

ILUMINACE

Časopis pro teorii, historii
a estetiku filmu

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and Aesthetics

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Na obálce / Front cover:

Políčko z filmu *Nature* (Artavazd Pelešjan, 2019) /
Film Still from *Nature* (Artavazd Pelešjan, 2019)

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SPECIAL ISSUE:
**(ECO)TRAUMATIC LANDSCAPES
IN CONTEMPORARY AUDIOVISUAL CULTURE**

Guest Editor:
Bori Máté (University of Applied Arts Vienna)

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Bori Máté (University of Applied Arts Vienna)

(Eco)Traumatic Landscapes in Contemporary Audiovisual Culture

The epoch of the Anthropocene is characterized by the emergence of what could be called (eco)traumatic landscapes. These landscapes bear the tragic outcomes of human interference — which activities are not conducted by all humans nor do all humans benefit from such activities — in the environment. They are primarily defined by “hyperobjects,”¹⁾ a concept introduced by Timothy Morton to describe (human-made) things that are massively distributed in time and space compared to humans and are directly linked to “the end of the world.” In regions like Chernobyl, Fukushima, or the so-called “Sea of Plastic” in Almería (southern Spain), materials such as long-lasting plastics and nuclear substances exert prolonged and continuous harmful effects not only on the natural elements like water, soil, and air but also on both human and non-human life forms in the area and (eventually) beyond. The harm inflicted by these invisible “perpetrators” — nuclear, plastic, or agrochemical agents — unfolds gradually over years and generations, illustrating Rob Nixon’s concept of “slow violence,” a common outcome of what is termed “toxic geographies.”²⁾ Nixon’s idea of this specific form of violence, associated with capitalist and industrial societies, draws attention to the social repercussions and human suffering in these regions and environments. Slow violence also challenges conventional notions of space and time and prompts artistic and theoretical inquiries into representation, visibility, medium specificity, agency, and affectivity.

The inspiration for this discussion comes from recognizing that certain photographic works, experimental films, and expanded cinema pieces, employing unique formal strategies, compel us to confront the complexities of documenting slow violence within the

1) Timothy Morton, *Hyperobjects: Philosophy and Ecology after the End of the World* (Minneapolis and London: University of Minnesota Press, 2013).

2) Rob Nixon, *Slow Violence and the Environmentalism of the Poor* (Cambridge, Massachusetts and London: Harvard University Press, 2011).

realm of audiovisual arts. Specific experimental films and documentaries, as theorized by Scott MacDonald, fall under the category of “eco cinema.”³⁾ These works aim not to create conventional Hollywood or documentary narratives with pro-environmental themes but instead offer new types of cinematic experiences that challenge traditional media spectatorship and foster a more environmentally conscious mindset. While MacDonald primarily highlights cinematic works that immerse viewers in natural processes, emphasizing patience and mindfulness, the articles in this issue seek to expand the category to include audiovisual works that may not solely focus on these aspects but still contribute to an environmentally progressive mindset by providing sensory experiences related to hyperobjects, such as global warming, radiation, long-lasting pollution effects, resource extraction, and more. Consequently, the contributors to this issue aim to explore how artistic practices shape and redefine human agency in the context of (social-ecological) traumatic events, considering the role of technology and materiality in translating trauma into (sensory) artworks.

In the opening article, “Traumatic Landscapes from Above: Images of Colonization and Violence in the Sea of Plastic,” Loreto García Saiz and Miguel Fernández Labayen depict an area in Southern Spain which is commonly called the “Sea of Plastic.” This geographic region has been widely portrayed by aircrafts, satellites, and drones from the 1950s to the present. The authors understand the resulting images as visual testimonies of the Anthropocene inasmuch as they allow us to document the “slow violence” that has taken place in this space over decades. At the same time, however, they also point out that these visual depictions of the Sea of Plastic only capture the visible part of the bigger hyperobject, in this context the plastic, and fail to register the effects of agro-industrial activities taking place in this region in the long term such as desertification, aquifers’ overexploitation, and long-life plastic waste. By emphasizing the tension these images hold, García Saiz and Fernández Labayen wish to underpin the representational challenges that are involved in the efforts of representing traumatic landscapes.

Focusing on the environmental impact of film production, Salomé Lopes Coelho in “The Rhythms of More-Than-Human Matter in Azucena Losana’s Eco-Developed Film Series *Metarretratos*” explores the Mexican experimental filmmaker Azucena Losana’s eco-developing project, *Metarretratos*. This series of short films, as Lopes Coelho argues, is part of a movement that seeks less environmentally harmful film-developing solutions. What makes Losana’s project especially interesting is the fact that she uses exclusively native plants of South America experimenting with their chemical and curative properties. Furthermore, as Lopes Coelho puts it, the three tree portraits that are part of *Metarretratos* are not only depicted in these films but also employed in the film-developing recipe, thus foregrounding vegetal worlds as protagonists in complex ways. The author argues that Losana’s eco-developing project reveals the agency of both the vegetal and the cinematic matter in co-creating images, forms, and the world itself. On a more speculative note, Lopes Coelho also suggests that the curative properties of the plants used in the development of the films affect the cinematic dispositif involved in *Metarretratos*, thereby

3) Scott MacDonald, “Toward an Eco-Cinema,” *Interdisciplinary Studies in Literature and Environment* 11, no. 2 (2004), 107–132.

transposing these qualities beyond themselves performing curative mechanisms for eco-traumatic landscapes at different spatial and temporal scales.

Erica Biolchini in “Becoming-Grains-of-Mercury: Documentaries, Posthumanism, and the Entanglements of Traumas” invites the readers to re-think ecology-related trauma through a temporal lens that does not only consider the condition of post-trauma but proposes the idea of “environmental, social, and psychical post- and pre-traumatic syndrome of entanglements of trauma(s).” Giving a detailed analysis of Artavazd Pelechian’s *Nature* (2019) and Chloé Malcotti’s *Medusa* (2020), Biolchini argues for the necessity to challenge and renew traditional perspectives on trauma and its temporality also acknowledging the entangled nature of “our” terrestrial existence. Inspired by Félix Guattari’s *The Three Ecologies* (1989), she aims to think transversally and trans-corporeally about the enmeshment of the conditions of pre- and post-trauma that do not only affect humans but extend to non-human beings and the Earth itself and by that wishes to establish an ethico-aesthetic discourse between trauma studies and posthumanism. Ultimately, Biolchini urges “us” to look for alternatives, and become suggestive and visionary in our endeavor in imagining a future that is freed from the endless return of the same environmental catastrophes.

In the study, “Diffractive Way of Thinking and the Possibilities of Capturing Ecological Trauma in Tomonari Nishikawa’s *sound of a million insects, light of a thousand stars* (2014),” I employ the term diffraction borrowed from new materialist discourses whose qualities are quite underexplored in the field of film studies but — as I argue — have important implications for questions that are frequently asked about the nature of ecological trauma and its representation. With a case study of Tomonari Nishikawa’s film, *sound of a million insects, light of a thousand stars*, the article also explores the ways ecologically engaged experimental films can capture the sense of eco-trauma experience by challenging the idea of common-sense representationalism as a mode of knowledge-producing. In an effort to outline a framework in which ecological trauma is approached through connectedness, I turn to both Karen Barad’s “agential realist onto-epistemology”⁴⁾ and look for the guidance of certain Indigenous chains of thought. Ultimately, I also argue that Nishikawa’s film offers a different way of seeing and knowing promoting a diffractive way of thinking rather than “reflecting back” (reconstructing, re-playing) the social-ecological traumas that pervade the catastrophic events of the 2011 Fukushima tsunami.

Lastly, in the closing article of this issue, “‘Traumatomic’ Encounters Trauma through Radioactivity in Photofilmic ‘Experimental Documents’ of Chernobyl,” Beja Margitházi focuses on the Chernobyl Exclusion Zone and discusses three site-related artistic projects: Alice Miceli’s *Chernobyl Project* (2006–2010), Lina Selander’s *Lenin’s Lamp Glows in the Peasant’s Hut* (2011), and Daniel McIntyre’s *Lion* series (2011–2014). Margitházi argues that despite their differences all these works are produced by what she calls “traumatomic encounters” with the radiation-contaminated site of the Chernobyl Exclusion Zone and share a perception of Chernobyl as a “traumascape.” As she points out, Miceli’s, Selander’s, and McIntyre’s projects were inspired by direct contact with the space itself (entering and crossing the area) yet the artists do not seek to directly capture the effects of nuclear trau-

4) Karen Barad, *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning* (Durham and London: Duke University Press, 2007).

ma. They tend to provide the phenomenological study and reproduction of radiation and radioactivity. As Margitházi states, the projects analyzed in her study promote inquiries into the affective nature of nuclear trauma while also attempting to approach the hyperobjective phenomenon that radiation is.

Although the articles of this issue have different takes on the idea of (eco)traumatic landscapes, they all point towards the various ways ecology and trauma are weaved together. Through specific examples of experimental cinema, these papers may provide pointers as to how one might conceive the nature and behavior of such hyperobjects as plastic or radiation, revisit their understanding of time through inquiries into the temporality of trauma and critically engage with cinema and its production.

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Traumatic Landscapes from Above: Images of Colonization and Violence in the *Sea of Plastic*

Abstract

The so-called “Sea of Plastic” in Almeria (southern Spain) is the largest concentration of plastic greenhouses in the world. Because of its monumentalism and “accidental aesthetics” (Davis, 2015), this geographic region has been extensively depicted from above by aircrafts, satellites, and drones from the 1950s to the present. The purpose of this paper is threefold: first, it offers a historical account of these images from above (from the ones obtained during the Francoist period for geopolitical purposes to those taken by local farmers today) in order to understand its colonial condition and legacy; second, it explores the significance of these images in the process of institutionalization of the landscape and its use in the ideological battle that takes place in the core of the agribusiness regarding its human and environmental externalities; and finally, it analyzes the tension between the artistic and the political condition of these images.

We understand these productions as a visual testimony of the Anthropocene since they allow us to document the ecological violence that has taken place in this space over decades. Nevertheless, we argue that the aesthetic condition of most of the SoP’s images creates a distance that ultimately fails to show the consequences of agro-industrial activity in the long term: desertification, aquifers’ over-exploitation, and long-life plastic waste. Thus, these images allow us to think about the trauma inflicted on ecosystems and the representational challenges involved in representing traumatic landscapes.

Keywords

aerial images, satellite photography, traumatic landscapes, Anthropocene, Sea of Plastic

Introduction

The Sea of Plastic (SoP) is one of the few human-made infrastructures that are visible from the earth's orbit with the naked eye.¹⁾ Located on the south-eastern Spanish coast, in the province of Almería, and extended along more than three thousand square kilometers of surface area, it is the largest concentration of plastic greenhouses worldwide.²⁾ This plastic hub of intensive agriculture is also known as “Europe's orchard,” since it produces almost four million tons of fruits and vegetables every year, of which more than 70% are exported to the western European market, mainly to the UK, France, and Germany.³⁾

On a local level, the vast infrastructure that sustains this agribusiness has been widely celebrated because of the economic development that it has implemented in the region. However, it has also been severely criticized due to the environmental consequences and the labor conditions linked to its agro-industrial activity. Its impact has not gone unacknowledged in academia, and the Sea of Plastic has been studied in the fields of history,⁴⁾ economics,⁵⁾ geography,⁶⁾ anthropology,⁷⁾ sociology,⁸⁾ engineering,⁹⁾ and environmental studies.¹⁰⁾ Most of these approaches have used aerial images of the Sea of Plastic as evidence for their research, but hardly any analyzes them in-depth.

This article offers a visual studies account of the aerial visions of the Sea of Plastic. Through the examination of different representations of this agricultural space from above, our research intervenes in contemporary debates about ecocriticism and traumatic landscapes in three ways: first, it offers a historical account of the aerial images of the SoP from the 1950s until today; second, it understands these images as a part of the institutionalization process of the ideological and social conflicts within this space; and third, it analyzes these sources as a visual testimony of the Anthropocene. The article places the discussions on these aerial visions of the SoP at a crossroads between aesthetic, phenomenological, political, social, and ecocritical readings. In sum, we reflect on the historical

- 1) Javier Gallego, “Duque: ‘Desde el espacio destacan más los invernaderos de Almería que la Muralla China,’” *Antena 3 Noticias*, May 13, 2012, accessed May 13, 2021, https://www.antena3.com/noticias/ciencia/duque-espacio-destacan-mas-invernaderos-almeria-que-muralla-china_201205135749583b4beb28888065bd33.html.
- 2) Diego Luis Valera et al., *Greenhouse agriculture in Almería: A comprehensive techno-economic analysis* (Almería: Cajamar Caja Rural, 2016), 23.
- 3) *Análisis de la campaña hortofrutícola 2021/2022* (Almería: Cajamar Caja Rural, 2023), 71.
- 4) José Rivera, *La política de colonización agraria en el campo de Dalías: (1940–1990)* (Almería: Instituto de Estudios Almerienses y Cajamar, 2000).
- 5) Jerónimo Molina, “El papel de la agricultura intensiva en la economía de la provincia de Almería,” *Revista de humanidades y ciencias sociales*, no. 19 (2003), 13–38.
- 6) José A. Aznar-Sánchez, “Territory, Cluster and Competitiveness of the Intensive Horticulture in Almería (Spain),” *The Open Geography Journal* 4, no.1 (2011), 103–114.
- 7) Paloma Yáñez, “Music Videos as a Mode of Resistance in Almería's Industrial Agriculture,” *Visual Ethnography*, 9, no. 1 (2020), 58–76.
- 8) Jörg Gertel and Sarah Ruth Sippel, eds., *Seasonal Workers in Mediterranean Agriculture: The Social Costs of Eating Fresh* (New York: Routledge, 2014).
- 9) Abderrahim Nemmaoui, Manuel A. Aguilar, Fernando J. Aguilar, Antonio Novelli, and Andrés García Lorca, “Greenhouse Crop Identification from Multi-Temporal Multi-Sensor Satellite Imagery Using Object-Based Approach: A Case Study from Almería (Spain),” *Remote Sensing*, 10, no. 11 (2018), 1751.
- 10) Alfredo Tolón and Xavier Lastra, “La agricultura intensiva del Poniente Almeriense: Diagnóstico e instrumentos de gestión ambiental,” *M+A: revista electrónica de medioambiente*, no. 8 (2010), 18–40.

representations of the SoP with historiographical and geopolitical readings of the region as well as with contemporary takes on the SoP as a traumatic landscape. We approach these images as tokens of the transformation of a natural space into a traumatic landscape: a big plastic layer in a moment of oil peak and natural resources shortages. In this context, the images are an example of what Gómez-Barris has called the “extractive view,”¹¹⁾ by which aerial devices and “satellites, photograph large areas of the planet to convert them into commodities for utilitarian market ends.”¹²⁾

Our research looks at the three kinds of aerial images that have depicted this space: the cartographic aerial images of the 1950s and 1960s, the orbital images which capture the SoP from satellites, and the more recent artistic images that use drones and digital technology to surf through these territories. Though the article is organized around chronology, by no means this implies a teleological or deterministic reading of the different images. On the contrary, our approach presents the different technologies used to photograph the SoP (the plane, the satellite, the drone) as interconnected and challenging ways to domesticate the extension of the region, ways which have created an imagery that resonates and projects itself across time (from the 1950s to the present) and space (from plane photography to outer space views of Earth and drone captures).

The Sea of Plastic Through Its First Aerial Images

The origin of the SoP is directly linked to the autarkic maneuvers of the Instituto Nacional de Colonización (National Colonization Institute), created by the Francoist Regime after the Civil War for the revitalization and development of arid land from the 1940s onwards. During these years, the Regime performed an “Inward Colonization” along the Spanish territory for the establishment of hydraulic infrastructures that could convert the wasteland to irrigated agriculture. Between 1945 and 1969, the government built some 300 villages scattered throughout the Iberian Peninsula. This colonization was promoted, among other things, through the magazine *Vida Nueva*, which, as Tatjana Gajic points out, incorporated numerous aerial images of the colonized territories. As Gajic mentions,

seen from the vantage point of the regime, which is that of the vision from above, the newly built villages and irrigated lands appear as a clean, abstract pattern, a design free of history and oriented to a future yet to be produced — sown, grown, and harvested.¹³⁾

These images belong to a “colonial visual regime”¹⁴⁾ that was understood as a powerful tool to portray and control the land and thus used by the Regime to promote their plan of

11) Macarena Gómez-Barris, *The Extractive Zone: Social Ecologies and Decolonial Perspectives* (Durham: Duke University Press, 2017).

12) Gómez-Barris, *The Extractive Zone*, 8.

13) Tatjana Gajic, “Soil, Water, and Light: Aerial Photography and Agriculture in Spain,” in *Spanish Environmental Cultural Studies*, ed. Luis I. Prádanos (Woodbridge: Tamesis Books, 2023), 71.

14) Gómez-Barris, *The Extractive Zone*, 6.

inward colonization. This process of colonization stands as “a paradigmatic example of the role of the aerial vision in the monitoring, organization, and control of processes that take place of the ground, on the soil.”¹⁵⁾

The first aerial images of what would eventually become the Sea of Plastic (Fig. 1) were linked, as in many other places, to a military need of gathering geographic information. Aerial photography had been used extensively for the first time during the First World War¹⁶⁾ and it arrived at the SoP during the post-war period. It was then that the Army Map Service (AMS) of the United States, in collaboration with the Centro Geográfico de la Armada (Army Geographic Service) and the Spanish Instituto Geográfico y Catastral (Geographic and Cadastral Institute), carried out cartographic flights known as Series A (1945–1946) and Series B (1956–1957), the latter popularly called the “American flight” (Fig. 2). These cartographic flights were motivated by the geostrategic interest of the American government in the Spanish territory in times of international political tension. The “American flight” was a consequence of the Madrid Pacts of 1953, after which the US government established military bases in Spain in exchange for indirectly recognizing the Regime, and providing it with economic aid and military material. These flights were carried out at a scale of 1:33,000 and an altitude of 5,000 meters.¹⁷⁾



Fig. 1. Aerial photography of the American flight in of the territory that today occupies El Ejido

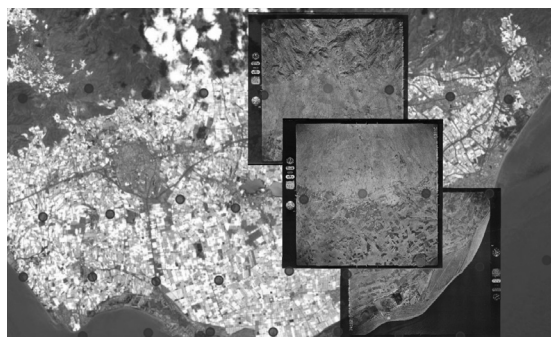


Fig. 2. Photographs of the American flight over a current satellite image of the Sea of Plastic

These cartographic flights updated and modernized knowledge of Spanish geography in the 1940s and 1950s. They also allow us to study the first aerial images taken of the ter-

15) Gajic, *Soil, Water, and Light*, 72.

16) Zoë Druick, “A Wide-Angle View of Fragile Earth’: Capitalist Aesthetics in The Work of Yann Arthus-Bertrand,” *Open Cultural Studies* 2, no. 1 (2018), 396–405.

17) Antonio Fajardo, “Los vuelos americanos de las series A (1945–46) y B (1956–57),” *Andalucía en la historia*, no. 52 (2016), 86–91.

ritory of the Campo de Dalías, which became the Sea of Plastic, and they immortalize the Almerian countryside in its initial stages when the process of inward colonization of certain rural areas was set into motion, even before the first greenhouses were built. According to Gil-Fournier,

in a blurred, hybrid process, land became an infrastructural surface to hold and transform solar light energy into cereals, fruits, and vegetables in an efficient way, while at the same time, the reflected sunlight became gradually a source of information to be stored in the photographic plates carried on by aircrafts owned by military and cartographic institutes.¹⁸⁾

Gil-Fournier understands the Spanish Inward Colonization in terms of “a material genealogy of the contemporary visual regime, attaching a history of forced labor and environmental exploitation to the production of images today.”¹⁹⁾ Through this process, agricultural landscape transformation and aerial visual practices are entangled. In the case of the territory that today occupies the Sea of Plastic, agriculture becomes “an eminently visual practice” from the period of Inward Colonization.²⁰⁾ For instance, nowadays the SoP’s agro-industry uses remote sensing technologies to control the crop’s growth even below the plastic.²¹⁾

The American flight was followed by others, such as the Vuelo Interministerial (Interministerial Flight, 1973–1986) (Fig. 3) and the Vuelo Nacional (National Flight, 1981–1986), which carried out the same exercise of mapping the Spanish territory through the compilation of aerial images. These images grant a relative continuity in the documentation of the territorial changes that the SoP has undergone during the 20th century, especially after the orthophotographic process done in this space, which consists of the union and combination of multiple aerial photographs after a process of error correction and

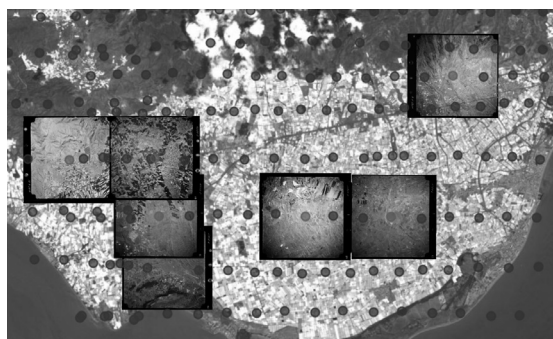


Fig. 3. Photographs of the Interministerial Flight over a current satellite image of the Sea of Plastic

18) Abelardo Gil-Fournier, “Seeding and seeing: the inner colonization of land and vision,” *APRJA: A Peer-Reviewed Journal About Research Networks* 6, no. 1 (2017), 97.

19) Abelardo Gil-Fournier, “La tierra está en el aire. Imagen y colonización interior” (Paper presented at Glocal [codificar, mediar, transformar, vivir] III Congreso Internacional de Investigación en Artes Visuales, Universitat Politècnica València, July 6, 2017).

20) Gajic, *Soil, Water, and Light*, 72.

21) Nemmaoui et al., “Greenhouse Crop Identification.”

standardization that avoids defects derived from differences in altitude, perspective, or camera adjustments in the various photographs. The combination of pictures has, as a result, a complete image of the Sea of Plastic in different moments of its history, which can be consulted on the website of the Centro Nacional de Información Geográfica del Instituto Geográfico Nacional (National Geographic Information Centre of the National Geographic Institute) of Spain.

