ramifications of all we have seen so far.

It was crucial for Mazin to pick out the best "rising actions" from the real events on which the series is based. In practice, rising actions are junctures in the story where the stakes are raised. Once the hero solves a problem, he regularly faces another of higher intensity, with a more branched-out impact, requiring more complicated countermeasures. *Chernobyl* is structured rather simply – but brilliantly – as a series of sequential tasks: ascertaining the nature of the accident; smothering the fire in the reactor with sand and boron (which first must be found); draining the water from the basement of the plant, avoiding a thermonuclear explosion (practically a suicidal mission, thus volunteers are needed); then, without water to cool things down, there's a risk of nuclear meltdown, thus, a tunnel must be dug and heat exchanger installed (negotiations with coal miners ensue).

What makes this recursive mechanism – this "story engine" (Landau 2022: 87) – engaging are the rising stakes, but mainly the growing pressure on the main character, Legazov, for there is always something new for him to tackle. The main agent of the action, in fact, is him. He is the harbinger of the bad tidings that they have come up against another, deadlier level of the game. He must convince hostile politicians – chiefly concerned with preserving the regime's image – that more operations are needed. Further operations would underscore the vulnerability and unpreparedness of the Soviet Union. Fittingly, the nickname for Jared Harris's character on set was 'Cassandra' (Renck et al. 2019).

Another appreciable structural move by Mazin is the continual change of the protagonists' quest (McKee 1997: 196-198). What starts as a quest for safety (the mission against the threat of radiation and how to handle the accident) becomes a quest for truth (the investigation into the causes of the accident and the courtroom revelations in the final episode). Task after task, the chain of complications brings the disaster story into the terrain of the legal drama, which includes elements of detection – offering an intriguing crossover into the spy genre.

Mazin made an early structural choice to imagine his protagonists taking part in the trial, which the Soviets held to establish their convenient version of the facts. In reality, the historical counterparts of these characters had no part in the trial. The second choice Mazin made was to set up a mechanism for ongoing plot evolution through Ulana Jurivna Khomjuk, introduced in Episode Two. She is an investigator who breaks the rules to interview witnesses and obtain the proof needed to spur Legazov/'Cassandra' to reveal the truth at the trial. An awful truth for the Soviets: the blame for Chernobyl lies squarely on the Soviet system itself.

From the outset, the investigative process (i.e., the detection) furnishes the audience with an *enigma*. Both Khomjuk and Legasov cannot comprehend how the reactor could have exploded at all. Knowing the reactor's technology, the scientists agree that the event was impossible – and yet it happened. Their bewilderment, which they express

several times in the series, serves as another hook for the audience. Finally, the narrative structure sustains a hierarchy of antagonists that elicits a steady and growing desire for justice – and retribution. *Chernobyl* calls forth our antipathy for the human pettiness that led to the disaster. It kindles our desire to see the bureaucrats who made reckless choices for selfish career motives meet their comeuppance. The story highlights mediocrity (Fomin), arrogance (Bryukhanov), and pathological single-mindedness (Dyatlov) in the three officials in charge of the plant.

High above them is a villain of a different caliber: First Deputy Director of the KGB, Charkov, a formidable and, in his own way, fascinating figure. In Charkhov's mind, a regime endures so long as it projects total power. He is highly cognizant of the risks of 'surface cracks.' Charkov is a man who fights behind a courteous facade that masks his ferocity. He embodies the 'Big Brother' archetype. Possessing diabolical knowledge of human weaknesses, he exploits them, now with flattery, now with an iron fist – always with precision.

6. The 'exploration of the theme'

Craig Mazin, along with colleague John August, is the author of the *Scriptnotes* podcast, a well-known and widely listened-to weekly event in the film industry, where various aspects of screenwriting are explored in depth. In the podcast, Mazin explains his approach based on thematic structure. The fundamental idea is that a story should unfold like an exposition of a thesis on certain values – without being preachy, however. The plot should be marinated in a specific conviction, a conviction that will be examined dialectically during the development of the drama. The validity of the thesis is then demonstrated via the plot's conclusion.[1] *Chernobyl* was written following this approach, as an exploration of the value of truth ("to explore a theme" is screenwriting jargon) and its opposite, the detriment of lies.[2] This theme permeates the entire story and gives it cohesion concerning its deeper message.

The series opens with Legasov as he finishes his recording of testimonial audio tapes against the Soviet Union before taking his own life. Inevitably, the controversial tapes, coupled with a suicide, prick the viewers' curiosity, sparking our desire to learn how and why things have reached such an unsettling point. However, the scene primarily establishes the series theme: "*What is the cost of lies?*" This theme is

[1] Mazin's approach is in perfect accordance with what is advocated in major screenwriting technique texts. See, for instance, Truby's pages (2007: 108-139) on the "moral argument."
[2] It's the semantic opposition that, from a generative approach, forms the foundation of the series' textual structure (Greimas and Courtés 1982: 308). Valuable insights on the compatibility between semiotics and screenwriting theory can be found in Ferraro and Santangelo (2013).

anchored in the sentences dictated by Legasov into the tape recorder. His words put forth the idea that inspired Mazin to create the miniseries: that sooner or later, reality rebels against the lies that have buried it. That lies always have a cost. The inevitable bill will arrive higher, heavier, and more enduring than the shroud of falsehood that has muffled objective facts. This notion – or thematic statement [3] – will reverberate in many passages in the series.

Consider Legasov's dilemma in the epilogue, a pivotal moment in his character arc. He faces a difficult choice: yield to the KGB's blackmail and collaborate in omissions and censorship or admit the truth despite the severe consequences (exile, isolation, and social ostracism). The regime's downfall will eventually prove Legasov right, with reality triumphing over ideology, even though this will happen after the scientist's death.

While emphasizing its cost (the effects of the catastrophe at the plant), the miniseries *explores the theme* of lying in many other ways. For example, in the choice of applying dramatic irony (where the viewer knows more than the characters) to depict the start of the tragedy. The explosion is shown in the distance, with a beam of light projected into the sky – which the residents of Prypyat believe to be the result of a regular fire. Heedlessly, citizens continue with their daily lives. Unsuspectingly, people gather on a bridge to admire the distant nighttime spectacle offered by the power plant. All of this makes the undetected presence of lies more palpable. The plant, in the beauty of its glow – like an attractive and deadly jellyfish – softly highlights the allure of lies.

The lying theme is also explored in Dyatlov's refusal to admit the problem, which carries a whiff of disease. Dyatlov dominates his subordinates in the control room, denying the undeniable, as intentionally blind as if possessed by the demon of falsehood. Objects, too, take on symbolic significance, particularly the plant's dosimeters. These dosimeters have a limited scale and can only detect a maximum level of radioactivity that is not particularly alarming, far below what occurred at Chernobyl. Thus, deniers may exploit this partial truth by citing the device readings. Mazin points to the ambiguity – the many shades of lying.

Above all, the series explores its theme best in the dialogue. Particularly telling is a moment in Episode Two, when Legasov's moral entanglements vis a vis the mission are displayed in a conversation he shares with an unknown woman in a hotel bar. While the scene highlights his commitment to the difficult and thankless task, it also shows his willingness to suppress information, implicating him as part of the problem. The loaded conversation appears quite banal and of little consequence. At the

[3] McKee uses the term "controlling idea" (1997: 112).

bar, Legasov asks to be served in one of the upside-down glasses on the countertop (revealing his reluctance to ingest contaminated dust along with his drink). A woman approaches and assumes he must be in town due to his involvement in the operations at the plant. She asks him openly if people should be worried. Legasov, controlling his instincts with difficulty, replies, "No." Of course, he is lying. At this emergency stage, evacuation has not yet been ordered but is likely inevitable. Nevertheless, it is the first time we see Legasov lie onscreen. With sad yet pointed irony, the series later reveals that the woman was really a KGB spy who knew Legasov was lying. The regime was testing his trustworthiness. In this case and others, the series postures the many faces of lying and then proffers as an outcome the definitive emergence of bitter truth.

7. Conclusions

In real life, Legasov did not participate in the trial that concludes *Chernobyl*. He also had a family, although the series ignores this fact. He did not hide the recordings of his accusations against the Soviet system but instead gave them to a journalist friend. The reasons for his suicide have never been fully clarified. By actor Jared Harris's admission, the real Legasov didn't have the personality of a reclusive scholar, as depicted in the series; he was a prominent and respected figure in his field, a voice to be reckoned with.

Craig Mazin acknowledges many of these edits to the facts. However, he has confessed he takes pride in his efforts to be truthful in the writing of a story centered around the theme of truth. He explains this in his podcast masterclass, where he walks listeners through each episode and details his process (Sagal and Mazin 2019). Mazin claims he kept to strict criteria to depict historical events in a fictionalized script. A screenplay is a text that must be tailored to meet dramatic entertainment needs that a documentary would not have to consider. During the writing, Mazin made it a point to make changes only when necessary to make it easier for the audience to follow a reconstruction of an overall picture of the tragedy as it happened historically. This would have been impossible without a protagonist who guides the audience to the end, serving as a familiar and emotionally charged perspective on the final debate: the courtroom hearing. Mazin explains that the bold denunciation he ascribes to Legasov in the series is a condensation of the many choices the real man-made in protest of the Soviet management of nuclear power plants. Ultimately, he isolated himself from his world, ending up alone.

The showrunner worked creatively to connect the dots between actual events, such as the suicide, and the presentation of factual but incomplete findings (a partial truth) to the International Atomic Energy Agency in Vienna, etc. The result was a personal yet convincing narrative. Chernobyl's greatest feat is in elevating

this largely neglected chapter from modern history into a metaphor for universal values. It offers a field of reflection that goes beyond sensationalizing a tragedy, serving as a moral story to lean on when the temptation to close our eyes to the truth becomes too enticing.

Mazin's skilled storytelling exalts the potential of the miniseries format. Chernobyl is lengthy enough to address many levels of a complex topic yet concise enough to portray tidy character arcs and stay thematically focused, like a movie.

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“In these stories, it doesn't matter who the heroes are.” Character’s construction in *Chernobyl*

punctum.gr

BY: **Andrea Bernardelli**

1. The character hierarchy: Heroes, anti-heroes, and villains

While heroes may appear similar, their defining characteristics differ. Through the progression of the narrative, the heroic protagonist's persona is gradually established and solidified in the viewer's mind. Particularly in serial storytelling, character building takes place in such a way as to be able to develop characterization in a more complex way. It is in television seriality that we find an exemplification of how characters can be constructed with a particularly complex identity, rich in potential narrative developments (Mittell 2015).

In a narrative, we identify the protagonist as the hero. However, not all heroes possess admirable qualities; some are flawed protagonists known as anti-heroes. Moreover, in some narratives, the protagonist is the exact opposite of a hero, thus a villain. The protagonist can be identified according to the two opposite poles of hero and villain. The hero represents absolute good, embodying virtues like courage, loyalty, and selflessness. Meanwhile, the villain embodies evil, displaying traits such as selfishness, dishonesty, and malice. Between the two extreme forms of characterization lies a spectrum of nuanced approaches to constructing the protagonist's identity. This is the space of the antihero and anti-villain; here, we can recognize those more articulate and thorough forms of characterizing a narrative's protagonist, or protagonists (Bernardelli 2016).

All this fits into the dynamics of a more complex system of characters in that specific narrative. It is the entire set of characters that define the properties of the individual character, be it heroic or not. It is as if the characters were on a chessboard; each defines the position of the other and determines each other's characteristics. This is achieved through the description of the characters' actions and also through what they say about each other. In this way, viewers learn details about the characters' lives and past experiences to construct the characters' identities. Characters become inter-defined as the story develops.

Following how the protagonists are constructed allows us to understand what function a narration develops. It is the character that defines how the narrative plot develops, not the other way around. The story's functionality and effectiveness come from how the characters are constructed and how they are developed during the narrative flow. The character makes the narrative effective through his actions and the construction of his fictional identity as if he were a real person. One of the key aspects of this construction is the character's ethical perspective.

It is a question of mapping how the characters' function is developed and defined with respect to their ethical characterization, behavior, and intentions to understand how they are perceived by the viewer in each story. The ethical characterization of the characters defines the development of the story plot for the viewer. Creating a character's moral identity is crucial for the viewer, who, in this way, creates expectations about the future development of the events in the story and thus uses the character's ethical characterization as an interpretive key to the story.

2. Fictionality or non-fictionality

I will compare the characters' ethical construction in the HBO *Chernobyl* TV miniseries and that of the Russian production movie *Chernobyl 1986*, released by Netflix. I will try to relate the characters' ethical construction to the fictional/non-fictional characterization of these narratives.[1]

Both stories refer to the same narrative world, the same diegesis, namely the historical events of the 1986 Chernobyl disaster. In both cases, the title references those actual events. The documentary intent is more evident in the TV miniseries than in

[1] It would have been very interesting to compare the HBO miniseries with the Russian-produced miniseries *Chernobyl*, aired in 2022 on the NTV Russian network in 12 episodes, directed by Alexei Muradov, unfortunately unreleased in the West. The plot suggests a conspiracy by the CIA to cause the accident and follows the efforts of a brave KGB agent trying to stop a U.S. agent infiltrating Russia. This storyline is inspired by a hypothesis that circulated in Russia immediately after the incident. This production seems to be a response to the various criticisms the U.S. miniseries had received in Russia. The Russian press had observed how HBOAmerican miniseries was full of cultural stereotypes against Russia, joking that only bears and balalaikas were missing.

the movie. In the Russian film, the reference to what historically happened is present only in the title, referring to the city of Chernobyl and indirectly to its nuclear power plant. Photos of the actual events are shown to the viewer with a dedicatory caption to the heroes of the disaster, the so-called liquidators, in the closing credits. In the Netflix movie the documentary intent is excluded.

A fundamental difference between the two products is that miniseries has a more complex system of characters. In the HBO miniseries, we have the apparent centrality of the protagonist, the character of Legasov, who is inserted in a choral construction of the story. In this series, we have at least two couples of heroic figures willing to sacrifice themselves, represented by the firefighter Vassily Ignatenko and his wife Lyudmilla and by two scientists, Valery Legasov and Ulana Khomyuk. The firefighter Vassily Ignatenko was one of the first responders to arrive at the scene of the accident and eventually died from radiation exposure. Legasov is the scientist who sacrifices himself to solve the critical situation of the plant and then denounces the errors of the institutions. As regards these heroes, Legasov will be the one who will suffer the consequences most deeply. His character is linked to that of Ulana Khomyuk, a nuclear physicist, who helps him to investigate the government's omissions. The two groups of protagonists are constructed through the representation of a male and a female figure, thus representing two different forms of heroism. In the miniseries, one can also find an anti-heroic figure, an apparent opponent who turns into a helper, represented by the character of Boris Shcherbina, the deputy minister. As viewers, we can recognize the narrative figures that are narratively identifiable as the real villains: the technicians of the plant, Anatoly Dyatlov, Viktor Bryukhanov, and Nicolai Fomin.

The movie *Chernobyl 1986*, on the other hand, focuses on the heroic character of a firefighter, Alexey Karpushin, played by Danila Kozlovsky. However, the problematic character's nature makes him somewhat of an anti-hero. After initially refusing his heroic destiny, the character undergoes development throughout the story, eventually maturing and embracing his role. The protagonist is connected to his partner and mother of his son, Olga Savostina; however, her presence is less significant compared to the importance and prominence of the male figure. The two protagonists in the movie evoke the real-life firefighter and his wife. However, unlike the miniseries, their names differ from those of the actual individuals. If we judge based on this description alone, the film seems fictional, while the miniseries appears to have a more realistic, nearly documentary-like purpose. However, upon closer examination of the character construction and representation, such a stark distinction may be questioned.

Most of the main characters in the HBO miniseries are inspired by real figures, except Ulana Khomyuk. As stated in a caption during the finale, Ulana is a fictional

character representing all the actual scientists who collaborated with Legasov and faced the consequences of their alliance. These repercussions included both the physical effects of radiation exposure and the dissent expressed towards the Government. Thus, Ulana is a fictional character set within a seemingly realistic context. Ulana is a symbolic figure whose presence is aimed to underline the overall narrative's ethical intention.

In the Russian Netflix movie, on the contrary, both the plot and the characters' characterization are admittedly fictional. There is no intent to reconstruct the real events. Only reference to the place where the homonymous power plant was located and the date of the tragic disaster, both present in the title, can be traced back to the Chernobyl disaster. In the film, a melodramatic tone predominates, and it is aimed not at reconstructing events and looking at them through an ethical/ideological perspective but intending them as a vague celebration of the heroes of Chernobyl in the finale. The movie's protagonistic couple, Alexey/Olga, can be compared to the Vasily Ignatenko/Lyudmilla couple featured in the miniseries. Both couples are inspired by the real figures of a firefighter who intervened on the disaster scene and his wife. Nonetheless, the film's portrayal of these characters diverges from the actual individuals involved in the events (for instance, they did not have a child and were not divorced, among other differences).

Let's examine the concept of fictionality more closely. In the movie, we have the representation of characters of invention who are only partially inspired by real people. In the miniseries, the only fictional character is Ulana. Still, the general characterization of the miniseries, as a sort of docu-fiction, leads us to think that the characters are all fundamentally non-fictional, inspired by real people, and whose existence is documented. Consequently, the characters in the miniseries are perceived as real-bound or less fictional in the viewer's perception than those in the movie, Ulana included.

Nevertheless, this is not entirely true, given that the protagonistic couple Alexey/Olga in the Netflix movie is still inspired, as mentioned, by an actual, documented couple. It is the melodramatic and slightly soapy tone of the film that induces the viewer to feel a strong fictional characterization and not the differences described by real people. However, the events involving the fireman and his wife in the miniseries are also strongly dramatized, and a melodramatic tone is often used. The melodramatic nature of the story is linked to its necessary sensationalization and spectacularization, which is useful to capture the viewer's attention by affecting their emotions. The melodramatic general tone appears to bring the two narratives closer together. It seems that the narrative genre, or tone, is bringing the fictional and non-fictional closer to the viewer's perception. But there's more to it.

3. Focalization and fictionality

Directly relevant to how we perceive the respective fictionality and nonfictionality of the characters in the movie and the miniseries is the aspect concerning narrative *focalization*. The screenplay of the Netflix movie is based on a traditional external gaze, a heterodiegetic point of view. The viewer observes the story from the perspective of someone who already knows how the events will unfold. However, this viewpoint does not belong to a character directly involved in the narrative world, creating a sense of fictionality for the viewer. They feel as if an anonymous gaze is guiding them through the story.

In the HBO miniseries, the script's connection to the collection of testimonies from Pripyat citizens, documented in *Voices from Chernobyl* by Nobel Prize-winning writer Svetlana Alexievich, is established (2016). This is a crucial indicator of the story's realism and non-fictional nature. The characters also have the names and formal characteristics of the real people involved in the historical events (Nicholson 2019). The chronology of events in the miniseries respects the historically documented events. But something calls into question this supposed realism or historicity of the story.

Right from the beginning – from the first scenes of the miniseries – the viewers know that the general perspective of the story is given by the content of the tapes recorded by Legasov. In the initial scenes, we witness Legasov recording his testimony and concealing it for a journalist, who eventually obtains it. Then, we witness Legasov's suicide, which is also the moment of peak tension and pathos for the viewers in the first episode. What we listen to and follow narratively in this first miniseries episode is his personal testimony, and this intensifies the drama of the story, given the direct emotional involvement of the character and, indirectly through him, of the viewer. This is the narrative perspective according to which the viewer follows the story. Essentially, the story is guided by Legasov's perspective, beginning with the opening scenes and recurring throughout. The first sentence we hear is, "What is the cost of lies?" by Legasov's voice-over. However, those tapes inevitably represent Legasov's viewpoint as he attempts to justify his actions. It appears we are immersed in a form of autofiction without explicit forewarning; an individual involved in the events narrates them, sharing his personal moral perspective. This character does it candidly, revealing his faults and weaknesses. The viewers have Legasov's accusation against the institutions in mind from the very beginning, even before witnessing the trial, which will be represented only in the final episodes of the miniseries.

It is evident that the accusations and the responsibilities of the individuals and institutions reported by Legasov are true and established. Still, the construction of his heroic figure functions to support his point of view. Choosing to place a chronologically later event at the beginning also functions to obtain this centrality of Legasov's voice. However, all this diminishes the narrative's realism, making its near-documentary claim less credible. Using narrative devices typical of fiction shifts the miniseries'

character towards a hybrid between fictionality and realism (Kuprina 2016). Significantly, the miniseries characters are portrayed realistically, even though fictional, to ensure a clear moral conclusion to the story. Choosing the ethical perspective of Legasov's self-justifying story is an instrument for this. To support and convey an ethical message to the viewer, the character must have a fictional characterization and, therefore, turn into a symbol and largely lose its realism. Legasov is a seemingly realistic character because he is inspired by a real and historically existing person whose name and formal characteristics he bears. Still, he is constructed and represented in a strongly fictional way, playing a crucial role in constructing the story's meaning. This character is the vehicle of the ethical message of the story, of the meaning intended by the writers.

On the one hand, the 'masked fictionality' of the HBO miniseries characters – primarily Legasov and Ulana Khomyuk – serves to convey an ethical and ideological message of denunciation. Narratively speaking, they are *fictional* because they are *functional*. The partial fictionality of those characters in the miniseries is functional in communicating the ethical message to the viewer.

Nevertheless, the fictional portrayal should be proportional to its purpose. Excessive fictionality leads characters to lose their value as vehicles of a socio-culturally relevant message. On the other hand, the declared and evident fictionality of the characters in the Netflix movie ultimately reduces the ideologization of the product, which becomes a case of catastrophic melodrama very similar to the classic disaster movies of the 1970s (Lindbladh 2019). The narrative shifts from an ideologically oriented characterization to one of pure entertainment and spectacularization of the events represented. That is why there is no evident polarization of the characters between good and evil in the Netflix movie. We have the antiheroic central figure of the firefighter, but we cannot, as viewers, identify a character who fulfills the villain's function. Evil is represented through the catastrophic event without implying the responsibility of a subject. The firefighter is not opposed to a character – or a group of characters – characterized in negative moral terms. Hence, the film has a low ethical enhancement charge. It has no intention to take an ethical and political stance. The situation is different and far more complex, however, for the HBO miniseries.

4. The miniseries polarizations: good/bad, rational/emotional

There is another perspective through which we can consider character construction and representation. Television series' plots are often based on polarizations, on binary contrasts that are simple enough for the viewer to understand and follow. In the *Chernobyl* miniseries, the primary focus is to depict a conflict between good and evil.

The primary conflict is the moral struggle between the protagonists, scientists Valery Legasov and Ulana Khomyuk, who courageously attempt to mitigate the disaster's impact, and the antagonists, nuclear plant technicians Anatoly Dyatlov, Viktor Bryukhanov and Nicolai Fomian, whose incompetence and arrogance led to the accident. In addition to the adversaries, we can also mention the institutions, the government, and the KGB, who have concealed and persistently covered up the mistakes made during the plant construction.

In the miniseries, there is another narrative thread line that runs parallel to the previous one, where the protagonists are firefighter Vasily Ignatenko and his wife, Lyudmilla. It is within the connection between these two narrative threads that further polarization arises between *rationality* and *emotionality*. Here, we see the contrast between the rational approach of the scientists, who are dedicated to finding effective solutions for the emergencies they gradually encounter, and the tragic story of a firefighter and his wife suffering from radiation exposure consequences.

The role of the Legasov/Khomyuk duo is to inform the viewers about the unfolding events. They elucidate how the disaster occurred, retrace the search for truth regarding institutional errors in building the plant, and highlight their disregard for safety concerns. Here, we follow a plot like that of a spy story (with the intervention of the KGB) or of a legal drama (the search for truth during a trial) that leads the viewer to a better understanding of what happened. To enhance the viewer's understanding of the accident's dynamics, the sequence of scenes dedicated to the technicians of the plant trial is fundamental. Here, Legasov's character is given the opportunity to explain, both in fictional representation to the judges and narratively to the viewers, the dynamics of the physical mechanisms that led to the reactor's explosion. The narrative functionality of this representation of Legasov's detailed explanation of the events is made evident by the fact that, in historical reality, this episode never happened. The real Valery Legasov never had the opportunity to provide those clarifications to the Commission of Inquiry. Yet another concession to fictionality that serves to reinforce the ethical functionality of the narrative.

Regarding the contrast of the two narrative lines between rational/cognitive and melodramatic/ emotional, it is interesting to note how other elements of historical reality have been manipulated in fiction to increase the effects of this polarization on the viewer. For example, the real Valery Legasov had a wife and daughter, which are not part of the miniseries narrative world. This is because their presence would certainly have added an emotional and melodramatic dimension to Legasov's narrative line, which instead had to preserve its rational characterization. Instead, regarding the Ignatenko and Lyudmilla narrative, the miniseries has reconstructed the firefighter's wife's direct testimonies in a heightened and melodramatic manner. This portrayal serves to amplify the emotional and dramatic impact of this part of the story.

This contrast is evident in the way Legasov's and Ignatenko's death are differently portrayed. The scientist's suicide, depicted at the beginning of the story, occurs almost off-screen. We only see Legasov's feet dangling, implying an extreme action taken, while his cat quietly eats and licks its paws, oblivious to the owner's fate in the same room. The scene is undeniably chilling, and even the actions performed by the character in the minutes preceding his gesture do not in any way portend the dramatic tension of the moment.

The death of the firefighter Ignatenko, or rather his excruciating agony, is instead represented in all its drama and physicality. The presence of his wife at his side and the display of her pain are equally strong emotionally for the viewer. The depiction of those extreme moments was dramatized in the miniseries to the point of arousing the grievances of the real Lyudmilla, who claimed she did not succumb in that way to the pain of losing her husband. On the one hand, therefore, it is a cold representation of the extreme moment of death; on the other, it is an emotional and highly melodramatic one.

This clearly shows that in the miniseries, which often alludes to its strong link with the audiovisual documents of the time, there is a significant fictional portrayal of the story. This creative approach allows screenwriters to maintain narrative coherence throughout the series. As pointed out, the characters and their stories in the miniseries are fictional because they are functional, narratively speaking. The characters are represented in this mixed form of fictionality and reality to support those simple and essential polarizations that sustain the deeper ethical meaning of the narrative in the viewer's perception. It's the representation for the viewer of the clash between good and evil, between truth and lies (Schmid 2020).

For this reason, the miniseries turns out to be an intertwining of narrative genres. Apparently, it is a docu-drama trying to correspond, even from an iconographic point of view, to the real situations reported by the media of the time (Rosenthal 1999). However, it is also a historical drama in which the fictional aspects of reconstructing the characters are evident (Dusi 2019). We can also identify references to other typical television series genres, such as legal drama, spy story, and certainly melodrama, present in the most emotionally driven part of the miniseries plot. The intertwining of different genres and audiovisual narrative forms supports the complex relationship between reality and fiction in the miniseries (Correyero-Ruiz and Sánchez 2022). The construction of the characters and their actions from an ethical point of view is based precisely on the possibilities offered to the screenwriters by referring to different narrative registers. Reality and fiction coexist to allow the characters to express the sense of the story. The way the heroization process of the characters is constructed seems to explain the first sentence pronounced by Legasov right at the beginning of the first episode: "What is the cost of lies?" The answer is provided to the viewer through the two keys mentioned above, the rational and the emotional, which aim to reinforce the story's overall meaning: the hero's sacrifice.

5. Conclusions

Summarizing the above, we have identified a close relationship between how characters are constructed and the functionality of both narrative structures. A main character can be characterized flatly, taking the two typical forms of the two extreme poles of hero and villain. More often, though, he is constructed as being nuanced and complex, with a problematic past and identity, thus falling into the vast typology of the anti-hero or anti-villain. These more elaborate forms of portrayal of the protagonist's character tend to give the viewer the feeling of a strong sense, or effect, of reality.

At this point, it becomes clear how a character's identity, whether more fictional or realistic, is shaped by the portrayal of characters, especially the protagonists, in a story. And how particular narrative devices come into play that may cause the viewer to perceive it as more or less fictional. For example, whether the narrative is presented to the viewer from an impersonal point of view or through the words and gaze of a character involved in the events narrated influences the viewer's perception of the story's realism.

However, the relevant role played by how the protagonist's identity is constructed concerns the ethical perspective. Viewers tend to share in a character's ethical outlook depending on how emotionally engaged they are with that character (Smith 1995). Viewers are first *aligned* with the protagonist when taking on the latter's point of view on the narrative. They may or may not accept the protagonist's ethical perspective according to their 'consonance' with the latter's identity – what Smith calls *allegiance*. Allegiance to the character, as Smith calls it, occurs because of processes other than the viewer's simple assumption of the character's point of view but is linked to the two processes of ethical polarization – good vs. evil – and the strong emotional involvement carried by the character – rational vs. emotional.

We observed that the Netflix movie's emotional impact far outweighed its rational elements and how the aspect of good/evil polarization was skewed toward the pole of good. This gives the narrative a more captivating or emotional tone, losing ethical and political functionality. In the case of the HBO miniseries, we are faced with ambiguous characterizations. We have two pairs of characters who symbolize the pole of good: in one case, we have a stronger emotional charge (Ignatenko/Lyudmilla), while in the second, we are faced with an imbalance toward the rational (Legasov/Khomyuk). This evokes in the viewer a sense of being confronted simultaneously by a genuine tale and a fictional reinterpretation. Emotion intertwines with reason, creating a narrative filled with pathos and profound ethical and cultural-historical significance.

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Chernobyl and the anthropology of sacrifice

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BY: **Alberto N. García**

1. On visual details and rituals of sacrifice

In the somber introduction of HBO's *Chernobyl*, a solitary room becomes a crucible of revelation. The camera navigates the dimness, revealing Valery Legasov, embodied by Jared Harris, amidst a haunting quiet. Vintage recording devices cast elongated shadows, emphasizing the gravity of the impending disclosure. A cassette slips into the recorder with measured intent, each mechanical click echoing like a countdown to destiny. Legasov, etched with the weariness of profound knowledge, sits alone, the cold light of a vintage lamp accentuating the lines on his face. Filled out with stifling quiet, the room bears witness to Legasov's meticulous testimony – a narrative that extends beyond the technical unraveling of a nuclear disaster. Amidst this solemnity, the scene is punctuated by the subtle presence of Legasov's cats, silent witnesses to his solitary crusade. They move gracefully in the periphery, their fur catching the muted light. The room, filled with the gravity of impending revelation, is also softened by the quiet companionship of these animal observers.

This visual overture is a chiaroscuro of moral reckoning, as Legasov becomes the reluctant messenger of an unfolding tragedy. In this intimate exploration, *Chernobyl* thrusts its audience into the heart of a narrative that delves into the technical complexities of a nuclear catastrophe and grapples with the profound sacrifices humanity (Soviet people, to be precise) bears in its aftermath. Legasov's meticulous preparations and

the silent presence of his feline companions serve as a touching prelude to a series that unravels the cost of truth and the sacrificial decisions made when faced with an unprecedented calamity.

As Legasov thoroughly navigates the intricacies of the disaster, the notion of sacrifice looms large. It casts a shadow on the stoic figure of Legasov and his faithful feline witnesses, foreshadowing the profound sacrifices that will unfold in the following narrative. The silent companionship of the cats becomes an intriguing metaphor for the sacrifices that will be made for the sake of truth, justice, and the desperate bid to unveil the hidden realities of Chernobyl. Ultimately, this solemn scene anticipates the climax of Legasov's sepulchral act of self-immolation – a desperate, sacrificial gesture to break through the shroud of secrecy and reveal the truth to the world.

Chernobyl is a critically acclaimed miniseries premiered on HBO in the spring of 2019. The show is based on the catastrophic nuclear accident that occurred on April 4, 1986, at the Chernobyl Nuclear Power Plant in Ukraine. The series consists of five episodes that accurately and meticulously reconstruct the events leading up to and following the explosion. It portrays the devastation and human cost of the disaster, including the heroic efforts of the first responders and the scientists involved in containing the aftermath. The show has been praised for its attention to historical accuracy and its depiction of the political and social context of the time, providing a gripping and informative account of one of the most significant events of the twentieth century.

In keeping with the nuclear disaster, the series features images of charred bodies and explicit scenes of death and desolation. Intertwining character drama with political chronicle, *Chernobyl* recalls many stories of those who fought to control the disaster or even immolated themselves to prevent the effects of radiation from becoming even more significant among the Soviet population. In this dramatic context that moves between epic and tragedy, it is no coincidence that *Chernobyl* begins with a sacrificial sequence. Beyond the dramatic power of starting the series with a flash-forward that tells us how the protagonist will end, placing Legasov's immolation as the first sequence emphasizes the centrality of the notion of sacrifice in *Chernobyl*.

Additionally, the emphasis in the show is not limited to the narrative and dramatic elements but also extends to the stylistic aspects. The mise-en-scène, in particular, showcases a distinctive aesthetics of sacrifice, as surveyed above. The story takes a strong stance regarding Legasov's unexpected suicide, depicted at the show's beginning. This is a prelude to how the theme of sacrifice permeates the explicit visuals and the stories of the individuals who worked tirelessly to contain the nuclear disaster. This is evident from the depiction of the workers who risk their lives to change the water pressure in episode one to the tragic story of a mother who loses her child to radiation in episode four.

In this sense, the various sacrifices presented in the story can be grouped, roughly speaking, into three types: the one assumed voluntarily by multiple characters throughout the series (heroic sacrifice), the animal sacrifice perpetrated by the authorities or forced by the toxic radioactive situation, where the immolation adopts a value not only literal, but also figurative (symbolic sacrifice), and, finally, the sacrifice applied to another innocent human being, which serves to free others from their hardships and adversities (redemptive sacrifice). In the last section of this article, we will explore how the three types of sacrifice converge in Legasov's suicide. This event is presented to us in the first sequence of the series. It sets the story's narrative entrance and moral framework, emphasizing the importance of sacrifice in the narrated events.

Sacrifice has existed in all cultures, originating from a religious or magical substratum. According to Henninger, the concept of sacrifice can no longer be considered a reenactment of a creation myth. However, it can be understood as emerging from such a myth, especially from the religious sphere (Henninger 1987). That is, even if a given sacrificial rite has become secularized, its transcendent origin serves to highlight its narrative nature. In other words, the sacrifice maintains a structure, a grammar, whose essence survives in its execution today.

During the dramatization of the suicide, two crucial characteristics of the sacrifice are brought to the fore: the ritualistic nature of the act and the use of symbolic representations. The presence of these elements indicates the profound significance of the sacrifice and underscores its importance within the context in which it is performed. By drawing attention to these features, it is possible to gain a deeper understanding of the cultural and societal values that underpin such practices. The initial image in the series depicts a feline reclining on a sofa adorned with illustrations of deer ambling serenely through a verdant meadow. The kitten's prominence in this scene is further underscored in a subsequent sequence, which features the creature grooming itself and drinking milk after the demise of Legasov. The symbolic importance of the cat in the narrative is thus emphasized, and its significance as a thematic motif becomes more apparent.

Relatedly, the television series presents numerous instances of sacrifice, which are visually distinguished by an amalgamated aesthetic pattern. This recurring theme is visually unified and contributes to the overall stylistic coherence of the series. To capture the essence of sacrifice and symbolism in *Chernobyl*, the creators employ a common audiovisual storytelling technique, the detail shot. This technique is prominent throughout the series as it helps highlight the symbolic significance of various props and objects. By weaving together these symbols, the show creates a compelling and emotionally resonant narrative.

In the case of Legasov's suicide, detailed shots of various elements are present, which hold symbolic meaning and will be explored in the last section of the article. These elements range from the cat mentioned earlier to the drops of blood on a handkerchief that suggest the protagonist's terminal illness. The detail shots also include a clock that marks the exact time of the initial explosion of the fourth reactor and a cigarette butt that is extinguished in an ashtray.

Therefore, this article will delve deeper into the intricate details of sacrificial scenes and their impact on the story. Our primary focus will be analyzing these scenes' aesthetic and narrative patterns. Additionally, we will examine the anthropological and political significance of the act of sacrifice and how it contributes to the story's meaning. By thoroughly exploring these elements, we hope to gain a more profound understanding of the themes and messages conveyed through the act of sacrifice in storytelling.

2. Heroic sacrifice and the "Thousand years of suffering in our veins"

Chernobyl takes a nuanced approach to depict the nuclear disaster, avoiding simplistic portrayals of good versus evil. The show's narrative features a cast of characters who embody heroism without being tied to any particular ideology. Some characters, such as Legasov and Khomyuk, are heroic in confronting Soviet secrecy. Others are heroic for following the orders of the bureaucratic state apparatus, such as firefighters, miners, soldiers, and scientists who risk their lives to mitigate the explosion's damage. Throughout the series, the concept of heroism is flexible, embodied by both primary and supporting characters. This theme is displayed by the frequent losses made by the characters because, ultimately, in *Chernobyl*, heroes are defined by their sacrifices in the face of tragedy.

The criminology professor Adam Lankford highlights the two characteristics that define sacrificial heroism. Linking to classical archetypes that gave their lives altruistically to save others from their sins (Jesus Christ) or military defeat (Joan of Arc), Lankford asserts that sacrificial heroism is not mere generosity or good Samaritanism but instead "It requires the risk of something highly valued; and the attempt to achieve a directly morally positive result" (2013: 637).

The singularity of sacrificial heroism is prominently depicted in the context of the Chernobyl disaster. Since the initial episode, firefighters, engineers, and technicians displayed bravery and abnegation in their efforts to mitigate the impact of the disaster. Engineers Akimov and Toptunov manually opened water valves while Sitkinov visually inspected the damage on the roof of the nuclear plant. Despite

the risks, they were committed to fulfilling their professional duties and accepted the brutal radiation dose as part of their sacrifice. The consequences of their actions proved fatal, as they eventually succumbed to the radiation exposure. Their actions, however, exemplify the highest levels of professionalism and dedication to duty in the face of unprecedented adversity.

Therefore, it is even more heroic when, fully aware of the lethal harm to their health, Ananenko, Bezpalov, and Baranov, three plant workers, volunteer to drain the water (1.2). From the perspective of the anthropology of sacrifice, such missions connect with their political aspect, as explained by Ivan Strenski: "The idea of sacrifice itself seems precisely one of those religious notions especially prone to migrate to politics. Notions like ritual and cultic giving – sacrifice – bear a natural affinity with civic giving" (quoted in McClymond 2008: 160). Scherbina's speech serves as a pivotal moment in the shift from a religious to a political perspective in the aftermath of the nuclear disaster. Legasov's failure to find volunteers for the dangerous and critical task is emphasized by Scherbina's desperate attempts to recruit them by offering monetary rewards and promotions. However, when these bargains prove to be in vain, Scherbina resorts to using national grandiloquence and the prospect of death to rally the citizens of the political community. In doing so, he calls upon them to make the ultimate sacrifice for their country's greater good in a crisis. This highlights the significant role that political rhetoric played in shaping the response to the disaster and the lengths to which those in power were willing to go to ensure the success of their mission:

> You'll do it because it must be done. You'll do it because nobody else can. And if you don't, millions will die. If you tell me that's not enough, I won't believe you. This is what has always set our people apart. A thousand years of sacrifice in our veins. And every generation must know its own suffering. I spit on the people who did this and I curse the price I have to pay. But I'm making my peace with it, now you make yours. And go into that water. Because it must be done. ('Please Remain Calm' 1.2)

The notion of sacrifice is a recurring theme in the series, and it acknowledges the price paid by those who sacrifice themselves for the good of others. *Chernobyl* visually depicts this resignation throughout the narrative. It highlights the importance of various heroic professions and accentuates the courageous individuality of such professionals. Through the judicious use of close-ups, the series strives to isolate the occasional characters who embody this spirit of epic resignation and bring to the fore their sacrificial countenance. [Figures 1 and 2].

Figure 1. Andrei Glukhov is the mining crew chief.

Figure 2. Vasily Ignatenko was a first responder.

3. "Don't let them suffer": Animal immolation and symbolism

If we consider the first type of sacrifice analyzed in *Chernobyl* as literal, the second type emerges as symbolic or metaphorical, leading to the redemptive sacrifice analyzed in the third section. In this second type of sacrifice, animals are the ones who suffer. According to René Girard, one of the critical elements of modern sacrifice lies in its vicarious capacity: "Society is seeking to deflect upon a relatively indifferent victim, a 'sacrificeable' victim, the violence that would otherwise be vented upon its members, the people it most desires to protect" (2005: 4). Within the context of the Chernobyl disaster, animals served as a symbolic representation of human sacrifice. This concept resonates with the anthropology of sacrifice, where offering animals to divinity represents a constant and integral aspect of sacrificial semantics. The series effectively captures this sentiment and draws parallels to the ancient practice of sacrifice, a significant cultural and religious component across various civilizations throughout history.

From this perspective, it is unsurprising that the first image that appears in the entire series, as anticipated, is that of a cat lying on a sofa with drawings of deer peacefully wandering in a meadow. The significance of the cat introduced in the series opening is sustained throughout via a recurring symbolic iteration facilitated by the on-screen appearance of various animals, such as cows, dogs, crows, and caterpillars. The association of these animals with the idea of oblation establishes a traditional link with their role in sacrificial rites.

Thus, the deer featured in the first sequence of the series undergoes a tragic visual continuation in the midsection of the second episode. The camera slowly pans over the lifeless remains of a deer situated amid a dense forest. Subsequently, it shifts its focus towards the sky, where multiple helicopters approach the nuclear core to carry out a mission that ultimately fails. As Chwalkowski explains, "The deer has

been an important source of food, tools, and clothing in many cultures for thousands of years" (2016: 425). Consequently, the comparison between the depiction of the deer in the two contexts underscores its sacrificial role within the narrative. The deer expiring amid the forest symbolically reinforces the barrenness of the land that will eventually become unusable and uninhabitable in the aftermath of the disaster. On the other hand, the healthy and buoyant deer associated with Legasov represents the rekindling of hope and truthfulness, a result of the protagonist's selfless sacrifice: "The deer has come to be viewed as a symbol of fertility, rebirth, and rejuvenation and a symbol of purity and sublimity" (Chwalkowski 2016: 426).

The deer makes several appearances throughout the series and carries a significant meaning in different sequences. Similarly, the crow holds a substantial semantic load in various scenes. The first episode concludes with the sudden death of a crow due to radiation. Its appearance contrasts the happy and sunny scene of children walking the streets of Prypiat after leaving school. This sudden appearance highlights the corvid's death and juxtaposes it with the explicit intentionality of the previous scene. In this particular instance, the creators have concluded the episode with a metaphorical ending that establishes a connection between the bird and death, evoking the crow's classic association as a harbinger of doom and a messenger of bereavement. "They serve an important function in the cycle of life because they waste nothing, even facilitating the easier decomposition of a corpse. This behavior associates them with death in general, as a prophesier of doom and war" (Chwalkowski 2016: 494).

The fourth episode subtly completes the reference to the bird, which, as we will see in the next paragraph, is not the only animal playing a crucial role. During the burial of the sacrificial dogs, the song Chorniy Voron is played, a frequently heard tune among Soviet soldiers. This piece, sung in Russian, holds cultural significance and has a poignant history. As per the research conducted by Margaret Ziolkowski, the wounded bird has been a recurring symbol in the cultural and artistic imagination of Russia and the Soviet Union. This symbol has been consistently portrayed in various art forms, including literature, painting, and music. The wounded bird has been used as a metaphor for vulnerability, fragility, and the suffering of the individual or the nation. Such symbolism has been present in the work of notable Russian and Soviet writers, including Ivan Turgenev, Boris Pasternak, and Andrei Platonov. The wounded bird also played a significant role in Russian folktales and has become a part of the country's cultural identity (1988: 106).

The Chorniy Voron song relates an exchange between a soldier injured in a battle and a crow flying above him. Initially, the soldier endeavors to avoid his inevitable fate, but eventually, he acquiesces to it ("I see death coming; black crow, I am all yours"). *Chernobyl* subverts the traditional order of sacrifice, much like the deer we discussed earlier. In its first beats, the song depicts the image of death descending

upon the city, reiterating this motif to underscore the insufficiency of the initial sacrifices to cleanse the contaminated land. The ritualistic process, aimed at purification, becomes a repetitive exercise in futility. However, the need for repeated attempts remains imperative despite the ultimate failure to achieve the intended purification. *Chernobyl* establishes a theme of perpetual sacrifice by correlating the song of the 'black crow' to the ultimate fate of the sacrificed dogs, which serve as the epitome of the scapegoat, as we will argue in the next paragraph. Throughout the series, the black crow is a recurring symbol representing the unfolded tragedy. However, it is only with Legasov's self-immolation that the vicious circle of sacrifice is finally broken. By sacrificing himself, Legasov breaks free from the cycle of sacrifice perpetuated until that point.

The last animal presented as a scapegoat is the dog. This animal plays the most relevant non-human role in *Chernobyl*, as a subplot of the fourth episode is articulated around its presence as a domestic creature that must be mass-sacrificed. According to Henrietta Mondry, "The dog's body in modern Russian culture is a site where body politics and politics are played out and where culture and nature, the sacred and the obscene, come together" (2015: 2). This symbolic resonance ranges from the cruel treatment of dogs in Pushkin and Dostoyevsky's works to the heroic story of Laika, the first animal to orbit the Earth. This symbolism is also evident in an episode where dogs are used as a perfect embodiment of a scapegoat, a notion explored in depth by René Girard in his work. For the French anthropologist, sacrifice has nothing to do with the guilt or innocence of the victim, not even with the guilt or innocence of the individual representing the victim of sacrifice: "When unappeased, violence seeks and always finds a surrogate victim. The creature that excited its fury is abruptly replaced by another, chosen only because it is vulnerable and close at hand" (2005: 2). Girard further elaborates on the human propensity to identify surrogate victims by citing Joseph de Maistre's explicit reference to animal sacrifice:

> The sacrificial animals were always those most prized for their usefulness: the gentlest, most innocent creatures, whose habits and instincts brought them most closely into harmony with man. . . . From the animal realm were chosen as victims those who were, if we might use the phrase, the most human in nature. (Maistre 2005: 3)

The moral status attributed by society to human beings and domestic animals is evidently distinct. However, the fourth episode's subplot employs a disturbing symbolic representation of executing dogs, which serves as a metonymy for their owners' fate. Using these four-legged friends as symbols of their proprietors' demise creates unsettling undertones.

As Chwalkowski has studied, "Dogs symbolize dependence, trust, fidelity, and defense. The dog is seen as a powerful symbol of loyalty, intelligence, and vigilance" (2016: 380). During the third episode, while evacuating civilians from Prypiat was underway, the camera captured a poignant moment when a German shepherd was seen chasing after a bus, presumably in pursuit of its masters. This event is a notable example of the dog's unwavering loyalty and obedience. It serves as a symbolic representation of the concept of "homo sovieticus," introduced by dissident philosopher Alexander Zinoviev and systematized by Russian sociologist Yurii Levada.[1]

In episode four, the pets display the same submissiveness in Pavel, Bacho, and Garo's subplot. They respond to a whistle and obediently come forward to receive a shot that ends their lives. This behavior reflects the sinister paternalistic attitude expressed by Zharkov in the first episode, suggesting that the state's ruling class always knows what is best for its citizens. The comparison is made between the citizens' obedience to their leaders and the dogs' compliance with the soldiers who lure them to sacrifice. Hence the emphasis on Pavel's fear before pulling the trigger, Bacho's warnings not to make them suffer, or Garo's sarcastic recitation of the Soviet slogan during the meal ("Our goal is the happiness of all mankind"). The interactions of the three characters with the dogs certify, beyond the evident regret for killing the animal, the symbolic relevance they hold. The animals are scapegoats paying for their owners. That is why the narrative focuses on pets: they are the ones most similar to people forced into exile. People cannot be purified by annihilation, so *Chernobyl* opts for a sacrificial victim.