These historical aerial images have been crucial to represent the landscape changes in the Sea of Plastic over the decades. Press articles²²⁾ and films, such as the documentary *Me acuerdo perfectamente* (José Sánchez Montes, 2014), have juxtaposed these images to compare the transformation of the territory. These visual representations work as a point of reference when contrasting the territorial changes that have occurred due to the development of intensive agriculture (Fig. 4). In the case of *Me acuerdo perfectamente*, the film narrates, through a discussion about memory and family legacy, the transformations of the landscape and the society in the coastal village of Balerna, and the political tensions created by the distribution of the agricultural land during the dictatorship.

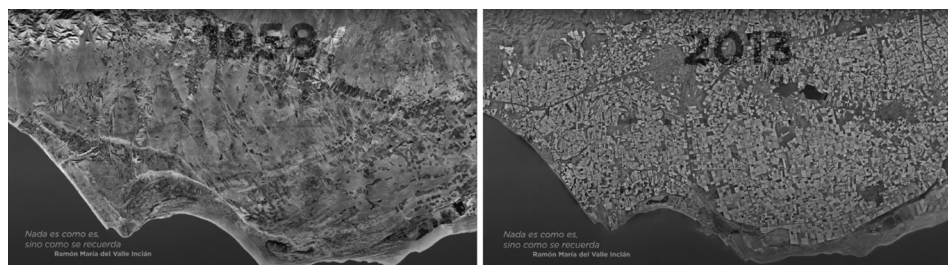


Fig. 4. Orthophotographic shots the Sea of Plastic used in *Me acuerdo perfectamente*

Satellite Views and Popular Culture in the Sea of Plastic

The views of the Sea of Plastic from above did not become prescient in popular culture until satellite images gained media presence. Unlike aerial photographs, satellite views are taken from a much higher altitude, showing the Plastic Sea in its entirety, so that it can be seen in relation to the surrounding geography.

The first and one of the most widely circulated satellite images of the SoP was from *Almería, Spain*, used by the United Nations Environment Program in its 2005 publication *One World, Many People: Atlas of Our Changing Environment* (Fig. 5). Its aim was to document through “images from space” how human activity had made irreversible changes on the world’s landscape. It compared two satellite photographs of the Dalías countryside from 1974 and 2000. Their origin was not specified, although they might have been taken by a meteorological satellite. These photographs work in a similar way to José Sánchez

22) Carlos Prego, “La increíble expansión del ‘mar de plástico’ de Almería desde 1960, explicada en fotografías aéreas,” *Xataka*, May 6, 2022, accessed December 21, 2022, <https://www.xataka.com/ecologia-y-naturaleza/increible-expansion-mar-plastico-almeria-1960-explicada-fotografias-aereas>.

23) “La devastación de la Tierra,” *El Mundo*, 2005, accessed December 19, 2022, <https://www.elmundo.es/fotografia/temas/ciencia/2005/06/atlasonu/index.html>.

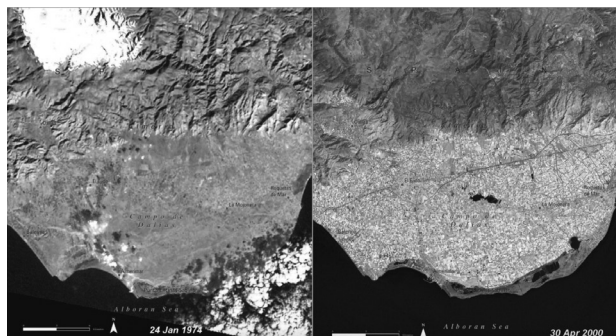


Fig. 5. Almería, Spain. Satellite images of the Sea of Plastic from 1974 and 2000

Montes' *Me acuerdo perfectamente* and they have been used recurrently in press articles to denounce the "devastation of the Earth,"²³⁾ to envision environmental changes in scientific papers,²⁴⁾ to explain the history of this peculiar landscape,²⁵⁾ to celebrate its economic success,²⁶⁾ or even to sell adventure tourism activities.²⁷⁾

In the years before their publication, the Sea of Plastic was already becoming a topic of national and international interest due to documentaries that were denouncing the working conditions of migrants in the greenhouses, like *Bienvenidos al paraíso* (Miguel Ángel Nieto, 2000), *Vida de moro* (Josep Serra, 2001) or *L'Eldorado de plastique* (Arlette Girardot and Philippe Baqué, 2001). The former created a political turmoil when right-wing parties considered it to be "biased and sensationalist,"²⁸⁾ and the director of Radio Televisión Española (RTVE), the state public broadcasting corporation, had to declare in the Parliament and provide an explanation about this production.²⁹⁾

Satellite images became an even more popular trademark of the SoP after the renowned NASA astronaut and former Spanish Minister of Science, Pedro Duque, stated in 2007 that the greenhouses could be seen from outer space:

From the International Space Station, it is perfectly visible. I personally think, and some of my colleagues agree, that it is the most visible human-made infrastructure. In daylight, of course. I didn't know it but a French colleague, after six months on the station, asked me what was that white thing you could see in the south of Almería. He thought it was salt flats or something like that. He knew it was something that somebody had done. That is to say, it is not something you have to pay attention to

24) Tolón and Lastra, "La agricultura intensiva del Poniente Almeriense."

25) Alexis Rodríguez-Rata, "La NASA descubre un 'mar de plástico' español donde antes sólo se veía verde," *La Vanguardia*, December 15, 2018, accessed January 8, 2023, <https://www.lavanguardia.com/economia/20181208/453319751509/campo-de-dalias-el-ajido-poniente-almeriense-pasado-y-presente-mar-de-plastico-antes-verde.html>.

26) Javier Vegas, "Así es el primer mar de plástico español," *Eltiempo.es*, January 17, 2019, accessed December 18, 2022, <https://www.eltiempo.es/noticias/asi-es-el-mar-de-plastico-espanol>.

27) "Invernaderos De Almería Desde El Espacio, Imágenes Espectaculares," *Toyo Aventura*, June 2, 2022, accessed January 15, 2023, <https://www.toyoaventura.es/noticias/invernaderos-de-almeria-desde-el-espacio/>.

28) Session's record of the Congress, no. 111, November 29, 2000.

29) After this episode, the documentary remained archived and was never broadcasted again. As a result of the present research, the production is once again available for public access, in this case on RTVE's website.

notice, but it caught the attention of people who had no idea that it was there when they passed over it (our translation).³⁰⁾

The national press echoed this statement, emphasizing the symbolic legitimacy of Pedro Duque, a representative of the scientific community, and his proclamation that this plastic infrastructure is “admirable.”³¹⁾

Thus, the Sea of Plastic started to be celebrated as a monumental and unique space in the world, a noteworthy human intervention that no one could overlook, its sheer pres-



Fig. 6. A journalist shows an aerial shot of the Sea of Plastic in *Lo más de lo más*



Fig. 7. Satellite image of the SoP in *España a ras de cielo*

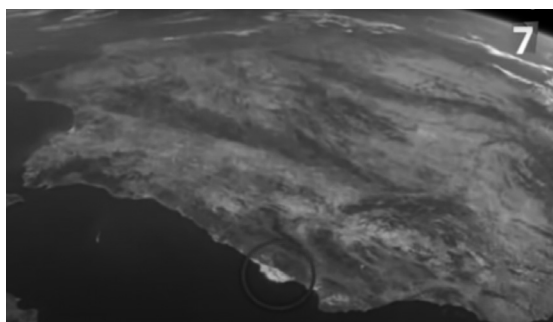


Fig. 8. The Sea of Plastic from a satellite in the documentary *Parcela nº 24*

30) Efrén Legaspi, “III Jornadas Astronómicas,” Andalucía Investiga, accessed December 23, 2022, <https://w3.ual.es/Universidad/GabPrensa/index/2007/abril/18-04-07/17-04-07%20ANDALUCIA%20INVESTIGA%2001.pdf>.

31) “Duque dice que los invernaderos de Almería son lo único que se ve desde el espacio,” *El Mundo*, April 10, 2007, accessed December 10, 2022, <https://www.elmundo.es/elmundo/2007/04/10/ciencia/1176220298.html>.

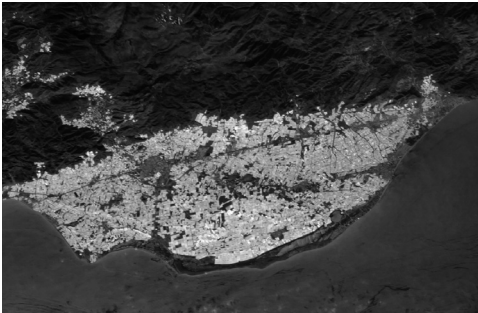


Fig. 9. iss008e14686. Photography taken by a crewmember of Expedition 8 in 2004 from the International Space Station



Fig. 10. Almería, Spain. Photography taken in 2011 by a crewmember of from NASA Terra spacecraft



Fig. 11. Instagram post of astronaut Thomas Pesquet

ence as remarkable as Earth’s most iconic landforms. These celebratory readings neglected the negative externalities related to social and environmental issues within the area. Examples of such a trend can be found in TV programs like the episode *Lo más de lo más* of the show *Comando actualidad* (S08E32), dedicated to “the biggest, the highest, the most dangerous,” the episode *España de mil colores* of the program *España a ras de cielo* (S01E05), or the institutional documentary *Parcela nº24* (José Luis Hernández Arango, 2015) (Figs. 6, 7 and 8). Iconically and verbally, Pedro Duque’s words became a mantra of the SoP’s “greatness”: “It is the only man-made work that can be seen from space. They said it was the Chinese wall, but no, it is the greenhouses of Almería,” the voice-over proclaims in *Parcela nº 24*.

Truth be told, the visualization of the SoP from Earth’s orbit had already generated interest among the astronomical community prior to Duque’s statements, as many photographs of the Plastic Sea had been taken by astronauts from the International Space Sta-

tion. Particularly relevant were those obtained in 2004 and 2011, as they were published on NASA's website and widely distributed in the press (Figs. 9 and 10). Astronauts' fascination with this space continues to this day. In 2021, the cosmonaut Thomas Pesquet took a picture of the Plastic Sea and uploaded it to his Instagram account with the following post (Fig. 11):

As the world's population continues to grow, we need to innovate to improve food production. Space research is already having an impact on this type of agriculture — indeed the word is technically no longer appropriate as it comes from the Greek word for 'field', and most tomatoes (for example) are fed directly with nutrients, without a field or soil — just like in space.³²⁾

As can be read, Pesquet links astronomical research to agricultural innovation, in line with the technological utopianism of the agribusiness' supporters. After all, aerial and satellite images of the Sea of Plastic have had a significant impact in the processes of institutionalization of this space,³³⁾ and have become an important symbol of the ideological conflicts within Almería's agro-industry. On the one hand, "the plastic regime is a powerful stronghold of the economy's technological utopianism,"³⁴⁾ so the images have been used to celebrate a joint achievement and are the symbol of the "Almería miracle." A substantial part of the population, greenhouse owners, and local farmers rely on these images to boast the reversal of a very unfavorable economic situation that placed the province at the bottom of the Spanish economy in the 1950s and which, thanks to the efforts of thousands of families, has become an economic, technological, and demographic benchmark.³⁵⁾ However, other sectors, attracted in part by the uniqueness of the landscape, use the same images and the undoubted scale of the infrastructure to criticize the social and environmental problems associated with this industry, as will be discussed below.

Film Images and Artistic Photography

The singularity of the SoP has also attracted the gaze of numerous local and international artists, who choose to portray this landscape from above. That is the perspective that bet-

32) Thomas Pesquet, *Instagram*, August 12, 2021, accessed December 15, 2022: https://www.instagram.com/p/CSeMIiwMHOQ/?utm_source=ig_web_copy_link.

33) Other aspects that have eventually contributed to the institutionalization of this territory and its presence in Spanish social imagery are (1) the recurrent use of this space as a background scenario for dramatic fiction stories: *El mejor de los tiempos* (Felipe Vega, 1989), *Las cartas de Alou* (Montxo Armendáriz, 1990), *Poniente* (Chus Gutiérrez, 2002), *Naufragio* (Pedro Aguilar, 2010) and (2) the use of the term "mar de plástico" (Sea of Plastic) to give the title to some of these cultural products. That is the case of the fiction movie *El mar de plástico* (Silvia Munt, 2011) or the TV series *Mar de plástico* (Boomerang TV for Atresmedia, 2015–2016).

34) Amanda Boetzkes, *Plastic capitalism: Contemporary art and the drive to waste* (Cambridge: MIT Press, 2019), 184.

35) This narrative of the Almería miracle is still very much present in the area, and has been transferred from the oral stories to new media representations in a process that could be conceptualized as "territory", by which land and stories are intertwined in the same phenomenon. Warren Cariou, "Territory: Land and Language in the Indigenous Short Story — Oral and Written," *Commonwealth Essays and Studies* 42, no. 2 (2020).

ter represents, first, the scale of the agricultural infrastructure; and second, the “accidental aesthetics,”³⁶⁾ that is, the involuntary geometric design that the greenhouses create, a striking patchwork of colors and forms which, following Heather Davis,³⁷⁾ could be inadvertently exchanged for a piece of contemporary art:

This phenomenon, of accidental or incidental aesthetics, is a hallmark of what is being called the Anthropocene — the era in which extractivist logic and capitalist economics have drastically reshaped the chemical, geological, and biospheric conditions of the earth. [...]. The aesthetic effects — as in *aisthesis*, or affects produced by our sensorial experience of the environment — have been entirely re-ordered by the presence of plastic.³⁸⁾

Before the use of advanced visual technologies became a common practice, the overhead views of the Sea of Plastic were mostly taken from the Sierra de Gador, the mountains that surround the space from the north. Examples abound in TV documentaries such as *Bienvenidos al paraíso* (Miguel Ángel Nieto, 2000) or *Vida de moro* (Josep Serra, 2001), and in the fiction features *Las cartas de Alou* (Montxo Armendáriz, 1990) and *Poniente* (Chus Gutierrez, 2002).



Fig. 12. Aerial shot of the SoP in *El Ejido, the Law of Profit*



Fig. 13. Aerial shot of the SoP in *Home*

36) Heather Davis, “Life & Death in the Anthropocene: A Short History of Plastic,” in *The Routledge Companion to Critical Approaches to Contemporary Architecture*, eds. Swati Chattopadhyay and Jeremy White (London: Routledge, 2019), 347–358.

37) Davis, *Life & Death in the Anthropocene*, 348.

38) *Ibid.*, 348.

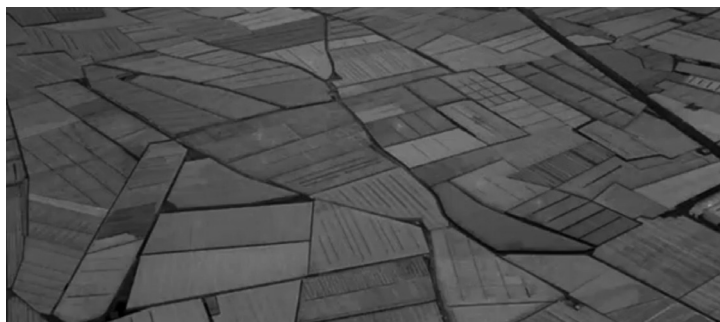


Fig. 14. Aerial shot of the SoP in *Blade Runner 2049*

In 2006, only a year after the famous satellite image of the SoP was published by the UN, the first aerial shots — taken from an aircraft — in international productions were produced. First, in the awarded documentary *El Ejido, the Law of Profit* (Ejido, la loi du profit; Jawad Rhalib, 2006) which denounces the poor living conditions of the workers of the greenhouses (Fig. 12), then in the international hit *Home*, directed in 2009 by the aerial photographer and environmentalist Yann Arthus-Bertrand (Fig. 13). In this documentary, Arthus-Bertrand uses aerial images of several places on Earth, alternating “between the sublime beauty of nature and the equally breath-taking scale of its destruction at the hands of development”³⁹⁾ to denounce how the ecological balance of Earth is threatened. Especially relevant to this context is the case of the blockbuster *Blade Runner 2049* (Denis Villeneuve, 2017) (Fig. 14), which uses aerial shots of the Sea of Plastic to represent a post-apocalyptic world in which, due to a climate catastrophe, people’s only source of protein comes from worms grown in greenhouses. Although dystopian and traumatic landscapes are not the same, the accidental aesthetics of *Blade Runner 2049* become an effective way to portray a dystopian science fiction world. It represents a non-desirable future, yet the images are captivating.

This vertical gaze, which used to be historically reserved for the military, the natural sciences, or high-budget film productions, has recently become reachable to a larger demographic. Local institutions, farmers, and artists can produce these kinds of images thanks to the democratization of drones. Examples of this could be the institutional documentary *Cultivando bajo el techo de cristal* (Nuria Vargas, 2016) (Fig. 15), the music video *Cogiendo habichuelas* (Faster, 2021) (Fig. 16), or the short film *Fuera de lugar* (Mandu Aguilera, 2017) (Fig. 17).

In these productions, filmmakers either choose an oblique perspective or a vertical one to portray the SoP’s landscape from above. The oblique perspective allows the audience to see an endless horizon of plastic. The result is not very different from the former shots taken from the mountains of Sierra de Gador, but in these cases, the directors have more freedom to choose the specific angle from which to portray the space. The vertical perspective, on the other hand, is the preferred one to focus on the “accidental aesthetics” previously mentioned. Oropesa gives an example of this when, discussing the TV series

39) Zoë Druick, “A Wide-Angle View of Fragile Earth’: Capitalist Aesthetics in The Work of Yann Arthus-Bertrand,” *Open Cultural Studies* 2, no. 1 (2018), 397.



Fig. 15. Aerial shot of the SoP in the documentary *Cultivando bajo el techo de cristal*



Fig. 16. Aerial shot of the SoP in the music video *Cogiendo Habichuelas*



Fig. 17. Aerial shot of the SoP in the short movie *Fuera de lugar*

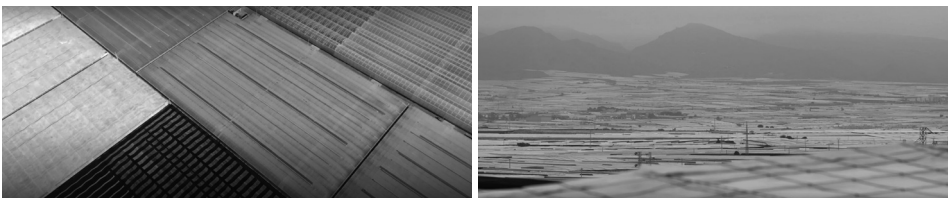


Fig. 18. Aerial shots of the Sea of Plastic in the documentary *Después de las ocho*

Mar de plástico (Sea of Plastic, Boomerang TV, 2015–2016), he states: “on an aesthetic level the drone shots of the sea of plastic highlight the beauty of the sun’s reflection on the plastic.”⁴⁰⁾ In some cases, oblique shots are combined with vertical ones to show both perspectives with different aims, like in *Mar de plástico* or the documentary *Después de las ocho* (Carlos Juan Martínez, 2020) (Fig. 18).

40) Prego, “La increíble expansión del ‘mar de plástico.’”

Most, if not all, of the audiovisual pieces that are shot in the Sea of Plastic, whether they aim at representing this specific space or a fictional one, contain shots taken from above that point at its scale and beauty. Nevertheless, its spectacularity is used with different means: to portray post-apocalyptic dystopian scenarios, to denounce the dysfunctionalities and negative externalities of the agribusiness, or to celebrate the economic milestone that the construction of this landscape has meant for the region. These productions have created, through similar images, different narratives concerning this hypermediated landscape and its history, and its economic, social, technological, and environmental implications.

Cinema is not the only lens-based art that has looked down on the SoP. Other visual artists have approached this space from above. The first one to do it was the photographer Edward Burtynsky in 2010 in his series *Water*. Burtynsky's work has focused since the 1980s on capturing the intervention and impact of industry on the planet. He has photographed thousands of landscapes that have suffered deep transformations after the development of human industrial activities. He has also worked in the trilogy of environmental documentaries *Manufactured Landscapes* (Jennifer Baichwal, 2006), *Watermark* (Jennifer Baichwal and Edward Burtynsky, 2013), and *Anthropocene: The Human Epoch* (Nicholas de Pencier, Jennifer Baichwal and Edward Burtynsky, 2018). The series *Water* aims to open a discussion on how landscapes are reshaped because of the human relationship with water. Paradoxically, water is absent from most of the pictures, like *Greenhouses*, the one that portrays the Sea of Plastic (Fig. 19). This picture is a good example of the mismatch between the message that the author aspired to convey and the reception of the image. In the press, *Greenhouses* has been used to debunk the myths of Almería's agribusiness,⁴¹⁾ by promoting its economic success and its benefits for the environment, but it has



Fig. 19. *Greenhouses* by Edward Burtynsky



Fig. 20. *Las norias de Daza* by David Thomas Smith

41) "Los falsos mitos de la agricultura almeriense," *Techno Teonel*, January 30, 2018, accessed January 20, 2023, <https://technoteonel.com/los-falsos-mitos-la-agricultura-almeriense/>.



Fig. 21. AV_MARPLASTICO_008 by Bernhard Lang



Fig. 22. N°TGSII_04 by Tom Hegen

also been used to promote a campaign for the removal of plastic waste from greenhouses⁴²⁾ or in the poster of the already mentioned TV series *Mar de plástico*.

Another visual artist that has benefited from this perspective is David Thomas Smith. Using aerial photographs taken from the internet, his series *Anthropocene* composes these digital files to create symmetric mosaics that “reflect upon the complex structures that make up the centers of global capitalism,”⁴³⁾ including the Sea of Plastic in his work *Las Norias de Daza* (2009–2010) (Fig. 20). This could be considered a post-photographic practice⁴⁴⁾ that combines photocartographic processes and recycled images from the internet that open up questions about the authorship and accidental aesthetics: “knowing that there are surveillance cameras and satellites photographing everything 24 hours a day leads us to speculate how much of it is accidental and unforeseen.”⁴⁵⁾ Thus, Smith departs from found images of a real landscape to create a fake symmetric one, giving the water a bigger presence in the picture than it has in real life and contributing to a further aestheticization of the SoP. Another singularity of this art piece is that, unlike most representations of the Sea of Plastic, it is presented vertically.