The connection with the anthropology of sacrifice also lies in its ritual methodology. Following Victor Turner, the ritual can be understood as

> prescribed formal behavior for occasions not given over to technological routine, having reference to beliefs in mystical beings or powers. The symbol is the smallest unit of ritual that still retains the specific properties of ritual behavior; it is the ultimate unit of specific structure in a ritual context. (Turner 1970: 19)

Thus, Bacho sets clear rules for Pavel – "prescribes behavior," following Turner's definition – which he must follow to carry out the sacrifice: they wear a kind of metal shorts, go methodically door to door, and follow the instruction "If you hit an animal and it doesn't die, keep shooting until it does. Don't let them suffer." Several rules confirm a way to approach the task methodically and systematically. However, there

[1] For a comprehensive analysis of the "homo sovieticus" concept, see Sharafutdinova 2019.

is also an anthropological link to the ritual – the "reference to beliefs in powers or mystical beings," according to Turner – which is the metal shorts they wear. This outlandish attire has no scientific basis and does not improve their performance. Instead, the metal shorts symbolize their sacrificial ritual because Pavel, Bacho, and Garo believe that following a particular procedure will protect them from the evil they are fighting.

Furthermore, the ritual culminates at a symbolic altar where the victims are sacrificed – a mass grave where the dogs are buried beneath concrete. Again, *Chernobyl* exalts the human efforts required to eradicate radiation by employing a sacrificial aesthetic that adds an anthropological interpretation. The Chorniy Voron song, analyzed above, contributes to this understanding. The audience comprehends that the daily routine of slaughtering innocent animals culminates with the sanitation of the transport vehicle and the interment of the deceased pets. This ritualistic process repeats itself each day, commencing anew every dawn.

4. Redemptive sacrifice: "Children die to save their mothers"

The fourth episode starts with a narrative digression: an autonomous sequence without explicit narrative connection to the main storylines of the rest of the narrative. The sequence is characterized by its metaphorical nature rather than a narrative cohesion. The protagonists of the sequence include a young male Soviet soldier, an elderly Ukrainian peasant woman, and the cow she milks. The soldier orders the woman to leave her house as they are evacuating the area, but she refuses. However, the key to interpreting the sequence lies in the cow. Due to its nourishing capacity to produce milk, the cow is traditionally associated with motherhood and fertility.

On this basis, a parallel can be drawn between the older woman who continues milking the animal (a ritual in itself) and the motherland, a personification mainly used in Soviet artistic propaganda[2] – not coincidentally, one of the most strongly associated symbolic objects in Russian popular culture is the matryoshka. Joanna Hubbs (1993) has studied the pervasive myth of divine motherhood in the Russian sphere, exemplified by the omnipresence of matryoshkas in Russian culture. The prominence of the matryoshka doll in Russian popular culture as a symbolic object is highly significant. This cultural artifact has become an emblem of Russian identity,

[2] This predominance can be seen, for example, in The Motherland Calls, the colossal central figure of the memorial complex *To the Heroes of the Battle of Stalingrad* (Yevgeny Vuchetich and Nikolai Nikitin 1967). This statue, which is the tallest in the world, depicts a woman triumphantly wielding a gigantic sword while grimacing in victory.

and its widespread use in various art forms indicates its influence. The matryoshka has come to represent the quintessential Russian spirit, and its enduring appeal has made it an object of fascination for both domestic and foreign audiences. Its significance in Russian folklore and its association with themes of motherhood, family, and tradition have contributed to its status as a cultural icon. Hence, the matryoshka's preeminent position in Russian popular culture can be attributed to its intrinsic cultural value and widespread appeal as a symbol of national identity.

Therefore, the initial sequence of the fourth episode connects with that imagery, employing the symbol of the cow. By presenting the *babushka* milking, the scene metaphorizes the cycle of life: an elderly lady nearing death is visually linked to the symbol of fertility, rebirth, and growth (milk). Therefore, when ordered to evacuate – a new sacrifice for the motherland – the older woman recalls her family's multiple sacrifices for the motherland: the revolution, the Holodomor famine, World War II, etc.

Contrary to the abstraction of sacrifice for ideas, the mise-en-scène underlines the tangible, the specificity of that older woman's family: the everyday life of her kitchen, memories in photos, the meticulous image of a home, a cat wandering. That is why the old woman, reinforcing her refusal to be evacuated, exclaims: "With all that I've seen, do you think I'm going to leave now for something I can't see? No!" The soldier killing the cow also takes on a metaphorical reading: he kills the animal to save the older woman (by forcing her to evacuate), but simultaneously, the scene exhibits the sacrifice of fertility. The life cycle symbolized by the scene is violently broken.

Given this interpretation, it becomes clearer how this mysterious sequence is interrelated with a secondary storyline of the series and the main one in this fourth episode: that of Vasili Ignatenko's widow. The episode's opening scene presents a metaphorical allusion to motherhood through the symbol of a cow. To conclude the episode, Craig Mazin employed a circular structure that draws a connection to the beginning. Specifically, the closing image focuses on Lyudmilla Ignatenko in the hospital after delivering a daughter who sacrificed her life to preserve her mother's. This structural device reinforces the symbolic importance of motherhood throughout the episode and underscores the theme of sacrifice and selflessness as fundamental to the human experience.

The editing and mise-en-scène throughout the episode underscore the overarching theme of sacrifice. This theme is encapsulated in the three scenes comprising the final sequence. The first scene depicts soldiers planting the flag atop the nuclear plant. At the same time, General Nikolai Tarakanov gratefully acknowledges the courage and selflessness of those who risked their lives during this dangerous mission. Each repeats the phrase, "I serve the Soviet Union." In the subsequent scene of this same sequence, we see Pavel smoking thoughtfully in the dull and gloomy

camp, reflecting upon the horror he has just performed. The third scene features a long camera movement that takes us inside a maternal hospital room. The audience hears cries and sees new mothers holding their babies. However, the camera movement ends by focusing on an empty crib, followed by Lyudmilla sitting on the bed.

A semantic relationship is established using parallel editing to interconnect three distinct environments. Each setting portrays a sacrifice: the soldiers relinquishing their physical well-being, young Pavel losing his innocence, and Lyudmilla foregoing descendants (the future). However, the mise-en-scène also emphasizes the parallelism with the sacrificial lamb. Saint John the Baptist established the semantic contiguity between Jesus and one of the animals often used in religious sacrifices, building on Christian symbolism based on the Hebraic faith. John referred to Jesus as "the Lamb of God, who takes away the sin of the world." This evangelical statement founded the concept of the sacrificial lamb, which refers to one who is innocent but voluntarily accepts death to expiate the guilt of others. In this context, Lyudmilla's child served as a sacrificial lamb and saved her mother's life. The sacrificial lamb's symbolism represents the innocent, who willingly accepts their fate to absolve others of their sins. Ulana Khomyuk stresses this:

> She gave birth. A girl. The baby lived for four hours. They say the radiation would have killed the mother, but the baby absorbed it instead—her baby. We live in a country where children die to save their mothers. To hell with your deal and to hell with our lives. Someone has to start telling the truth. ("The Happiness of All Mankind" 1.4)

In the final shot of the episode, then, Lyudmilla's exposition accentuates the baby's sacrificial state. She is sitting on the bed, her hair covered with a scarf, her head slightly turned to the right, and her facial expression seems to convey silent pain. Lyudmilla's image evokes the figure of the Pietà [Figure 3]. The Pietà is a sculpture depicting the Virgin Mary's grief over her son's death, Jesus Christ, on the cross. Michelangelo popularized this artwork in the Vatican. As Girard wrote, "We have learned to identify our innocent victims only by putting them in Christ's place" (1989: 202). By drawing a visual parallel between Lyudmilla's overwhelming grief for her deceased baby and the Virgin Mary's agony over her son, the story implicitly suggests a sacrificial interpretation with biblical connotations that can be viewed as universal using Girard's theory. This is because the death of Lyudmilla's infant eventually prompts Legasov to have the courage to speak the truth. In other words, the immolation of the sacrificial lamb motivates the pivotal change in the protagonist, who decides to become the subject of sacrifice himself. He chooses to sacrifice for the Truth's sake, as we will explore further in the following section.

Figure 3. The iconography of Lyudmilla Ignatenko resembles a Pietà.

5. "What is the cost of lies?" Legasov's immolation as a communicative act

When Ulana Khomyuk recounts Lyudmilla's tragedy to Legasov and Scherbina, she concludes with a phrase that will become the prelude to the last episode: "Someone has to start telling the truth" (1.4). The series delves into the concept of sacrifice throughout its episodes, culminating in the fifth and final episode, which seeks to elucidate the nuclear disaster and attribute responsibility. In this dramatic context, the suicide of Legasov, which was portrayed at the outset of the series, acquires its complete narrative and symbolic value. Confronted with the infeasibility of shedding light on the entire truth due to the control of the Soviet dictatorship, Legasov decides to offer himself as a sacrifice. More notably, following Josetxo Beriain's proposed definition, the actions undertaken by Legasov could be interpreted as an exemplification of martyrdom.

> The martyr is someone who acts against all odds (...), not in the sense that he is unaware of his imminent death, but in the sense that he is aware that his sacrifice may not be appreciated in its just terms and, in spite of everything, he runs the risk, an infinite risk without any kind of security. He is only accompanied by the ontological security of a future that is on his side, in the face of the whole community against him. (2007: 109)

Legasov hangs himself, immolating so that his recorded testimonies can come to light upon discovering his corpse. The authorities, as specified in the last sequence of the series, had prohibited any contact with anyone. Therefore, his suicide aims – beyond the complex and multilayered emotions that trigger such a radical action – to achieve a communicative act: that someone could find the tapes where he detailed the tragic events of Chernobyl. Consequently, by articulating itself as a "do ut des" (I give so that you may give), personal and voluntary sacrifice becomes a positive and beneficial act for the community. With his death, Legasov intends to restore the truth to the public sphere.

Legasov's confession also has a profound effect on his intimate outlook. The protagonist experiences a strong compulsion to confess and confront the survivor's guilt and trauma resulting from witnessing the horrifying events. Trauma psychiatrist Dori Laub argues that testimony is "the process by which the narrator (the survivor) reclaims his position as a witness: reconstitutes the internal 'thou' and thus the possibility of a witness or a listener inside himself" (1995: 70). The idea behind assimilating the trauma story into one's personal narrative is to help the trauma survivor become a unified and integrated individual who is no longer broken or disarticulated but repairs and mends itself. This is achieved through a structure that presents a gigantic flashback that helps to reorder the past and make sense of it.

In other words, Legasov, in the tapes, is also appealing to himself. His suicide serves as a demonstration of "the sacrificial contract," as cataloged by anthropologist Marcel Mauss: "The purpose of destruction by sacrifice is precisely that it is an act of giving that is necessarily reciprocated" (1967: 16). This contract involves the offering of something valuable in exchange for a benefit. Legasov's sacrifice is a prime example of this contract, as it ceases his character's complicity in a lie that has been causing him distress. The "sacrificial contract" is a fundamental structure of sacrifice wherein giving leads to reciprocation. His self-immolation is, thus, also a liberation.

By consolidating several sacrificial aspects into a singular act, Legasov's self-immolation bears relevance to the three types of sacrifice previously expounded upon in this article. On the one hand, his sacrifice partakes in the characteristics of forced heroism: his physical deterioration due to radiation received in the exercise of his professional duties makes his death imminent. At the same time, Legasov chooses his own body as a scapegoat. As Tom Douglas argues, "Someone has to take the blame to allow the rest of us to continue our normal functions, nominally at least, free of guilt or responsibility for events past" (2003: 5). Accordingly, instead of transferring the blame towards others, Legasov traces the opposite path. He absorbs – akin to Lyudmila's baby – the collective guilt as a means of redeeming society. In the third and final place, the figure of Legasov is associated with that of a sacrificial lamb, as he sacrifices himself to expiate the sins of others, metaphorically speaking. Thus, following Claire Sisco King, "sacrifice redresses a crisis or breach within a community through expiatory substitution wherein the sacrificial object takes on and atones for the imperfections of the larger social body" (2011: 15).

6. Embracing sacrifice and the transformative power of memory

Throughout this analysis, we have navigated the intricate layers of sacrifice portrayed in the TV series *Chernobyl*, spotlighting its nuanced exploration of sacrificial heroism, symbolic animal representations, and the redemptive sacrifice of Lyudmilla Ignatenko's baby. The series is a profound canvas, intricately weaving these themes into its narrative fabric. *Chernobyl*'s portrayal of sacrificial heroism transcends the simplistic dichotomy of good versus evil, presenting heroes who navigate the complexities of confronting Soviet secrecy or adhering to bureaucratic orders to mitigate disaster. The series meticulously depicts the flexible nature of heroism, where characters embody courage in the face of tragedy, defined ultimately by their sacrifices. Adam Lankford's insights into sacrificial heroism as an altruistic act with a direct moral positive outcome find resonance in the actions of *Chernobyl*'s characters, whose sacrifices are underscored by professionalism and dedication to duty amid unprecedented adversity.

The symbolic and metaphorical use of animals as sacrificial representations adds another layer to *Chernobyl*'s narrative and dramatic tapestry. From the tragic fate of the deer symbolizing the barren aftermath of the disaster to the black crow serving as a harbinger of doom, the series subtly subverts traditional sacrificial orders. The repeated motif of sacrifice becomes a powerful reminder of the perpetual sacrifices demanded in the face of an uncontrollable catastrophe. By showcasing their deaths or presenting them in sacrificial contexts, the series integrates them as narrative and metaphorical elements, projecting an anthropological reading that enhances the significance of sacrifice. The final animal to appear in the series is a caterpillar, depicted in a close-up shot of Scherbina's jacket and hand [Figure 4]. The caterpillar is the ultimate symbol of sacrifice – an

Figure 4. Throughout the miniseries, animals serve as a powerful symbolic representation.

animal that transforms into another. From annihilation emerges something more beautiful, renewed, and pure. At the end of the series, the creators encourage viewers to remember the victims, turning their tragedy into a reason never to forget. The redemptive sacrifice theme unfolds in a symbolic sequence in the fourth episode, where milking a cow becomes a metaphor for the sacrifices made for the motherland. This sequence, initially enigmatic, finds a profound connection with historical sacrifices, linking the past to the present. The closing scene of the same episode, where Lyudmilla's newborn sacrifices her life to save her mother, exemplifies the transformative power of sacrifice, aligning with Christian symbolism. The thematic parallelism with the sacrificial lamb echoes the timeless concept of innocence sacrificed for the greater good.

This visual storytelling culminates in Legasov's self-immolation, breaking free from the cycle of sacrifice. His hanging emerges as the climax of *Chernobyl*. Beyond a personal catharsis, his act becomes a communicative sacrifice aimed at restoring truth in the face of Soviet censorship. In the poignant final episode, Legasov's recorded testimonies, preserved through his self-inflicted death, represent a *do ut des* for the community, embodying the sacrificial contract. His self-immolation, with its facets of forced heroism, scapegoating, and sacrificial lamb, intricately weaves the theme's profound impact on both the individual and society.

The recurring sacrifices depicted in the *Chernobyl* series align with a crucial aspect of sacrificial storytelling: assisting in healing trauma. This conclusion is bolstered by the series' final sequence, which showcases authentic individuals who inspired the show, accompanied by informative captions and fitting melodies. The creators have deliberately chosen to incorporate Vichnaya Pamyat, a melody commonly used at the closing of Orthodox Christian funerals. Vichnaya Pamyat refers to a eulogy, a rhetorical device that originates from Greek (ἐγκώμιον enkṓmion) and denotes fervent praise. Among the Russian verses, one can distinctly hear: "In a blessed sleep, oh Lord, grant eternal rest to your departed servants and make their memory eternal."

To sum up, *Chernobyl*'s masterful storytelling leverages sacrifice as a lens to explore heroism, societal values, and the quest for truth amid catastrophe. Through its heartbreaking visuals and nuanced character arcs, the series underscores the enduring memory of those who died for the greater good. It challenges viewers to reflect on the transformative power of sacrifice, where loss can lead to regeneration, the end can lead to a new beginning, and the collective memory becomes a perpetual reminder of the catastrophic events at *Chernobyl*.

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History, power, and narrative.
Chernobyl is still there

BY: **Federico Montanari**

1. Fiction, narrative, history, truth

This essay intends to investigate, as the title alludes to, the nature of the relationship between the fictional dimension and the historical event and the representation of truth conditions. As it is well known, the HBO *Chernobyl* mini-series (2019) is characterized by its meticulous attention to historical accuracy and detail in its depiction of the events surrounding the 1986 Chernobyl nuclear disaster. The creators, led by writer Craig Mazin, conducted extensive research and consulted experts to ensure a faithful portrayal of the events. On the one hand, the series blurs the line between fiction and non-fiction, dramatizing actual events and presenting them in narrative form. The characters and their personal stories are often composites of real people, and some events are dramatized to create a narrative effect. However, the main events and the broader context of the disaster are presented in a manner faithful to the historical facts. In this way, the *Chernobyl* series engages a form of narrative that raises questions about the nature of historical representation in the media. It asks viewers to consider the balance between creative storytelling and the responsibility to accurately portray historical events, especially those with significant real-world consequences.

The series also serves as a platform to explore broader issues, such as the impact of secrecy, the consequences of human error, and the complexities of dealing with technological disasters. In this way, it goes beyond the simple narration of historical events to become a vehicle for reflection on the

nature of truth, accountability, and the intersection of fiction and reality. Ultimately, the *Chernobyl* series contributes to the ongoing discourse on ethical considerations related to adapting real-world events into fictional narratives, especially when these events involve human suffering and significant social consequences.

But what is most important in the *Chernobyl* series is the relationship between the truth of the fiction, the truth of the historical facts, and their relationship to the truth within a context such as that of a regime like the Soviet one, particularly in the phase of the latter's crisis. As emphasized by Michel Foucault's work, through many moments of his research, and as pointed out in a talk by Judith Revel,[1] the problem is that not of truth itself, but of the historicity of the conditions of the utterances of truth: that is which surrounds the 'rarity' of these utterances and discursive events. This is the case for this series and what it intends to represent.

Indeed, from a semiotic and sociosemiotic perspective, *Chernobyl* raises interesting questions about representing the truth, the modalities of veridiction (truth-telling), and the strategic capacity of these modalities in shaping our understanding of historical events. Let us try to see these points more specifically from a sociosemiotic side.

1.1. **Veridiction modalities, actants, and *Chernobyl***

In semiotics, 'veridiction' refers to how truth is conveyed or established from a modal point of view. The *Chernobyl* series navigates through various modalities of veridiction, blending the factual with the fictional. The creators choose how to represent the truth of the events, considering the narrative impact, emotional resonance, and the need to convey historical accuracy. This involves decisions about storytelling techniques, character development, and the portrayal of events.

The first point deals with the strategic capacity of modalities. The series strategically employs different modalities of veridiction to achieve specific effects. For example, using actual historical footage in conjunction with dramatized scenes creates a sense of authenticity. The strategic use of these modalities influences the audience's perception of the truth and shapes their emotional engagement with the narrative. The series, therefore, becomes a medium through which the creators strategically construct a version of the truth, balancing the demands of storytelling with the responsibility to convey the gravity of the events.

The second question concerns Modal Identity as Actants. It is well known that in semiotics and sociosemiotics, the concept of actant refers to entities or elements

[1] See, on this topic Judith Revel's beautiful talk, "Il coraggio della verità" (The courage of truth), at the *FestivalFilosofia*, Modena Philosophy Festival, 2018, https://www.youtube.com/watch?v=J9c6tP3h3n4.

and functions that contribute to the narrative. But what is interesting here is how the "modal identity" (cf. Fontanille 1999; Colas-Blaise 2022) of actants in *Chernobyl* becomes crucial. The characters in this series, whether based on real individuals or composites, are constituted by actants that contribute to the modalities of veridiction. The composition of these actants, going on to construct motivations and actions, all play a role in constructing narrative truth. And according to Bertrand (2000: 101):

> On ne cherchera donc plus à opposer les textes qui ont un "référent réel" à ceux qui ont un "référent fictif ou imaginaire." On cherchera plutôt à distinguer les formes de discours à partir du régime de "véridiction" – les jeux de vérité qu'installe en son sein le discours – qui les caractérise en propre. En d'autres termes, à partir du mode d'adhésion que le contrat énonciatif de chacun d'eux propose à son lecteur: à quoi et comment fait-il croire?

But here, we find another level of construction that relates to a cultural semiotic perspective. From a cultural semiotic standpoint, the series becomes a macro-text that reflects and reshapes societal perceptions of the Chernobyl disaster. The choices made in representing the truth are embedded in cultural contexts and influenced by societal values, historical interpretations, and collective memory. The series, therefore, participates in the ongoing semiotic construction of the cultural narrative surrounding Chernobyl. In essence, the *Chernobyl* series can be seen as a complex semiotic system that engages with the challenges of representing historical truth in a narrative context. It involves the strategic use of veridiction modalities and considerations of actant modal identities. It operates within the broader cultural semiotic landscape, contributing to the ongoing discourse on the relationship between fiction and nonfiction.

If the *Chernobyl* series, as anticipated, poses some problems regarding the so-called relationship between fiction and nonfiction, more generally, from a semiotic and sociosemiotic point of view (and I would say, either from cultural semiotic), the problem is about (cf. Bertrand 2000; Alonso 2023; Fontanille 1999) the definition of 'veridiction modalities' and their strategic-manipulative capacity of modalities, that is the possibility of "*faire-faire quelque chose*": getting something done. Or, again, according to Colais-Blaise (2022: 5), "wanting to do something even though we know we can't (...) wanting to do something overtaking knowing how to do it", etc. So, in this series we are faced not only with modalities but with real broad modal dispositifs that connect emotions, attempts to show the truth of facts, and individualities. These modal identities raise another crucial issue. Veridiction and making truth are closely related to a real pedagogy of catastrophe. That is to say, it is not only about "the making of true" but also "the making as it seems true" (Or "real?").

How does this HBO mini-series claim to tell a historical truth as dramatic as the Chernobyl catastrophe? In other words, we can speak of a pedagogy of catastrophe because this series wants to convince us that it is telling us the truth. It is to persuade viewers that the truth is being told and well narrated and that this is useful and important for us. In this sense, one can speak, concerning *Chernobyl* and other recent TV series, of a pedagogic narrativization (as well as fictionalization) of truth.

What is fictionalization? And in what sense can it be accompanied, in an only seemingly paradoxical way, by a pedagogy and an account of reality? It does not necessarily have to be strictly related to fiction texts. For example, when Zelensky changes clothes and wears military clothing from the earliest stages of the war in Ukraine, we can speak of a procedure of 'fictionalization,' in that he produces a new narrative that 'talks about the war.'[2] So, fictionalization is a narrative-modal procedure, which is also related to the 'putting into perspective' (thus also turned in discourse): creating "from a truth, a new narrative" (Larousse, Webster) (cf. also Colas-Blaise 2022, resuming Couégnas and Fontanille 2018; Zilberberg 2006).

Therefore, fictionalization not only produces a new narrative and, secondly, a new putting into perspective, but also the need for intensification ("*la mise en scene modale quand est fictionnelle est 'intensifiante*," cf. again Colas-Blaise, which quotes Fontanille et Latour, among others), and a surmodalization is also produced (Latour 2012). In this sense, can we talk about fiction as "a new mode of existence"? (ibid.) With a constant dynamic and passages between the different modes... Or, better to say, modulations of existence. Would fiction be a "form of modulation or deep modality"? (see again Colas-Blaise, quoting Souriau, as a Latour's source; cf. also Couégnas and Fontanille 2017), with fictional beings populating different microcosms.

More generally, how do we rethink (see again Colas-Blaise 2022 and Giorgio Grignaffini in this book) this delicate frontier between 'fiction' and the so-called 'reality'? Here, we also confront the logical-semantic theories of possible worlds, from Lewis to Goodman (possible worlds could be part of the "real" world). And in this sense, we should also add to the comparison Eco 1979 to Dolêzel (1997) and the idea of the "story world," taken up by Dusi and Grignaffini (2022), with their use in the semiotics of culture and media (Saldre and Torop 2012). How do we critically rethink this idea in relationship with «modes of existence»? Beyond the *fictif/fictionnel* distinction (Colas-Blaise 2022), the idea is to move from the false and illusion to the 'fabricated,' and to the different degrees of 'consistency' of the 'real.' We would deal with varying degrees of consistency (of plans of consistency, quoting Deleuze and Guattari 1991).

[2] This example also comes from a personal discussion with Isabella Pezzini, whom I would like to thank.

2. Truth, struggle, and memory

Coming back to our case, in the *Chernobyl* series (also related to other narratives, such as the phenomenon of tourism that the post-Chernobyl disaster had produced around the plant site, in its whole intermedial dimension), there is a narration that is presented as 'true and credible,' but it must struggle against a background of a non-truth. In this case: the falsity of the Soviet system (we remember all the literature about it... Homo sovieticus, etc.). But, in order not to fall into an 'ontologism' or rather 'ontalgia' (as often stated by Paolo Fabbri), it could be better perhaps to say 'ontographics,' in the sense of new realities being drawn at the frontier between the different and subtle levels of fiction and narrative.

On the one hand, as anticipated, the *Chernobyl* series narrates the events in a rather precise way. But, simultaneously, the series works on memory, starting from the simulation and reconstruction of personal experience and testimony, as well as on perception (and therefore in connection to the plastic and figurative dimension, as also stressed by Nicola Dusi in this book).

An important example on the visual level is represented by the scene of the 'radioactive snow,' the experience on the 'death bridge,' where a crowd gathers on the night of the explosion, and they will all die. This scene is recounted in Svetlana Alexievich's famous book, *Chernobyl Prayer. Voices from Chernobyl*. (*A Chronicle of the Future*, 2006). Clearly, there could have been many other ways of filming this scene, and there were many choices between the series and the book. In this regard, we should recall that this book represents the primary source of the writing of the *Chernobyl* series. This is where Alexievich collects the accounts, tales, sometimes anonymous voices, and biographical testimonial interviews of victims, their relatives, citizens, doctors, scientists, politicians, intellectuals, and ordinary people.

The book sometimes describes sensations like a particular smell or a taste. For instance, what is the scent of a radioactivity level high enough to destroy the bodies in a few hours? It's a metallic taste in the mouth (and it's the only case reported in the series from the book: let's refer to the scene of firefighters desperately trying to put out the fire in the reactor core). In a certain sense, they are 'lost in translation' between the book and the series. Another example concerns the description of animal-related scenes in the book:

> The animals can probably see it and hear it, but people can't. But that's not true! I saw it. This Caesium was lying in my vegetable plot until it got wet in the rain. Sort of inky blue, it was. It lay there shimmering in these little lumps. I'd just run back from the collective-farm field and gone to my vegetable plot. And there it was, this blue lump, and a couple of hundred metres away, there was another, as big as the scarf on my head. (Alexievich 2006: 26).

2.1. Memory, fiction, and forms of political discourse in *Chernobyl*

But let us also consider another level of analysis and a problematic question (see also Gambarato, Heuman, and Lindberg 2022): the link between memory and political discourse. The political discourse and the confrontational/conflictual dimension seem largely lost in the series, except for a few scenes related to the trial of the perpetrators, as we shall see. Or, where it is present, it is diluted, for example, in the scene of the confrontation between the minister and the miners to convince them to participate in the work of securing the plant.

Discourse concerning conflicts is lost in this translation passage from book to series. According to Gambarato (et al. 2022), this point relates to the broader question of cultural memory as it is considered in the series and other current forms of TV: the problem of cultural memory in a post-television age. The problem seems to be posed in the following terms: concerning people's active and passive memorization (as quoted by the authors from memory theorist Aleida Assman) and memorial layering. That is to say, memory, filtered through narrative and media devices, takes on characters of mediation and its own specific discursive characteristics. Memory should not be seen as 'in itself' but as a discursive and textual device. In sum, this effect, this 'deformation effect' identified in *Chernobyl*, as well as in other series, has less to do with a 'collapsing of memory' than with a 'retrospective' and 'nostalgia effect,' which is a typical feature of television series in recent years.

More generally, concerning memory and political discourse, taking up and reinterpreting some concepts from these authors, we propose the following, very concise, interpretive schema and modelization of *Chernobyl* and series' characteristics (taking up, synthesizing, and rearticulating the categories proposed by Gambarato et al. 2022, see also the chapter in this book):

A) *Inter-medial dimension* (with its transmedial effects). From the book to the series, from the series to tourist or other textual experiences;

B) *Intra-medial dimension*: Heroes' narrative (concerning the classical, Proppian model, comprising departure, initiation, return, etc.) and its myth in support of memory (also dealing with the ambiguous role of the hero, cf. Andrea Bernardelli and Charo Lacalle, in this book);

C) *Pluri-medial dimension:* politicization (and, at the same time, de-politicization) of memory: *Chernobyl* as a catalyst (of themes like Ukraine, Belarus, USSR and Russian legacy, Gorbachev and Putin's Russia).

2.2. Some 'problems' with the series

Some critical points can be noted in the *Chernobyl* and other recent TV series. The first point deals with the so-called '*platformization* of cultural production,' and consequently, of cultural memory, such as in the case of *Chernobyl*, as it provokes an '*HBOization*': "the proliferation of the Same" as stressed by Gambarato et al. (2022), quoting Han (2018: 2). That is to say, it gives us the false impression of overall agreement with our own beliefs, due to the lack of exposure to different or conflicting content.

But what interests us here is to emphasize a further, more specific question. How, starting from this series, the process of re-contextualization is staged: i.e., how the universe of the Cold War and its internal power relations are referred to and evoked, both in the history and in the situations narrated by the series; and concerning the external ones, linked to the surrounding political, therefore discursive and value sphere.[3] Pallister (2019) speaks, in this regard, as we anticipated, of "TV series nostalgia" or, more precisely, of "Netflix Nostalgia" with the idea of "streaming the Past on Demand." But which nostalgia? If some forms of "TV-series nostalgia" can be found in other series as well (we can remember the now classic case of *The Americans*, cf. Laugier 2019a, who speaks of "formes de vie partagés") in the case of the *Chernobyl* series, we are once again dealing with a work, refined and complex on the aesthetic and emotional level, of stereotyped memory, precisely, as mentioned above, of the proliferation of the "same."[4] Again, the risk of simplification and over-stereotyping invests the whole dimension of political discourse within the series, which risks being watered down with the claim of an ethical search for justice and truth through the depiction of details.

A point that emerges from *Voices from Chernobyl* concerns the character of a prophecy regarding Russia, of the Chernobyl tragedy as a self-fulfilling prophecy and a concrete, negative myth. This character seems to be largely obliterated in the miniseries, which, according to the critics quoted (cf. Gessen 2019; Mitchell 2019), often falls back on a partly caricatured and, as mentioned, stereotyped character of Russia. Of course, we do not find caviar, vodka, balalaika, or Russian ballets, but some characters remain. This also happens at the genre level. Often, the series seems to slip under the category of 'legal & judicial drama' with a trial, as if we were in a New York court. However, a public trial was indeed conducted precisely because it was the beginning of the Gorbachev era.

However, what becomes diluted is precisely the dimension of conflict and war, which also concerns Alexievich's book. War discourse and discourse about war (specifically, prophecies not just about the Cold War but about war as such) lead us to retake the

[3] About this question see Sharf (2019) and Mitchell (2019).
[4] For some discussions and critiques of the Chernobyl series, see Gessen (2019), Laugier (2019b), and Mitchell (2019).

reflections of Baudrillard (1981) and Virilio (2007) concerning the deep connections between accidents, nuclear incidents, and war, with all the securitization and risk devices.

Working on the translation from the book (which the series authors acknowledge as their primary source) to the series, all the 'heroic' or 'mythical' characteristics of the story, such as 'Russian heroes,' are stressed. On the one hand, the series tends to get lost in the everyday life behind them. But here we find the point already anticipated: that is the subject concerning the theme of the War from a culturological view or semiotics of culture. In the sourcebook *Voices from Chernobyl*, the word 'war' is mentioned and elaborated as a theme and figure at least 300 times. In the series, there is no trace of that. Indeed, the intervention of the military is represented. But for the 'liquidators' (the thousands of young soldiers and conscripts who had to remove the radioactive debris from the roof of the plant), all the others are civic heroes (the miners, the firemen, the doctors, the scientists). In contrast, every account and tale in the book evokes war: the spectrum of nuclear war, the memory of the war: "It was like being at war." The Zone as a war zone; State of siege; Intervention of the military against the enemy; Is it the U.S.? Who attacked?

There is a last important point: the characters. The moral question is not abstract but strictly related to the characters. Quoting Laugier (2019a), "Il n'y a pas des séries sans personnages." That seems obvious, but it deals with a central question even concerning the *Chernobyl* series:

> Le lien du spectateur avec les personnages conduit à un partage. Partage de leurs connaissances et de leur univers professionnel: acquisition d'un savoir sur l'hôpital, la police, la justice, la politique, la prison,(...) la police, le renseignement, le travail au bureau. Cette expérience est démultipliée dans le temps avec les séries et s'accorde avec le temps réelle de l'apprentissage (des spectateurs). (Laugier 2019a: 117-118)

The question here touches on two issues already evoked, albeit hurriedly: on the one hand, the modal-ethical question, which we have touched on several times, is related to the moral identities of the characters and related actants. On the other hand, recognizing not only a genre but a style of the series, with its thematic and figurative domains. From one side, i.e., HBO 'family air-time' and political series (or, in this case, a kind of "hybrid docufiction"), or concerning "fictions politiques et securité humaine" (Laugier 2019a: 173; Laugier 2019b on 'Radioactivité serielle et *Chernobyl*').[5]

[5] Quoting Laugier (2019a: 173): "*Fear the Walking Dead*, spin-off du culte TWD (*The Walking Dead*), est devenue une œuvre majeure et originale, avec son style bien à elle, récupérant des personnages de TWD", and this series includes episodes that take place in a nuclear power plant, crossing the theme of the living dead with that of nuclear contamination.

3. Final critical questions about series, political discourse, and conflict

In recent years, according to Laugier (2019a), we have seen the emergence of a dual thematic genre in the series. On one side, there are Securitarian Series (post 9/11), such as *Homeland*, etc., but also *Westwing*. On the other hand, the Catastrophist (or better post-disaster) series: *The Handmaid's Tale*, the *Walking Dead*, and perhaps *Chernobyl* (even if in a specific way). The former are increasingly elaborate and refined and sometimes made in collaboration with (thus close to) intelligence or strategic circles. They attest to a new role of series in contemporary conflicts (with the theme of Soft power, etc. cf. Laugier 2019a). We also recall the important earlier cases of *The Americans*, written by a former secret agent, and *Prisoners of War*. The latter also testify to a change of sensibility concerning the moral state of the world, etc. According to Laugier (2019a), post-catastrophe series are a way to explore everyday life and its relationships. They are not only a "miroir du monde" (Jost 2011) but, says Laugier, "care," attention to some ethical themes.

More generally, I argue that a series, more than a mirror, acts as a filter. A provisional foreshadowing text of other source texts; here, with *Chernobyl*, however, a particular filter emerges: precisely on the discursive (thus thematic-figurative) and then on a deeper narrative level concerning the domination of heroes, individual and individualistic; the 'collective' as well the conflict (protests and war) are misrepresented.

The question of a 'sociosemiotics' and a 'semiotics of culture' of the series. Laugier (2019a) insists that they should be thought of as "gyms of civic culture" or social "care," in an American Deweyan pragmatist sense, and with some criticism toward the "aesthetic and structural" approach. Instead, we can assume that the structural approach should be retained, but on the condition that it is strongly linked to an extended analysis of the political-aesthetic discourse: its circumstances and situations and also, as we have seen with *Chernobyl*, from a critical point of view, of the pedagogy of the construction of memory, of stereotypes, of the forms of public discourse.

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Chernobyl. From nuclear disaster to the TV series, and beyond

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BY: **Antonella Mascio**

In May 2019, Sky Atlantic aired the TV mini-series *Chernobyl*,[1] inspired by the events that had taken place a few decades earlier, in April 1986. The series tells the story of the nuclear disaster, retracing its initial stages up to the trial of people held responsible for the disaster. The attention paid to the historical reconstruction of the events, the use of testimony documents, reference to the actual names and people who made the decisions and guided the various operations, together with an excellent script, direction, and cast, as in the best *Complex TV* (Mittell 2015), have earned the audiences' favor globally. But what does Chernobyl represent today? What are the reasons for the success of the series? How did the audience react?

To answer these questions, our study starts with the textual analysis of the TV series. What is immediately evident is the considerable amount of archive materials on which the television storytelling draws to document a simultaneous social and cultural trauma, which still retains its poignant significance. Archive and trauma are, therefore, two macro references guiding the analysis from a conceptual and theoretical perspective due to their fundamental role in achieving the narrative's *effect of reality*. To understand the strategy on which the narrative is based, then, we will focus on the archival device and its function in the creation of *Chernobyl*. It is precisely trauma and archive – or rather their viewing and revisiting – that move certain audience groups to investigate the places where the disaster occurred. The last part of the article will focus on some of these collaborative audience communities.

[1] In the present article, the use of the italics will indicate the TV series (*Chernobyl*), while in all the other cases Chernobyl in text typeface will refer to the nuclear power plant.

1. The event between media and cultural shock

The events narrated in the TV series are not too distant from our present. This is one of the most staggering disasters in history, still present in the collective memory. The explosion of the No.4 reactor in the Chernobyl plant had such an impact that it has become a universal warning. Ulrich Beck defined it as an anthropological *shock*, which, like other disasters, produced a "collapse of the every day" and a "crisis of presence." For Beck, Chernobyl would seem to coincide with the entry into the "nuclear age (...) and the beginning of a social construction of risk realities" (1987: 156).

In April 1986, the disaster had extensive media coverage, so much so that it could be considered an actual media event. It produced breaks in television programming and had consequences in the daily routines of the audiences-citizens, creating new frames of interpretation for the notion of 'danger.' With Chernobyl, in effect, the population was invited to turn their attention to an invisible enemy (radioactive material) which quickly reached most of Europe, as well as North America. Not only did the media images, together with the daily updates, keep the attention on the events relatively high, but they also animated the public debate. The tragedy quickly took on the traits of a global threat, resulting in an intense debate attention on the risks of using nuclear energy.

Chornobyl was therefore construed as a catastrophe on various levels: indeed, in terms of health, due to the radioactive pollution in the atmosphere and the plant's surrounding area, but also at the political and cultural level, by activating active processing of the accident that gave rise to new meanings of the event. In the cultural and collective memory (Gambarato, Heuman, and Lindberg 2022), Chernobyl corresponds, to a sort of a reference model, to an extreme and fearful event, a negative term of comparison (let us think about the more recent accident in Fukushima, taking place in March 2011), and a form of danger that is extremely difficult to manage, capable of triggering devastation on a large-scale. Moreover, it continues to be scary, and it is better to move away, both physically and symbolically. Describing Chernobyl as a double shock, Beck underlines that "the loss of sovereignty is added to the threat in itself, over the assessment of the dangers to which one is so directly exposed" (1987:72). Therefore, the risk awareness is combined with strong shortcomings in information management. This is precisely what emerges from the testimonies of the people living in Pripyat, collected afterward and today, and is comprised of a constantly updated archive.[2]

[2] In particular, Svetlana Alexievich's book *Chernobyl Prayer: Voices from Chernobyl*, which was originally published in Russian in 1997 and translated into English in 2005.

2. Archives and reality effect

The explosion of the Chernobyl reactor had a medial impact worldwide, giving rise to multi-layer narratives from news broadcasts, in-depth features, and reportages to documentaries. A large repository of materials about the disaster was created quickly, partly from newsreels filmed on-site and partly linked to the accounts of direct witnesses of the tragic accident/event. From amateur and media images to audio-videos recorded in the period following April 1986 to written testimonies or recorded on tapes, all have progressively merged into a sort of archive – more widespread than established - regarding the event. A changeable archive, enriched over time and producing a historical and collective memory of the spring of 1986.

The archive is a device responding to multiple functions. It is configured as a complex tool capable of containing materials available to be reprocessed and redesigned to give life to new possibilities of interpretation. This tool is also used to generate future stories (Giannachi 2006). Given this, how important were the archives in making the TV series *Chernobyl*?

Craig Mazin, the series's writer, has stated that every time one attempts to re-construct reality for a TV show, referring to archival cultural products (encyclopaedias, press releases…)[3] is essential. Specifically, for the *Chernobyl* series, Mazin used the book by Nobel laureate Svetlana Alexievic, *Chernobyl Prayer: Voices from Chernobyl* (2005), which includes several testimonies by people who had experienced the tragedy firsthand, thus bringing back the human perspective to the event. On-screen, the TV series tells the story of Chernobyl through a treatment of the testimonies of several men and women, explicitly highlighting the sacrifice they made to save Europe from a nuclear disaster. The description of the events comprises several layers: a scientific one, presented in the TV series, via the voice of characters representing that world; a political one, through the party representatives of the then-USSR who acted in their various capacities and who found themselves having to make immediate and difficult decisions. Finally, an emotional level is related to the feelings, fears, and pains expressed through contextual images and characters involved in the disaster. This is a storytelling that applies its model of reference to the notion of "complex" logic (Mittel 2015): the viewers are invited to follow the evolution of events, step by step, according to a timeframe that is anything but simple. Each step relates to a wide series of variables touching the three levels described above and producing effects on each. It is a drama that focuses its storytelling on the rush against time to curb damage and its related loss of lives by men and women, as well as on the search for accountability.

[3] Here we refer to the YouTube interview titled 'Craig Mazin on Writing Chernobyl,' the HBO/Sky Atlantic Miniseries | 'On Writing' (https://www.youtube.com/watch?v=vY0r1Ln6tkM, channel Bafta Guru, accessed 5 January 2024).

In its serial version, *Chernobyl* is therefore configured as a reflection – at a distance – of that event, being depicted as the story of a sort of 'media event' (Dayan and Katz 1992), which kept viewers glued to the screen back in 1986 and again in 2022. Unfortunately, this new visibility given to the nuclear accident evoked by the present conflict between Russia and Ukraine has a combined informational and political flavor, pointing citizens toward the version of the event seemingly backed by archival documents. Therefore, historical values are associated with behavioral and moral values. In 2021, Danila Kozlovsky presented the Russian answer to the TV series: *Chernobyl 1986*, a production where the romantic and patriotic spirit prevailed over everything else. In *Chernobyl*, instead, the story is being told as a docu-drama: its purpose consists in bringing a realistic story to the screen, in which the search for the real – or truth – is part of its poetics. The use of statements made by first-hand witnesses, who felt the brunt of the tragedy on their skins, is, in fact, well mixed with the typical devices of audio-visual storytelling. All of this determines a narrative construction based on a constant balance between historical sources on the one hand and plausible – and partly fictionalized – descriptions on the other hand. Different narrative layers contribute to the setting up an articulated view of what happened, following the stories of various characters. *Chernobyl* is not just the story of the nuclear disaster; it is an in-depth plunge into a specific historical moment, where a series of changes were taking place, both at a geo-political and socio-cultural level. Drawing on sources that tell the experience of the people who participated in those events, the series can only be a choral story, composed of the reconstruction of many voices and different points of view.

Here, there are two main narrative lines: the story of Lyudmila Ignatenko, wife of a firefighter who was among the first to put out the fire that had developed at the power station and died from radiation. And the story of Valerij Alekseevič Legasov, at that time deputy director of the Kurčatov Institute of Atomic Energy, a member of the Commission appointed by the Soviet government to investigate the causes of the disaster. Both stories are based on the accounts of those directly involved: Ignatenko's testimony is present in the aforementioned book *Chernobyl Prayer: Voices from Chernobyl*, while that of Legasov is recorded on audio cassettes he made just before his suicide, which took place exactly two years after the catastrophe (April 26, 1988), was turned into a book translated into several languages, called *Legasov's tapes* (1986 – 1988).[4] These two testimonies are the sources more frequently used for the series and often mentioned by Craig Mazin.

[4] https://legasovtapetranslation.blogspot.com/ checked January 10, 2024.

Figure 1. Prypiat (source: *Il Sole 24ore*, 25 April 2016).

The development of the narrative, therefore, rests on two fundamental parallel lines: historical sources enriched by the reconstruction of locations, buildings, streets, and cars that bring back the typical looks of countries in the Soviet Union in those years. Thus, the settings reproduce a scenario like the real one and tell much about that event, constantly soliciting collective memory through recollection. With time, some areas in Chernobyl and Pripyat have, in effect, become a symbol of a shared tragedy and trauma (for example, the Ferris wheel in addition to the power plant).

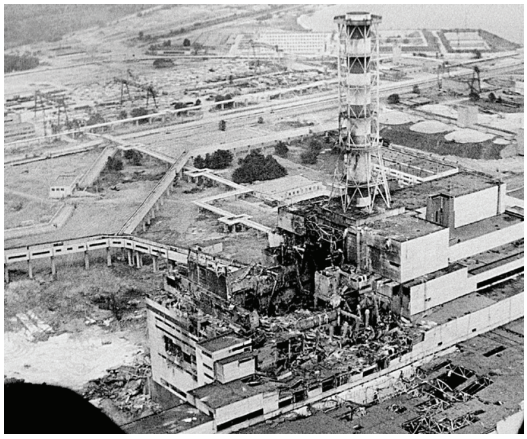

Figure 2. Chernobyl nuclear power plant's reactor 4 destroyed after the accident (source: *Il Post*, 26 April 2011).

Figure 3. The Ferris Wheel (source: *Urbex Squad*)

The reconstruction of the atmosphere is achieved through an accurate description of the spaces, furnishings, and character clothes. The meticulous research into such details may, at times, seem excessive. Still, all this is part of the TV series poetics and helps produce that reality effect (Barthes 1988) that brings about an additional level of signification. In effect, *Chernobyl* presents a narrative basing much of its effectiveness on descriptive expedients: This is not a 'detective' TV series or science-fiction. Its reference is an event that we know about and has become part of history books. And what is highlighted, precisely to make the storytelling more realistic, are the details taken from reality or based on archival materials.