German aerial photographer Bernhard Lang has been since 2010 working on his *Aerial Views*, in which we can find the series *Mar del plástico* (2014) (Fig. 21) awarded in 2015 with the International Photography award in the category of Fine Art Abstract. In the project description, Lang makes explicit that Germany is one of the main destinations of the fruits and vegetables that are grown inside these greenhouses, pointing at the international scope of this phenomenon that, far from being a local issue, is a demand from richer countries in Europe.

Lastly, Tom Hegen is also a German photographer who focuses on the “traces we leave on the earth’s surface (and) provides an overview of places where we extract, refine, and consume resources.”⁴⁶⁾ After his series about Dutch greenhouses in 2019, in 2021 he did

42) “Campana de retirada de residuos plásticos de invernaderos en Almería, Granada y Huelva,” *Gestores de residuos*, August 2, 2018, accessed January 20, 2023, <https://gestoresderesiduos.org/noticias/campana-de-retirada-de-residuos-plasticos-de-invernaderos-en-almeria-granada-y-huelva>.

43) David Thomas Smith, accessed January 4, 2023, <https://www.david-thomas-smith.com/anthropocene>.

44) Joan Fontcuberta, “Por un manifiesto posfotográfico,” *La Vanguardia*, May 11, 2011, accessed January 15, 2022, <https://www.lavanguardia.com/cultura/20110511/54152218372/por-un-manifiesto-posfotografico.html>.

45) Fontcuberta, “Por un manifiesto posfotográfico.”

46) Tom Hegen, accessed January 4, 2023, <https://www.tomhegen.com/about>.

his series *Greenhouses II* on the Sea of Plastic (Fig. 22). In line with Lang's ideas, this series aims to show how "our demand for products that don't grow in our proximity and the need to have them available throughout the year puts pressure on landscapes we believe we have no connection to."⁴⁷⁾ Especially interesting is the focus of this series on the colonization of the mountains by the greenhouses after most of the flatland of Campo de Dalías has already been occupied.

Except for David Thomas Smith, all the aforementioned artists are aerial photographers specialized in environmental issues. As such, they search for places whose aerial view is both relevant to convey an environmental message but also somehow beautiful. In this way, the Sea of Plastic has become a fetishized landscape for aerial photographers and filmmakers who look for spaces that are both aesthetically appealing and serve the environmental message they aim to convey.

Aesthetics of the Anthropocene in the Aerial Images of the Sea of Plastic

Contemporary images of the SoP are inextricably connected to the colonial past of this space. Just as the greenhouses progressively colonized the province, triggered by the hydro-modernity plans of the Regime,⁴⁸⁾ plastic settled in its visual representations. Plastic is the "substrate of advanced capitalism,"⁴⁹⁾ "the material of the Anthropocene by excellence", and the hypervisible milestone of our traumatic landscape. In most of the aerial images of this agricultural space, you can see no humans, no soil, no water, only a fragmented geometric plastic layer overtaking nature, regardless of the purpose of each specific image. The aerial views depict how the economic activity of intensive agriculture follows the logic of colonization, spreading across the territory and extracting its resources for economic profit. This results in what Gómez-Barris calls "extractive view": "a matrix of symbolic, physical, and representational violence [...] that sees territories as commodities, rendering land as for the taking."⁵⁰⁾

The vertical representations of the Sea of Plastic are an accurate visual testimony of the Anthropocene. By zooming out and with plastic overtaking any human and more-than-human presence, they depict the ecologies of violence that take place, and how humans have the agency to heavily intervene and exert increasing pressure on the ecosystems. The existence of aerial views of this space from its origins until today allows us to document the "slow violence" that is taking place in the shape of ecocide in the long term,⁵¹⁾ a process that is often linked to capitalism and industrialization.

The aerial images are also evidence of how the agricultural industry is highly dependent on fossil fuel-based material, and how the "oil industry reterritorializes planetary life."⁵²⁾

47) Ibid.

48) Luis I. Prádanos, ed., *Spanish Environmental Cultural Studies* (Woodbridge: Tamesis, 2023), 27.

49) Davis, *Life & Death in the Anthropocene*, 348.

50) Gómez-Barris, *The Extractive Zone*, 5.

51) Rob Nixon, *Slow Violence and the Environmentalism of the Poor* (Cambridge: Harvard University Press, 2011), 2.

52) Amanda Boetzkes, *Plastic capitalism: Contemporary art and the drive to waste* (Cambridge: MIT Press, 2019), 184.

From this point of view, these images are an attempt to show the magnitude of the environmental violence that humans are infringing on the no-human world.

However, the effect that emerges from the decision to recurrently use the “technological gaze”⁵³⁾ together with the lack of human representation — which is the “present absence”⁵⁴⁾ of the images — and the aestheticization of the landscapes complicates the relationship between the artistic and the political condition of the images. The images show the more-than-human world organized and colonized to serve the needs of humans, but without pointing at them, in line with the current critiques that have been made to the term Anthropocene⁵⁵⁾. We experience the Sea of Plastic through a specific technological and visual framework and this vertical, distant, and abstract perspective consciously or unconsciously hides the socioenvironmental implications of this agribusiness.

The images reveal a local manifestation of the bigger “hyperobject”⁵⁶⁾ that plastic is. However, the most dangerous consequences of this hyperobject, which threatens the health of humans and more-than-humans, stay unrepresented. Beyond the hypervisibility of plastic in the representations of this space from above, its long-term externalities, like the pollution and plastic waste generated by the industry — which often is thrown into the ocean or accumulated in illegal landfills — or the unknown consequences of human exposure to this material, remain hidden. Something similar occurs with other externalities associated with this economic activity: the progressive desertification that the territory is suffering, the overexploitation of the aquifers, and the working conditions of the mostly migrant labor force who operate inside them. The representational challenge posed by these hard-to-visualize long-term externalities implies that they are absent from the aerial images of the Sea of Plastic, questioning their capacity in bringing forth a critical approach to this phenomenon.

The vertical and abstract perspective helps to “aestheticize” and romanticize this traumatic landscape, fostering its spectacularization. That is the reason why it has been considered one of the 10 most beautiful landscapes of Spain⁵⁷⁾ which would explain why the reception of the images and their latter use are often contrary to what the author of the image intended in the first place, being Burtynsky’s *Greenhouses* and United Nations’ *Almería, Spain* photographs exemplary of this. Even when the images of the SoP are used to portray dystopian post-apocalyptic futures — like in *Blade Runner 2049* — or to convey environmental messages — like landscape artistic photography, — they are visually appealing and celebrated. As Zoë Druick has stated regarding the work of Yann Arthus-Bertrand, director of *Home*,

53) Richard Lewis, “Technological Gaze: Understanding How Technologies Transform Perception,” in *Perception and the Inhuman Gaze: Perspectives from Philosophy, Phenomenology, and the Sciences*, eds. Anya Daly, Fred Cummins, James Jardine, and Dermot Moran (New York: Routledge, 2020), 128–142.

54) Caren Kaplan, *Aerial Aftermaths: Wartime from Above* (Durham: Duke University Press, 2017), 17.

55) Many authors dismiss this term as lacking a critical look at the unequal ways in which humans, due to colonial or gender issues, have historically impacted the environment.

56) Timothy Morton, *Hyperobjects: Philosophy and Ecology after the End of the World* (London: University of Minnesota Press, 2013).

57) “El ‘espectacular’ paisaje almeriense que está entre los 10 más bonitos de España,” *La voz de Almería*, February 23, 2020, accessed January 15, 2023, <https://www.lavozdealmeria.com/noticia/5/vivir/187387/el-espectacular-paisaje-almeriense-que-esta-entre-los-10-mas-bonitos-de-espana>.

His work is thus a compelling illustration of the contradictions at play when we are taught to look at the negative effects of capitalism through a liberal humanist lens: one risks telling a story about global responsibility that is incapable of mapping global power relations.⁵⁸⁾

On top of that, scholars like Davidson and Gismondi state that this aerial visual language establishes “an authoritative industrial discourse in support of corporate investment, government assistance, the inevitability of commercial-scale exploitation, and ultimately the human domination of passive nature.”⁵⁹⁾ The tension between the harmful nature of the landscapes and the magnificence of its representation has in turn been defined by Peeples as “toxic sublime.”⁶⁰⁾ Indeed, the vertical images of the Sea of Plastic become a paradigmatic example of the inspiring views of contamination denounced by Peeples, allowing us to think of the trauma inflicted on natural ecosystems, the problems of abstraction, and the aestheticization of traumatic landscapes. They exemplify the tension between the seen and the unseen⁶¹⁾ that has been present since the origins of aerial photography, between the artistic and the political image.

Conclusions

In this paper, we have explored the continuous presence of aerial images of the Sea of Plastic throughout its history, from the moment when it was barely a project engineered as part of the bigger hydro-modernity plan during the 1950s, to the current state of international acknowledgment of this infrastructure as a key supplier for the European market. In line with Gajic’s work, there has been an “active implication of aerial imaging in the process of environmental transformation and management in Spain from the 1950s onward,”⁶²⁾ and we build on this, pointing at the Sea of Plastic as a paradigmatic example of this implication, due to the exceptional extension of the land that has eventually been colonized and the continuation of the aerial regime until the present time, when satellite imagery keeps being used to control the growth and development of the crops even below the plastic. Hence the Sea of Plastic stands as a paradigmatic example of how “colonial visual regimes normalized an extractive planetary view that continues to facilitate capitalist expansion.”⁶³⁾

Second, we have analyzed these visions from above as important symbols for the process of institutionalization of this space. We have explored the crucial role that orbital images have had to place the Sea of Plastic on social imageries. The images have become a symbol of the territory, a weapon for the ideological battle that takes place in the area re-

58) Zoë Druick, “A Wide-Angle View of Fragile Earth,” 297.

59) Debra J. Davidson and Mike Gismondi, *Challenging Legitimacy at the Precipice of Energy Calamity* (New York: Springer, 2011).

60) Jennifer Peeples, “Toxic Sublime: Imaging Contaminated Landscapes,” *Environmental Communication: A Journal of Nature and Culture* 5, no. 4 (2011), 375.

61) Kaplan, *Aerial Aftermaths*, 14.

62) Gajic, *Soil, Water, and Light*, 69.

63) Gómez-Barris, *The Extractive Zone*, 6.

garding the legitimation and demonization of this enormous agricultural infrastructure. As we have demonstrated, the very same images are used by the agro-industry's stakeholders to celebrate the industry's world leadership in the field of high-tech greenhouse agriculture and by the critical voices that look at its socio-environmental consequences, from the grassroots activist movements to the United Nations Environmental Program.

Finally, we have analyzed the conflictive correlation between the political and the artistic nature of these images. Initially, we acknowledge the existence of a genealogy of images of the Sea of Plastic, which allow us to document the drastic changes that have taken place in this territory. This enables us to talk of the cluster of images of the Sea of Plastic from above as a visual testimony of the Anthropocene. However, although this perspective helps document a part of the slow violence that has been perpetuated in this traumatic landscape, we detect a representational challenge, fostered by the nature of the images, which prevents them from revealing the environmental consequences of this agribusiness. This translates into a mismatch between the environmentalist intentions with which many artists take aerial photographs of the SoP — and to which they explicitly allude in their films or photographic exhibitions — and the use that other sectors or individuals, appropriating these images, make of them. Thus, this hypermediated landscape has created, through similar images, different narratives in relation to its history and its economic, social, technological, and environmental implications.

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Cultivando bajo el techo de cristal (Nuria Vargas, 2016)

El Ejido, the Law of Profit (El Ejido, la loi du profit; Jawad Rhalib, 2006)

Home (Yann Arthus-Bertrand, 2009)

L'Eldorado de plastique (Arlette Girardot and Philippe Baqué, 2001)

Las cartas de Alou (Montxo Armendáriz, 1990)

Poniente (Chus Gutierrez, 2002)

Fuera de lugar (Mandu Aguilera, 2017)

Vida de moro (Josep Serra, 2001)

Biographies

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The Rhythms of More-Than-Human Matter in Azucena Losana's Eco-Developed Film Series *Metarretratos*

Abstract

This essay explores the eco-developing project *Metarretratos* by Mexican filmmaker Azucena Losana, addressing it in the context of a set of cinematic gestures concerned with the environmental impact of film. Focusing particularly on the film *Ceibo/Erythrina crista-galli*, the article argues that the series contributes to the three main axes that characterize academic debates about film and environmental concerns: a) with regard to cinematographic modes of production, b) concerning the thematization of the more-than-human and its relationships with humans and the environment, and c) with reference to the understanding of images as matter and imagination as action in the world. As part of a broader movement searching for less environmentally harmful film-developing solutions, the *Metarretratos* series has the particularity of experimenting with the chemical and curative properties of native plants from South America. Additionally, it depicts the plants/trees used in the developing recipe, foregrounding vegetal worlds as protagonists. Specifically, this paper discusses how *Ceibo/Erythrina crista-galli* engages with the healing properties of plants, drawing from indigenous knowledge systems and the philosophy of vegetal life. It explores the botanical significance of the Ceibo tree depicted in the film, as it exists in a particular soil and geography, the Plaza de Mayo in Buenos Aires, while simultaneously communicating with the spatialities and temporalities that exceed it. I suggest that what the eco-developing project reveals — reveal being the Spanish word for develop — is the very agency of both cinematic and vegetal matter in the creation of forms, images, and the world itself, exposing the inseparability of nature and technology. The cinematic dispositif that *Metarretratos* involves, we may speculate, is affected by the curative properties of the plants used; it seems to accommodate, translate, and transpose these qualities beyond itself, functioning as part of a curative mechanism of eco-traumatic aspects of landscapes.

Keywords

Azucena Losana, cinematic matter, film-developing, rhythm, vegetal matter, ecocriticism, new materialisms, Latin American moving images, ecology, environmental humanities

Introduction

We are sitting on a terrace facing the Douro River and one of the bridges that crosses it, connecting the cities of Vila Nova de Gaia and Oporto, Portugal. Azucena Losana, a Mexican filmmaker, was traveling through several European countries to screen her films when one of her Instagram stories showed her in Oporto, a few kilometers away from my home. I had a particular interest in her work since it was part of my research corpus, and I could not miss this opportunity to meet her, even though at the time, given the initial state of my research, I was only able to formulate broad questions about her work. Azucena quickly responded to my message, and a couple of hours later, there we were at a café in the Fontainhas neighborhood discussing her eco-developing project, one of Losana's several cinematic gestures concerned with the environmental impact of film.¹⁾

I first became aware of the *Metarretratos* series (*Metaportraits*, 2020) through the *Eco Developing* tab on the filmmaker's website.²⁾ It is in the context of the webpage that the encounter and experience of Losana's proposal take place, and not in other locations more commonly connected to cinema and art, such as theaters, galleries or museums.³⁾ Under the tab *Eco Developing*, we find three tree "portraits," *Tutiá/Solanum sisymbriifolium*, *Palo Borracho/Ceiba Speciosa*, and *Ceibo/Erythrina crista-galli*, all from 2020. Each portrait includes four key components that appear simultaneously. The first element is a silent black-and-white Super 8 film of the plant used in the developing recipe. The screen is divided vertically into two equal parts, with the left part showing the negative image of the tree/flowers used in the development and the right side showing the positive image (Fig. 1). The second concerns taxonomic information about the plants used in the recipe (their common names in several languages and their medicinal properties in Amerindian cosmologies). The third component consists of a black-and-white film-developing procedure that substitutes the usual environmentally harmful chemicals with developing recipes based on South American native plants, specifically from Argentina, where the filmmaker has lived and worked over the past decade. Finally, the fourth element corresponds to colored photographs of the tree and details of its flowers and/or leaves. In some cases, botanical illustrations and photographs of the roll before being developed are included. The "Meta" in *Metarretratos* thus expresses the notion of reflection in itself since the filmed portraits are those of the vegetal matter used in the film-developing recipe, images of themselves portrayed through their own beings.

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- 1) Other gestures include workshops to construct analog projectors with discarded or found materials, although this project seems to have more to do with Do-It-Yourself procedures than with environmental concerns. This DIY approach characterizes Losana's vast and complex artistic practices. She works mainly with experimental films, installations, performances, and videos. She has also worked as a film laboratory technician at "Arcoiris Super 8," an important laboratory in the region, "the only one left after all the big laboratories in South America closed." See "Azucena Losana: Hazlo tú misma," *Mostra de Cinema Periférico*, accessed January 12, 2022, <https://bit.ly/3S8s0Br>.
 - 2) On the artist's page, the name of the project is not mentioned, appearing under the category "Eco Developing." It was during the interview I made with Losana on June 8, 2022, in Oporto, that I learned about the name of the project.
 - 3) To date, Losana's webpage has been the project's only interface.



Fig. 1. Still from *Ceibo/Erythrina crista-galli* (Azucena Losana, 2020)

In this study, I argue that the eco-developed series contributes to the three main axes that characterize academic debates on film and environmental concerns. The first axis pertains to cinematographic modes of production, distribution, and consumption,⁴⁾ wherein *Metarretratos* embodies and promotes more sustainable cinematic practices through the use of less toxic film-developing solutions. The second axis involves the thematization of nature, the environment, the more-than-human and its relations to the human.⁵⁾ *Metarretratos* stands out by foregrounding vegetal existences and embracing plants as the stars of the films. This approach brings to the fore conceptions of the human, the “natural,” and the environment beyond human exceptionalism and anthropocentrism. Moreover, through its emphasis on the Guaraní knowledge about the depicted plants, *Metarretratos* challenges the dominant colonial narrative, wherein the colonizer is depicted as the exclusive knowledge holder. In doing so, the series presents a counter-movement to the prevailing extractive systems in which either the indigenous possessors of the expertise or the expertise itself are extracted or even destroyed.⁶⁾ The third axis refers to the un-

4) Some fundamental studies addressing the impact of the film industry on the environment are Nadia Bozak, *The Cinematic Footprint Lights, Camera, Natural Resources* (New Brunswick: Rutgers University Press, 2011), Richard Maxwell and Toby Miller, *Greening the Media* (Oxford: Oxford University Press, 2012), or Kate Oakley and Mark Banks, *Cultural Industries and the Environmental Crisis: New Approaches for Policy* (Cham: Springer International Publishing, 2020).

5) There are several studies addressing film's modes of representation of the “natural” and the other-than-human, such as Jhan Hochman, *Green Cultural Studies: Nature in Film, Novel and Theory* (Moscow: University of Idaho Press, 1998); Scott MacDonald, *The Garden in the Machine: A Field Guide to Independent Films about Place* (Berkeley and London: University of California Press, 2001); Anat Pick and Guinevere Narraway, *Screening Nature: Cinema beyond the Human* (New York and Oxford: Berghahn, 2013), and Ilda Teresa Castro, *Eu Animal — Argumentos para um Novo Paradigma — Cinema e Ecologia* (Sintra: Zefiro, 2015).

6) Due to the attention and dialogue it establishes with indigenous cosmologies of the region (Andean, Amerindian, etc.), Latin American cinema and its study may be particularly fruitful for questioning the dominant understanding of humans and other-than-humans. Nonetheless, research focusing on contemporary Latin

derstanding of image as matter and imagination as action in the world.⁷⁾ By focusing on the processes and privileging the encounters involved in its material transformations, *Metarretros* exposes the agency of both cinematic and vegetal matter in the creation of forms, images, and the world itself. It also reveals the intertwined practices of multispecies becoming and the inseparability of nature and technology, thus contributing to reconfiguring the understanding of both human and more-than-human modes of existence, as well as their relationships.

To develop the aforementioned argument, I closely follow the rhythms of the matter of the *Ceibo/Erythrina crista-galli* tree portrait and its four elements, filmed by Losana and displayed on the artist's webpage. By focusing on a specific vegetal mode of existence — the Ceibo tree, its trunk, flowers, and leaves — I aim to challenge the supposedly universal “plant” or even a “Ceibo” categorization. I focus on the specific rhythms of the Ceibo filmed by Losana as it exists in a particular soil and geography and at a specific time while simultaneously communicating with the spatialities and temporalities that exceed it.⁸⁾ Approached in its momentary configuration, that is, in its rhythmic dimension,⁹⁾ the Ceibo and its meaning require going beyond the individual and specific dimensions to focus on a meshwork of the interspecies relations that have made it what it is or what it may bring about in the future.¹⁰⁾ The properties of the Ceibo matter are understood not as static, meaningless, and lacking the capacity to act, but rather as generative becomings, as things that act on/with other things. I am interested in how meanings and stories are “embedded in material forms, intra-acting with the lives and landscapes of humans and nonhumans.”¹¹⁾ As opposed to interaction, which supposes that there are separate individual

American cinema has not yet been fully explored, with remarkable exceptions, such as Lucy Bollington and Paul Merchant, eds., *Latin American Culture and the Limits of the Human* (Gainesville: University of Florida Press, 2020) and Carolyn Fornoff and Gisela Heffes, *Pushing Past the Human in Latin American Cinema* (Albany: State University of New York Press, 2021). Indigenous cinemas have also been vital in challenging the forms in which film figures, shapes, and imagines human and more-than-human entities, and have been reinventing cinema, thus constituting a fundamental field to attend to. See, for instance, the following studies on indigenous cinema: Ana Carolina Estrela Costa, *Cosmopolíticas, Olhar e Escuta: Experiências Cinemáticas entre os Maxakali* (MA diss., Federal University of Minas Gerais, 2015); Rodrigo Lacerda, *Animism and the Mbya-Guarani Cinema* (London: Royal Anthropological Institute, 2016).