Figure 4. Source: deMilked

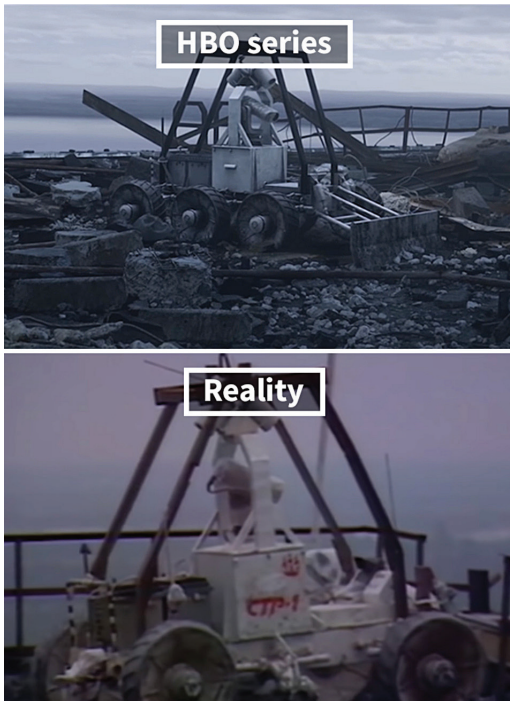

Figure 5. Source: deMilked

Figure 6. Source: deMilked

These details have an *indirect functional value* (Barthes 1988) since they represent essential, but not always necessary, clues. They look like a 'luxury of storytelling': they seem almost useless. For example, what does showing an old computer screen mean in the general economy of the narration? Yet, as Nabokov also stated, our idea of reality is strongly connected to "different levels of information" (Siti 2013:10): the more information we have, the more we seem to be in the presence of "truth." The precise descriptions when the camera approaches the reactor and shows the debris and the human robots trying to remove them show an excess of details, engendering an evident effect of reality. All this is also confirmed by the archival images that have driven some directorial choices. The effect is, therefore, an intended one and sought after, even in the city's reconstruction, starting from the architecture, the furnishing inside the houses, the cars, and the children's playgrounds. Each onscreen element does not speak only of the tragedy but recreates our looking back towards a near past characterized by and linked to a specific cultural reality. Therefore, the effect of reality is rendered through a precise reconstruction of the spaces, the characters' wardrobes, and the exact succession of events, which, in several moments of the narration, are accompanied using the original sound. Therefore, the aesthetic constraints are intertwined with referential ones: although the series was not shot in the real Pripyat, what appears on the screen is plausible. The details appearing on the screen then denote precisely 'what happened' to give shape and depth to the narrative and to link its development to elements that belong to that specific event and are stored today in the archives. Some archival materials are used as full-fledged quotes, although not explicitly declared: for example, the original recordings of television news reports, some dialogue over the radio, or emergency calls. The construction of these passages appears as a copy of the original (the video can be shown here).

Again, the names of real people who become part of the storytelling as characters indicate the passage of time through the superimposed writing of times and days following the event. The fictional story is, therefore, enriched through expedients that constantly recall the reality of the events, attracting the viewers' attention.

The use of the archives in *Chernobyl* is clear and ambivalent: on the one hand, as we have seen, the narrative is based on documentary sources; on the other hand, it becomes an example of the activation and processing of historical materials, thus working not only as a reconstruction of an event that did take place but as an indicator of additional options of further study. In other words, through the recourse to some archival fragments, the TV series *also speaks of the archives themselves*, presenting the critical viewer with the option of following the intertextual references and their origins. This media product recounts a past event, updated by employing a critical look at the present and capable of providing its interlocutor with indications for further investigations.

The archives are also configured as generative devices (see Demaria 2012; Hagedoorn 2013; Giannachi 2016) – not solely well-arranged repositories of the past – since they are open to the reactivation and reinterpretation of that past. They also refer to an outlook on the future because they are constantly revised, updated, expanded, and ready to be used again.

3. The investigative fandom and trauma – the creation of new archives – a new 'reality effect' between the present and the past (and future?)

Chernobyl immediately established itself as a successful product based on the appreciation shown by its audiences and enthusiastic media reviews. In Italy, many national newspapers devoted ample space to the TV series, referring to the nuclear disaster being narrated and drawing attention to the 'media event' of 1986. Appreciation for the TV series is undoubtedly due to the quality of its realization; therefore, it is a level of use that we can define as "linear," which coincides with the enjoyment derived from the consistency of the text and its richness. However, for a part of the audience, *Chernobyl* is a product that activates a process of greater involvement, which aims to "penetrate the surface of the TV series to understand the complexity of the plot and storytelling" (Mittell 2015: 471). In *Chernobyl*, reflexivity is brought into play, going well beyond narrative mechanisms to bring the event back into the present, along with the shock it produced. A traumatic event narrated through forms of 'fictionalization of reality' gives rise to many online exchanges, including forums and social media pages.

For some viewers' groups, the 'penetration of the TV series surface' concerns, in fact, the dissemination of the archival fragments included in the text, acting, as we have seen, as intertextual references. Such references shift the attention of fans towards the past – towards what has been – but also towards the present – what Chernobyl is today. This is the fandom that Mittell defines as investigative, committed to seeking further insights into the disaster and interested in the possible world recalled by the narrative. Part of this fandom is attracted to the world appearing on screen and referring to a distant – perhaps reassuring – context since it is placed in a precise historical moment. For others, however, the interest is related to the real world: the so-called "exclusion zone," the security perimeter traced around the power plant and the city of Pripyat. For both investigative lines, fans make "leaps out of the text" (Eco 1979). In the first case, the investigation revolves precisely around the archival materials being researched, adapted, and placed within new forms in the online space: from dedicated Tiktok profiles to Facebook pages or websites in a sort of 'transmedia activism' (Gambarato et al. 2020).

The second case includes audio videos or texts and images, finding space online, and reporting on visits into the "exclusion zone." Here, reference is made to the period immediately after the airing of the TV series but before the start of the Ukraine-Russia conflict, which has certainly brought back the Chernobyl plant to the fore alongside its related risk factors, *but de facto* limited access to the area. The visits before 24 February 2022 referred to a new form of tourism, the so-called 'dark tourism.'[5] After the airing of *Chernobyl* in the area surrounding the power plant, dark tourism reached unexpected peaks, with up to 35% increases.[6]

Some of these reports are included in the YouTube social space, where, besides the video shot by the 'tourists,' other users have left comments and exchanged views, often citing the TV series as a reference. These are, in effect, different forms of testimony about the disaster contributing to augmenting the archives on Chernobyl and are focused on what was found in the area up to the start of the war: objects disfigured by time, torn furniture, and abandoned cars. A set of materials recounting the sudden interruption of the life and routines of a community in a ghostly and, at the same time, sacred way.

What emerges from this large series of grassroots products is again the shock I mentioned at the beginning, as reported through new gazes. What did Chernobyl mean then? Was it the story of a past tragedy or of an event still disquieting us?

The TV series undoubtedly worked as a stimulus and activated mechanisms of remediation and mediatization of both – past and present – testimony through a perspective based on an effect of reality and its particular reconstruction. It brought about a return to a collective trauma, now part of a shared memory. And precisely as a trauma, it is still capable of unleashing cultural and social mechanisms. The story does not end with the last episode of the TV series: the event continues to be talked about, taking on new meanings. The construction and installation of the new sarcophagus in 2016, for example, marked the achievement of a positive and reassuring goal. The events linked to the ongoing war and the new visibility that media have given back to Chernobyl have instead raised new concerns.

"Humanity," – wrote the Nobel laureate Svetlana Alexievich in her *Chernobyl Prayer: Voices from Chernobyl* – "was not prepared for this. (…) We continue to live with the fear of Chernobyl. (…) I thought I had written about the past. Instead, it was the future."

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[5] Dark tourism is an academic nomenclature that exists in the imagination of scholars who wish to shine a critical light on heritage that hurts (Stone 2006; Birns 2021).

[6] Source: https://www.theceomagazine.com/lifestyle/travel-leisure/dark-tourism-chernobyl-tourism-tv-series/ and https://www.pcma.org/dark-tourism-growing-chernobyl-hbo/ (accessed 13 November 2023).

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Images

Figure 1. Prypiat, source: *Il Sole 24 Ore*, https://st.ilsole24ore.com/art/mondo/2016-04-24/trent-anni-dopo-cosa-resta-tragedia-senza-fine-chernobyl-170623.shtml?uuid=ACepFjED, accessed 20 January 2024.

Figure 2. Chernobyl nuclear power plant's reactor 4 destroyed after the accident, source: *Il Post*, https://www.ilpost.it/2011/04/26/chernobyl-il-26-aprile-1986/, accessed 20 January 2024.

Figure 3. The Ferris Wheel, source: *Urbex Squad*, https://www.youtube.com/watch?v=kd0z9TgeH9I, accessed 20 January 2024.

Figure 4, 5, 6. Comparison between fiction and reality, source: *deMilked*, https://www.demilked.com/hbo-chernobyl-vs-real-life/, accessed 20 January 2024.

TV and Cinema:

Chernobyl, HBO - Sky Atlantic, 2019

Chernoby 1986, film director D. Kozlovskij, Russia, 2021

Chernobyl: The cognitive value of multiplot aesthetics in contemporary television

punctum.gr

BY: **Héctor J. Pérez**

1. Introduction

This study is based on the premise that the multiple storylines articulated to represent reality in all its dimensions and interactions can facilitate the viewer's cognitive access to the content rep-resented by the narrative (Pérez and Ortiz 2021). This is evident in series such as *Downton Abbey* (Fellowes 2010-2015), *The White Lotus* (White 2021), *Vår tid är un* (The Restaurant, Hamrell et al. 2017-2018), *Orange is the New Black* (Kohan 2013-2019), and several others where multiplot architecture enables the representation of realities rich in cognitive significance, usually involving different characters (Azcona 2010). It is an approach that gives us a better understanding of human relationships as processes and the contexts in which they develop.

Multiplot structures can also serve to create extreme cognitive experiences, puzzles whose piec-es are distributed across the narrative with very ambiguous criteria and changing relationships (Kiss and Willemsen 2022), or that require a greater effort than film plot structures because they involve the use of long-term memory to connect elements that are chronologically much further apart than they could be in a film, such as many of the plot developments in *Westworld* (Nolan and Joy 2016-2022) and *Dark* (Baran Bo Odar 2017-2020). But this occurs only in some series and is not common to all.

The specific case examined in this study is the miniseries *Chernobyl*, produced by HBO and Sky UK (Mazin 2019). In our analysis, we explore the multiplot architecture of the series as

an aesthetic device and, more specifically, the aesthetic dimensions that contribute to the serial aesthetic experience by facilitating the viewer's cognitive gain. It considers meaningful ways in which multiplot narrative structuring can foster an aesthetic experience based on the interaction between cognitive and emotional processes.

The main point underpinning this analysis has to do with space. *Chernobyl* is a series characterized by an effort to recreate the spaces where the main events take place as faithfully as possible, and the definition of spaces, which seriously affects questions of a cognitive nature, is intimately associated with the decisions of the series' design production director that determine all the artistic nuances of the visual design. Space is the element in which cognitive and artistic aspects are most clearly related, and this perspective has been adopted to choose the scenes to be analyzed. Narratives can be used to explore complex events, which are constellations of occurrences like wars, disasters, and other long-term historical processes (Scherer 2003). In such cases, TV series, with their multiplot-based narrative forms, can sometimes convey knowledge in a way that can be highly rewarding for viewers.

The basic technique for this approach to the multiplot narrative structure consists of a narrative mapping technique that has taken several years to develop. An example of this narrative mapping is shown below, illustrating the narrative architecture of *Chernobyl*. This technique consists of creating a longitudinal representation of the different plotlines to provide a picture of the continuity of each and their interrelationships. The first point of reference for the narrative analysis technique used to develop this plotline map is the scene, or 'beat,' which is the term proposed by Michael Newman (2006) and has since become widely accepted among scholars in this field. This first stage gives us a detailed scene-by-scene analysis that forms the basis for identifying the set of properties of the series aimed at eliciting certain reactions – both cognitive and emotional – from the spectator. Identifying the scenes is the first task in defining a plot, which is achieved by attributing to each scene the development of one or several plots. This process is essential for the perspective proposed in this study. The second stage involves a longitudinal representation of each of the broader narrative sequences established in the episodes so that each season of the series analyzed is divided first into scenes and then into episodes. This second stage will reveal crucial narrative elements specific to episodic structuring (Van Arendonk 2019). Finally, the third stage represents the length of plotlines that can extend over a season or several seasons. It is common in many series for the main plots to have inter-seasonal continuity in the narrative, while the secondary plots can have variable lengths. The map thus offers a precise depiction of the set of properties of television serial storytelling, facilitating the visualization of the elements of long duration that are specific to multiplot architecture (Nannicelli 2016).

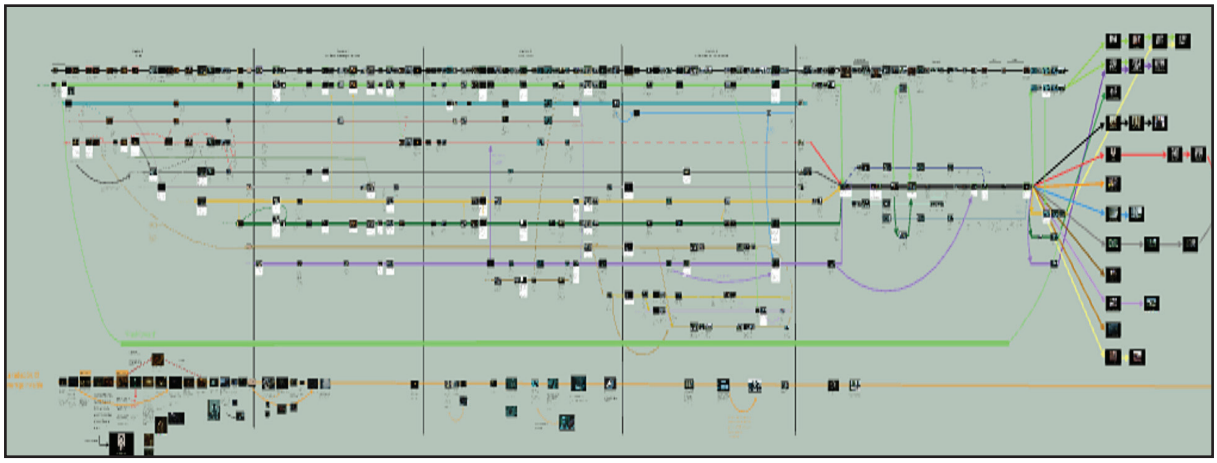

Figure 1. Narrative map of *Chernobyl* (by Claudia Ulldemolins)

Based on the analysis technique described above, this study considers the usefulness of the multiplot structure as a narrative formula with a certain level of cognitive complexity to show how effectively a combination of different plots can help spectators to better understand a complex event and how the relational structures established between the diverse plots may support the supposed objective of representing the event from a cognitively rewarding perspective. In this respect, the distribution of narrative emotions across the different storylines plays a role, for which there are as yet no studies offering precise guidance. Components of different plots can be connected by causal relationships to provide a certain logic that forms the basis for a new way of understanding the constellations of events. As will be shown, the hedonic valence of this cognitive dimension depends on the viewer's active participation, particularly on the viewer's task of making various inferences to grasp the relationships between the stories.

An important aspect of this representation in plots is the processual quality it often acquires, requiring the viewer to predict temporal relationships between elements of the various plotlines or to intuit possible inferences capable of reinforcing or enriching our temporal understanding (Magliano, Dijkstra and Zwaan 1996). The main cognitive criterion to consider here is the existence of a narrative fluidity that can contribute to the phenomenon of narrative absorption (Kuijpers, Hakemulder et al. 2017), which involves the relationship between plot changes and the continuity of the dominant narrative emotions, especially curiosity.

2. The multiplot design of a 'macro event'

The main hypothesis underpinning this article is that *Chernobyl* offers the viewer a new form of cognitive access to the complex nature of the nuclear accident that occurred in northern Ukraine in the former Soviet Union on April 26, 1986. Numerous narrative works have previously explored this event, considering aspects such as the consequences of radiation on children's health in the documentary *Chernobyl Heart* (2003), the negative impact on human life in the film *Land of Oblivion* (2011), and the book *Voices of Chernobyl* (1997); the struggle to deal with the short- and long-term effects of the disaster in documentaries such as *The Battle of Chernobyl* (2006) and *Inside Chernobyl's Mega Tomb* (2016), respectively; and its causes in *The Chernobyl Disaster: Causes and Consequences* (2004).[1] Most of these works address a single aspect of the disaster, as its great complexity and impact have led it to be considered a macro event. The miniseries *Chernobyl* aims to address not just one or two of the most significant aspects of the tragedy but a whole range of important questions, covering the period from the accident itself on the night of April 25 to 26, 1986, to the trial held to determine culpability for the catastrophe, which in the series occurs in July 1987.[2] According to Craig Mazin's explanation in a well-known podcast released simultaneously with the distribution of the series, the project's development arose out of curiosity about the causes of the disaster and the impression that there was a gap in the knowledge surrounding it.[3] This led to a two-year investigation during which the project matured, and its objectives were redefined and expanded substantially, from examining causes to exploring the processes and consequences of efforts to conceal, deny, or avoid the truth about the chain of failures that provoked it. These objectives explain many of the decisions that Mazin made in the process of turning his narrative project into a series, including some that have been met with criticism (cf. Gambarato, Heuman and Lindberg 2022). Despite his obsessive ambition to produce a rigorous work of docufiction and the series' indisputable success in the visual recreation of historical settings from the Soviet era, receiving the enthusiastic appreciation of many viewers on social media, including many Ukrainians,[4] *Chernobyl*'s ultimate objective reflects the mentality of the Western democracy that produced it, i.e., the United States. This fact has also been noted by

[1] For a perspective on the films and series that have previously dealt with the catastrophe (Lindbladh 2019).
[2] The success of this objective can be measured not only by the reactions of fans of the series on social media, who often rate it very positively in terms of the better understanding they believe it has given them of the catastrophe, but also by the publication of studies of *Chernobyl* from different disciplinary perspectives, including studies of energy (Brown 2023), memory (Gambarato, Heuman and Lindberg 2022), history (Christian 2019) and more specifically the history of technology (Schmid 2020 and Rindzevičiūtė 2020), politics (Braithwaite 2019), and the history of the series (Braithwaite 2019).
[3] Cfr. https://youtu.be/rUeHPCYtWYQ?si=8mcNfb2_O19AiVOz
[4] See, for example, the reviews posted by viewers on the IMDB website: https://www.imdb.com/title/tt7366338/reviews/?ref_=ttrt_sa_3

Soviet citizens who lived through the historical period in question.[5] Of course, the limitation of the series' cognitive value to the condemnation of a political system that disappeared years ago is undoubtedly enhanced by the fact that it offers an open framework that can be applied to other contexts, such as that of the Donald Trump administration in power at the time, as a much-retweeted observation on the subject by Stephen King reminds us,[6] given that the relationship between truth and politics was an equally relevant issue during the mandate of the controversial Republican president[7] (Mills 2021).

How did the accident happen? What immediate consequences did it have? What emergency measures were adopted when it occurred? How did the people responsible for the catastrophe – the scientists and politicians – behave at the time? What actions prevented graver consequences, and who took them? What errors were made in the management of the accident? What were the causes? The multiplot narrative structure of the miniseries is structured mainly to seek answers to all these questions. However, we are not offered answers in clear-cut terms like an academic text would put them forward. Instead, the series examines them from a narrative perspective, the perspective of personal experience, to guide the viewer's cognitive engagement by adopting strategies in keeping with what contemporary narratology defines as experientiality (Fludernik 1996) or understanding capable of delivering processual knowledge (Mikkonen 2021). In addition, the role of imagination also constitutes an important part of this approach (Breitenbach 2020).

An excellent example of this can be found in the first episode, mainly dedicated to the single plotline of what happened at the nuclear power plant the night of the accident. It does not offer a technological explanation of the accident or an outline of the sequence of errors that triggered it. Instead, we are shown various reactions of plant workers, from Dyatlov's obstinate denial that the core has exploded to the submissiveness of the young engineers who are sent to certain death to examine the burning reactor. The situations presented offer rich material for the viewer's imaginative access to the human experience at this terrible moment in history: the workers' emotions of pain, insecurity, and panic; their fear of disobeying an order from a superior in the Soviet hierarchy, even outweighing their fear of nuclear radiation; the ignorance of those who were largely unaware of what they were doing when they were placing themselves at high risk of radiation poisoning; and the courage of those

[5] See https://www.newyorker.com/news/our-columnists/what-hbos-chernobyl-got-right-and-what-it-got-terribly-wrong

[6] King S (2019) It's impossible to watch HBO's *Chernobyl* without thinking of Donald Trump. *Twitter*, 30 May. Available at: https://twitter.com/stephenking/status/1134084923915145218

[7] Another interesting aspect of critiques of the series, which is not dealt with here, is its anthropocentrism in dealing with the consequences of the catastrophe (cf. Mills 2021).

who knew the possible personal consequences but went ahead and did their job all the same – the most common attitude depicted in the miniseries. However, this narrative representation of the first hours of the accident is not limited to the portrayal of emotions and attitudes alone; it does not merely answer *how* the accident was experienced but also places spectators in a position where all the other questions posed above can be considered, in a production acclaimed for its epistemic value. From the outset, it is established that there was a committed chain of responsibilities, and the narrative triggers the viewer's curiosity about the behavior of those responsible for the plant, as well as the local politicians (and, shortly after that, politicians on the national level). The way the answer to one question leads to another is evident in two narrative mechanisms very typical of serialization: the interconnection between plots due to their temporal juxtaposition through the interspersing of plot fragments and the existence of scenes with such narrative density that various plotlines are advanced at the same time.

The temporal design of the series is also important since each episode deals with a different time period. The first, except for the initial flashforward featuring Valery Legasov, only covers the time from just before the accident to about eight hours later. Episode two picks up where episode one left off, forming a temporal block with it, presenting the events in the first two days after the catastrophe. These include the immediate consequences of the accident, such as injuries, the evacuation, and Legasov and Shcherbina's management of the danger posed by the fusion of the radioactive material, as well as the introduction of Uliana Khomyuk, up to the moment when the three diving heroes enter the plant on the afternoon of April 28. Episode 3 begins with the positive outcome of the divers' expedition (April 28) and immediately jumps two days forward to when Lyudmilla visits her husband, the firefighter Vasily. The narrative then moves to May 3, when the miners are recruited and continues through to May 6, when the miners are in the middle of their task. This is followed by Legasov and Shcherbina's meeting in Moscow on May 7 to inform the council of ministers of the success of the operations and what still needs to be done, and the episode ends with the firefighter's funeral, the date of which is not indicated in the series, but which took place on May 13. Episode 4, after an introduction showing a moment of the evacuation, begins in August 1986, four months after the accident, covering the actions of the liquidators throughout that month, the cleaning of the graphite from the plant with robots in September, and the change to the use of liquidators beginning in October, until the loss of Lyudmilla's baby. Finally, episode 5, although it starts with an extensive flashback of the moments before the accident, presents some events in March 1987 leading up to the trial of those responsible for the catastrophe and then focuses on the month of July, when the trial takes place according to the series.

In this narrative design, it is evident that the period covered by each episode varies, following an increasing trend: the first episode covers events over a period of eight hours; the second episode spans two days; the third episode covers nine days; the fourth covers two months; and the fifth spans events over five months. This varying distribution reveals a narrative strategy that is selectively oriented towards a set of specific elements to the exclusion of many others, thereby creating a highly concentrated narration based on dramatization strategies to simplify the events chosen and make them narratively accessible. This temporal structure is the matrix for the causal relationships that will transport the viewer into the narrative through the connections between the different plotlines.

Rather than taking a mechanistic view of the relationships between the plots, it is necessary to adopt a perspective that can offer a temporal dynamic of these relationships that configures a structure very rich in connections. To this end, this analysis draws on the cognitive psychology of narrative comprehension to characterize a set of strategies aimed at providing the viewer with an active cognitive experience. The framework used here is the theory of mental models applied to serial narratives proposed by Foy and Magliano (2022). In terms of the theory of narrative comprehension, the series has the objective of transforming the viewer's mental models regarding the catastrophe. This theory proposes three main types of mental models: those related to events, those pertaining to characters, and those related to the rules of the world of narration. These authors describe the dynamics of mental models established by seriality in the following way: "In the context of serialized television, episodes do not usually repeat events, but these are part of a coherent causal sequence (i.e., characters' goals from previous episodes carry over to new episodes), and these connections serve as clues that resonate with prior knowledge, allowing viewers to make connections" (Foy and Magliano 2022: 99). This idea has the virtue of offering an image of cognitive processes with a temporal component that is highly relevant to seriality. One of the most interesting aspects of *Chernobyl* is that the organization of the different plots depends on the procedural nature that the narrative acquires, converting the narrative experience into a deeply temporal dynamic resulting from the meticulous process of episodic temporal distribution described above.