- 7) Some proposals focusing on the material conditions of cinema are Jussi Parikka, *A Geology of Media* (Minneapolis: University of Minnesota Press, 2015) or Kim Knowles, *Experimental Film and Photochemical Practices* (Cham: Palgrave Macmillan, 2020).
- 8) Even though I focus on the filmed Ceibo, which is in Plaza de Mayo in Buenos Aires, Losana depicts two Ceibos. One is filmed with a Super 8 camera in black-and-white. The second Ceibo, at an unknown location, is depicted through digital color photography. This choice to depict two Ceibos points to the diversity of Ceibos without wanting to reduce the totality to just one part. On the other hand, by presenting them almost as interchangeable trees, the Ceibo is devoid of its individual history, contributing to a “universal plant,” which would be desirable to challenge.
- 9) Following Benveniste, rhythm is understood as the momentary configuration of a flow in constant movement, observed in the moment of its formation. See Émile Benveniste, *Problèmes de linguistique générale* (Paris: Gallimard, 1966).
- 10) Donna Haraway, *The Haraway Reader* (New York and London: Routledge, 2004); Donna Haraway, *Staying with the Trouble: Making Kin in the Chthulucene* (Durham and London: Duke University Press, 2016).
- 11) Serenella Iovino and Serpil Oppermann, “Introduction: Stories Come to Matter,” in *Material Ecocriticism*, eds. Serenella Iovino and Serpil Oppermann (Bloomington: Indiana University Press, 2014), 13.

agencies that precede their relations, in intra-action these agencies are not regarded as distinct but as entities that emerge through their relations.¹²⁾

I begin this study by situating the *Metarretratos* project within the framework of plant-based processes for image creation. Subsequently, I delve into the botanical significance of the Ceibo tree, exploring its historical and cultural significance. Moving forward, I examine the specific location of the Ceibo tree as filmed by Losana, namely, the Plaza de Mayo in Buenos Aires, Argentina. I discuss how the project engages with the healing properties of plants, drawing from indigenous knowledge systems and embracing the philosophy of vegetal life. To conclude this essay, I emphasize the intertwined relationship between plant life and cinematic dispositif rhythms. Additionally, I put forth a speculative proposition regarding the *Metarretratos* dispositif's potential as a curative mechanism to address eco-traumatic aspects of landscapes.

I. (Moving) Image Creation and Plant Worlds

Background of the Plant-Based Image-Creating and Eco-Developing Processes

Plant-based image-creating may be dated back to the 1830s–1850s, to the work of scientists and amateur botanists such as John Herschel. Combining knowledge from botany, color theory, and the study of light, Herschel realized experiments using photosensitive emulsions of vegetal juices and the natural pigments of flowers from his garden to make images by letting them be exposed to the sun. This photographic process is called phytotype, also known as anthotype. Herschel is additionally identified as the inventor of the photographic process cyanotype, widely used by botanists and artists Anna Atkins and Anne Dixon. The studies carried out by Mary Somerville on the effect of the solar spectrum on plants and other substances were fundamental to Herschel's experiments. Herschel is also known for other pivotal contributions to the field of photochemistry, namely the identification of a photographic fixer which was communicated to both William Henry Fox Talbot and Louis Daguerre. According to the photography historian Boris Kossoy,¹³⁾ at the same time, Brazil was the site of cutting-edge experiences in the field of photography, thanks to the inventiveness of Hercules Florence, who created his own printing technique called polygraphy. In 1833, Florence managed to fix the image captured by a dark camera on paper using silver salts. Years before Herschel came up with the term, Florence used the word “photographie” in his diaries.

Concerning moving images specifically, the relationship between cinema and plants dates to the beginnings of cinema, as several studies have documented.¹⁴⁾ Due to its sup-

12) Karen Barad, *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning* (Durham and London: Duke University Press, 2007).

13) Boris Kossoy, *The Pioneering Photographic Work of Hercule Florence* (New York: Routledge, 2018).

14) See, for instance, Karel Doing, “Phytograms: Rebuilding Human–Plant Affiliations,” *Animation* 15, no. 1 (2020), 22–36; Teresa Castro, Perig Pitrou, and Marie Rebecchi, eds., *Puissance Du Végétal et Cinéma Animiste: La Vitalité Ré-vélée Par La Technique* (Paris: Les presses du réel, 2020); Graig Uhlin, “Feminism and Vegetal Freedom in Agnès Varda's *Le Bonheur* (1965) and *Vagabond* (1985),” *Philosophies* 7, no. 6 (2022),

posed ability to objectively represent nature and its aptitude for rendering plant movement noticeable to human perception, film technology was soon understood as an important scientific tool. Despite the early fascination with plants, Patrícia Vieira states that cinema continues

to use humanity as a measure against which its alterity is outlined. [...] It is as if plants were a riddle that could now be solved by the new techniques of cinema and, when finally looking at them face to face, humans ended up contemplating another version of themselves.¹⁵⁾

Both mainstream and experimental cinema tend to confine more-than-human existences to the background, “blocking access to the semiotic sphere” and reinforcing human exceptionalism.¹⁶⁾ Therefore, there is a tendency in cinema, as well as in cinema studies, to overlook the interdependence between the human and the more-than-human and to reinforce the division between culture and nature, as Anat Pick and Guinevere Narraway have pointed out.¹⁷⁾ Furthermore, there is a propensity to downplay the significance of non-human existences in cinematic imagery and stories and to “underplay the intertwining of historical, social, and ideological concerns with the environments in which they arise and which they constitute.”¹⁸⁾

In film, the remission of the plant to the background of what really matters — the humans themselves and what matters to humans — is also done through different cinematic techniques. From the outset, by subordinating plant rhythms to the rhythm of human perception, through the manipulation of the image speed to make it “as realistic as possible,” using mainly visual devices such as time-lapse photography and the fixed camera that frames the plants in the center of the image. Even in cinema studies and critical plant studies, conceptualizations aiming to address film and vegetal worlds beyond the anthropocentric logic may fail in their attempt to overcome the human-centered perspective, due to their dominant tendency to show that plants are very much like *Homo sapiens*, and thus tying themselves to the naturalist paradigm, as spotted by Vieira.¹⁹⁾

Eco-developing, for its part, refers to a movement of artists, photographers, and filmmakers based on experimental black-and-white film-developing solutions in which toxic

1–14; Teresa Castro, “Common Grounds: Thinking with Ruderal Plants about (Other) Filmic Histories,” *Philosophies* 8, vol. 1, no. 7 (2022), 2–18; Elio Della Noce and Lucas Murari, eds., *Expanded Nature: Écologies Du Cinéma Expérimental* (Paris: Light Cone Editions, 2022).

15) Patrícia Isabel Lontro Vieira, “Animist Phytofilm: Plants in Amazonian Indigenous Filmmaking,” *Philosophies* 7, no. 6 (2022), 2.

16) Chris Dymond, “New Growth: To Film Like a Plant,” *Ecocene: Cappadocia Journal of Environmental Humanities*, no. 2 (2021), 34.

17) Pick and Narraway, *Screening Nature*, 7.

18) *Ibid.*

19) Vieira, “Animist Phytofilm.” As I proposed elsewhere, we may extend the study of the relationship between cinema and plants to its intersections with the ritual consumption of plants by Amazonian shamans, the latter being understood as cinematic modes of experience that occur by other means. See Salomé Lopes Coelho, “Dream and *Yākoana*: Hypotheses to Understand Cinema as the Crossing of Worlds,” *La Furia Umana*, no. 43 (2022), n.p.

chemicals are replaced by elements less harmful to the environment. In addition to the independence they provide, these solutions are less damaging to human and more-than-human existences (water systems, air, etc.) than the standard developing solutions. Moreover, they are cheaper, easier to make, as they involve just three ingredients, and more accessible since they are homemade. Scott Williams and his Technical Photographic Chemistry Class at the Rochester Institute of Technology are often touted as the creators of a coffee-based black-and-white image-developing recipe that has served as the basis for experimentation for several contemporary artists and researchers (not just from cinema and art studies but also from scientific areas such as Radiology).²⁰⁾ The solution was later termed Caffinol. In 1995, Williams and the class found that tea and coffee were rich in phenolic acids (tannins), which have the potential for supporting film and paper development, and that when combining them with agents that balance the pH successfully, they can make printable images for the exposed film. Nowadays, sodium carbonate, a more convenient washing soda, is used as a pH-adjusting agent, with Vitamin-C (ascorbic acid) powder added to the formula — hence the name Caffinol-C.

(Moving) Image Creation and Plant Worlds in *Metarretratos*

Metarretratos can be placed in continuity with the botanic gestures of Herschel, Atkins, and the others mentioned above since Losana experiments with plant-based film-developing processes and focuses on botanical classification and knowledge conservation.²¹⁾ In the interview I conducted with Losana, the filmmaker stated that her idea was to promote the ability to recognize trees, flowers, and their uses as a “superpower that we, those of the city, are not normally interested in.”²²⁾ She wants to preserve the endangered knowledge about different plants and their uses as well as to visually preserve the plants, as botanists would do, but, in her case, by filming them. In this way, *Metarretratos* offers modes for preventing the loss of a specific conception and understanding of vegetal worlds. The disappearance of certain medicinal uses of plants would be as if the landscape had a part of itself amputated. Another motivation to start these experiments for eco-developing procedures was the awareness that the toxic chemicals used in traditional developing solutions are drained into the plumbing system, ending up contaminating bodies of water. As Losana states:

I was a lab assistant [...]. So, while I was working with the chemicals, putting together the developers, then developing, I realized that there was something super aggressive about that [...] to get rid of the chemicals and throw them into the *Río de*

20) Scott Williams and Technical Photographic Chemistry 1995 Class, “A Use for That Last Cup of Coffee: Film and Paper Development,” *Rochester Institute of Technology RIT Scholar Works* (1995), n.p.

21) Within the Argentine context, besides Claudio Caldini’s films focusing on vegetal worlds, such as *Cuarteto* (1978) or *Poilean* (2020), we may refer to Leandro Listorti’s recent film *Herbaria* (2022), a striking example of the intersections between cinematic and vegetal worlds, as well as conservation gestures in cinema and botany.

22) Azucena Losana, personal interview, June 8, 2022.

la Plata. I asked for forgiveness from the *Río de la Plata*. It is a very small laboratory, and it was not that I was destroying the river, but it is a little bit like that, right?²³⁾

Paradoxically, at around the same time that the Ceibo tree filmed by Losana was planted in Plaza de Mayo in Buenos Aires, the Finnish corporation Oy Metsä-Botnia Ab (commercial name Botnia) implanted two major pulp mills on the margins of the Uruguay River that flows to *Río de la Plata*, the River Plate. Losana was concerned about the waste of her developing work and the possible contamination of the River Plate, whereas Botnia had permission to install two factories on the east coast of the Uruguay River and extract a significant volume of water from it. More carbon dioxide was liberated into the atmosphere by these gigantic factories, as well as many other chemicals, endangering human and more-than-human entities, including the rivers themselves.²⁴⁾

In the long history of dialogues between film and plants, Losana's work bears particular relevance due to this double gesture of using plant-based developing formulas and making the plants the stars of the films. While *Metarretratos* echoes the work of botanists, it distances itself from canonical taxonomies used in botanical studies. Losana establishes a way of looking at and dealing with plants that disrupt the botanical systems of collection, differentiation, and classification on a fundamental level: the Ceibo tree and its parts were not collected and extracted from the tree's home milieu. What is depicted is not a tree or parts of it that were plucked by the roots and meticulously prepared for cataloging, study, and conservation purposes; on the contrary, we see moving images of a particular tree, its leaves and flowers, and their way of existing in its own context. The tree parts selected for the developing process were collected from the ground after having fallen or having been harvested so that the life of the trees persists.

With regard to the resemblances between *Metarretratos* and the field of botany, the filmmaker initiates the visual presentation by positioning the complete tree at the center of the frame, employing a wide, static shot. Similar to how a paper sheet is to botanists, the wide shot of the plant is to film. The blurry image prevents a detailed view of the tree and its parts, which can only be achieved by two subsequent close-ups of the leaves and flowers. The first close-up maintains the Super 8 format, but in the second one, the image expands, its limits coinciding with the boundaries of the screen. This is an idiosyncrasy of this film, not observable in other works of the series. Losana's purpose is that of a botanist, i.e., a detailed depiction of the tree and its parts, but the difference lies in the technique being used. Cinema allows Losana to conduct our gaze between wide shots and close-ups. This resemblance with botanical gestures is also present in the description accompanying the images. The filmmaker uses a classification system through tree designations in different languages, as well as the specific family, according to the "International Code of Nomenclature for algae, fungi, and plants," resembling the usual botanic plates that tend to see plants as objects.²⁵⁾ The objectification of plants is common since they tend

23) Ibid.

24) The so-called "paper mill conflict" between Argentina and Uruguay involved strong citizen resistance and a demand to The International Court of Justice by Argentina.

25) Nicholas J. Turland, John H. Wiersema, Fred R. Barrie, Werner Greuter, David L. Hawksworth, Patrick S. Herendeen, Sandra Knapp, Wolf-Henning Kusber, De-Zhu Li, Karol Marhold, Tom W. May, John McNeill,

to be reduced to functions such as providing breathable oxygen, food, clothes, etc. This understanding of plants as objects or resources is only possible by depriving or eliminating “their powers of structuring the reality [...], namely, their characteristic and sensory affections, their singular temporality, their voracity, and their capacity to both kill and nourish or proliferate the living.”²⁶⁾

In the following segment, I specifically explore the botanical significance of the Ceibo tree while also delving into its historical and cultural rhythms. Furthermore, the section examines the presence of the Ceibo tree in Plaza de Mayo and discusses the ways in which *Metarretratos* addresses the healing properties of plants, highlighting the intertwining of plant life and cinematic apparatus.

II. The Rhythms of Vegetal and Cinematic Matter

The Rhythms of the Ceibo/*Erythrina crista-galli* Flowers

Botany classifies the Ceibo tree as *Erythrina crista-galli* (from the Greek word *erythros* for red and from the Latin *crista-galli*, which means rooster crest). It belongs to the legume family *Fabaceae*, which has around 110 species dispersed throughout the tropical and subtropical regions of the planet. The *Erythrina crista-galli* possesses a tortuous trunk, compound leaves, trifoliolates with glabrous leaflets, and red flowers. The Ceibo's fruit is a pod with bean-like seeds. This species is typical of swampy lands, rarely found in the forest interior, and flourishes in the summer. The flower of the Ceibo is the national flower of Argentina, as designated in the Decree 13847/42 in December 1942, even though it is not the national tree (that is “Quebracho colorado chaqueño”/*Schinopsis balansae*) and each province has its own flower. The Ceibo tree originates in South America, especially in the coastal areas of Argentina, Brazil, Paraguay, and Uruguay, where it is also a national flower. In the year that the Ceibo was decreed the national flower of Argentina, the main square in Buenos Aires, Plaza de Mayo, was also decreed a National Historic Place. It is the Ceibo tree in Plaza de Mayo, the only one from this species at that location, that Losana films in *Metarretratos*. Flower and square both appear as “natural” tools to reinforce the national identity of Argentina.

One of the reasons mentioned in the decree for establishing Ceibo as the national flower is its evocations in legends, with the legend of Anahí being the most well-known. Anahí was a Guaraní resistant who was captured, along with other indigenous peoples, during the Spanish Conquest of the region. Taking advantage of the moment when the guard who watched her was sleeping, Anahí killed the incarcerator and managed to escape, but was not able to go too far and was eventually recaptured. As revenge for killing the incarcerator, Anahí was sentenced to death at the stake. She was tied to a tree, and when the flames started to touch her, she turned into a tree of green leaves and red flow-

Anna M. Monro, Jefferson Prado, Michelle J. Price, and Gideon F. Smith, eds., *International Code of Nomenclature for algae, fungi, and plants* (Glashütten: Koeltz Botanical Books, 2018).

26) Noelia Billi, “La caída del cielo y la diplomacia vegetal,” *La Furia Humana*, no. 43 (2022), n.p.

ers, the Ceibo tree, dyed with Guaraní blood. There is a dissonance in choosing a tree entangled with the Guaraní cosmologies and resistance as a national symbol since the region's nation-states, Argentina included, were built upon the denial and genocide of the indigenous peoples that inhabited these territories.

The tree is thus deeply intertwined with the Guaraní people. The medicinal properties mentioned in *Metarretratos* are also based on Guaraní uses. Losana inclusively mentions the name of the tree in Guaraní, *zuinaná*, although I have only seen it referred to elsewhere as *zuiñandí*.²⁷⁾ One of the main goals of *Metarretratos*, as we saw before, was to acknowledge and spread the curative properties of the plants. Although its uses are varied, namely for construction, artifacts, and handicrafts,²⁸⁾ Losana chooses to address its medicinal properties and, specifically, how the Guaraní people used it:

The Guaraní used the flowers for dyeing, and the crushed bark was the only remedy for the poisonous wounds of the jaguar's claws. There was also a famous remedy made from the bark and flowers against "troubles of love," perhaps due to the alkaloids of the bark that have *deep narcotic and sedative properties. In moderate amounts it is good as a tranquilizer to combat anxiety and as a plant to sleep.* The leaves are used in baths and washes to heal sores and wounds. This same preparation serves to wash and/or stop the bleeding of wounds and cuts. [My highlights]²⁹⁾

According to Gustavo Fabián Scarpa and Leonardo Martín Anconatani,³⁰⁾ the most "outstanding historic herbarium of the South American Southern Cone" is *Materia Médica Misionera* (1710) by the Jesuit Pedro de Montenegro. It consists of a treaty on medical botany, containing a corpus of information about the medicinal properties of plants used by Jesuit missionaries in the region, illustrated in a total of 136 plates. The botanical plate XXIV depicts some leaves from the Ceibo tree, trunks, and a jaguar (Fig. 2).³¹⁾ The description emphasizes the curative properties of the Ceibo tree, indicating that, after shaving the thorns, the trunk should be smashed and applied to injuries.³²⁾ Relying on the knowledge of indigenous peoples, Jesuit priests such as Montenegro installed herbaria and

27) Jorge Miño, Susana Gorzalczy, Valeria Moscatelli, Graciela Ferraro, Cristina Acevedo, and Oksana Hnatyszyn, "Actividad Antinociceptiva y Antiinflamatoria de *Erythrina Crista-Galli* L. ('Ceibo')," *Acta Farm: Bonaerense* 21, no. 2 (2002).

28) Giovana de Souza Pereira, Francisco Silva Noelli, Juliano Bitencourt Campos, Marcos Pereira Santos, and Jairo José Zocche, "Ecología Histórica Guaraní: As Plantas Utilizadas No Bioma Mata Atlântica Do Litoral Sul de Santa Catarina, Brasil (Parte 1)," *Cadernos Do LEPAARQ XIII*, no. 26 (2016), 198–246.

29) Losana, personal interview.

30) Gustavo Fabián Scarpa and Leonardo Martín Anconatani, "La 'Materia Médica Misionera' Atribuida al Jesuita Pedro de Montenegro En 1710: Identificación, Sistematización e Interpretación de Los Usos Medicinales de Las Plantas y Sus Implicancias Para La Etnobotánica Actual," *IHS: Antiguos Jesuitas En Iberoamérica* 7, no. 1 (2019), 24–46.

31) Roberto Poletto and Samuel Cristiano Welter, "A Matéria Médica Misionera Do Ir. Pedro Montenegro (1710): Um Estudo Sobre as Virtudes Das Plantas Mediciniais Nativas Americanas," *Revista Historiador*, no. 4 (2011), 96–116.

32) Cf. Eliane Cristina Deckmann Fleck, "A Medicina Da Conversão: Apropriação e Circulação de Saberes e Práticas de Cura (Província Jesuítica Do Paraguai, Século XVIII)," *Revista de Estudos Marítimos y Sociales*, no. 11 (2017).



Fig. 2. Botanical plate XXIV, *Materia Médica Misionera*

pharmacies and systematized, and disseminated knowledge via frequent correspondence and circulating treaty copies among Jesuit settlements (called reductions), Jesuit Provinces of America, and Europe.

As stated by Moisés Santiago Bertoni, one of the best-known specialists in Guaraní medicine, there is a generalized idea that the Guaraní knowledge of the medicinal properties of flora comes from the Jesuits and their studies. Nevertheless, the Jesuits only assembled and spread the knowledge produced by the indigenous peoples.³³⁾ The indigenous knowledge was appropriated and frequently distorted due to the Jesuits' evaluation of all plants according to their understanding of European flora. Either the possessors of the expertise or the expertise itself were extracted and sometimes destroyed. Botany, affirms Noelia Billi, has been a part of an "extractive system of knowledge" from indigenous communities, promoting "the transplantation, capitalization, and exploitation of both human and plant groups."³⁴⁾ We may understand the Jesuits' knowledge appropriation, extraction, and destruction as forms of *epistemicide*. Although they did not "murder it," both the extraction of knowledge for the benefit of occidental humans and the deturbations by the Jesuits could expand the understanding of *epistemicide*, since it also involves the destruction of social practices and the disqualification of social agents that operated according to such knowledge.³⁵⁾ Furthermore, the extractive system also constituted one of the condi-

33) Moisés Santiago Bertoni, *De La Medicina Guaraní: Etnografía Sobre Plantas Medicinales* (Córdoba: Buena Vista Editores, 2008), 148.

34) Billi, "La caída del cielo y la diplomacia vegetal," n.p.

35) Raul Pertier, "The rationality problematic: An Anthropological Review of Habermas' 'The Theory of Communicative Action' Volume I," *Social Analysis: The International Journal of Social and Cultural Practice*, no. 23 (1988), 72–88.

tions for the genocide perpetrated by European colonization. By choosing to mention this indigenous knowledge and highlighting its Guaraní provenance and uses, Losana is promoting a counter-movement to the prevailing extraction, appropriation, and erasure actions.

Returning to the curative properties of the Ceibo tree and its geography, I find the selection and implantation of the tree with these characteristics in Plaza de Mayo intriguing. The reasons mentioned in the decree for electing the Ceibo as the national flower are not directly concerned with these properties: the decree refers to qualities such as the beauty of the flower or its importance to local folklore tales or music. Nevertheless, we may ponder the wounds that may need healing at the core of the political, economic, and social center of the capital and the country.³⁶⁾ Perhaps a more significant question would be related to the narcotic and tranquilizing properties of the tree and its hypnotic effects. We may ask why a tree with sedative properties would be installed at the core of the Argentinean nation-state, symbolically as the national flower but also physically due to its localization in the main square.