3. Narrative analysis: Transitions between plots and information-dense scenes

One of the outstanding artistic merits of *Chernobyl* is found in the extraordinarily detailed recreation of the settings. Luke Hall, the production designer of the series, points out that in addition to the arduous work of shooting at 158 different locations, 40% of the setting materials had to be reconstructed, ranging from scientific equipment to the

bust of Lenin. One of the aspects that Hall repeatedly highlights is the importance of the spatial scale of the nuclear power plant. To better understand the spatial aspects, a modeling process was carried out:

> The way we started with it was to model the whole thing in 3D [...] and then it was a bit of a detective kind of thing of working out what had happened in the aftermath of the explosion. Because there's not a lot of footage. There's some very good Getty images that we pieced together, and we realized that it was actually a pump room that was destroyed. You could see in the images pump rooms on either side of the reactor, and the whole roof of the reactor had gone. So, from a story point of view, that was what I wanted to build.[8]

Hall points out that to get a sense of the spatial dimensions, they made various visits to Chernobyl's sister plant in Lithuania (Ignalina), where many scenes would later be filmed. The destroyed reactor, however, had to be completely reconstructed.

Focusing on the importance of the perception of space from a narrative point of view, the first aspect that stands out is the spatial organization of the nuclear plant workers in the first episode, during the first hours of the accident. Here, we see workers who cross from one section of the plant to another. The provincial committee is shown going to a power station room where the directors of Chernobyl take refuge. We can understand, for example, that when Dyatlov leaves the room and walks down a corridor, he does not see the reactor, which is far away, and thus does not realize that it has exploded. Later, another worker will realize it. Perceiving these spatial dimensions not only helps to better understand the succession of events in the plant but also, for example, the reason for the differences in the doses of radiation received by each worker depending on the area of the plant they were in at the time. This is a somewhat subtle element from a cognitive point of view. Still, it serves as a kind of causal bridge that will help the viewer understand a subsequent plot that begins in episode 2, related to Khomyuk's investigation into the responsibilities of the workers she interviews in the hospital. In fact, we will witness the dramatic differences in the effects of radiation when Khomyuk interviews each worker, and the viewer will have a basis to infer the reason for these differences. This could also be identified as a very interesting case of narrative density, with scenes that advance two plots at the same time, because while the interviews take place, the viewer not only discovers details about the succession of events and the responsibilities for the management of the accident but also can see the different levels of radiation poisoning suffered by the workers based on their different

[8] See Luke Hall's video 'Obsessed by a project like this.' Avalable at: https://youtu.be/M6wEHUBTYCY?si=tXNPD_vCUmrDliyB

degrees of spatial proximity to the exploded reactor. This example of the recreation of spatial relations in the plant is one of the aspects that most clearly involves a collaboration between artistic elements and others of a cognitive nature. The reconstruction of these spatial dimensions forms part of the artistic creation of new atmospheres, and the use of color plays an important role in this: in this case, the predominance of green, greyish lights and the relative darkness of many shots. It is thus a clear case of interaction between aesthetic features and cognitive value.

The spatial scale also supports narrative strategies through the visual representation of dramatic events. One of the most significant examples of this is the accident of the first helicopter that approaches the burning reactor. The plummeting helicopter is shown from the perspective of Legasov and Shcherbina, who are watching from the roof of a distant building. This perspective is functionally designed to show that the helicopter cannot fly over the fire in the nuclear reactor. Viewers witness the helicopter's difficulty in pouring boron and sand on the fire without flying directly over it. It is important to understand this physical problem, demonstrated by the fate of the first helicopter, which flies over the fire. In many films, such an expensive scene would have involved recreating the fall from many more perspectives, including very close shots.

Here, the falling helicopter is only shown in the distance from Shcherbina and Legasov's per-spective. In contrast with this distanced spatial perception of the event, we cut immediately to extreme close-ups of Shcherbina's and Legasov's faces, showing their reaction to it. These shots build on a strategy initiated at the beginning of the sequence, where very similar images were offered of both characters. The event of the accident matters above all to these two characters, who are protagonists in the main plot. Thanks to this closeness, we can perceive a slight change in Shcherbina's expression so that, for a moment, it seems to converge with Legasov's expression. The two men seem to be experiencing the same cognitive event: an awareness of the gravity of the threat they will face if the helicopters cannot operate. This realization reinforces the predictive inference we can draw from the helicopter accident. The generous duration of these shots invites us to imagine, from our global perception of the situation (including its physical dimensions), the thought processes taking place behind the two men's grim expressions. What is important to recognize here is that Boris Shcherbina, the most senior Soviet politician taking charge of the catastrophe at the time, does not lash out angrily at Legasov because he proposed a solution that now seems unrealistic. There is no sign of such anger in his expression, which instead reveals a greater concern: that the whole operation is doomed to fail, and in this sense, his expression reflects what Legasov's expression can make us empathetically imagine after having understood the situation with our own eyes. It is a critical moment: At this point, our expectations of a possible solution to the crisis will be mitigated. This scene reveals

that the situation is out of control, which helps sustain the suspense of the episode, and the dominance of this emotion can ensure narrative absorption by reviving a negative expectation, which accentuates our curiosity during the following scenes.

Once again, this results in another scenario of information density because it provides information that advances two plots in parallel since the helicopter accident simultaneously triggers a new plotline related to the friendship developing between Shcherbina and Legasov, which will strengthen as the show progresses. The aforementioned convergence of the two men's understanding of the difficulty of solving the most urgent problem is the first step along a path that will bring the two men closer together, mainly through the shared difficulties they face in handling the situation, the shared tension during crucial operations like that of the divers later in the episode, the shared knowledge that they are both being stalked and scrutinized by KGB agents, their shared awareness of the health consequences of their exposure to radioactivity (which will reduce their life expectancy to only a few more years), and the shared knowledge that the various actions they undertake together to manage the consequences of the terrible accident are ultimately useful. This will be the basis for a plotline related to the trust and mutual understanding that grows between the politician and the scientist. In this sense, the helicopter scene is the starting point of a narrative arc that ends in the last episode with the dialogue between the two men during a break in the trial, when they talk frankly about their lives and express their admiration for each other.

In short, we have seen how a perceptual aspect, spatialization, is treated artistically to acquire a cognitive functional value because it makes a situation more understandable, and this serves as a means of access through another convergent artistic strategy (the choice of shots and Stellan Skarsgård's acting style), to the narrative core of the series: the suspense created around the lack of control over the nuclear accident, producing expectations that will maintain the continuity of the story beyond the episode (since the struggle for control over the worst consequences of the catastrophe will still be the objective in subsequent episodes).

What is interesting about the examples discussed is that they offer a valuable perspective on the strategy of developing several plots at the same time, which occurs at crucial moments in the series. The fifth and final episode of the series is dedicated to the trial of those found responsible for the catastrophe. This episode takes place in a space just as meticulously designed, which, according to Craig Mazin in the last episode of the previously mentioned podcast, required extensive research to be replicated as realistically as possible. This last episode condenses the longest narrative development, not only because the trial informs us of the process of assigning culpability that leads Legasov to tell the truth about what happened, but because Mazin uses it to explain as clearly as possible the process that led to the accident, the

series of physical consequences of the technicians' decisions. As a result, a trial that lasted months becomes a very specific point in time in the series, lasting less than a day, in which Khomyuk and (especially) Legasov lecture the court on the physical process that led to the disaster and the chain of erroneous decisions that gave rise to it. This effectively advances three plots advance at the same time, as almost the entire trial provides information not only about the degree of responsibility of each of the workers (which was the first plot introduced in the series) but also about the responsibility of the of senior Soviet policymakers (which is a plot developed with Khomyuk's investigation), as well as about the dynamics of the accident itself in technological terms (a plot that is also introduced when we are shown the first moments of the disaster, in the main operations room and other spaces in the nuclear power plant). Here again, the spatial reconstruction of the power plant becomes important because, during the trial, we are shown several previously unseen scenes from before and during the test that led to the accident, which trigger our memory of the first episode and remind us of the importance of the spatial coordinates described above, so that we can see what happened as precisely as possible. A major epistemic objective of the series is to provide viewers with the most exact explanation possible of what led to the catastrophic event. The representation of space is shown repeatedly, while Khomyuk and then Legasov describe the chain of events that occurred step by step. That space, shown to us in the episode in the moments just before the accident, is presented again in increasingly frequent flashbacks, some even superimposed over Legasov's explanation in the final and more tense, suspenseful moments of his monologue. The temporal dynamics of the series are now adding some puzzle pieces that fit together because they offer us the sequence of actions carried out by the operators in the control center, following Dyatlov's orders against their will.

All these flashbacks convert Legasov's specialized technological discourse into a multiplot representation, which includes Dyatlov's coercion as one of the causes of the accident. This adds some highly significant expressiveness in informative terms to the plotline of Khomyuk's assignment of responsibilities and puts the icing on the cake by showing how the supposed preventive measure of pressing the emergency shutdown button was actually a causal factor, due to the seriously defective materials resulting from Soviet savings policy: the tips of the containment rods were made of graphite, as this material was cheaper, though this had been carefully concealed. Thus, some of the most striking images of the space of the plant are reserved for the final sequence, such as those of the defective rods being accelerated and that of the moment of the explosion, which, in episode one, we saw only as a distant glare through a window. In contrast, in this final episode it is recreated in strict accordance with the steps described by Legasov.

4. Conclusions

This study has explored various scenes in *Chernobyl* in which staging, imaging, and acting are used strategically to create moments of cognitive significance, revealing an interaction between aesthetic appreciation and narrative absorption (Kuijpers, Hakemulder et al. 2017) because these artistic properties are used to make narrative content more accessible and interesting. The multiplot structure analyzed here suggests the idea of a network of interconnected components that call upon the viewer to identify their reciprocal interactions. The evolving plotlines trigger a variety of relational elements in spectators' minds that respond to the challenge of representing a set of events from a cognitively rewarding perspective. Most of those relational elements are causal relationships connecting events belonging to the different plots. These provide a form of logic as a basis for a new way of understanding that creates a new mental model. This cognitive response depends on an active viewer, who must be able to make a wide range of inferences to identify the relationships between the plots. A crucial aspect of this approach is the processual quality that the representation in plots often acquires, compelling us to use our ability to predict temporal relationships between elements of the various plots or intuit possible inferences capable of reinforcing or enriching our temporal understanding.

An example of this is the fact that viewers must access the spatial-temporal relationships of the final episode based on information provided at the very beginning of the series. The inferential activity involved here concludes a process established at the start of the series to complete the viewer's information in very broad terms, advancing three different plots simultaneously to bring them all to their conclusion. This activity can contribute to the phenomenon of narrative absorption, which usually involves the relationship between plot changes and the continuity of dominant narrative emotions, especially curiosity, and suspense, often related to the presence of information-dense scenes.

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The 'lifeworld' criterion in HBO's *Chernobyl*: An approach of the *intentio lectoris*

BY: **Ioanna Vovou**

This chapter examines the 'lifeworld' experience as a major criterion for engaging with fiction. The concept of the lifeworld (deriving from a long phenomenological tradition) as a sort of "common sense reality" perceived by ordinary people or as a background inside which our cognitive and affective activities develop is to be examined in connection to crafting a fictive universe. In what ways is the lifeworld, our experience of the real or the historical real, forged through fiction? Our analysis of the mini-series *Chernobyl* (HBO 2019) is also conducted considering its inscription in the actuality of the war in Ukraine since February 2022 and the fear of another nuclear catastrophe. It is grounded on two combined methods, both focusing primarily on the *intentio lectoris* (cf. Eco 1990): a genre analysis of inter-generic spaces (what are the semiopragmatic oscillations of the series, in between fiction, documentary, use of archives as comprehended by audiences?); and qualitative interviews with a selected sample of Greek audiences, examining the reception modes of global media products in a local environment.

Genre oscillations: 'Playing' the fiction

Discussing the series *Chernobyl* (HBO 2019) with Greek viewers raised a crucial question regarding the cognitive effects of the interplay between audiovisual *genres*. One could ask: *What if history was taught through watching movies inside classrooms?* The question is partially rhetoric since, to various degrees, this educational and pedagogical practice, i.e., the use of fiction and films to support teaching history or other subjects, is implemented at all educational levels. Thus, fiction is *de facto*

crafting historical memories and knowledge. Moreover, the relationship of a text to a genre, or to use Genette's words, "the relation of a text to its archi-text" that he calls *architextualité*, is fundamental since the "architext is omnipresent" (2004 [1991]: 81), providing a background frame in which the text unfolds and becomes understood. Therefore, the perception of the category in which a text is embedded is a major component of understanding this text, providing that this perception will not change.

Playing the game of comparing the 'real' with the fictional to 'spot the ten differences in the images,' like in children's games, concerns a playful dimension of fandom culture and audience reception attitudes that goes beyond simply *watching a series*.[1] However, we would be mistaken in only considering it a fun, light activity. "To control what is outside, one has to *do* things, not simply to think or to wish, and *doing things takes time*. Playing is doing" (Winnicott 1971: 41). Following Huizinga's (1949: 46) idea that "culture arises in the form of play, that it is played from the very beginning," the playful attitude regarding the promise of the genres is discerned even from the trailer of *Chernobyl*, where the fiction is presented as "an HBO Miniseries Event." The series aspires to be an *event* to shape and forge our lifeworld. For media scholars, the reference to *Media Events*, the classic study of Daniel Dayan and Elihu Katz (1992), where the authors analyze television rituals when presenting ceremonies, contests, etc..., might recall some analogies regarding the *interruption of a routine* in media flow and the exceptional character of the program (without, though, the live broadcasting element, as far as the series is concerned).

Figure 1. The series as an *event (from the series trailer)*

[1] As Lull (2002: 170) points out: "People never just 'watch' television […] more than anything else, audiences 'feel' television and other popular media, often quite deeply."

The paratextual element of *The Chernobyl Podcast*, which discusses "the true stories that shaped the scenes, themes and characters behind the episodes," as described on the series' official website, can also be attributed to this playful attitude of the production.

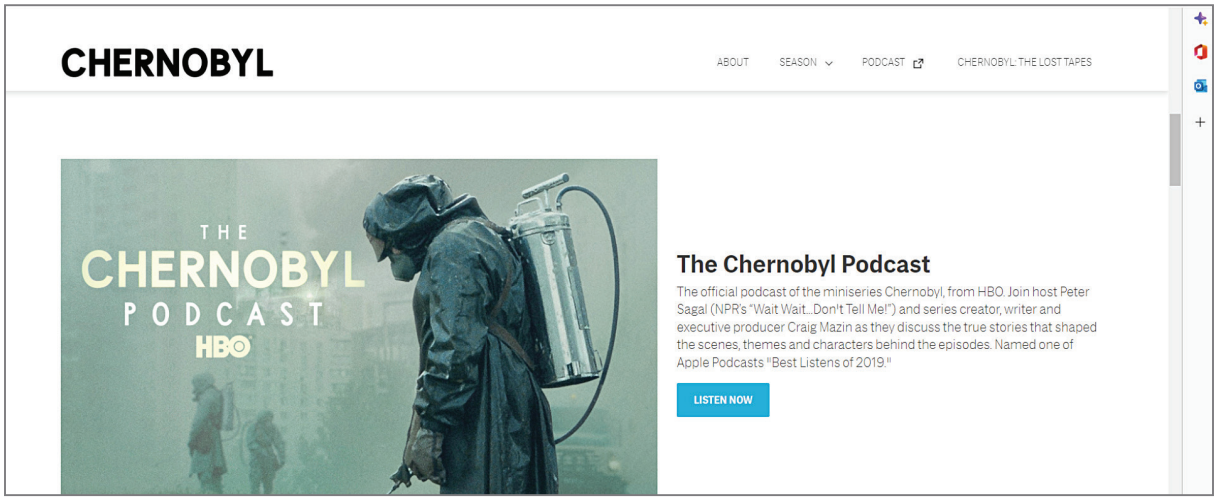

Figure 2. From the official website of the series

From a reception point of view, the playful dimension of audience attitudes when engaging with the series and, in our case, with the mini-series *Chernobyl* becomes perceptible. For, even if the series seems to borrow from the narrative mode of documentary or that of docu-drama, it winks, at the same time, at the spectator, communicating that this is, in fact, a *genre travestissement*, a playful disguise or a *pastiche* of one genre into another. These intergeneric oscillations are reflected in the qualitative interviews conducted with seven audience members during the summer of 2022, selected on the criterion of having watched the series. In their appreciation, it was about a "testimonial series," a "docu-drama," a "historical series," a "socio-historical film," a "social movie," and "realistic as a documentary." This *transparency cum opacity* of the sign[2] is to be discerned in the playful and constant oscillation between the promises of the genres.

However, two remarks should be made regarding the above viewers' comments. The first is to underline that, during the interviews, everyone referred to *Chernobyl* as a movie, pointing out the confusion regarding the format; nevertheless, from a reception point of view, this doubt was of secondary importance for engaging with the series.

[2] "The only solution to the paradox of the sign consists on the assumption that in addition to transparency and opacity, there is a third state of the sign, transparency -cum- opacity. The sign neither transparent nor opaque, is both transparent and opaque, it is reflected at the same time as it represents something other than itself" (Recanati 1979: 21).

The second and most significant one raises the question of the *genre* assigned to the series. In the context of a pragmatic approach, the cognitive frame inside which a media program is placed and the viewer's hypothesis and interpretations depend primarily on its *genre*. The producer assigns the latter but it is also an element of appreciation and negotiation by the viewer. In our case, the terms used to describe the series, such as 'testimonials,' 'historical film,' 'realistic,' and 'docu-drama,' are all linked with the state of reality, as the viewers perceive it. For François Jost (2010: 21), "reality is a kind of horizon, always present, whose status is changeable." TV genres respond to permanent negotiation processes, as we consider that genres are not only defined by *textual* parameters but also historically and culturally as *cultural categories* (Mittell 2000 and 2004). From a communicational point of view, "an *oeuvre* is never a simple *text* but first an act of interhuman communication" (Lits 2008: 47). Or, as Annette Hill suggests, "[v]iewers are alchemists, transforming factual genres from audiovisual documentation into cultural and social experience" (2007: 84).

Media experiences and the 'actuality effect'

From the interviews with Greek viewers of *Chernobyl*, the idea that the truth is in the details emerged. Some of the interviewees' quotes, such as the "realistic representation" [*"it brings reality in front of you," "it was not beautified"*], with "many details" (for instance, on the faces and bodies distorted and decomposed by radiation, the scenes with the animals, etc.), point out the qualities of a highly informative fictive universe. Other quotes corroborate this feeling: "It was very demonstrative, like the film *The Lives of Others*[3] showing how the state functions," dealing with "the struggle between truth and lies." They are also indicative of the mode of their attachment to the series, implying a strong engagement with a certain feeling of the veracity of the *diegetic* universe ["*The feeling it was a real story… the pain…*"], which itself holds from various hypotextual layers: the historical event itself, testimonials, archive material, literature, etc. As one interviewee said: "*authentic emotions were coming out*." One can no longer overlook that media culture is a major component of the experienced real shared with the audiences (Vovou 2019).

Roland Barthes explains the *reality effect* as an expression of realism in modernity, pointing out the fact that details that are supposed to denote directly the real are, in fact, signifying it. This would be the *referential illusion*, a situation in which elements of the 'real' do not denote (represent) the real but refer to the category of 'real,' i.e., to a sense of reality inside texts that gives way to a state of verisimilitude of the fictive universe.

[3] German movie released on 2006 depicting the state of systematic surveillance of citizens by the communist regime in the Eastern bloc. It is interesting to notice, here, that the 'lifeworld' of audiences is crafted by experiences from different sources that include not only factual genres and texts but, also, fiction, entertainment, art, etc.

According to Barthes, by this procedure, the traditional notion of 'representation' is put in doubt in the texts of the era of modernity (Barthes 1968). From a different epistemological departure, Mepham reaches a similar conclusion when he refers to a "postmodern nightmare – a world overwhelmed by the endless flow of simulacra to such an extent that the distinction between fantasy and reality no longer has any purchase" (1991: 27). Or, as Schaeffer (1999) explains, fiction is not only imitative in the platonic sense of a simulacrum. The imitation of the real world is also to be understood in an Aristotelian sense of creating a *model of reality*.

The high informational and educational value of *Chernobyl* is highlighted by all the spectators interviewed who claimed they "learned from the series," confirming scholarly work pointing out that the skills we gain from gaming, from engaging in entertainment with media products, affect the way we learn, work, engage in politics, and socialize with other people (Jenkins, 2006). The idea of a social and practical learning through reality TV developed by Hill (2005 and 2007) goes in the same direction of analysis. In large-scale research on the political socialization of young people in the USA, bringing together the findings of several American scholars, it is pointed out that an "updating of previously accepted models of political socialization is particularly needed" given the fact that the "traditional" media environment has dramatically changed over the decades. With an emphasis on televised entertainment and the diffuse political messages in various entertainment and fictional programs, the authors underline the hybrid co-shaping of our behaviors and activities in a "media-saturated world" (Thorson, Mickinney and Shah 2016: xiv).

Moreover, immediate connections with the current actuality were made by the interviewees, such as a) the War in Ukraine and the fear of another nuclear accident; b) Covid 19 and the analogy with the sentiment that some things were hidden from people just as they were from the soviet people on Chernobyl's nuclear accident back then; c) the feeling of similitude between cancel culture in social media and Soviet State's power in discrediting and silencing people, pointed out by a 16-year-old male interviewee. In addition to these connections, interviewees in their 50s recalled their memories of Chernobyl in 1986; those were retrieved and blended with the information acquired from the series. In that sense, 'the truth of the fiction' is to be understood as a perceptive category of crafting the "lifeworld" in the manner of every "archaeological inquiry" into the past that is shaping our present situation (see Foucault 1969). As Grodal (2002: 70) points out: "[i]n order to understand the experience of the real in media representation, we must look into the basic mechanisms that constitute our experience of what is real." The thoughts, comments, and appreciations made by audiences lead us to think of the series *Chernobyl* as a fictive – yet aspiring to be an authentic – expression not simply of the historical past, of that which preceded the present, but even more, questioning, engaging a relationship with the future (in the way in which Derrida analyzes it in *Le mal d'archive*).

"If something deserves to be called ideology, it is the truth."[4]

In our small-scale reception study, the quest for truth and the pleasure that follows that quest also includes questioning the *truth of fiction*. As mentioned by the interviewees: *"We only heard one side of the story [in the series]"* or *"it was a capitalistic production who wants to stigmatize the bad aspects of socialism, [...] a decadent state, [...] a dystopic one…"*. In his essay *Truth and Truthfulness*, Bernard Williams (2002) recognizes two virtues of Truth, e.g., accuracy and sincerity. He argues that "*[i]*n general, in relying on what someone said, one inevitably relies on more than he said," also referring to the speaker's ethos.

The promise to tell "*the untold true story*," the one that was hidden from us, to *reveal* it, as a solid ideological common trend of many contemporary TV series circulating in the global media landscape (see Jost 2011a), marks the point of departure of HBO's *Chernobyl*. The crafting of multiple regimes of truth (in the Foucauldian sense), both in terms of production and reception, is 'what makes the – *narrative* – world go round.' In the era of *post-truth* regimes, the epistemological premisses of the pragmatic approach, pointing out the relational character of the notion of representation, need to be reminded. Thought in these terms, the notion of representation is not *factive*, for it might be erroneous or misleading (Recanati 2008: 141-149).

Figure 3. *Chernobyl*, from the series trailer

In this regard, the voice of Legasov, as the voice of the authoring instance of the series (such an *intentio auctoris*), potentially, also, as the voice of the spectators, carries the *real* promise of the series:

[4] Paul Veyne (1983), *Les Grecs ont-ils cru à leurs mythes?* Paris: Seuil

> To be a scientist is to be naïve. We are so focused on our search for truth, we fail to consider how few actually want us to find it. But it is always there, whether we see it or not, whether we choose to or not. The truth does not care about our needs or wants, it doesn't care about our governments, our ideologies, our religions. It will lie in wait for all time. And this, at last, is the gift of Chernobyl. Where once I fear the cost of truth, now I only ask: what is the cost of lies?