Plaza de Mayo has a crucial role in the history of the city and the country, and the Ceibo has taken part in and generated that history for almost two decades (Fig. 3).³⁷⁾ I am puzzled by the paths this inquiry may open. How has the Ceibo contributed to historical events? As Maurice Maeterlinck asserted in his book *The Intelligence of Flowers*, the “plant world that strikes us as so tranquil, so resigned, where all seems to be acceptance, silence, obedience, reverence, is on the contrary one wherein the revolt against destiny is at its most vehement and most obstinate.”³⁸⁾ We could ask about the resistances and rebellions of the Ceibo of Plaza de Mayo.³⁹⁾ Moreover, we can query about what the Ceibo of Plaza de Mayo has witnessed. To begin, we could ask how many rounds of the Madres de Plaza de Mayo the Ceibo has been part of through its particular mode of existence. How does its corporeality reveal the multiple spatial and temporal scales it traverses? How many demonstrations, riots, police violence, and political discourses, among other events, has the Ceibo witnessed? If the living structures of plants are *their* semantic structures, as Michael Marder states, what is this Ceibo filmed by Losana expressing?⁴⁰⁾ What are the stories it tells? Would it be possible to translate its forms of knowledge, sensitivity, memory, learning, and thinking?

In dialogue with the herbarium created by the artist Anaïs Tondeur, consisting of 31 rayograms of plants harvested in the “exclusion zone” of Chernobyl, i.e., the thirty kilo-

36) Sonia Berjman, “Una Mirada a Los Espacios Verdes Públicos de Buenos Aires Durante El Siglo XX,” *Revista de Arquitectura* 8, no. 1 (2006), 28–33.

37) Concerning the age of the Ceibo, and, consequently, the events it may have witnessed, it was not possible to find the precise date of the plantation. I was able to collect some photos of the Ceibo in Plaza de Mayo and identify the year they were taken through the events depicted (usually demonstrations). Showing them to a landscape architect from Argentina, Ana Pessio, it was possible to identify their estimated age.

38) Maurice Maeterlinck, *The Intelligence of Flowers* (New York: State University of New York Press, 2008), 2.

39) The Mothers of the Plaza de Mayo is a human rights movement founded in opposition to the military dictatorship by Jorge Rafael Videla. Its main missions are to locate the *desaparecidos* (the missing) and to identify those responsible for the crimes against humanity in order to advance their trial and sentencing. Since 1977, the Mothers of Plaza de Mayo have been marching around the Plaza de Mayo every Tuesday.

40) Anaïs Tondeur and Michael Marder, *Chernobyl Herbarium* (San Sebastián: Cristinaenea Fundazioa, 2003), 19.



Fig. 3. Ceibo between protest banners (on the left), Malvinas war veterans protest camp. Plaza de Mayo, 2010. Photo by Katja Speck

meters surrounding the nuclear plant whose reactor number four exploded in 1986, Michael Marder writes 31 reflections and memories. Drawing on a rayogram of the *Geranium chinum*, the philosopher addresses the plants' excess of meaning. Before any use, he argues, "plants radiate a meaning of themselves, and their corporality [...] is the result of a living interpretation of the environment, such as the direction and intensity of the sun-rays or the amount of moisture in the air."⁴¹ Although he is referring specifically to the impression of radioactivity in the images, we may wonder whether this excess of meaning does not permeate other plants and their temporal and spatial scales. Perhaps this excess linked to the history of plant growth in a specific soil is expressed and imprinted on the image beyond the specific case of the Chernobyl flora. With Marder, and like Anaïs Tondeur's plants, we may say that Losana's trees assimilate the imperceptible and inconceivable, and that this excess of meaning, dense and impenetrable, jumps from the frame.

The Rhythms of the Cinematic Dispositif and the Ceibo Flowers on Film

We may speculate whether the *Metarretratos* dispositif, encompassing its technological, enunciative, spatial, temporal, and material dimensions, is influenced by the curative properties of the plants employed. *Metarretratos* prompts an inquiry into whether the dispositif not only employs or accommodates plants as developers and subjects of the films

41) Ibid.

but also serves as a conduit, translation, and transposition of the plants' curative properties. In this capacity, it operates as a healing mechanism to address the eco-traumatic dimensions of landscapes on multiple scales. A more explicit scale is related to climate change, specifically concerning the contamination of water bodies. By substituting toxic chemicals with local plants, Losana reduces the impact of the film on water, albeit very slightly. Moreover, this gesture can enhance other artists' and filmmakers' care practices, affecting their future choices. A second scale would be the foregrounding of Guaraní knowledge of the plants. By highlighting the Guaraní provenance and uses of the plants, Losana is resisting the epistemicide initiated by the colonization of indigenous knowledge, which still prevails through gestures of extraction, appropriation, or erasure.

In *The Life of Plants*, Emanuele Coccia claims that plant life is "life as complete exposure, in absolute continuity and total communion with the environment," thus embodying the most direct and elementary connection that life can establish with the world.⁴²⁾ Because of that, plants are the purest observatory for contemplating the world in its totality, the philosopher argues. In this theorization of vegetal life, flowers have a primordial role since they are the consummation of the process of absorption and capture of the world. To get to know the world coincides with the variation of the form itself, its metamorphosis caused by the outside, with the flower being the part of the plants that allows this process to be achieved. The evolutionary choices of flowers, or their metamorphoses, are not limited to the production of energy via photosynthesis, although light matter has a paradigmatic role in both plants and image creation. As Roland Barthes beautifully writes in *Camera Lucida*, in a passage that Losana recalled in our conversation, light traverses the thing photographed and the person observing the photograph:

From a real body which was there proceed radiations which ultimately touch me, who I am here [...]; the photograph of the missing being, as Sontag says, will touch me like the delayed rays of a star. A sort of umbilical cord links the body of the photographed thing to my gaze: light, though impalpable, is here a carnal medium, a skin I share with anyone who has been photographed.⁴³⁾

Losana felt touched — moved — by the idea that the light touching the Ceibo tree was touching her while filming and developing the image of the tree. She was also touched — moved — by the light itself that had touched the tree. We can discuss whether light is just a transversal component touching different elements of the world or whether it may be the very condition of possibility for those elements. The light that has touched that Ceibo tree does not just touch Losana or us now, in the moment of our encounter, but it is the very condition of possibility of that encounter, providing the medium we both inhabit, the atmosphere. Barthes states: "It is often said that it was the painters who invented Photography [...]. I say: no, it was the chemists." And we may say: "No, it was the chemicals and the light."⁴⁴⁾

42) Emanuele Coccia, *The Life of Plants: A Metaphysics of Mixture* (Cambridge: Polity Press, 2019), 14.

43) Roland Barthes, *Camera Lucida: Reflections on Photography* (New York: Hill and Wang, 1981), 80–81.

44) Ibid., 80.

It is thanks to the flower that plant life becomes a space in which colors and shapes explode, conquering the mastery of appearances. When related to the film camera and the developing solution, the Ceibo flower's capacity for multiplying forms strengthens. The film-developing formula based on Ceibo flowers not only embraces the forms and colors of the flowers but also metamorphoses itself into other forms, shapes, and images. It allows the passage from a latent image on the film's emulsion into a manifest image. If the flower is an active instrument of the mixture, since any encounter and any union with other individuals occur through the flower, these entities appear as a threshold where the individual and the species open themselves to the possibilities of mutation, change, or death. The power of the mixture is amplified by the cinematic dispositif (both the camera and the developing procedures). Film is not circumscribed to appearances, and the fact that *Metarretratos* depicts the flowers as responsible for the form's transfigurations requires us to look back at the technical apparatus. *Metarretratos* reveals that the medium is "natural" from the outset. The project exposes the world as it is: a "natureculture," an inseparability of what is conceived as the natural world and the technical one.⁴⁵⁾ *Metarretratos* was able to foresee and translate that into a cinematic experience; that in flowers, there is no opposition between matter and fantasy, imagination and development, body and knowledge, image and matter.

By foregrounding the plants in the same gesture as it embraces them as the stars of the film, *Metarretratos* reveals that both the vegetal life and the cinematic dispositif are places of indistinction between the material and the cultural. The project does not merely "depict" vegetal life; instead, it reveals the agency of plants in the performative construction of the world. What is displayed in *Metarretratos* is the world exposed in its inextricable mixture, i.e., as a meshwork of human and more-than-human entanglements, including not just the vegetal life, the fungi or water, to name some other-than-human modes of existence, but also the inhuman cinematic apparatus. The plants are already technical devices of development, and cinema is a natural phenomenon (from the minerals used on the cameras to the celluloid, etc.). In other and more adequate words, *Metarretratos* puts the understanding of technology and nature as separated realms under suspicion.

Conclusion

I have argued that *Metarretratos* makes an important contribution to discussions about film and environmental issues on three levels: a) with regard to cinematographic modes of production, b) concerning the thematization of the more-than-human and its relationships with humans and the environment, and c) with reference to the understanding of images as matter and imagination as action in the world. Moreover, I suggested that the cinematic dispositif that *Metarretratos* involves is able to accommodate, translate, or trans-

45) Introduced by Donna Haraway, the term does not have a single definition. It brings together different epistemological and ontological approaches that question dichotomies, such as nature/culture and human/non-human, highlighting the inseparability and mutual constitution of binaries. See Donna Haraway, *The Companion Species Manifesto: Dogs, People, and Significant Otherness* (Chicago: Prickly Paradigm Press, 2003).

pose the curative qualities of plants, functioning as part of a curative mechanism of eco-traumatic aspects of landscapes at different scales. The first possibility for these curative properties is *Metarretratos*' promotion of more sustainable cinematic practices through the use of less toxic film-developing solutions. Although on a very small scale, Losana's practices contribute to the reduction of water contamination, be it the River Plate (more directly concerned with the project) or other planetarily connected water bodies, such as the Douro River, where the filmmaker and I first met. The second dimension to consider would be the challenge of the general distribution of the sensible⁴⁶⁾ that tends to reduce plants and other-than-humans to passive, static substances devoid of meaning and deprived of the potentiality to act. Additionally, the series foregrounds Guaraní knowledge of the portrayed plants, contesting the extractive system that devalues or devastates indigenous expertise.

In Spanish, Losana's mother tongue, the developing process is called *revelado*, which literally means revealed, also sounding as *rebelado*, rebelled. In *Metarretratos*, what is constantly being revealed, simultaneously rebelling against a full understanding, is the process itself, the gestures, and the materiality involved. The processes involved in the film's material transformations are given priority over the film itself, which is no longer the sole focus of attention. What is *eco revelado*/eco-developed in *Metarretratos* is the very agency of more-than-human matter — the vegetal and the cinematic — in the creation of forms, images, or the world itself. It exposes the inseparability of nature and technology, suggesting that instead of the interactions among supposedly preexisting elements, there exist naturecultures with intra-acting elements. Like the very Ceibo flowers filmed by Losana, *Metarretratos* is an agent of revelation and a matter of agency, simultaneously revealing and being revealed, and hopefully also rebelling.

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46) Jacques Rancière, *The Politics of Aesthetics: The Distribution of the Sensible* (London and New York: Continuum, 2006).

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Filmography

Ceibo/Erythrina crista-galli (Azucena Losana, 2020)

Cuarteto (Claudio Caldini, 1978)

Herbaria (Leandro Listorti, 2022)

Palo Borracho/Ceiba Speciosa (Azucena Losana, 2020)

Poilean (Claudio Caldini, 2020)

The Sound We See — Fernanditol (Azucena Losana, 2018)

Tutiá/Solanum sisymbriifolium (Azucena Losana, 2020)

Biography

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Becoming-Grains-of-Mercury: Documentaries, Posthumanism, and the Entanglements of Traumas

Abstract

Félix Guattari, in his ecosophical work *The Three Ecologies*, urges us to contemplate and, most importantly, to live transversally with the entangled ecologies of nature and culture/society. Specifically, he states that “it is simply wrong to regard action on the psyche, the socius, and the environment as separate;” particularly, he adds, when it comes to the “simultaneous degradation of the three areas.” Guattari’s transversal process is more accurate than ever if we consider how human activity, in the context of the current geological epoch — the Anthropocene — has sent the Earth’s natural ecosystems into a tailspin; into a course of environmental, social, and psychical post- and pre-traumatic syndrome of entanglements of trauma(s). At this moment, what roles do documentaries play in penetrating the geological scars of the becoming-traumatized Earth? How can they convey our transversal and posthuman understanding of the entanglements of traumas? More specifically, how do we consider the ecological disasters that have already occurred and *have yet to occur* on Earth as entangled human and non-human traumas, respecting that also the Earth-others have been undergoing a process of traumatization? As the entanglements of the traumatic syndrome are an ongoing, impending, and imminent processual (and imaginative) catastrophe that *has not yet happened*, thus proclaiming a condition here defined as “pre-trauma,” how do we re-think trauma through a temporal lens which incorporates the notion of *pre-trauma*? The proposition of this paper is to transversally think about the entanglements of trauma(s) by initiating a conversation between posthumanism, canonical trauma studies, and contemporary documentary ecologies in order to specifically disclose how it is necessary to radically question and renovate our perspectives on trauma and its temporal dimension(s), finally acknowledging the intermeshed amalgam of our terrestrial existence.

Keywords

Eco-Trauma, Pre-Trauma, Posthumanism, Trauma Studies, Experimental Documentaries, Documentary Ecologies

Introduction

Artavazd Pelechian's latest film, *Nature* (2019), opens with a series of shots juxtaposing grandiose, heavenly, and sublime natural sceneries with the violent tremors and deep wounds that those landscapes have suffered due to the traumatizing interventions of human beings on the environment. In the historical moment of the Anthropocene, a term coined by Paul J. Crutzen which characterizes the contemporary period of the Earth heavily impacted by human activities,¹⁾ the human species is not the only terrestrial being who has been and will continue to be traumatized as a result of the human-induced climate change. In this regard, following Félix Guattari's ecosophical thinking in *The Three Ecologies*, "it is quite simply wrong to regard action on the psyche, the socius, and the environment as separate. [Especially if we want to] confront the *simultaneous* degradation of these three areas. [...] We need to apprehend the world through the interchangeable lenses of the three ecologies."²⁾

Ahead of his time, in 1989 Guattari advocates for a process of considering and respecting the entangled connections between what he defines as the three ecological realms: mental, social, and environmental.³⁾ Guattari, therefore, explores the complexity of our assembled and dynamic planetary existence while announcing an ethico-aesthetic ecosophy which contemplates both human and non-human modes of existence as inherently transversal. Guattari proposes transversality as an ecological and political concept, according to which the subject is not divided from the natural, social, political, and environmental. A transversal conception of subjectivity is the result of a profound and inherent connection in an assemblage with the pluralities of modes of existence.⁴⁾ In line with this Guattarian reasoning, in *The Posthuman* Rosi Braidotti argues that the environment "rests on an enlarged sense of inter-connection between self and others, including the non-human or 'earth' others. This practice of relating to others requires and is enhanced by the rejection of self-centred individualism."⁵⁾ Guattari's transversal subject and Braidotti's posthuman subject are more necessary than ever when we reflect upon our contemporary geological epoch as an alarming, problematic, and wounding moment in which human activities have sent Earth's natural ecosystems and all their inhabitants into a traumatized and traumatizing tailspin.

1) Although the purpose of this article is not to critically engage with the notion of the Anthropocene, it is important to bring attention to the problematic nuances and tensions it holds. According to David Shaw, the ambiguity of Anthropocene lies in the root of the term; *anthropos* generalizes and encapsulates all the humans and their activities on the planet in an all too unified level. As he explains in his entry to *Genealogy of the Posthuman*, "the Anthropocene reveals the standard conception of *anthropos* to be both too narrow and too diffuse, as it neither fully accounts for the broad assemblage of non-human elements implicated in the culpable 'human activities,' nor does it adequately specify exactly which humans ought to be held accountable" (David Shaw, "Anthropocene," *Genealogy of the Posthuman*, October 10, 2018, accessed July 20, 2023, https://criticalposthumanism.net/anthropocene/#_ftn1). In this paper, the accountability of the all-too-human activities which keep on traumatizing the environment is situated specifically within the context of Western Europe.

2) Félix Guattari, *The Three Ecologies*, trans. Ian Pindar and Paul Sutton (London: Continuum, 2008), 128.

3) *Ibid.*, 135.

4) Félix Guattari, *Chaosmosis: An Ethico-Aesthetic Paradigm* (Sydney: Power Publications, 2006), 4–5.

5) Rosi Braidotti, *The Posthuman* (Cambridge: Polity Press, 2013), 48.

If we consider such environmental catastrophes as generating entanglements of human and non-human traumas, series of critical questions arise. What role do visual culture and, more specifically, documentaries play in penetrating the geological scars of the becoming-traumatized Earth? That is, how can they convey a transversal and posthuman understanding of the entanglements of traumas? More specifically, how do we consider the ecological disasters that have already occurred and *have yet to occur* on Earth as entangled human and non-human traumas, therefore respecting that also the Earth and non-human inhabitants have been undergoing a process of traumatization? As the entangled traumatic syndromes are an ongoing, impeding, and imminent processual (and imaginative) catastrophe that *has not yet happened*, thus proclaiming a condition here defined as “pre-trauma,”⁶⁾ how do we re-think trauma through a temporal lens which incorporates a dimension of trauma from the future? In the proceeding pages, my approach builds on the theoretical work of “Trauma Studies, Critical Posthumanism and New Materialism” introduced by Deniz Gündoğan İbrişim.⁷⁾ Yet, my focus shifts to what I define as the *becoming-traumatized* Earth and its inhabitants with the spectral temporal dimension of pre-trauma vis-à-vis the cinematographic renderings of the entanglements within experimental documentaries. I follow specific images of two contemporary experimental documentaries, the aforementioned *Nature* and *Medusa* (Chloé Malcotti, 2021).⁸⁾ Through the idiosyncratic and diverse world-makings, these films show the vulnerability and the scars of human and non-human beings, and reveal singular alternatives for penetrating, experiencing, and understanding the Anthropocene through cinematic images. An ethico-aesthetic dialogue between experimental documentaries, canonical trauma studies, and posthumanism is here proposed to unveil how a transversal and posthuman recalibration of the anthropocentric solipsism of our planetary existence through the world-making of cinema might help us renovate the perspectives on ecological thinking.

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- 6) E. Ann Kaplan has also recently theorized a “pre-traumatic stress syndrome” (Pre-TSS) as a mental health condition by specifically looking at cinematic representations of climate change in science fiction and dystopian films (see E. Ann Kaplan, “Is Climate-Related Pre-Traumatic Stress Syndrome a Real Condition?,” *American Imago* 77, no. 1 (2020), 81–104). This article, as we shall see, proposes pre-trauma as exposed by experimental documentaries while grounding the concept in the philosophy of the three syntheses of time introduced by Gilles Deleuze in *Difference and Repetition*.
- 7) Deniz Gündoğan İbrişim, “Trauma Studies, Critical Posthumanism, and New Materialism,” in *The Routledge Companion to Literature and Trauma*, eds. Colin Davis and Hanna Meretoja (New York: Routledge, 2020).
- 8) The proposition of the concept of pre-trauma is specifically geolocated with experimental documentaries from the Global North. Although the aim of this article is not to engage with such a critical question, it is important to highlight how the Global North cannot be understood as not a unified geographic group of countries. In accordance, the ends of the world and the exhaustion of the future do not work in the same way in Western Europe as in the rest of the world. For instance, for the Brazilian philosopher, thinker, and indigenous activist Ailton Krenak, the indigenous people of the Americas have been living for more than 500 years at the end of the world. Ailton Krenak, *Ideas to Postpone the End of the World* (Toronto: House of Anansi Press, 2020).

Entangling Traumas: A Posthuman Perspective

Approaching and initiating a discourse on a traumatic syndrome inflicted on human beings and on the Earth, as well as its non-human inhabitants, sheds critical light on the Anthropocene and, specifically, on what human activity does to the environment. However, to argue for an ecological trauma as a contemporary diagnosis that does not only mirror the condition of human beings but also of our natural ecosystems, we need to revisit the canonical anthropocentric perspective of trauma studies. This approach encourages the discipline to consider and respect the Earth, nature, and, more importantly, the assemblage of our entangled planetary existence.

In her edited volume *Trauma: Explorations in Memory*, Cathy Caruth introduces the traumatized human psyche and the harrowing memories as experiences that cannot be fully remembered, penetrated, and possessed. However, those same haunting memories constantly come back within the survivor's mind in the form of hallucinations, dreams, or other mental phenomena.⁹⁾ At the same time, Caruth posits a way of approaching and thinking about trauma which is centered on interconnected groups of people traumatized by collective events.¹⁰⁾ By advocating for a notion of a shared post-traumatic syndrome, Caruth moves away from a conceptualization of trauma that focuses solely on the individual human subject, starting to think — we could say — transversally among humans and their mutual traumas.¹¹⁾ She cites examples, among others, such as the (traumatizing) consequences of World War II, the Holocaust, the Bosnia-Herzegovina conflict, or the AIDS epidemic in the 1990s in the US. However, as these cases show, Caruth and the contributors to *Trauma: Explorations in Memory* focus their interrogations, analyses, and conceptualizations solely on the traumatic events that occur within European and American contexts in the course of the twentieth century, highlighting the leading Western paradigm of cultural and historical trauma theory.¹²⁾

Without initiating the discussion on posthuman approaches to trauma studies, which considers the natural environment as a traumatized being, the traditional Caruthian trauma theory excludes the traumatic vicissitudes that colonized regions and their inhabitants had (and continue) to endure. As İbrişim outlines, a revolutionary step towards global perspectives on trauma is taken, which urges us to consider non-Western accounts of suffering.¹³⁾ This has been addressed in the first half of the 2000s by the publication of *The Future of Trauma Theory: Contemporary and Literary Cultural Criticism*, edited by Gert Buelens, Sam Durrant, and Robert Eaglestone. In the introduction to this work, the editors draw from the study and theory initiated by Caruth, Dori Laub, Shoshana Felman, and Dominick LaCapra, among many others, while at the same time looking at the future(s) of

9) Cathy Caruth, *Trauma: Explorations in Memory* (Baltimore: John Hopkins University Press, 1995), 6.

10) Ibid., vii.

11) Other influential works of the late 1990s conceptualizing the notion traumatic events and memories include: Cathy Caruth, *Unclaimed Experience: Trauma, Narrative, and History* (Baltimore: Johns Hopkins University Press, 1996) and Shoshana Felman and Dori Laub, *Testimony: Crises of Witnessing in Literature, Psychoanalysis, and History* (New York: Routledge, 1992).

12) Gündoğan İbrişim, "Trauma, Critical Posthumanism and New Materialism," 231.

13) Ibid, 231.

the discipline. In accordance with this, Buelens, Durrant, and Eaglestone state that *The Future of Trauma Theory* “points to areas of change in the field, especially in relation to issues of globalisation and postcolonialism,” moving the discipline away from its traditional Eurocentrism into a broader global and postcolonial framework;¹⁴⁾ an innovative theory and approach to trauma studies which therefore exceeds national and continental boundaries, as well as religion and ethnic associations.¹⁵⁾

Therefore, trauma theory has expanded its focus on traumatic events and post-traumatic memories experienced by humans by continuously questioning itself and increasingly trying to theorize the multiplicities and multidimensionality of human trauma. With respect to this development within the trauma studies discipline, in the midst of the Anthropocene, an epoch which has at its core the becoming-traumatized Earth and nature, it is now necessary to re-examine and re-evaluate the approach of trauma studies and its anthropocentric agenda on trauma by transversally reflecting upon the entangled planetary existence with the Earth. In doing so, this section confronts the supposed centrality of the human species within trauma studies and recalibrates the discipline through/within an ethical posthuman framework.

As mentioned in the introduction, Braidotti, in the wake of the rhizomatic philosophy of Gilles Deleuze and Félix Guattari, explores the flexible, fluid, and multidimensional human subjectivity in ways that displace the humanistic unity of the subject, rejecting the inherent dualism characterizing the traditional scholarship of the humanities. In doing so, she advocates for a non-dualistic understanding of the nature-culture continuum and intra-action¹⁶⁾ as the shared “manifesto” of the posthuman theory. A theoretical framework whose ultimate ethical purpose is to advocate for “the self-organising (or auto-poietic) force of living matter.”¹⁷⁾ Within the spectrum of posthumanism, a transversal continuum, a porous and dynamic interrelation between the human and non-human, nature, and culture, is established. In posthuman ethics and philosophy, the human is thus removed from their central positionality and sovereignty as the only vulnerable and engendered species on the planet. According to Braidotti, the transversal attitude towards the non-human and the Earth or, as she touchingly defines it, the “trans-species embrace” of posthumanism is rooted in “the awareness of the impending catastrophe: the environmental crisis of global warm/ning issue, not to speak of the militarisation of space reduce all species to a comparable degree of vulnerability.”¹⁸⁾

To concretely theorize the idea of a shared and mutual vulnerability that traverses across and permeates all the species on the planet and, consequently, retains the possibil-

14) Gert Buelens, Sam Durrant, and Robert Eaglestone, eds., *The Future of Trauma Theory: Contemporary Literary and Cultural Criticism* (New York: Routledge, 2014), 41.

15) Stef Craps, *Postcolonial Witnessing: Trauma out of Bounds* (London: Palgrave Macmillan, 2013), 89.

16) Intra-action is a term used by Karen Barad to replace “interaction,” which necessitates pre-established bodies that then participate in action with each other. Intra-action understands agency as not an inherent property of an individual or human to be exercised, but as a dynamism of forces in which all designated things are constantly exchanging and diffracting, influencing and working inseparably. Karen Barad, *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning* (Durham: Duke University Press, 2007).

17) Braidotti, *The Posthuman*, 3–4.

18) *Ibid.*, 85.

ity of traumatizing the Earth and the natural environment, another “trans” concept of the posthuman ethical tradition needs to be further analyzed and unpacked.¹⁹⁾ In her trans-disciplinary study *Bodily Natures: Science, Environment and the Material Self*, Stacy Alaimo formulates the notion of trans-corporeality, a powerful ethical and political idea that originates from her argument concerning the literal point of connection between human corporeality and more-than-human nature. Alaimo states that:

Imagining human corporeality as trans-corporeality, in which human is always intermeshed with the more-than-human world, underlines the extent to which the substance of the human is ultimately inseparable from “the environment.” It makes it difficult to pose nature as mere background for the exploits of the human since “nature” is always as close as one’s own skin — perhaps even closer.²⁰⁾

By (re-)placing nature at the forefront of our contemporary discussions on environmental and ecological ethics and politics, Alaimo turns and challenges our gaze towards a conceptualization of nature as fundamentally dynamic, vital, energetic, and active. Through the notion of trans-corporeality, the Earth becomes a vibrant matter, a “fleshy being” which holds within itself its own claims, needs, actions, and vulnerable singularities.²¹⁾ Trans-corporeality, at the same time, creates bonds between and across the human and non-human agents. In this ethical space formed via the notion of trans-corporeality, the act of thinking, feeling, perceiving, and, more importantly, being affected by (human) activities is not confined solely to the human. In fact, by thinking transversally and trans-corporeally about the Earth, the non-human environment and nature acquire claims to vulnerability, suffering, and being traumatized; the destructive affective responses that have been perpetually overshadowed by the anthropocentric solipsism of our historical moment. The dimensions of transversality and trans-corporeality of posthumanism create an ethical space within the discipline of trauma studies. More specifically, such posthuman ethics created gives us the theoretical tool for acknowledging and respecting the entanglements of trauma(s) of the Anthropocene, a geological time when humans are exploiting the environment’s natural resources, threatening the organic ecosystem, and, consequently, traumatizing not only the singular (human) individual but, foremost, the Earth as a whole.

19) The prefix trans* is one of the theoretical entries of *Posthuman Glossary*. In conceptualizing the transitive and prepositional nature of trans- and trans*, Goda Klumbyté argues that this prefix “proposes to see transness/transing [i.e., moving across, above and beyond] as a process, a ‘becoming with,’ that stretches across species, ecologies and matter itself.” Goda Klumbyté, “Trans*,” in *Posthuman Glossary*, eds. Rosi Braidotti and Maria Hlavajova (London: Bloomsbury Academic, 2018), 433.

20) Stacy Alaimo, *Bodily Natures: Science, Environment and the Material Self* (Bloomington: Indiana University Press, 2010), 2.

21) Alaimo, *Bodily Natures*, 2–3.

The Earth is Screaming: Pelechian's *Nature*

The environmental explorations of the entangled planetary existence of humans with the Earth are at the core of the ecological imaginary, conscience, and ethics of Pelechian's approach to documentary filmmaking. From his documentary *The Inhabitants* (1970), which captures the hostile activities of humans towards the animal world, to *The Seasons* (1975), showing the entangled (transversal and trans-corporeal) interrelation of a community of Armenian peasants across the natural environment, Pelechian's images are ecological, new-materialist, and posthuman *avant la lettre*; poetic, delicate, and caring odes dedicated to the vulnerable, dynamic, and vibrant Earth and its non-human inhabitants. Specifically, the already traumatized Earth is immediately perceptible and entangled within the cinematic world-making images of Pelechian's latest documentary. *Nature*, a black-and-white composition of archival amateur footage taken and chosen from the internet, exposes more clearly than his previous work the traumatizing precariousness of the Earth. It reveals the transcorporeal coexistence of humans and other inhabitants of the planet — animals, plants, mountains, oceans — and a shared traumatic state. Pelechian's film urges us to reconsider and re-evaluate our relationship to nature in an inherently posthuman manner by respecting and caring about the Earth transversally and transcorporeally.

The initial sequence of Pelechian's *Nature*, as briefly sketched in the introduction, opens with a prolonged shot of mountainous sceneries, immersed in a sea of mist, accompanied by Mozart's "Kyrie in D Minor." Throughout the introductory sequence, the camera pans and reveals the (apparently) invulnerable force and majesty of nature, conveying to the spectator a sublime imagery of the natural landscape. As Adrian Ivakhiv explains in *Ecologies of the Moving Images* for contextualizing Terrence Malick's eco-sublime documentary *Day of Heaven* (1978), the sublime "strikes the viewers more forcefully and confronts them with a sense of their own limits."²² However, Pelechian, in his (re)collection and (re)montage of archival images, does not focus only on the sublime representation of natural landscapes; actually, he challenges Ivakhiv's idea of the sublimation of nature, choosing footage that portrays the limits of the Earth itself, showing what the environment has suffered through various local and global catastrophes. After the initial sequence of *Nature*, the spectator is confronted with the vulnerability and fragility of the organic ecosystem — consequently, with the reality of our planetary existence of the becoming-traumatized Earth. In these confronting moments, the images create a transversal and transcorporeal bond across the (already occurred) environmental disasters unfolding on the screen, presented to the spectator. Pelechian's documentary ecology stretches the awareness of the Earth's traumatizing condition outside the screen and onto the viewer. As Siegfried Kracauer illustrates in *Theory of Film: The Redemption of Physical Reality*, the viewer is able to truthfully "apprehend physical reality in all its concreteness"²³ through the power of cinematic imageries and the film experience. Moreover, Jennifer Fay notices

22) Adrian Ivakhiv, *Ecologies of the Moving Image: Cinema, Affect, Nature* (Waterloo: Wilfred Laurier University Press, 2013), 109.

23) Siegfried Kracauer, *Theory of Film: The Redemption of Physical Reality* (Princeton: Princeton University Press, 1997), 303.

that cinema, for Kracauer, does not intend to preserve a world we (imagine to) love; quite the opposite. According to Fay, Kracauer sees cinema as “the medium par excellence that estranges nature and our contemporary moment with effect of dissolving reified history and the emotional and political investments that sustain it.”²⁴⁾ In fact, during the documentary’s climax, amateur footage taken during ecological disasters of the past two decades (specifically, the earthquakes and tsunamis that occurred in 2004 on the west coast of northern Sumatra, Indonesia, and in 2011 in the Tōhoku region of Japan) disturbingly permeates the screen. The cameras have filmed the concreteness of those environmental catastrophes that marked the lives of Indonesian and Japanese inhabitants and, foremost, of the organic ecosystem of those lands, revealing to the spectator how the Earth has been screaming; how it has been — and continues to be — profoundly traumatized due to human activities.

Here, to understand and conceptualize the screams of the Earth and, more precisely, how the Earth becomes traumatized within the documentary ecology of *Nature*, I need to (re)consider the philosophers who inaugurated the ethical approach to the environment, thus (unknowingly) initiating the transversality and trans-corporeality of posthumanism: Deleuze’s and Guattari’s work, *A Thousand Plateaus*. This brief theoretical flashback further disentangles the film world-making of Pelechian’s *Nature*, allowing us to comprehend how, in line with the aforementioned posthuman theory, the natural ecosystem of the planet in these images becomes a giant molecule alive with energetic dynamism, which, nonetheless, morphs into a becoming-traumatized Earth due to human-induced environmental degradation.

In “10,000 BC: The Geology of Morals (Who Does the Earth Think It Is?),” a chapter of *A Thousand Plateaus*, Deleuze and Guattari follow a lecture by Arthur Conan Doyle’s Professor Challenger, who denotes the Earth as the giant Molecule, as a body without organs which is formed and “permeated by unformed, unstable matters, by flows in all directions, by free intensities or nomadic singularities, by mad or transitory particles.”²⁵⁾ These bodily, energetic, and dynamic molecules (and movements) of/in the Earth occur upon it through a complex processual phenomenon defined by Deleuze and Guattari as stratification,²⁶⁾ whose ultimate purpose is to lock and maintain the Earth’s singularities and activities into an interconnected system of “resonance and redundancy;”²⁷⁾ of natural, geological, and biological functioning systems. Within the intricate process of stratification, each “strata are Layers, Belts” which connect, merge, and sustain the organic equilibrium; the flowing intensities and vibrant molecules of the Earth and the natural environment itself.²⁸⁾ Now,

24) Jennifer Fay, *Inhospitable World: Cinema in the Time of the Anthropocene* (New York: Oxford University Press, 2018), 167.

25) Gilles Deleuze and Félix Guattari, *A Thousand Plateaus: Capitalism and Schizophrenia*, trans. Brian Massumi (London: Bloomsbury Academic, 2013), 46.

26) Here, it is essential to note that, for the sake of this article, the complexities of the process of stratification, with its diverse layered and multidimensional articulations, as introduced by Deleuze and Guattari in their third chapter of *A Thousand Plateaus*, will not be unpacked. For a compelling engagement and critical exploration of Deleuze’s and Guattari’s *A Thousand Plateaus*, see, for example, Brian Massumi’s *A User’s Guide to Capitalism and Schizophrenia: Deviations from Deleuze and Guattari* (Boston: MIT Press, 1992).

27) Deleuze and Guattari, *A Thousand Plateaus*, 46.

28) *Ibid.*, 46.

turning to our contemporary day and age, marked by exhaustive, unnatural, and damaging activities of the human species onto the ecosystems of the Earth, making it “*scream with [our] pain machine(s)*,”²⁹⁾ those Deleuzo-Guattarian strata, layers, and belts that have served to retain and preserve the organic equilibrium of our planet have been placed on a course of permanent and catastrophic decline — both on local and global scales. Think of, to name a few, the wildfires that burned through (and down) the forests in the Amazon, California, Australia, and Southern Europe; the spreading drought in East Africa; the deadly floods in India, Bangladesh, and Nepal; the (human-made) extractions that are destroying, degrading, and depleting the natural resource of marble in the Apuan Alps in the northern part of Tuscany (Italy).³⁰⁾ Or, as Pelechian’s documentary ecology shows, the disasters that occurred in 2004 in Indonesia and in 2011 in Japan, two distant moments in history when the energies, singularities, and intensities of the Earth have been unlocked and dispersed, thus going to traumatize those local organic ecosystems.

By following the series of specific images (see figures 1, 2, 3, and 4 inserted below), captured from one of the most challenging sequences of *Nature*, the traumatizing screams of the Earth are conveyed expressively and powerfully. In these terrorizing scenes, the telluric layers have been torn apart and destructed from within by the mechanisms of our anthropocentric culture of abundance and society of exploitation of natural resources. Here, the spectator sees the gradual and violent explosion of a mountain that resembles the mountainous landscape that has pervaded the opening images of *Nature* while, at the same time, being confronted with the power of the cinematic medium in conveying our



Fig. 1–4. Screenshots from *Nature* (Artavazd Pelechian, 2020)

29) Deleuze and Guattari, *A Thousand Plateaus*, 46.

30) The catastrophic processes here mentioned are the protagonists of other contemporary documentary ecologies: *Koyaanisqatsi* (Godfrey Reggio, 1982), *Lessons of Darkness* (Werner Herzog, 1992), *Behemoth* (Zhao Liang, 2015), *The Anthropocene: the Human Epoch* (Jennifer Baichwal, Nicholas de Pencier, and Edward Burtynsky, 2018), *Earth* (Nikolaus Geyrhalter, 2019).

physical reality.³¹⁾ Specifically, the mechanical eye has rendered visible to the spectator how, in both the environmental degradations that occurred in Indonesia and Japan, as well as in the explosion of the sublime yet fragile mountainous landscape, the Earth is screaming louder, more frequently, and more intensively than ever before, in Deleuzo-Guattarian terms. In the powerful images of Pelechian's *Nature*, the audience is faced with the fragile and vulnerable reality of the vibrant, energetic, and dynamic Earth, witnessing the traumatization of the stratified equilibrium of the natural ecosystems with its geological archive and geophysical energies. Triggered by human intervention and the resulting human-induced drastic climatic changes, the images of *Nature* powerfully exemplify how our presence on Earth is threatened by an entanglement of human and non-human traumas. However, these entanglements of trauma embodied in ecological catastrophes, as we are warned, are still in the process of happening, leaving our transversal, transecological, and transcorporeal planetary existence in an ongoing, impeding, and imminent condition of pre-traumatization of the Earth and its human and non-human inhabitants — a hallmark of the Anthropocene.

Living in a Time out of Joint: The Pre-Traumatic Syndrome

As the previous sections have shown, our historical moment is completely and inherently out of joint; it lies between different but intra-active ecological temporal dimensions. On the one hand, environmental disasters on the Earth have already occurred: as Pelechian's *Nature* illustrates, with its images of the devastating earthquake and tsunami processes, the human and non-human inhabitants of this planet and the Earth as a whole have already been traumatized locally and globally. On the other hand, catastrophes are still occurring and will occur more frequently and more violently. In this sense, the Earth will continue to speak and scream back at us, expressing its increasing and impeding traumatizing state. As the editors of *Arts of Living on a Damaged Planet* argue, "anthropogenic landscapes are also haunted by imagined futures."³²⁾ Such a haunting state finds its origins in the future. A speculative future in the living present that is imagined as a haunting temporal dimension of an eternal return of those same ecological catastrophes, inflicting, therefore, the humans and the Earth with a syndrome of pre-trauma.

Before defining the contemporary condition of pre-trauma, a brief conceptual detour through the canonical definition of the post-traumatic syndrome is needed to understand the intrinsic difference between the temporal dimensions of post- and pre-trauma. In this regard, Caruth explains that within the traumatized mind (and life) of a survivor, the past takes complete control of and over the present, thus trapping them in an eternal repetitive loop of those same traumatic memories.³³⁾ In fact, the singularity and peculiarity of post-traumatic syndrome consist in how the traumatic memory extends and stretches itself out

31) Fay, *Inhospitable World*, 4–5.

32) Anna Tsing, Heather Swanson, Elaine Gan, and Nils Bubandt, "Introduction: Haunted Landscapes of the Anthropocene," in *Arts of Living on a Damaged Planet*, eds. Anna Tsing, Heather Swanson, Elaine Gan, and Nils Bubandt (Minneapolis: University of Minnesota Press, 2017), G2; italics in the original.

33) Caruth, *Trauma*, 115.

from the past, possessing and haunting the present through “repeated, intrusive hallucinations, dreams, thoughts, or behaviours stemming from the [overwhelming] event, along with numbing that may have begun during or after the experience, and possibly also increased arousal to (and avoidance of) stimuli recalling the event.”³⁴⁾ At the same time, the survivor is denied the possibility of imagining a future existence detached and unhooked from the repetition of images of the traumatic event. When referring to the temporal dimension of the post-traumatic syndrome, it is therefore the memory of the catastrophic events that grounds (and traps) time for the traumatized subject, whose present and future are nothing but precarious elements constitutive of the dominating past.

With the disastrous events of the Anthropocene, it is crucial to address the question of the temporality of the becoming-traumatized Earth and its living (human/non-human) beings. Unlike canonical trauma theory, in which the dimension of the past constantly intrudes on the present of the survivors, when considering the living on a damaged and damaging planet, the (speculative) future appears, takes over, and becomes the most important dimension in the imagination of the living present. It becomes the temporal ontology that orients the thinking and imagining of/from a future which, nonetheless, retains the possibility of eternally repeating the same environmental disasters that have already occurred — inflicting the Earth’s inhabitants with a pre-traumatic syndrome. In this contemporary condition, it is the imaginative traumatizing future that spectrally haunts our actual planetary existence.

The proposition of the future as the haunting and traumatizing temporality which creates a syndrome of pre-trauma needs here to be unfolded through an engagement with Deleuze’s philosophy of time. In the second chapter of *Difference and Repetition*, Deleuze makes time travel possible through the act (and voyage) of repetition:³⁵⁾ in fact, according to him, there is no such thing as complete independence of the dimensions of present, past, and future. Quite the opposite: within our minds, each dimension is repeated and continuously synthesizes the others via different processes of transformations. As James Williams puts it,

the best way of understanding these statements is through Deleuze’s idea of times as dimensions of one another. For him, past, present, and future are not separate parts of time. Instead, they alternatively treat each other as dimensions, where to be a dimension means to be a subsequent process. These processes operate on a series of events.³⁶⁾

Thus, Deleuze’s (process) philosophy of time “sets each one [of these dimensions] into many different orders of dimension according to many different processes, [which] interacts and includes one another.”³⁷⁾ In order to define (and create) the temporality of the pre-

34) Ibid., 4.

35) Williams states that “according to Deleuze, we are travelling back and forward in time all the time and we do not need for odd physical properties such as wormholes.” James Williams, *Gilles Deleuze’s Philosophy of Time: A Critical Introduction* (Edinburgh: Edinburgh University Press, 2011), 8.

36) Ibid., 9.

37) Ibid., 9.

traumatic syndrome rooted in the possibility of an ecological collapse, I specifically focus on the complex enfoldings of the processes of imagination within the first synthesis of time (the present) and that of the eternal return within the third synthesis of time (the future).

The process of imagination is essential to Deleuze's "repetition for itself" and his conceptualization of habitual gestures experienced within our minds in the act of repetition. Referring to Hume, Deleuze states that "repetition changes nothing in the object repeated, but does change something in the mind which contemplates it."³⁸⁾ Particularly, Hume's cases AB, AB, AB, etc. are here taken into consideration (or imagination?), and by repeating each case, this repetition does not change anything in the nature of each duo; yet, a change and a difference are expected within the mind that thinks, contemplates, and imagines these "objects." A habitual and passive mental motion is grounded in the act of repetition of these exemplary cases; a power of the mind which is thus constantly and unconsciously able to contract situations, instants, concepts, and meanings within the passive synthesis of our living present. According to Deleuze, the contractile power is distinct from the imaginative ability of the minds: "the imagination is defined as a contractile power; like a sensitive plate, it retains one case when the other appears. It contracts cases, elements, agitations, or homogenous instants and grounds these in an internal qualitative impression endowed with a certain weight."³⁹⁾ Here, it is important to underline that Deleuze distinguishes this contractile power and passive movement of imagination within our mind's present from both "a memory and an operation of understanding: contraction is not a matter of reflection."⁴⁰⁾ In the conscious moment of remembering and reflecting upon an event that has passed, we actively go into the layers of our past, we choose a specific moment and, ultimately, we (try to) articulate and understand that same memory.

The act of imagination is, therefore, intrinsically passive. It constitutes a habitual and unconscious movement of contemplation that happens within our minds in the passivity of the present, a habit of living that is out of our control — as Deleuze argues, "we are contemplations, we are imaginations, we are generalities, claims and satisfactions."⁴¹⁾ However, as aforementioned, the contemplation of the passive synthesis of time cannot occur without noting its past and its future dimension since, in Deleuze's philosophy, past, present, and future inherently coexist. In the passive synthesis of time of the living present, specific past events are contracted and can (unconsciously and passively) take the form of individual imagination within our minds. Meanwhile, the future is contemplated through a series of general, non-specific, and uncertain possibilities and expectations.⁴²⁾ In this regard, the living present is the arrow of time that goes from the particularities of the past to the generalities of the future, contracting these dimensions in a fundamentally asymmetrical manner.⁴³⁾ Considering the passivity of the contracted living present with its particular and general perceptual syntheses, it is important to emphasize that in Deleuze's terms, it does not enclose a psychological state: imagination, contemplation, retention, and ex-

38) Gilles Deleuze, *Difference and Repetition*, trans. Paul Patton (London: Bloomsbury Academic, 2015), 93.

39) Deleuze, *Difference and Repetition*, 94.

40) Ibid., 94.