"*It will lie in wait for all time…*" There lies the promise of the series, i.e., not simply to reveal the truth, but the idea that the truth is always there, *always lying in wait*. Accessible whenever we are willing to find it, we only need to 'dig for evidence.' This would be a comforting myth, putting an end to the torturing oscillation of postmodern humanity: not only the truth kept or hidden from us is there in the series, but also, in the series, we can find a particular *modus operandi* for questing all kind of hidden truths. Consequently, one could ask what *Chernobyl* (HBO 2019) is the symptom of, if not a faithful, simple analogical representation of the historical reality the world has experienced. Inspired by the work of François Jost (2011b) on the consideration of media works as symptoms, we argue that the series functions as an allegory on more than one level: not only as a fictive representation of a historical event but also and more importantly, as fiction's response to the ideology of transparency, in a context where reality is reduced to the visible.

If we keep in mind, then, Paul Veyne's (1983) assertion regarding the truth as a relational process, noting that "people do not find the truth: they make it, as they make their history," two levels of understanding of the latter process need to be distinguished. The first one applies to truth assumptions made by audiences when immersing in a fictive universe, and the second level raises methodological issues and refers to the interpretation of the interviewees' comments and the contextualization that scholars do. Even in the more explicit and – likely to be – evident situations of *performance* of an audience, such as qualitative interviews, between the expression of comments, words, on the one hand, and the attribution of an intention to this expression, on the other hand, there is a thin line not to be crossed. As Daniel Dayan (2005) explains, interviewees and audiences, in general, are not to be transposed as a *persona ficta*, talking as scholars (or, in a commercial context, as the producers) imagine "in virtue of its performative dimension." In that regard, the notion of *promise* (Jost 1997)[5] is central to our understanding of the intentionality of media productions. Therefore, the idea of a promising act is more

[5] The notion of *promise* regarding media contents stands in opposition to the idea of a 'pact' or of a 'reading contract' with the audience since it would be exaggerated to imply that the series includes a bilateral act signed by both parts, producers, and readers/viewers.

adequate, questioning severely the notion of a contract or pact regarding media products. The audience interviewed seems to acknowledge the proposition of the series to be used as a kind of 'manual' explaining not only 'what happened then' but 'how things work' now and adhering to it in various and controversial levels. In that sense, the series proposes a sort of symbolic resilience, counterbalancing in a certain way "[…] the fear of a breakdown that has already been experienced" (Winnicott 1974).

In that sense, our thesis is that in *Chernobyl*, as in any fiction of that kind, the similitude with the historical reality (the iconicity of the sign in Peircian terms) and the fact that it holds from an actual event – it is somehow a trace, distorted but based on it (it is an index, following Peirce's sign categorization) – aren't enough elements to explain the sentiment of veracity proposed by the series. In other words, paradoxically, the unique answer cannot only be realism or the quest for realism by audiences. What is it then? We would opt for saying, in a rather *playful* mood – and we know that not every game is funny – that fiction has become a kind of manual or guide, offering a *mode d'emploi* for surviving in slippery postmodern societies.

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Transcending the blurred boundaries of *Chernobyl*

BY: **Renira Rampazzo Gambarato** and **Johannes Heuman**

1. Introduction

This book tackles fundamental issues illuminated by the *Chernobyl* mini-series, such as the public debate on nuclear power, the blurred lines between fact and fiction, and the power of historical narratives. Amid the ongoing Russo-Ukrainian war (which began in 2014 with the annexation of Crimea by Russia and escalated in 2022), concerns regarding nuclear power are resurging as the topic regains traction with the dispute over the weaponization of the Zaporizhzhia Nuclear Power Station in southeastern Ukraine. This is the largest nuclear power plant in Europe (and among the ten largest in the world), which could potentially cause an even bigger catastrophe than Chernobyl (Prokip 2022). Moreover, the Russo-Ukrainian war has drastically affected the energy market in Europe, intensifying a polarized discussion of the increase in nuclear power capacity on the continent. The premiere of *Chernobyl* in 2019 reignited the debate, for instance, in Sweden, with a tweet from the Social Democratic minister of social affairs, who suggested that the proponents of nuclear power watch the series and reflect on its consequences (Gambarato, Heuman and Lindberg 2022). In 2023, the recently elected right-wing Swedish government signaled its plan to procure new nuclear power stations as a source of a low-carbon, base-load energy supply (Johnson 2023).

Another relevant issue discussed in previous chapters of this book is the blurred lines between fact and fiction, which can raise ethical concerns about the fictionalization of history. In our article analyzing the Netflix series *The Crown* about the

life of Queen Elizabeth II from her wedding in 1947 until the early twenty-first century (Gambarato and Heuman 2022), we explored the potential ethical implications of the fictionalization of historical events represented across multiple media platforms to examine the potential impact fictionalization has on what is culturally remembered and what is forgotten. Our purpose was not to determine whether *The Crown* represents the past accurately but to expose the ethical dilemma involved in the fictionalization of contemporary history when the series is perceived as an authoritative interpretation of the past, as is also the case of *Chernobyl*. We departed from the notion of transmedia ethics (Gambarato and Nanì 2016) to address the blurring boundaries between fact and fiction and the potential ethical issues of transmedia storytelling through the conceptualization of ethics developed by semioticist Charles Sanders Peirce.

A semiotic perspective – explored elsewhere in this book – is, in our case, related to the Peircean conceptualization of ethics, articulating the connection between aesthetics, ethics, and logic, which enriches and expands the discussion of ethical matters in the fictionalization of history. This issue will be further discussed later in this chapter in relation to *Chernobyl*. Apropos of the power of fictionalization of history by streaming media services, we underline the potential of series such as *Mrs. America*, *The Crown*, and *Chernobyl* for use in learning processes in the educational context (Heuman and Gambarato 2023). For instance, *Mrs. America* (produced by FX and aired on Hulu and HBO Max in 2020) portrays the countermovement STOP (Stop Taking Our Privilege) ERA (Equal Rights Amendment) and feminist support for the amendment in a fictionalized version of American contemporary history. The series can be used as a starting point for discussions, for example, to introduce gender topics and to challenge national master narratives by focusing on other spaces of historical development, as *Mrs. America* places women at the center of political changes in the United States. Furthermore, streaming series can be used as a supplement for lessons, as a second-language learning support, and as a means of assessing students and developing research skills, historical thinking, media literacy, and critical competencies (Heuman and Gambarato 2023).

Our findings from previous research highlighted that a narrow focus on details by commentators, reviewers, and audiences tends to reduce the content of series such as *Mrs. America*, *The Crown*, and *Chernobyl* to what is right or wrong in the drama. At the same time, essential aspects of the historical narration or storyworld are ignored and are not the subject of critical discussions and reflections. Therefore, a deeper understanding of the conventions of the historical fiction genre and the transmedial ramifications of streaming media productions could potentially mitigate the ethical implications, transcending fact and fiction (Gambarato and Heuman 2022).

Our distinctive approach to HBO's *Chernobyl* is informed by the perspective of cultural memory studies. Theoretically, our study is based on the conceptualization of

cultural memory (Assmann 2010, 2011; Erll 2011) and the Peircean conceptualization of ethics (Parker 2003; Shepperson 2009) applied to a transmedia context (Gambarato and Nanì 2016) to discuss potential ethical implications for and impacts on what is remembered and what is forgotten regarding the 1986 Chernobyl nuclear disaster. Methodologically, it is structured as a case study underpinned by the multidimensional analytical model developed by Erll (2010), adopted to elucidate how the cultural memory of the miniseries *Chernobyl* is mediated amid its ethical implications shaped by the blurred boundaries between fact and fiction spread across multiple media platforms.

2. Cultural memory in a post-digital society

The concept of cultural memory encompasses the emergence of shared references to the past in the present. It delves into the multifaceted ways through which representations of the past circulate within a society and the interplay between the past and the present (Assmann 2010, 2011; Erll 2011; Rigney 2012). Recent scholarly attention has notably embraced digital popular culture, which has brought fresh perspectives to the realm of cultural memory. For instance, De Kosnik's (2021) exploration of novel practices of web-based cultural preservation challenges the strong connection between public memory and nation-states regarding archiving. This transformation is attributed to the emergence of self-designated archivists who curate alternative repositories called 'rogue archives,' thus disrupting the conventional roles of public archives and museums. In a context more closely aligned with streaming services, Hagedoorn (2013, 2017) directs our attention to the active role played by digital television viewers in shaping the distribution of content, highlighting how the selecting and sorting processes of digitally stored archives of audiovisual media are pushed by users, as well as by technology, to be carried out at an increasingly faster pace. This acceleration is further facilitated by evolving interfaces and functionalities, contributing to the widespread dissemination of historical materials on the web. Consequently, this evolution enables the (re)mediation of representations of the past in new ways (Hagedoorn 2013).

These studies exemplify how cultural memory can be explored as a dynamic and performative process of remembrance across diverse media platforms, actively engaging interactive audiences within a post-digital society. The term post-digital is employed here to characterize a society that has progressed beyond the initial emergence of digital technology (Berry and Dieter 2015; Jandrić et al. 2018; Knox 2019). As such, the emphasis shifts from the technology itself to how individuals live, interact, and make sense of a world that extends beyond the digital realm, encompassing domains such as big data, biotechnologies, algorithms, artificial intelligence, streaming services, and machine learning (Heuman and Gambarato 2023). These features also influence how people remember and engage with the past. Assmann's (2010) considerations of people's active

and passive processes of remembering and forgetting, for instance, must be reconsidered because of the increased circulation and accessibility of historical material on these platforms (Hagedoorn 2013). The non-transparent selection and sorting processes provide evidence of a more complex agency concerning the dynamics of remembering and forgetting, in contrast to how broadcast television, cinema, traditional archives, and museums maintain links to the past. In this context, the authority to shape historical narratives is distributed among multiple actors, but it can also be appropriated by commercial interests and technological advancements (Gambarato, Heuman and Lindberg 2022).

Streaming media platforms, such as Netflix, Max, and Amazon Prime, serve as essential frameworks in shaping and disseminating cultural memory in post-digital society. The audience's yearning for nostalgic content is fueled by the ability to revisit and relish classic series and films (Pallister 2019). Simultaneously, these platforms offer new series infused with historical elements. The portrayal of historical events in fictional contexts contributes to an emotional engagement with the past through creative narration rather than academic historiography. This renders such narratives potent conduits of cultural memory (Rigney 2012). Just as historical fiction thrived in the nineteenth century, the hybrid nature of contemporary historical fiction on streaming platforms captivates audiences by tapping into the pursuit of authenticity and an enduring "desire for historical recollection" (Mitchell 2010:36). Productions such as *Chernobyl*, *Mrs. America*, and *The Crown* adeptly acquaint viewers with past customs and traditions in an engaging manner, often bridging gaps present in academic historiography. A recurring pattern is the tendency to extend the narratives of these series across multiple media platforms, thus deepening audience engagement. This approach aligns with the principles of transmedia storytelling, as highlighted by Gambarato, Heuman and Lindberg (2022). However, the hybridity of the historical fiction genre frequently engenders debates and apprehensions regarding the accuracy and authenticity of its portrayals of history (Saxton 2020). This makes it pertinent to merge insights from transmedia ethics.

3. Transmedia ethics and the blurred boundaries of *Chernobyl*

In transmedia storytelling, which involves the dispersion of a story across multiple media platforms to engage the audience, exploration of the ethical challenges associated with it remains nascent (Finch 2012; Phillips 2012). Nevertheless, for this study, we rely on Gambarato and Nanì's (2016) research, which examines the blurred boundaries between fact and fiction and the potential ethical dilemmas inherent in transmedia storytelling. To analyze these issues, we draw upon Charles Sanders Peirce's conceptualization of ethics, which encompasses aesthetics, ethics, and logic, thus broadening

the discourse on ethical concerns within the realm of transmediality. Unlike a dichotomous and polarizing view of ethics, Peirce proposes a trinomial framework in which aesthetics (the pursuit of the admirable) forms the basis of ethics (the means to achieve the admirable; CP 1.191; Parker 2003). Thus, Peircean ethics transcends conventional notions of morality, moving beyond simplistic categorizations of true or false, right or wrong, and good or bad (CP 5.130), and instead presents aesthetics, ethics, and logic as normative sciences (CP 1.575).

Peirce distinguished clearly between morality and ethics. While morality pertains to the explicit judgment of our actions as right or wrong, ethics, as a normative science, concerns itself with the principles and ideals that govern our conduct (Santaella 2000). Furthermore, "Peirce sharply distinguishes the normative science of *philosophical ethics* directed by reason, from the practical matter of *moral conduct*, guided by instinct and sentiment" (Parker 2003:29, emphasis in the original). Consequently, Peircean ethics focuses on the underlying justifications for what can be deemed right or wrong, aiming to explore the fundamental nature of ethical actions. According to Peirce's perspective, the desired outcomes of ethical actions are preceded by aesthetics or, as Shepperson (2009:286) describes it, by "admirability." In other words, when someone asserts that a particular thing, situation, or story is "terrifying," aesthetics focuses on the quality of being terrifying rather than on the moral judgment of right or wrong (Shepperson 2009:251).

According to Peirce, aesthetics determines what we should consider admirable and what has the inherent qualities of admiration. In transmedia storytelling, this concept of inherent admirability can be observed in various projects that resonate with audiences at the artistic and/or commercial level. Ethics, however, proposes and examines rational purposes and ideals that should be pursued. Peircean ethics can be defined as an investigation into the deliberate choices we can make regarding the ultimate goals of our actions (CP 5.130).

Peirce's philosophical framework offers several facets that can be applied to ethical analysis in the realm of transmedia storytelling. First, Peirce positioned aesthetics as the fundamental basis of ethics, recognizing the intrinsic connection between the two. Rather than neglecting aesthetics, his ethical perspective incorporates and values it. Second, Peirce's semiotics (understood as logic) and other significant concepts within his extensive philosophical work were built upon triadic structures that acknowledged the role of the interpreter. This recognition of the interpreter's significance aligns with the central elements found in transmedia storytelling, which positions audiences at its center. Third, Peirce approached ethical norms with a critical mindset. Instead of solely focusing on determining acceptable actions, he delved into examining how one should act (Shepperson 2009). These aspects of Peirce's thought offer valuable insights for the ethical evaluation of transmedia storytelling, which can be applied to the case of the streaming production *Chernobyl*.

Peircean ethics provides a framework for identifying two crucial ethical dimensions in developing transmedia narratives. The first dimension pertains to the blurring of the boundaries between fact and fiction, suggesting the inclusion of *disclaimers* and *disclosures* on the media platforms involved. Gambarato and Nanì (2016) define this dimension as the audience's ability to discern the blurred lines and the importance of disclaimers or disclosures. The second dimension revolves around the *ethical involvement* of authors and audiences, addressing the potential consequences of merging factual and fictional elements. These consequences include deception, disappointment, endangerment, and actual outcomes affecting the audience and the transmedia creators (Gambarato and Nanì 2016). Disclaimers, which typically negate or disavow something, and disclosures, which aim for transparency, are employed to address these dimensions. However, their effectiveness remains uncertain, as audiences may choose to either comply with or disregard these attempts at accountability and transparency.

In terms of Peircean aesthetics and ethics, Craig Mazin, the creator of HBO's *Chernobyl*, asserts that the show was as true as possible to historical events, and where events were compressed, combined, or modified, this was part of artistic license (Sagal 2019), implying a commitment to Peirce's principles. However, a key factor in *Chernobyl* is the suspension of disbelief. This refers to the audience's voluntary acceptance of the plausibility of extraordinary events or characters, deliberately setting aside their inclination to critically analyze the unreal elements for the sake of enjoyment (Coleridge 1985 [1817]). The concept recognizes that the audience is aware of the story's fictional nature and willingly chooses to temporarily suspend their skepticism. From an ethical standpoint, it is crucial for transmedia stories to establish the degree of fictionality within the narrative.

Nevertheless, it is important to note that what the audience believes or not within the storyworld cannot be controlled or guaranteed. In the context of *Chernobyl*, the narrative is intertwined with acts of remembering and forgetting, encompassing not only the retrieval and exclusion of information but also the creative act of reshaping and rewriting. Throughout this process, information is reimagined and reconstructed (Tang 2021).

4. Analyzing *Chernobyl*

The analysis of *Chernobyl* follows Erll's (2010) three-dimensional model, which distinguishes intra-, inter-, and pluri-medial levels. These dimensions offer a framework for exploring cultural memory by examining representations of the past from different perspectives. (1) The intra-medial dimension focuses on how memory is expressed within the representation itself. The first section of the analysis looks within the mini-series, examining ethical issues and the blurred boundaries between fact and fiction in HBO's *Chernobyl*. (2) The inter-medial dimension involves the inter-

play between various representations of cultural memory, specifically addressing the remediation of different media portrayals of this nuclear disaster. In the second section, we discuss the transmediality of the mini-series, considering its presence across multiple media platforms. (3) The pluri-medial level refers to the contexts in which memory-making representations are received and exert influence, encompassing reception and discussions in diverse media spheres. In the third section, the pluri-medial analysis delves into how the series becomes part of a wider construction of cultural memory via political uses across networks in the public debate. Although these three dimensions are interconnected and not mutually exclusive, we present them separately for clarity and coherence.

4.1. The intra-medial dimension: The ethics of *Chernobyl*

Well-received historical fiction like *Chernobyl*, *The Crown*, and *Mrs. America* are commonly accompanied by supplementary content, such as documentaries, podcasts, or books, which aim to clarify the distinction between fact and fiction, truth and falsehood. Whether these additional materials are dependent on or independent of the streaming platforms, they contribute to a dynamic and interactive process of remembrance, aligning with a growing interest in ethical considerations concerning the interplay between history and fiction.

The *Chernobyl* miniseries depicts the historical events of the catastrophic nuclear accident that occurred on April 26, 1986, at reactor number four of the Chernobyl Nuclear Power Plant in Pripyat, northern Soviet Ukraine. The portrayal of these events incorporates artistic license. Consequently, HBO's marketing has never positioned *Chernobyl* as a documentary series. Instead, the miniseries is explicitly presented as a historical drama, indicating that the portrayal of events is fictionalized rather than a strictly factual account of historical occurrences, alluding to the audience's capacity to distinguish one from another. Craig Mazin refers to the series as a "dramatic telling of history" (Sagal 2019) and states that the historical sources used in the production provided not only direct material for the show but also inspiration, for instance, regarding the elaboration of fictional aspects, such as the creation of the character Ulana Khomyuk (Sagal 2019).

Drawing upon Gambarato and Nani's (2016) two significant ethical dimensions as foundational elements, we critically examine the characteristics of *Chernobyl* concerning the audience's capacity to distinguish the blurred boundaries between fact and fiction and the potential instances of deception, disappointment, endangerment, and real-world impacts. Interestingly, the presence of blurred lines does not necessarily contradict Peircean ethics, as these blurred boundaries can create captivating storyworlds that align with the pursuit of what is admirable. However, it is crucial to consider additional factors specific to the case of *Chernobyl*.

The mini-series has received considerable praise and accolades (Hale 2019; Richwine 2019) but also stark criticism regarding its historical accuracy (Gessen 2019) and its capability to mislead audiences about nuclear energy, for instance, creating panic about the issue (see Shellenberger 2019). Hale (2019) ponders that "the first thing to understand about the HBO mini-series *Chernobyl* is that much of it is made up. But here's the second and more important thing: It doesn't really matter." He stresses that HBO "gets a basic truth right," concluding that *Chernobyl* is "more about lies, deceit and a rotting political system than (…) whether nuclear power is inherently good or bad" (Hale 2019). This is also the argument presented by Craig Mazin, who has expressed that the core motivation for creating the show was to emphasize the immense cost of the lies during the disaster's aftermath (Sagal 2019). He explains that "the lesson of Chernobyl isn't that modern nuclear power is dangerous," but rather "that lying, arrogance, and suppression of criticism are dangerous" (Shellenberger 2019).

In this sense, an intriguing aspect emerges in the final episode of the miniseries that could be considered questionable. The scientist Valery Legasov supposedly testifies in court and delivers this impactful line: "Every lie we tell incurs a debt to the truth. Sooner or later, that debt is paid. That is how an RBMK reactor core explodes. Lies" (Gessen 2019). This scene is fictional. Legasov did not attend the trial (Mitchell 2019; Sagal 2019).

In addition, Gessen (2019) argues that the mini-series portrayal of "heroic scientists confronting intransigent bureaucrats by explicitly criticizing the Soviet system of decision-making" is inaccurate because "resignation was the defining condition of Soviet life." Moreover, Gessen (2019) asserts that "resignation is a depressing and untelegenic spectacle." Still, the show consistently presents the opposite, and she emphasizes that the mini-series overlooks the "vast divisions between different socioeconomic classes in the Soviet Union" and the intricate Soviet power dynamics.

Although the HBO series does not claim to be a documentary and openly incorporates fictional elements, such as the composite character Ulana Khomyuk, it has captivated audiences with its remarkably meticulous portrayal of the material culture of the Soviet Union (Gessen 2019; Sisson 2019). This attention to detail enhances the perception of reality and truth (Shackleford and Vinney 2020), making the series memorable and positioning it at the forefront of the audience's recollections. HBO effectively becomes a producer of nostalgia and a gateway to nostalgic responses (Pallister 2019) concerning the material culture of *Chernobyl* and the Soviet era. Nostalgia intertwines deeply personal and collective memories, creating a potent social bond that aids in comprehending ourselves, our times, and our cultures (Pallister 2019). Craig Mazin, for instance, acknowledges the fascination with the "sovietness of things" (Sagal 2019) in the show.

Furthermore, we can trace a parallelism between *Mrs. America*, *The Crown*, and *Chernobyl* to argue that audiovisual productions of extremely high quality with an extensive audience reach are most likely to remain in cultural memory as the truthful

reference for historical events despite the more accurate historical texts. Thus, *Chernobyl* has the potential to influence what is culturally remembered and what is forgotten (Gambarato and Heuman 2022; Gambarato, Heuman and Lindberg 2022), in addition to the potential for use in learning processes within the educational realm (Heuman and Gambarato 2023).

The discussion surrounding how audiences perceive fictional worlds as genuine has been examined extensively in disciplines such as narratology (Bell and Ryan 2019) and media studies (Hall 2003). However, this debate has been revitalized due to the emergence of alternative facts and the post-truth era (Wight 2020). An essential element that contributes to the sense of authenticity is the use of archival footage.

Mrs. America, for instance, incorporates short montages of archival footage to imbue the series with an aura of legitimacy. *The Crown* goes further and employs a sophisticated utilization of archive footage to narrate its storyline. The series blends authentic footage with specially shot scenes, which are manipulated to resemble archive material. For instance, during the coronation scene, actress Claire Foy, portraying Queen Elizabeth II, was seamlessly incorporated into real archive footage to create a realistic portrayal (Will 2016). The VFX (visual effects) team responsible for the post-production of the series assures that "*The Crown* is pretty accurate in its depiction of what happened in real life. We carefully referenced the archive throughout to ensure that we were getting the correct look for things" and "hopefully, the audience will not pay any attention to the VFX work we've done" (Will 2016). Although manipulating actual footage could be interpreted as potentially deceptive, this aligns with the present-day yearning for older media formats (Pallister 2019), which serve as significant reservoirs of cultural memory, preserving the content and stylistic aspects of media representation (Schrey 2014). *Chernobyl*, however, does not use archival footage from the actual event. Instead, the mini-series relies on dramatic reenactments, meticulous production design, and computer-generated imagery to recreate the events and atmosphere of the disaster.

As expected, the HBO mini-series stirred a significant reaction in Russia, eliciting strong responses from media outlets and audiences alike. The show became a national sensation in Russia despite being available exclusively to paying viewers online, leading the Communist Party to call for its prohibition (Sharf 2019). Pro-Kremlin media outlets launched a campaign against the series, categorizing it as American propaganda (Shepelin 2019). Shepelin (2019) suggests that the vehement opposition from government-controlled media stems from a sense of envious resentment, claiming that they view themselves as the sole authority to discuss their history and disapprove of any external interference. Their claims revolve around the fact that the show "turned a tragedy into an object of ideological manipulation, demonizing the Soviet regime and Soviet people" (Andreeva 2019). However, Shepelin (2019) argues that Chernobyl's ethical concerns and critical reception reflect more on the critics than on the series itself.

4.2. The inter-medial dimension: The transmediality of *Chernobyl*

Considering Erll's (2011:113) assertion that "cultural memory is unthinkable without media," the transmediality of *Chernobyl* is particularly relevant. Narrating stories across various media environments is not a recent occurrence (Freeman 2017), and in the context of transmediality, particular attention is given to the inter-medial dimension, which is characterized by clusters of texts that merge with "the deliberate multiplatform distribution of content" (Gambarato, Alzamora and Tárcia 2020:67). The concept of transmedia storytelling pertains to the extension of captivating narratives across diverse media formats and platforms, creating a unified storyworld.

Before delving into the inter-dimension analysis of *Chernobyl*, it is crucial to clarify that there are numerous films (*Aurora* 2006, *Innocent Saturday* 2011, *Inseparable* 2013, etc.), documentaries (*Chernobyl Heart* 2003, *Inside Chernobyl* 2012, *The Voice of Ljudmila* 2001, etc.), and books about the Chernobyl disaster (*Chernobyl 01:23:40* 2016, *Chernobyl* 2018, *Midnight in Chernobyl* 2019, etc.). Still, they lack direct connections to the HBO show. The media platforms directly connected to the miniseries and considered in our analysis are the book *Voices from Chernobyl* by Nobel laureate Belarusian author Alexievich (2006) – originally published in Russian in 1997 – and *The Chernobyl Podcast* (Sagal 2019), a podcast produced by HBO and launched simultaneously with the series.

Voices from Chernobyl (Alexievich 2006) is a notable example of oral history, reflecting the experiences of Chernobyl survivors and providing valuable insights into the accident. Published more than a decade after the disaster, the book was the first to address the information gap and narrative void caused by the Soviet media's dismissal of Chernobyl accounts (Gessen 2019). Although Gessen (2019) recognizes the significance of recent historically accurate publications on the subject, such as those by Plokhy (2018) and Higginbotham (2019), it is likely that the HBO show will have a lasting impact on cultural memory: "It being television, and very well-received television, it is the series, rather than the books, that will probably finally fill the vacuum where the story of Chernobyl should be. This is not a good thing" (Gessen 2019).

Gessen's argument is corroborated by the network and salience effects inherent in the dissemination of cultural memory through streaming media services (Gilchrist and Sands 2016). The concept of platform-mediated networks posits that users perceive a higher value in platforms with a larger user base (McIntyre and Srinivasan 2017). Consequently, streaming media services exhibit a network effect (Cennamo and Santalo 2013), where the value for users increases as more individuals use the service, providing them with more interaction opportunities (McIntyre and Srinivasan 2017). This interaction is visible in various aspects, such as top ten lists, likes, and recommendations within the context of streaming media services.

Furthermore, streaming services employ a salience effect (Kiousis 2004) related to attention, prominence, and valence (attractiveness) in shaping the communication process. Streaming platforms strategically use this salience to emphasize specific elements to their users. These elements are chosen based on the company's interests, leading them to prioritize and highlight their original productions by presenting them first or in a more prominent format than other options. As a result, the combined network and salience effects solidify streaming platforms' ability to influence content, favoring their own original productions over others and thus influencing what content remains in or fades from public consciousness. Therefore, subscribers of streaming services become influential tastemakers. For instance, when *Chernobyl* aired, it received the highest ratings ever for a television series based on more than one hundred thousand votes on IMDB (Internet Movie Database) (Tassi 2019), while in the United States, viewership reached 1.19 million per episode (Stoll 2019).

The HBO miniseries is closely connected to Alexievich's book. The series draws from the recollections of Pripyat locals, as documented in the book (Gredina 2019). The personalization of the tragic accident becomes apparent through the eyewitnesses' perspectives and shared experiences. These experiences become part of cultural memory only through interviews or the publication of letters, a process known as "externalization" (Erll 2011:114). Conversely, individuals gain access to socially shared knowledge and images of the past through communication and media reception, a process referred to as "internalization" (Erll 2011:114). Mazin states that he drew historical facts and scientific information from various sources, with Alexievich's *Voices from Chernobyl* as his primary source for finding beauty and sorrow within the tragedy (Sous 2019). He mentions that the show includes stories from the book, such as heroism and sacrifice in the aftermath of the accident, as well as accounts involving animals, such as abandoned dogs (Sagal 2019).

The transmedia expansion of content also occurred via *The Chernobyl Podcast*, a companion podcast for the series, featuring new episodes (five and a bonus episode released in August 2019) that coincided with the airing of each HBO episode weekly from May through June 2019. Hosted by Sagal (2019), the podcast includes discussions with Mazin about the series' adherence to historical events and about the events that were condensed, combined, or altered as part of artistic license, as seen in the trial of three power plant employees in the series' final episode, for instance.

Erll (2011:113) underscores that at the collective level, the construction and dissemination of cultural memory rely solely on the assistance of the media. Key media platforms, such as print media, radio, television, and the Internet, are pivotal in shaping the dynamics of remembering and forgetting cultural content. This expansion into new media formats and platforms ultimately demonstrates how streaming media environments tend to provide a more diverse and dynamic engagement with the past.

4.3. The pluri-medial dimension: The reception of *Chernobyl*

Historical fiction can also trigger political discussions and academic controversies that involve a dialogue between the past and the present. For this purpose, a closer examination of the intricate pluri-medial networks through which cultural representations circulate and exert influence becomes imperative. This is particularly important within the interactive post-digital cultural landscape of streaming media platforms, where series can become subjects of heated debates on social networks and websites, leading to audience engagement (Grandinetti 2017). Historical fiction can provide the most exciting images of the past, yet its impact on cultural memory requires active consumption by audiences (Erll 2010). Reactions to *The Crown* tended to focus on scandals and gossip involving the British Royal Family rather than political history, although the series also extensively emphasizes this aspect. A central concern was how fact and fiction intertwined when Netflix represented contemporary British history (Gambarato and Heuman 2022). In the case of *Mrs. America*, feminist and anti-feminist perspectives emerged in the reactions to the series, evoking different memories of women's liberation in the 1970s (Heuman and Gambarato 2023). *Chernobyl* also became a catalyst for political discussions on climate change, fake news, and state corruption, ultimately presenting different interpretations and uses of the mini-series. Although the memory of Chernobyl undoubtedly carries a more profound emotional and political resonance within Ukraine, Belarus, and Russia (Lindbladh 2019), in this section, we delve into its entanglement with contemporary politics beyond the confines of former communist states, elucidated by examples drawn from the daily press and social media landscapes of France, Sweden, and the United States. By examining *Chernobyl* within the framework of an ongoing interplay between the past and the present, we redirect our attention from the series's narrative to the reception of this cultural representation in the public debate.

The series garnered significant positive attention in Sweden, France, and the United States. Particularly noteworthy was the extensive discussion of the series in the Swedish media, attributed to its director Johan Renck and several actors being Swedish. It is worth mentioning that Sweden was among the nations affected by radioactive waste from the Chernobyl accident, albeit with comparatively minor consequences. Notably, it was an employee at the Swedish nuclear power plant Forsmark who initially detected alarmingly high radiation levels and alerted Europe (Ascarelli 2011). Following the airing of the second episode of HBO's *Chernobyl* series, the Swedish minister of social affairs engaged in the political discourse via her Twitter account by urging "newly awakened proponents of nuclear power" to watch it (Strandhäll 2019).

This tweet from the Social Democratic minister should be viewed within the context of renewed political interest in nuclear power in Sweden and was followed by criticism of nuclear energy in traditional media, using HBO's cultural retelling of the accident as a reference or a starting point (Ericson 2019; Kierkegaard 2019;

Liedman 2019; Schottenius 2019). In this critique, Chernobyl emerged as an accurate historical reconstruction and was used to underscore the hazards of nuclear power and the urgency of climate-related action. Due to this political instrumentalization, the historical dimension of the disaster has rarely been examined in depth. HBO's cultural depiction of Chernobyl seemed to serve as a political tool to spotlight the *naïveté* of right-wing politicians envisioning nuclear power plants in the future. An editorial in Sweden's largest tabloid, for instance, contended that *Chernobyl* should scare the country's major center-right conservative party "out of their minds" (Ericson 2019), while the historian Liedman (2019) dismissed contemporary support for nuclear power in Sweden as misdirected nostalgia for the technological optimism of the 1960s.

However, not all those who employed the memory of Chernobyl for political purposes, criticizing nuclear power, held a favorable view of the representation propagated by HBO. Despite the disaster serving as a prominent cultural symbol of the tragic blind faith in modernity during the twentieth century, French philosopher Sandra Laugier contended in *Libération* that the series downplays the peril posed by nuclear technology. Laugier's argument centered on the series' emphasis on the malfunctioning of the communist system, suggesting that *Chernobyl* portrays the opaqueness of the Soviet regime as the fundamental cause of the catastrophe while implying that such an event would not occur in better-managed and designed power plants of the capitalist world (Laugier 2019).

Similarly, French philosopher and economist Frédéric Lordon (2019), in *Le Monde Diplomatique*, drew parallels between the capitalist and socialist systems, particularly in their pursuit of productivity, to elucidate the nuclear disaster. Furthermore, journalist and anti-nuclear activist Baldassarra (2019) criticized the series for neglecting to depict the influence of Western countries and the International Atomic Energy Agency (IAEA) when Soviet authorities downplayed the casualty count. This critique underscores how the cultural memory of the Chernobyl disaster serves not only to validate a liberal and democratic political framework in the Western hemisphere of the Iron Curtain but also to contest the very same political structure by connecting this memory to broader technological and political advancements across Europe. Anti-nuclear advocates, in their pursuit of universalizing the lessons of Chernobyl, tend to associate the disaster's memory with industrial progress on both sides of the Iron Curtain rather than solely attributing the disaster to the dysfunctionality of the Soviet Union.

The United States has its own historical experience of an accident, notably in Three Mile Island (Harrisburg, Pennsylvania) in 1979. The American reception of the series highlights how perceptions of the recent past can be influenced by enduring cultural and political trends that have developed over an extended period. The 1986 Chernobyl disaster was broadly contextualized within the ideological framework of the Cold War, aligning with the established pattern of how Soviet communism has historically been interpreted in the United States. This persistent cultural and political lens, casting the

Soviet Union as a symbol of oppressive tyranny opposed to the free world (represented by the United States), is underscored by the introduction of the National Day of Victims of Communism in 2017. This commemorative policy reflects a continuity dating back to the Cold War era (Koposov 2018). Consistent with this tradition, a CNN review of HBO's *Chernobyl* remarked that the series "pulls back the Iron Curtain," unveiling the "face-saving contortions by Kremlin" and the negligence that facilitated the disaster (Lowry 2019). Chernobyl's role as a cultural symbol depicting the collapse and corruption of the Soviet Union holds even greater resonance within conservative circles in the United States, where apprehensions about communism persist as a dominant trope, and the memory of the Soviet Union remains an integral component of their political identity. In the conservative magazine *National Review* (Smith 2019), *Chernobyl*'s lesson lies in the perils of a state prioritizing its interests over those of its citizens. Thus, the pertinent context of the series is not energy or climate change but the dismantling of an ideological illusion:

> Here are the last pages of the fantasy of socialism, a conclusion whose soundtrack was not brass bands' victory at parades but the terrifying high-pitched static of the dosimeters wielded by terrified men in hazmat suits. Five years later, the Soviet Union would die. Chernobyl was the emetic manifestation of the illness that was Soviet socialism. (Smith 2019)

This interpretation and utilization of the series' depiction of the nuclear accident gained further legitimacy during the Russo-Ukrainian war three years later. It became evident that the series had played a role in disseminating not only the memory of the disaster but also highlighting Soviet dysfunctionality and aggression. At the onset of the war, as the Russian army advanced toward the region, the series acted as a poignant reminder of "Soviet mismanagement" (Seitz-Wald 2022) and the "combination of incompetence and cruelty" (Nazaryan 2022). Furthermore, an article in *The Washington Post* highlighted the cultural dimension of the war, pointing out the "near-complete dearth of films about Soviet atrocities" (Bunch 2022) in the United States and depicting *Chernobyl* as a significant exception that heightened awareness of Ukraine on the international stage.

Similar ideological Cold War rhetoric emerged among conservatives and liberals beyond the borders of the United States, where commentators accentuated the totalitarian and corrupt characteristics of the Soviet Union as the determining factors behind the disaster and its adverse aftermath (Kärkkäinen 2020; Magnusson 2019). An editorial in the Swedish liberal-conservative daily *Svenska Dagbladet* highlighted that HBO should not "control the Swedish energy debate" (Wålsten 2019). This perspective asserts that the nuclear power plant operated within a totalitarian state, and, in general, the death toll from nuclear accidents has remained relatively low (Wålsten 2019). Although *Chernobyl* undoubtedly aligns neatly with the Cold War dichotomy of totalitarianism versus the free world, certain commentators pointed out that concealed truths

akin to those found within Soviet bureaucracy are still apparent in present-day society. These observations drew parallels with contemporary issues, such as immigration management in Sweden (Gür 2019). Several years later, during the Russo-Ukrainian war and amid soaring energy prices, Tobias Billström, the Swedish foreign minister of the subsequent right-wing government, took to Twitter to argue that Swedish Social Democratic Minister Strandhäll had misunderstood the series almost three years earlier (see above). Billström highlighted Craig Mazin's positive comment on nuclear energy as a solution to the climate crisis (Billström 2022).

A contrasting perspective regarding falsehoods and concealed realities, stemming from a different political orientation, surfaced in connection to the contemporary skepticism toward science, experts, and independent journalism (Drezner 2019; Stephens 2019). Taking this a step further, the American author Stephen King made a comparison in a widely shared tweet, likening Donald Trump to those responsible for overseeing the reactor:

> It's impossible to watch HBO's *Chernobyl* without thinking of Donald Trump; like those in charge of the doomed Russian reactor, he's a man of mediocre intelligence in charge of great power – economic, global – that he does not understand. (King 2019)

A nuclear explosion within a collapsing political regime undeniably serves as a powerful reference to reinforce opposition and stir up emotional debates about current concerns. However, drawing such comparisons between the past and the present is subject to controversy. A prominent American conservative writer vehemently contested these claims, asserting that the series cannot be construed as a condemnation of Trumpism because the "epistemological difference between the Trump era and the Soviet era is so vast" (Smith 2019).

The focus on the pluri-medial dimension helps us to understand how the series became part of a broader construction of cultural memory in France, Sweden, and the United States. The diverse reactions to *Chernobyl* underscore the evolving significance and interpretation of this cultural representation, underscoring the necessity of examining it as a continual dialogue with the past in various political and cultural domains. Every comment, discussion, and controversy plays a pivotal role in molding the series into a form of memory-making fiction (Erll 2010), illustrating the dynamic impact of streaming media. The series has extended its influence well beyond the HBO platform's immediate audience, penetrating public discourse with remarkable reach. Moreover, the political uses of the past about *Chernobyl* highlight the role of streaming media productions in shaping cultural memory across international boundaries, as comparable reactions to the mini-series have surfaced in distinct national contexts, hinging more on stances toward the Soviet Union and nuclear energy rather than mere national affiliations.

5. Reflecting on *Chernobyl*

As the Russo-Ukrainian war continues to cast its ominous shadow, the HBO mini-series *Chernobyl* has attained renewed significance. The series not only portrays a nuclear catastrophe but also exposes the dysfunctionality and aggression of the Soviet Union, resonating with changing concerns and fears regarding Russia. The world will now perceive this cultural representation of a nuclear disaster from a different perspective than when it was initially launched in 2019. This shift in perspective is due to the performative dimension of cultural memory and its interplay with current developments, including the emotions evoked by an escalating war (Assmann 2012). Historical fiction presented on streaming platforms offers an imaginative and entertaining engagement with the past, enhancing audience engagement and transmedia storytelling in a post-digital media landscape. Our analysis of the series based on Erll's (2010) framework explores the inter-, intra-, and pluri-medial levels of *Chernobyl*'s contribution to cultural memory. This examination spans from the production to the reception of the miniseries across different media environments, resulting in cultural and political repercussions within public discussions.

The research demonstrates how this cultural representation rekindles memories of the nuclear accident for various purposes – ranging from anti-nuclear activism and anti-communism to discussions of climate change – ultimately shaping cultural memory across national frontiers. The historical narrative is intrinsically linked to Alexievich's book *Voices from Chernobyl* while also evolving further through discussions on a popular podcast that coincided with the launch of the series. This recurrent pattern of transmedia content expansion in streaming media environments underscores how the platforms effectively engage audiences and contribute to cultural memory. However, as a hybrid genre, historical fiction has a long tradition of encountering skepticism due to its challenge in meeting the creative demands of fiction and the accuracy of historical writing or documentaries (Saxton 2020). Like *The Crown* and *Mrs. America*, the series poses ethical dilemmas for the audience concerning the blurred boundaries between fact and fiction, as evidenced by reactions to the series. A deeper understanding of historical fiction as a genre has the potential to alleviate these ethical implications (Gambarato and Heuman 2022), thus enriching audience interaction and guiding public discussions toward new perspectives. Indeed, the inherent tension within the genre not only gives rise to ethical considerations for the audience as they navigate the gray area between fact and fiction but also accentuates the compelling nature of *Chernobyl* as a representation that ingrains memories of the nuclear disaster in the public sphere.

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Biographical Notes
on Contributors

Andrea Bernardelli teaches *Semiotics*, *Cognitive Semiotics*, and *Narrative Theory* at the University of Ferrara. He is also a member of the scientific board of the international doctoral program in Environmental Sustainability and Well-Being at the same university and of the board of the Doctorate of National Interest *Image, Language, Figure: forms and modes of mediation* (University of Milan).

andrea.bernardelli@unipg.it

Paolo Braga is Associate Professor at Università Cattolica del Sacro Cuore (Milan), teaching Screenwriting, Semiotics, and Journalism. At Università Cattolica, he also teaches at the Master in International Screenwriting and Production. He has published extensively on the construction of empathy with characters and US television series.

paolo.braga@unicatt.it

Nicola Dusi, PhD in Semiotics, is Associate Professor of Media Semiotics at the University of Modena and Reggio Emilia (Italy), in the Department of Communication and Economics. He works on the theory and analysis of cinema and television seriality, and in particular on the translational relations between arts and media. He is the author of the books *Il cinema come traduzione* (2003), *Dal cinema ai media digitali* (2014), *Contromisure. Trasposizioni e intermedialità* (2015) and *Capire le serie TV. Generi, stili, pratiche* (with G. Grignaffini, 2020). He has co-edited many books on media research, including *Remix-Remake. Pratiche di replicabilità* (with L. Spaziate, 2006); *Matthew Barney. Polimorfismo, multimodalità, neobarocco* (with C.S. Saba, 2012); *David Lynch. Mondi Intermediali* (with C. Bianchi, 2019); *Cesare Zavattini. Soggetti mai realizzati* (with M. Salvador, 2022). In 2025, he is editing a monographic issue of *DeSignis* with Charo Lacalle on *Mutaciones narrativas de la contemporaneidad y nuevas serialidades*, and a book dedicated to the intermedial translations of Umberto Eco's *The Name of the Rose*.

nicolamaria.dusi@unimore.it

Renira Rampazzo Gambarato is a Professor of Media and Communication Studies at Jönköping University, Sweden. Her expertise is in fiction and nonfiction transmedia studies and Peircean semiotics. Her most recent book is *Theory, Development, and Strategy in Transmedia Storytelling* (Routledge 2020).

renira.gambarato@ju.se

Alberto N. García is an Associate Professor of Film and Television Studies. He has published in journals such as *Continuum, International Journal of Communication, and Quarterly Review of Film and Video*. He is currently researching television aesthetics and is a member of the 'Bonds, Creativity and Culture' research group.

albgarcia@unav.es

Giorgio Grignaffini is head of TV series production at Taodue Film (Mediaset Group) and associate professor at IULM University in Milan. In parallel to his professional activity in the field of television production, he does research in the field of media and semiotics. He has published numerous articles and books in Italy, France and Brazil: *I generi televisivi* (Carocci 2021), *Mondi seriali* (with Maria Pia Pozzato, LINK 2008), *Che cos'è una serie televisiva* (with Andrea Bernardelli, Carocci 2017), *La bottega delle narrazioni* (with Stefano Calabrese, ed., Carocci 2020), *Capire le serie tv* (with Nicola Dusi, Carocci 2020).

grignaffini@taodue.it

Johannes Heuman is Associate Professor of History at Södertörn University, Sweden. He specializes in modern French and Swedish history, including cultural memory, interethnic relations, and social movements. His most recent book is *Early Holocaust Memory in Sweden: Archives, Testimonies and Reflections* (Palgrave 2021).

johannes.heuman@sh.se

Charo Lacalle is a Full Professor at the Faculty of Communication Sciences at the Autonomous University of Barcelona (UAB). She works on TV and internet analysis, particularly about social identity construction. She coordinates the Observatory of Spanish TV Fiction. As a visiting scholar, she has taught classes and seminars in several European and American Universities. She has published numerous articles in prestigious journals. Her last book is *(In)dignidades mediáticas en la Sociedad digital* (Editorial Cátedra 2022).

rosario.lacalle@uab.es

Antonella Mascio is Associate Professor of the Sociology of Cultural and Communication Processes at the University of Bologna (Italy), Department of Political and Social Sciences. Her main research interest is the relationship between TV series and audiences, using a sociological and media perspective, which includes fandom research, fashion and celebrity culture, and nostalgia studies. She has published books, and many articles in scientific journals and books focused on virtual communities, TV series, and their audiences, media, and fashion.

antonella.mascio@unibo.it

Federico Montanari, PhD Semiotics, is Associate Professor of Sociology of Cultural and Communication Processes at the University of Modena Reggio Emilia (Italy), Department of Communication and Economics. He works on socio-semiotic analysis of war and conflicts and political discourse; more recently, on the study of urban spaces, ecological discourse, and technologies, also in relation to cultural studies, and visual and media representations. He has written several books and articles on these issues, including: *Contested novel ecosystems: Socio-ecological processes and evidence from Italy* (2021, with R. Bartoletti, G. Trentanovi, A. Zinzani), *La forma seriale e mediale del conflitto* (2019), *Immagini coinvolte* (2016), *Morphogenesis and Individuation* (2014, with A. Sarti and F. Galofaro); "Actants, Actors, and Combat Units, a semiocultural viewpoint" (2012); *Linguaggi della guerra* (2004).

federico.mont@gmail.com

Héctor J. Pérez is Professor of audiovisual narrative at the Universitat Politècnica de València (Escola Politècnica Superior de Gandia). He has published extensively on the cognitive aesthetics of television series and other topics in the field of aesthetics. He is the editor of SERIES, the International Journal of TV Serial Narratives, and the principal researcher of various research projects (www.researchseries.org).

hperez@har.upv.es

Ioanna Vovou is an Associate Professor at Panteion University of Social and Political Sciences (Athens, Greece), in the Department of Communication, Media and Culture. She also has the title of Maître de Conférences at the Université Sorbonne Paris Nord, where she taught from 2002 to 2007. She is a full member of the Research Laboratory 'Communication, Information, Media' (CIM, University of Paris III-Sorbonne Nouvelle). Her research interests focus on the relationship between the media and society, media analysis, and television studies. Since 2020, she has been on the editorial board of *In Other Words. A Contextualized Dictionary to Problematize Otherness*. In 2022, she joined the editorial team of Henry Jenkins blog, renamed *Pop Junctions*.

vovou@panteion.gr

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