41) Ibid., 98.

42) Williams, *Gilles Deleuze's Philosophy of Time*, 28.

43) Deleuze, *Difference and Repetition*, 94.

pectation are the general and foundational processes that occur within the mind — and not by the mind — and can extend within many diverse human and non-human entities (from minerals to plants, from our geophysical system to our minds). For Deleuze, “every organism is a sum of contractions, retentions, and expectations.”⁴⁴⁾ I return to the imaginative power of every organism in the next section. For now, it is important to highlight the relevance of habitual use of the imagination in the Anthropocene. As *Nature* has shown, what we are experiencing is a moment of constant occurrences of environmental catastrophes — both on local and global scales. Our imagination, therefore, cannot do anything else but still conceive those “habits” that the planet, in order to rebel against violent activities, has initiated. What we hear and imagine are the endless screams of the Earth; an eternal return of those traumatic and traumatizing screams.

Now that we have defined the habitual gesture of imagination within the living present, it is time to make a leap into the future and turn our attention to the last Deleuzian process that accompanies the making of the temporality of pre-trauma. When thinking from the speculative temporal dimension of the future, Deleuze moves away from Hume (and Henri Bergson), and Nietzsche’s conception of the eternal return becomes the grounding for the third synthesis of time — the future. As Deleuze states, in telling the story of Zarathustra, Nietzsche narrated solely the past condition and the present metamorphosis, excluding, therefore, the third temporal dimension of his existence. For Deleuze, the future is crucial as it is “the moment of the revelation and affirmation of the eternal return. [...] The unconditioned which was to have resulted as the future.”⁴⁵⁾ In this regard, the Nietzschean eternal return, far from being an affirmative way of thinking towards the future (thus, absent in his narration), expresses an influence and power on Zarathustra and the Self inherently destructive and dangerous, haunting and traumatic. Possessed by the tremendous event — or, as Deleuze defines it, the caesura — of the death of the God, Zarathustra is trapped within a limbo of threat of the return of the same event and anguish for his own death.⁴⁶⁾

In Deleuze’s process of repetitive eternal return in the third synthesis of time, the future, absent from Nietzsche’s philosophical work, is speculatively created. Thus, we travel into the future, which becomes the temporal vector from/through which we reflect upon the dimensions of the past and present, as well as the *a priori* time of reference for the voyage of repetition. Repetition, therefore, is the royal category and process of/from the future which, at the same time, guarantees the possibility of repetition for itself and the openness of our future time through repetition: the future “ensures the order, the totality of the series, and the final end of time.”⁴⁷⁾ The past and present, as synthesized in the temporal dimension of the future, become, respectively, a condition and an agent for the future. Particularly, in this synthesis, habit as the process founded the present and memory as that grounded in the past, become “superseded but a groundlessness, a universal ungrounding which turns upon itself and causes only the yet-to come return.”⁴⁸⁾ The tempo-

44) Ibid., 96.

45) Ibid., 120.

46) Williams, *Gilles Deleuze’s Philosophy of Time*, 119–120.

47) Deleuze, *Difference and Repetition*, 122.

48) Ibid., 118.

ral dimension of/from the future makes use of the repetition of habit (first synthesis) and that of memory (second synthesis), but deploys them only as stages from which the future will draw its own lines of flight; the production of repetition for itself which, in the eternal return, becomes difference in itself. For the making of the temporality of pre-trauma, it is sufficient to highlight that Deleuze's introduction of the dimension of the future within the eternal return is needed in order to manifest the repetition as a positive, different, and affirmative possibility. In summary, it is an opportunity to believe in the creation of this world anew. In Deleuze's words,

the eternal return is a force of affirmation; but it affirms everything of the multiple, everything of the different, everything of chance except what subordinates them to the One, to the Same, to the necessity, everything except the One, the Same and Necessity. [...] Repetition in the eternal return excludes both the becoming-equal or the becoming-similar in the concept and being conditioned by lack of such becoming.⁴⁹⁾

Traveling back now, to our living present, the affirmative, positive, and constructive power of Deleuze's eternal return, which influences the self with a forward-looking belief in this world, is constantly put into question by the alarming and precarious predicament of the Anthropocene. Our time is a time out of joint: our present is intermeshed with our future, and our future is intermeshed with our present — while existing in the present, we anticipate, live, and think of/from a future. Simultaneously, that future dimension holds within itself a spectral and haunting aura as it is constantly threatened by uncertain but possible violent ecological catastrophes such as those that have already happened both on local and global scales.⁵⁰⁾ In this paradoxical, bizarre, and broken time, which challenges and confuses the temporal positionality of our planetary existence, Deleuze's passive synthesis and static synthesis are — more than ever before — entangled and intra-acted within/through each other. In our contemporary day and age, imagination plays a crucial role within human and non-human entities which are simultaneously exposed to past and imminent ecological collapses. In this sense, imagination is the process towards the generalities of the spectral future, repetitively and imaginatively characterized by an eternal return of the same: it grounds itself in the condition of the particularities of the already happened traumatic disasters, as Pelechian's *Nature* shows, while finding its mental agency in the living present, where environmental disasters are still in the process of occurring. The asymmetrical temporality of the Anthropocene, which breaks into the precarious present and into the threatened anticipation towards a spectral future, and which is repeated within the act of speculative imagination, constructs the complex temporal foundation of the pre-traumatic syndrome. Instead of being possessed by hallucinations, dreams, nightmares, and phobias of the past within the mind of the traumatized survivor,⁵¹⁾ within pre-trauma is the passive imagination of/from a future, conditioned by the repetitive contemplation/imagination of those same violent ecological disasters in the living present which

49) Ibid., 147.

50) Tsing, Swanson, Gan, and Bubandt, "Introduction," G10.

51) Caruth, *Unclaimed Experience*, 11.

takes over. In the pre-traumatic syndrome, humans and non-humans are caught in an unconscious, passive, and repetitive limbo of imagining the (future) eternal return of the ecological events that already inflicted trauma. Thus, by contemplating and imagining of/from the future, the pre-traumatic condition cannot imagine anything besides the recurrence of an entangled becoming-traumatized Earth.

Becoming-Grains-of-Mercury: *Medusa* and its Speculative Imagination from the Future

The speculative dimension of the temporality of pre-trauma, which interweaves itself with the already traumatized (local) environment and its inhabitants while imagining the eternal return of those entangled trauma(s), is the element of representation that Chloé Malcotti follows and creates in her film *Medusa*, set in Rosignano-Solvay (Italy). In this experimental documentary, the filmmaker crafts the temporality of an Italian coastal town, Rosignano, traveling through the past, present, and future in a synthetized and intra-active manner. As Karen Barad argues,

time is not given, it is not universally given, but rather that time is articulated and re-synchronized through the various material practices. Time itself only makes sense in the context of particular phenomena. Physicists are actually making time in making time, and there is a certain way in which what we take to be “past” and what we take to be the “present” and the “future” are entangled with one another. What exists are intra-active entanglements [of temporality].⁵²⁾

By creating time (Barad) and by traveling through the newly synthetized temporal dimensions (Deleuze), Malcotti unveils to the spectator how the seaside resort, its inhabitants, and its landscapes endured and will continue to endure a process of traumatization due to decades of pollution produced by Solvay chemical plant.

In the opening sequence of *Medusa*, a plastic bottle on a beautifully white beach appears on the screen. Then, the camera moves from the object to a group of children caught in contemplation. Through the words spoken by one character, the spectator now jumps into an imagined scene from the 1930s. The children, here, are imagining themselves as a part of their town’s city council, Rosignano, during a meeting that (speculatively) discusses the naming of the town. At this moment, we hear the words of a young girl:

The owner and current manager of the Solvay plant made us a proposal, and we are urged to respond. Given the importance of the factory in the construction of our town, he would like us to add the name of the factory — Solvay — to the town’s name. In this way, we would give justice, he believes, both to our town as well as to the company itself.

52) Iris van der Tuin and Rick Dolphijn, *New Materialism: Interviews & Cartographies* (London: Open Humanities Press, 2012), 66.

The discussion turns to whether the factory has occupied and will continue to occupy a crucial role in the development of the newly-founded Rosignano-Solvay. Most of the young characters agree that the company will help the town, especially since the construction of new factories will bring more employment opportunities and more economic relief to the population of Rosignano. “In my opinion, enough with the agricultural system! Rosignano must be distinguished for something else!” argues a conservative participant of the council. The characters continue to discuss their divergences until one of the most radical among them, who was refusing to add the name of the factory to his own town, literally turns into a grain of sand. On the level of the image, the becoming-grains-of-sand is rendered specifically through the use of thermal cameras, which enable the spectators to quite literally immerse themselves into the Earth. After him, all the other participants metamorphize, becoming themselves grains, and follow their “colleague” (and friend) into the layers of the Earth. It is after this sequence, and the alternative space it created, that the temporal dimensions of the past, present, and future begin to, as Barad would say, intra-actively entangle, or in Deleuzian terms, interdependently coexist. In fact, the thermal camera technique employed by Malcotti enables the characters and spectators to embark on a (cinematic) journey into different temporal layers of time; into the archive of the Earth itself. At the same time, the pre-traumatic syndrome, as experienced by those young characters and the Earth-others, finally materializes on the screen, thus rendering the speculation of the temporal dimension of pre-trauma visually explicit to the spectator. Within the stratification of the Earth, the characters encounter diverse species of animals originating from different temporal dimensions who want to actively participate in the council as they want to submit some claims concerning the state of the environment, highlighting how they have been and continue to be traumatized by human activity.

On the level of the image, the thermal camera follows the chemical substances that have been polluting (and wounding) the maritime landscape of Rosignano-Solvay. Such a cinematographic technique, more specifically, renders perceptible what, according to Tsing, Swanson, Gan, and Bubandt, humans cannot see: they state that “human-made radiocesium has this uncanny quality: it travels in water and soil; it gets inside plants and animals, we cannot see it even as we learn to find its traces.”⁵³⁾ Now, following the scene captured in figures 5 and 6 inserted below, these invisible contaminating traces become visible: immersed within the polluted sea, captured through the predominant and eerie red in the images, a fish begins by claiming its place within the anthropocentric meeting. It takes its place on the council by demanding that water pollution is decreased, the discharge of chemical substances into the sea is forbidden, and that divers entering the sea are prohibited — as even the simple act of a man diving into the sea can be traumatic. An aquifer and a pigeon then join the line of animals who want to become part of the council. By starting to listen to the mediated voices of the animal-others, the spectator is confronted with the violence of the acts he/she has inflicted on nature. On one hand, the dimension of the past, with its traumatic memories experienced by the animals, is captured; but, more importantly, it is the imaginative and speculative future that comes in, giving the

53) Tsing, Swanson, Gan, and Bubandt, “Introduction,” G2.

traumatized nature the opportunity to demand its place within the human council. In this long sequence, it is nature's fantasy and imagination — as represented by animal inhabitants — of the complete erasure of the environmental future that makes it possible for the animal-others to invoke its presence within the council. At the same time, in the transversal and trans-corporeal alternative space, the screen (and the thermal technique used by Malcotti) makes it possible for the spectator to perceive, access, and capture the chemical substances and the human actions that are traumatizing the species in the sea. Here, once again, the documentary ecology confronts the audience with the inherent transversal, trans-ecological, and trans-corporeal subjectivity which makes us — humans — always interconnected in a “global network of responsibility.”⁵⁴⁾

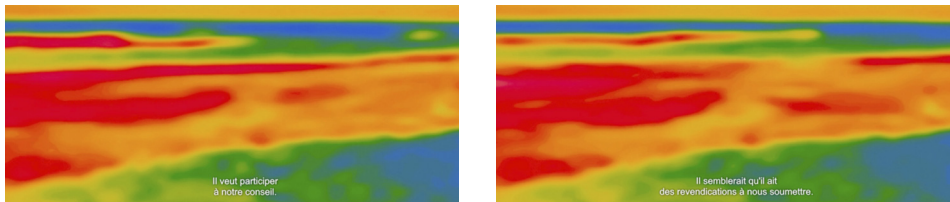


Fig. 5–6. Screenshots from *Medusa* (Chloé Malcotti, 2020)

In the final part of the sequence within the Earth, the entangled pre-traumatic syndrome is further exemplified by the impossibility of Filippo, the child who firstly metamorphized into a grain of sand, to bring everyone back to the Earth's surface — “the problem is that I do not know how to reverse the process,” Filippo states. This troubling phrase is followed by nothing more than the repetition of the same image with the voices of the young characters who, once again, reflect upon our contemporaneity:

CHARACTER 1: I'm starting to feel too hot now!

CHARACTER 2: It is because of the greenhouse effect. It is the problem that lizards have to constantly face. Now, Filippo, take us back. We won't remain grains of sand, will we?

CHARACTER 3: Or grains of limestone.

FILIPPO: Actually, I would say that we became grains of mercury.

The becoming-grains-of-mercury as a speculative and imaginative metamorphosis perfectly encapsulates the entanglement of trauma(s) of our contemporaneity: the human is not the sole planetary species to be continuously traumatized as we also can become grains of mercury, a substance that so much pollutes our waters, consequently becoming transversally, trans-ecologically, and trans-corporeally entangle with the Earth. As Alaimo argues, by trans-corporeally becoming (a sea of) mercury grains, this process “entails a rather disconcerting sense of being immersed within the incalculable, interconnected material agencies that erode even our most sophisticated modes of understanding” and, thus,

54) Stacy Alaimo, “States of Suspension: Trans-corporeality at Sea,” *ISLE: Interdisciplinary Studies in Literature and Environment* 19, no. 3 (2012), 477.

of being in the world.⁵⁵⁾ Together with our central positionality within the earthly ecosystem, the understanding of the temporality in the Anthropocene is also questioned. As the sequences of *Medusa* show, our time is a time out of joint: it is a constructed and created time through the material, destructive, and catastrophic practices of humans which trap our planetary existence in an imaginative process of repetition of the eternal return of the same scenes. In the final, long, and repetitive sequence of *Medusa* mentioned above — as Deleuze argues in exemplifying Nietzsche's Zarathustra and his eternal return — the spectator cannot imagine anything else for those "imprisoned" characters who do not know how to reverse the process; how to go back to the surface of the Earth.⁵⁶⁾ Here, the temporal dimension of the future is spectrally haunting our entangled reality, while inflicting the human and Earth-others with a pre-traumatic syndrome characterized by the power of imagination in constructing an eternal return of the same. However, our imagination also retains the ability to envision a possibility and potentiality which is affirmative, productive, and constructive — referring to Deleuze's own eternal return of the difference. Consequently, (how) can we envision an eternal return of a potential difference towards and from the future within the Anthropocene?

Conclusion

Throughout this article, I aimed at thinking transversally and transcorporeally about the entanglements of post- and pre-trauma, as conditions that do not only pervade the human species but also, and foremost, extend themselves into the Earth and its non-human beings, thereby initiating an ethico-aesthetic discourse across trauma studies and posthumanism. The documentary ecologies of Pelechian's *Nature* and Malcotti's *Medusa* have been the trans-space and world-making images that made this juxtaposition of theories possible, forcing the spectator to reflect upon and face the traumatic and traumatizing realities of the planet in the time of the Anthropocene. As Fay rightly argues in her *Inhospitable World*, "the Anthropocene confronts us with the fact that we need to learn how to live and die in an unpredictable and increasingly inhospitable world. Cinema has something to teach us about how and why we got there and how we envision our unthinkable future as such."⁵⁷⁾ This ethico-aesthetic function (and responsibility) that Fay transmits to the cinematic medium allows me to start approaching the haunting question that emerged in the last part of this study, thus concluding the paper with a scene of potential towards an affirmative future.

Here, I want to return to the sequence of *Medusa* I followed in the previous section. By becoming grains of sand or, as Filippo states, grains of mercury, the characters change their perception and their way of seeing the world, therefore starting to *listen* to the claims that the animals inhabiting the polluted sea of Rosignano-Solvay want to take forward. Filippo and his colleagues-friends thereby initiate what Bruno Latour defines as a possible

55) Alaimo, *Bodily Natures*, 19.

56) Deleuze, *Difference and Repetition*, 160.

57) Fay, *Inhospitable World*, 12.

Parliament of Things. Within the trans-corporeal space created by the world-making images of *Medusa*, an imaginative, visionary, and creative parliament in which things, objects, animals, and other non-humans can speak in their own name, without having us to forcefully demand the right to claim in their place, has been established. In this Latourian cinematographic space, a transversal, trans-ecological, and trans-corporeal Parliament of Things is able to take shape, and its democratic inclusivity has been extended into the Earth's non-humans themselves.⁵⁸⁾ Thus, *Medusa* shows us that our anthropocentric collective is profoundly inadequate in understanding the state of things during the Anthropocene and even more inadequate in envisioning a future without taking into consideration and listening to other non-humans. At the same time, the scene discloses precisely how we might be able to re-engage with the world by taking into account the Parliament of Things. *Medusa*, therefore, enables us to affectively *see* how we might become more ecologically attuned and perceptive if we start listening to the surrounding non-human world. To do so, we need to liberate ourselves from the negative practice of critique and, as Barad argues, we need to look for alternatives; we need to embrace creativity, thus becoming suggestive, imaginative, and visionary.⁵⁹⁾ In this regard, by following the world-making images of experimental documentaries, the powerful medium that cinema is might give us the ethico-aesthetic tools to change our perception while (re)enhancing a belief in an entangled planet, again.

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58) Bruno Latour, *We Have Never Been Modern* (Harvard: Harvard University Press, 1993), 142.

59) van der Tuin and Dolphijn, *New Materialism*, 50.

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Biography

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Diffraction Way of Thinking and the Possibilities of Capturing Ecological Trauma in Tomonari Nishikawa's *sound of a million insects, light of a thousand stars* (2014)

Abstract

sound of a million insects, light of a thousand stars (2014) is a camera-less two-minute-long film directed by the Japanese experimental filmmaker Tomonari Nishikawa. He buried a 100-foot-long 35mm negative film under fallen leaves alongside a country road close to the Fukushima Daiichi Nuclear Power Station where it was exposed to the possible remains of radioactive materials. The film is a document of an intrusive past. It becomes an (eco) traumatic landscape and a local manifestation of a hyperobject called radiation. This article will employ the concept of diffraction as a new materialist concept whose qualities are quite underexplored in the field of film studies but may have important implications for questions that are frequently asked about the nature of ecological trauma and its representation. Through rethinking 1) how we think about culture/nature and our being in the world; 2) identity and difference; 3) and representationalism, this article will argue that when discussed in a new materialist context, possible to approach eco-trauma in new and fertile ways. With a case study of Nishikawa's film, the study will also explore how ecologically engaged experimental films can capture the sense of eco-trauma experience by going against the idea of common-sense representationalism as a mode of knowledge-producing.

Keywords

eco cinema, eco-trauma, diffraction, new materialism, Indigenous wisdom

Introduction

sound of a million insects, light of a thousand stars (2014) is a camera-less two-minute-long film directed by the Japanese experimental filmmaker Tomonari Nishikawa. For this film, he buried a 100-foot-long 35mm negative film under fallen leaves alongside a country road about 25 kilometers away from the Fukushima Daiichi Nuclear Power Station, where it was exposed to the possible remains of radioactive materials. In 2011 due to the consequences of an earthquake, the Fukushima Nuclear Power Plant was hit by a tsunami. Three of the plant's six reactors were melted and radiation leaked. The catastrophe was followed by a government investigation, which revealed that the plant owners and operators had been negligent in preparing the plant for natural disasters. In 2015 — one year after Nishikawa's film was released — they also announced that the plant's operator (Tokyo Electric Power Company) had been covering up that radioactive waste had been continuously flowing from the site into the ocean, as well as, that the radiation's level in the towns near the power plant — such as Tamura City — was 19 times the amount considered safe for human inhabitation.¹⁾

In a broader sense, this film is an example of eco-related experimental cinematic works, or as Scott MacDonald would call them “eco-cinema” as it potentially helps nurture a “more environmentally progressive mindset”²⁾ while also challenging conventional media spectatorship. Moreover, it is a document of an intrusive past as it highlights a series of encounters of all manner of earthly beings joined together by globally linked — and here, poisonous — actions. To that end, more specifically, Nishikawa's film also can be understood as an example of “eco-trauma cinema”³⁾ being a record of social processes that traumatized the natural world and its species. On account of its formal strategies, the traces of the long-lasting results of human actions and non-human forms alike become visceral imprints that enhance the materiality of the hand-processed film. There is no narration, nor music, hence the film does not try to evoke emotional responses in the viewers⁴⁾ by using the classical tools of storytelling. Without any sort of orientation, we are immediately drawn into the flux of events, aware only of the palpable presence of the non-human but having a sense too of human presence and influence. The imprints of non-human agents race before our eyes as leaping flames; frosty-blue lightning (an effect of radiation) is burnt into the skin of the celluloid⁵⁾; sounds of earthly encounters — humans and nonhumans

- 1) Gregory Zinman, “Echoes of the Earth: Handmade Film Ecologies,” in *Process Cinema: Handmade Film in the Digital Age*, eds. Scott MacKenzie and Janine Marchessault (Montreal and Kingston/London/Chicago: McGill Queen's University Press, 2019), 108–112.
- 2) Scott MacDonald, “Toward an Eco-Cinema,” *Interdisciplinary Studies in Literature and Environment* 11, no. 2 (2004), 107–132.
- 3) Anil Narine, ed., *Eco-Trauma Cinema* (New York and London: Routledge, 2015).
- 4) My idea of the viewer and the film-viewing experience is based on Vivian Sobchack's concept, according to which film-viewing is both a carnal and conscious experience, and the viewing itself is a dynamic activity. The viewer is “communicatively competent” and takes part in “the embodied activity of perception and expression.” See Vivian Sobchack, *The Address of the Eye: A Phenomenology of Film Experience* (Princeton: Princeton University Press, 1992), 6–8.
- 5) Even though film stock has not been made of celluloid for decades, as Jonathan Walley points out in *Cinema Expanded* (2020), “the term has stuck even with professional filmmakers.” For these reasons — similarly to Walley — I use the term “celluloid film” for the medium of analog, photochemical, mechanical film. See

alike — such as Nishikawa scratching the film or insects running over the celluloid imprint themselves into the soundtrack, making visible and audible thousands of “intra-actions.”⁶ *sound of a million insects* manifests the troubled relationship and what I would call *traumatic connectedness* that exists between humans and the non-human world.

Kim Knowles when giving an analysis of Nishikawa’s film, stresses that the kind of materialist film aesthetic employed here makes way to “other forms of knowledge [and] [...] that it contains a documentary impulse that goes beyond the limitations of purely photographic representations.”⁷ To me, the way this cinematic work renegotiates representationalism evokes the idea of “diffraction” originally coming from physics that when used in new materialist contexts can be understood as an alternative to such concepts as the common-sense view of representationalism and reflection, as well as how we think about our being in the world. The questions of representation are problems that are frequently discussed in relation to eco-trauma or trauma in general. As Jill Bennett puts it, “trauma is classically defined as beyond the scope of language and representation [...] [as] an imagery of trauma might not conform to the logic of trauma.”⁸ I will argue that the idea of diffraction used in relation to Nishikawa’s film (an example of eco-trauma cinema) can elaborate on how (in this specific case) experimental films with their radical formal strategies go against the idea of common-sense representationalism and reflection (focusing on sameness and mirroring) as a mode of knowledge-producing and can find alternative ways for capturing the sense of eco-trauma. In the theoretical texts of Trinh T. Minh-ha, Donna J. Haraway, and Karen Barad written in the intersection of humanities and science studies, diffraction also appears as a way of thinking about identity and difference that offers a non-dualistic, non-separational model of identity. As Karen Barad puts it, “we can understand diffraction patterns — as patterns of difference that make difference — to be the fundamental constituents that make up the world.”⁹ Since this model brings interference and entanglement to the fore rather than separation, it fosters the act of re-thinking (as in thinking it over and over again) how we perceive our being in the world, as well as, our relationship with other humans and nonhumans. This non-binary, relational model of identity and non-dualistic worldview focusing on relations rather than division form the basis of my approach to eco-trauma and in thinking about the nature of trauma in general. Accordingly, I wish to challenge Timothy Morton’s idea of the “traumatic Severing” that lies beneath their sense of eco trauma¹⁰ and argue that what actually makes traumatic the relationship between humans and the natural world in such radical cases as for example a nuclear catastrophe is the realization of intimate *connectedness*.

Jonathan Walley, *Cinema Expanded: Avant-Garde Film in the Age of Intermedia* (Oxford: Oxford University Press, 2020), 11.

6) Karen Barad, *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning* (Durham and London: Duke University Press, 2007).

7) Kim Knowles, *Experimental Film and Photochemical Practices* (Cham: Palgrave Macmillan, 2020), 48–49.

8) Jill Bennett, *Emphatic Vision: Affect, Trauma, and Contemporary Art* (Stanford: Stanford University Press, 2005), 3.

9) Barad, *Meeting the Universe Halfway*, 72.

10) In my writing, I aim to read through each other a diverse body of thoughts in order to challenge hierarchical academic modes of thinking that are still largely burdened with a colonial mindset and also to think about ecological trauma through the lens of relationality. Therefore I would like to respectfully attend to

A Diffractive Way of Thinking

In this article, I wish to argue that Nishikawa's film is an instance of an experimental film-making practice that does not merely seek to mirror or reflect the eco-trauma experience but rather convey this experience by cultivating "realism without representationalism,"¹¹⁾ which involves embracing the principles of diffraction into the workings of the films themselves. However, I believe that diffraction does not only play a role in developing forms of realism without representationalism but is also an essential tool in re-imagining eco-trauma on new materialist grounds and approaching it as (an inconvenient) relationality. As diffraction is such a central notion to this inquiry being also an integral part and motivator of any further thinking, first I will give an overview of this concept.

Diffraction is a phenomenon in physics created when a "multitude of waves encounter an obstacle upon their path and/or when these waves themselves overlap."¹²⁾ In classical physics, it is often discussed in relation to the theorizing of light, which is proved to have both particle and wave characteristics (Wave-Particle Duality), depending on the experiment. According to the wave theory of light, light is made of waves that are extended in space and that have the ability to interfere, overlap, and extend one another. Beyond that, in the context of quantum physics, we are also invited to think about the inherent diffractivity of sets of waves, of single waves, and of single particles, under the right (experimental) conditions. The two-slit diffraction experiment is at the heart of quantum physics. It shows that the so-called wave-particle duality is not only the characteristic of light; even electrons are queer particles: they are particles, yet they are also waves; they are neither one nor the other. Electrons are the embodiment of the coming together of opposite qualities within as a relation of difference within. This is a theoretical impossibility according to Newtonian physics where everything is either one or the other (particle or wave, here or there, this or that). Quantum physics queers the binary type of difference at both micro- and macro-scales as "an ongoing reconfiguring of spacetime mattering across and within spaces and times."¹³⁾ In the context of feminist science studies, the phenomenon of

non-Western and Indigenous philosophies and wisdom. I also feel necessary to point out that in my inquiry into the question of eco-trauma and human-nature relationships, I will assert a human point of view but without the intention of placing humans above nature. Even though I think with Indigenous philosophies where nature is mostly considered animate in order to explore the web of complex entanglements between the different worlds of plants, animals, humans, etc. when I delve into the problem of eco-trauma, I will not focus on the traumatization of nature. Although it is important to stress again that ecological trauma is not a universal experience and even those who experience eco-trauma do not experience it in the same way, similarly, ecological problems do not affect citizens of the industrialized Global North to the same degree as those of the Global South, I will not discuss Indigenous senses of eco-trauma as I do not think mine would be a credible account.

- 11) The idea of fostering realism without representationalism is one of the fundamental notions of Karen Barad's work and the onto-epistemology and ethics they develop called agential realism in *Meeting the Universe Halfway*. It rejects the idea of representations of a separate, self-contained reality and accentuates the consequences and interventions of intra-acting within and as part of the world and as such, it negates nature/culture dualism.
- 12) Evelien Geerts and Iris van der Tuin, "Diffraction and Reading Diffractively," *New Materialism*, July 27, 2016, accessed February 2, 2023, <https://newmaterialism.eu/almanac/d/diffraction.html>.
- 13) Karen Barad, "Diffracting Diffraction: Cutting Together-Apart," *Parallax* 20, no. 3 (2014), 174.

diffraction is used as an optical metaphor for theorizing about knowledge and to denote a more critical and difference-attentive mode of consciousness. In the texts of Trinh T. Minh-ha and Donna Haraway, the metaphor of diffraction is usually used in relation to thought, differences, and alterity while in the theoretical work of Karen Barad — what I would like to think with a focus on here — difference is thought of as an act of making a difference in terms of figurative conceptualization and of how matter comes to matter.¹⁴⁾

In *Diffraction: Cutting Together-Apart* (2014), Karen Barad draws attention to diffraction — a key concept of their agential realism that is an ontology, an epistemology, and ethics at the same time — as a lively affair that challenges dichotomies and calls for a rethinking of the terms of identity and difference. The key is to understand that identity is not an essence nor is it fixed; it is not a given but a conditional repetitive performativity through which this supposed conflict is being reworked into an understanding of difference not as “an absolute boundary between object and subject, here and there, now and then, this and that, but as the effects of enacted cuts in a radical reworking of cause/effect.”¹⁵⁾ In the act of the coming together of opposite qualities within, difference is not erased, rather this act suggests “the material multiplicity of self” and “the way it is diffracted across spaces, times, realities and imaginaries.”¹⁶⁾ The opposition of subject/object, wave/particle, and position/momentum is only present within particular intra-actions that create cuts that enact contingent divisions (but not absolute separations) within phenomena. Difference thus, must be thought of as differencing, as “differences in the (re) making.”¹⁷⁾ They are within and constituted through intra-activity, in the creating of ‘this’ and ‘that,’ within the phenomenon that is formed in their entanglement (inseparability). Barad emphasizes that this process is just as a characteristic of electrons with one another, as it is of onto-epistemological intra-actions involving humans.

Another key concept of quantum physics that is also frequently used in Barad’s work is the idea of quantum superposition, which entirely shatters the classical concepts of identity: it shows that being/becoming is an indeterminate matter. This movement of “in/determinacy” (“an always already opening up-to-come”)¹⁸⁾ upsets the self/other binary and also the notion of the self as unity. The self is a superposition — the effect of agential cuts (the material enactments of differentiating/entangling) — of beings, becomings, here and there, now and then. In other words, it is a multiplicity just like entanglements that are not unities either, as they do not eliminate differences. Contrarily, “entanglements entail differentiating, differentiating entails entanglements. One move — cutting together-apart.”¹⁹⁾ Quantum entanglements are not about two or more entities (states, events) being intertwined. They raise a question about the very essence of “two-ness,” and conclusively of “one-ness,” as well. Quantum entanglements call for a distinct sense of “a-count-ability” and of “response-ability.”²⁰⁾ Differences do not only exist between two entities but they also

14) Geerts and van der Tuin, “Diffraction and Reading Diffractionally.”

15) Barad, “Diffraction: Cutting Together Apart,” 174.

16) Ibid., 175.

17) Ibid.

18) Barad, “Diffraction: Cutting Together Apart,” 176.

19) Ibid.

20) Ibid., 178.

work within a single entity. Furthermore, difference is itself a multiplicity within/of itself and it is too diffracted. Diffraction is a constituent of differences not only at every scale but “in the making and remaking of scale (spacetime-matterings).”²¹⁾ “Differences percolate through every ‘thing,’ reworking and being reworked through reiterative reconfigurings of spacetime-matterings [...] each being (re)threaded through the other. Differences are always shifting within.”²²⁾

In this view, beings and objects are not at all separate entities with a well-defined border as they are frequently referred to. In fact, they are constantly exchanging, transforming, and becoming entangled and through intra-action, they are mutually constituting and co-creating one another. This movement is agency itself because agency in Baradian terms is understood as a relationship and not something that one has. Causality in its reworking can be seen as a result of an agential cut. Intra-actions perform agential cuts, which do not produce complete separations but rather cut together-apart (one move). Agential cuts act out a settlement within the phenomenon of the inherent ontological indeterminacy. Through the enactment of agential separability, intra-actions create the condition of “exteriority-within-phenomena.” An agential cut ultimately executes a causal structure among the elements of a phenomenon in the “marking of the “measuring agencies” (“effect”) by the “measured object” (“cause”).”²³⁾

As discussed above, Barad — within an agential realist context — encourages us to re-think our knowledge 1) about the relations of nature/culture and our being in the world; and 2) about identity, body, and matter; through the concept of diffraction agential realism invites us to rework our modes of theorizing and how we think about representation-alism. In the following, I will argue that these aspects are relevant to a new materialist understanding of eco-trauma as they might be helpful in shedding new light on 1) the nature, and 2) the representational challenges of ecological trauma. The non-dualistic world view promoted by agential realism is undoubtedly essential in challenging the fundamentally Western or Eurocentric world view that has determined the intellectual heritage within it was conceived, however I must acknowledge that philosophies outside of Europe such as Indigenous wisdoms had already been evolved around a non-hierarchical relational understanding of being in the world. To this end, I find it important to acknowledge and be guided by some of these wisdoms when re-imagining human-nature relationships.

Thinking with Ecological Trauma in the Context of Diffraction and Relationality

Though what we call trauma theory today has its roots in psychoanalysis, since the 1990s other human sciences — as part of the “ethical turn” of the humanities — such as film theory have integrated trauma-related approaches into their fields of research. This interest in trauma studies was partly the result of escape criticism about “the indifference of theory, in its ‘deconstructive, poststructuralist or textualist guise,’ to historical realities and the

21) Barad, “Diffracting Diffraction: Cutting Together Apart,” 176.

22) Ibid., 178–179.

23) Barad, *Meeting the Universe Halfway*, 140.

possibilities of political engagement”²⁴⁾ writes Richard Crownshaw. Since then, the humanities have provided several disciplinary and interdisciplinary approaches across their various fields of research for the growth of “trauma studies’ representation and politicization of historical experiences.”²⁵⁾ Crownshaw warns us, that despite seeming like a smooth transition, this development entails still continuing debates over the conceptualization of trauma. This article would like to contribute to these debates with its own understanding of eco-trauma. Eco- or ecological trauma, as I call it, is still a relatively new sub-category of trauma theory; yet as related notions such as climate- or eco-anxiety²⁶⁾ have become widely discussed topics in contemporary media it is a subject of increasing research interest. Nevertheless, this area of investigation continues to be an open arena of diverse approaches without a consensus about the terminology. Terms like geotrauma,²⁷⁾ climate trauma,²⁸⁾ eco-trauma,²⁹⁾ ecological PTSD,³⁰⁾ and climate-related pre-traumatic stress syndrome³¹⁾ are all used to describe more or less the same phenomenon and with a differing understanding of the concept of trauma. This research builds on the works of these authors (both from the field of trauma studies and of eco-trauma) but at the same time wishes to move toward different directions inspired by new materialism and decolonial thinking.

As Cathy Caruth argues, a traumatic event is an overpowering experience of unexpected or fatal events in which the response to the event occurs in the often delayed, uncontrolled, repetitive appearance of hallucinations or other intrusive phenomena.³²⁾ One of the most problematic aspects of trauma is that the event itself is not fully experienced or absorbed mentally at the time but only later therefore it stays without a witness as Dori Laub puts it. Due to the inaccessibility and unassimilability of traumatic memories, being traumatized means being haunted by an image or an event. The phenomenon of trauma — in regards to the experience — is characterized by a radical absence and discontinuity through which it pushes the limits of understanding and knowing.³³⁾ Caruth also points out that a traumatic event is always an alienating experience. Additionally, it is marked by a certain numbness that results in helplessness that makes it impossible for the traumatized individual to act. Similarly, Jill Bennett writes that trauma “encapsulates both direct,

24) Richard Crownshaw, “Trauma Studies,” in *The Routledge Companion to Critical and Cultural Theory*, eds. Simon Malpas and Paul Wake (London and New York: Routledge, 2013), 167.

25) Ibid.

26) Panu Pihkala, “Anxiety and the Ecological Crisis: An Analysis of Eco-Anxiety and Climate Anxiety,” *Sustainability* 12, no. 23 (2020), 1–20.

27) Tim Matts and Aidan Tynan, “Geotrauma and the Eco-Clinic: Nature, Violence and Ideology,” *sympleke* 20, no. 1–2 (2012), 91–110.

28) E. Ann Kaplan, *Climate Trauma: Foreseeing the Future in Dystopian Film and Fiction* (New Brunswick: Rutgers University Press, 2016); Benjamin White, “States of Emergency: Trauma and Climate Change,” *Ecopsychology* 7, no. 40 (2015), 192–197; Zhiwa Woodbury, “Climate Trauma: Toward a New Taxonomy of Trauma,” *Ecopsychology* 11, no. 1 (2019), 1–8.

29) Anil Narine, ed., *Eco-Trauma Cinema* (New York and London: Routledge, 2015).

30) Timothy Morton, *Humankind: Solidarity with Nonhuman People* (London and New York: Verso, 2019).

31) E. Ann Kaplan, “Is Climate-Related Pre-Traumatic Stress Syndrome a Real Condition?,” *American Imago* 77, no. 1 (2020), 81–104.

32) Cathy Caruth, ed., *Trauma: Explorations in Memory* (Baltimore and London: The Johns Hopkins University Press, 1995).

33) Shoshana Felman and Dori Laub, *Testimony: Crises of Witnessing in Literature, Psychoanalysis and History* (New York and London: Routledge, 1992).

unmediated affective experience and an absence of affect [...] [thus] it is resistant to cognitive processing and induces psychic numbing.”³⁴⁾

When it comes to the specific question of eco-trauma, Zhiwa Woodbury, psychotherapist, argues that the climate crisis itself is a new form of trauma. It does not only cause trauma but it is a form of trauma that penetrates the conditions of our life. He stresses that

[a]s we humans are ourselves an integral part of the biosphere that is under assault and are wholly dependent upon the natural world in which we have evolved, there is no protecting us from this sweeping assault on the life-support system we share with all beings. The logical implication then is inescapable: The global climate crisis needs to be seen as an entirely new and unparalleled kind of trauma.³⁵⁾

Woodbury claims that the common measure of psychological trauma is a sense of intensive helplessness and fear, the deprivation of control, and the peril of annihilation. The unfolding flux of climate-related catastrophic events is putting almost incomprehensible stressors on the biosphere of which our bodies and minds are also a part, hence inducing an overwhelming feeling of fear and helplessness, and extinction. He too approaches climate trauma as a crisis of relationship: the relationship between humans and nature. However, he adds, that this crisis also influences all levels of relationality; it affects the interspecies, sociocultural, collective, job-related, and domestic spheres of our lives. Because all the cunning forms of trauma are omnipresent, and when experienced continuously they have an intensifying force and effect that can be essentially life-altering. In reaching his conclusions, Woodbury also emphasizes that the existing Western clinical paradigm cannot suitably address the encompassing category of climate change. A more Earth-oriented paradigm is required, one evolved “outside the limited and limiting box of Western psychology and the (Cartesian) scientific-materialist worldview from which modern psychology sprang forth.”³⁶⁾

I agree with Woodbury in that a paradigm shift would be welcome in our³⁷⁾ approaches toward both human-nature relationships and the question of eco-trauma. In my argument about ecological trauma, I would like to differentiate two levels of this traumatic relationship between humans and nature. The first one is what Timothy Morton calls the “Severing,” which is the sense of traumatic separation from nature. The second one is what

34) Bennett, *Emphatic Vision*, 5.

35) Woodbury, “Climate Trauma: Toward a New Taxonomy of Trauma,” 2.

36) *Ibid.*, 5

37) What I intend to explore is how the mechanisms of the system of thought we call Eurocentric works to predestine one's sense of kinship. Consequently, my examination will focus on how one in a hugely urbanized space in a highly industrialized Western country where the abovementioned mechanisms could work most effectively or those living in places that may be lesser industrialized or non-Western, yet have fully embraced the principle that the “other,” be it nature or marginalized groups of people can be exploited, controlled or dominated, based on the principle that certain groups of people or social strata are superior to others, might (but of course not necessarily) experience eco-trauma. Thus, my notion of “we,” “us” or “our” in the context of this article, refers to all those who inherited the epistemologies of the North. For a more detailed discussion of this issue see for example Boaventura de Sousa Santos' concept of the epistemological South and North, in *The End of the Cognitive Empire: The Coming of Age of Epistemologies of the South* (Durham: Duke University Press, 2018).

I call *traumatic connectedness*. Before I continue, however, I would like to note that even though this work intends to confront dualistic thinking, I must acknowledge how hard it is to completely escape the traps of Western rationalism and the binary oppositions in which it thinks. Texts on diffraction, which I have quoted exhaustively and that aim challenging dualistic frameworks unaware also base their argument on oppositions such as diffraction and reflection. Similarly, when I first started exploring how to approach ecological trauma through relationality I instinctively envisioned it as the opposite of the “narratives of separation” that usually characterize any Western thinking about ecological trauma. This again, models quite well how deeply one’s thinking is rooted in the environment it was trained. Recognizing this contradiction, I wish to organize my argument about ecological trauma, separation, and relationality around Unaisi Nabobo-Baba’s notion of both/and way of thinking.³⁸⁾ Inspired by both this idea and the concept of Karen Barad’s agential cut, I propose that within the experience of eco-trauma, the sense of separation and relationality coexist.

Eco-trauma, I argue, enacts agential cuts — that is, it acts out provisional divisions but not absolute separations within phenomena. A both/and way of thinking is based on the idea that seemingly opposing realities cannot be defined as opposite to one another. Looking at the question of separation and connectedness from this perspective and also adding that in our relationship with nature, we (may) experience these sensations quite differently and to differing degrees, these two experiences are in fact inseparable and threaded through each other. I believe that traumatic connectedness this latter component of eco-trauma is rooted in the sense of Severing while it is culminating in the realization that the separation we (Euro-Western subjects) took for granted has never existed. If the climate crisis has taught us anything about our place in the world is that we are intimately connected to nature.

Timothy Morton in discussing ecological matters and global warming, points out that white Westerners (whom Morton refers to as “we”) are in a constant state of “ecological PTSD” (Post Traumatic Stress Disorder). He argues that “we” create an “information dump mode” about ecological facts as a result of “our” creating a bubble of “anticipatory fear,” only then to find “ourselves” in the middle of terribly confusing and numbing traumatic events.³⁹⁾ The numbing quality of the traumatic event is the reason “we” are unable to do anything about the current ecological emergency. Yet, there is another force that determines “our” psyche. An event that does not happen “at” a certain “point” in linear time but is “a wave that ripples out in many dimensions,”⁴⁰⁾ an event that he calls “the Severing.” It is a traumatic crack between “the human correlated world” and “the ecological symbiosis of human and non-human parts of the biosphere.”⁴¹⁾ Moreover, because the traumatic Severing can only be experienced indirectly, it is not resolved. However, it can be all too easy to fall into the bad faith of a false “unified experience” of eco-trauma; I must acknowledge that Morton’s concept of the traumatic Severing was born within a Western academ-

38) Upolu Luma Vaai and Unaisi Nabobo-Baba, eds., *The Relational Self: Decolonising Personhood in the Pacific* (Suva: The University of the South Pacific and The Pacific Theological College, 2017).

39) Timothy Morton, *Being Ecological* (Cambridge, Massachusetts: MIT Press, 2018), xxii.

40) Morton, *Humankind*, 15.

41) Ibid.

ic environment and describes a fundamentally Western sense of eco-trauma; Listening — seeing and understanding too — is trained. “It is encultured and geographically specific, shaped by social, political and economic forces, violence and oppression.”⁴²⁾

As Ailton Krenak indigenous activist phrases it, “Nature” is the daughter of culture. It is only possible to think “Nature” if one is outside of her. He asks, how could a baby think of its own mother while it is still inside her uterus? How could a seed think of the fruit? One can only think the inside from the outside. In a given moment of history, “the civilized world” of humans conceived the idea of “Nature” to name that which had no name. For them (us, Euro-Westerners), he adds, Nature is a construct, an invention of culture, and not something that precedes it. This separation is precisely what allows — from the point of view of “the civilized world” — the domination of nature.

The way eco-trauma has been approached is based largely on a dualistic worldview that thinks in terms of binary oppositions that also determine the conceptualization of identity and therefore one's relationships. The idea of identity in this matrix is rooted in a reductive Hegelian Self/Other dialectics, which I propose to revise on the basis of relationality in order to be able to effectively discuss eco-trauma in a new materialist and decolonizing context. As proposed before, I will treat trauma itself as an active agent who creates a difference within by an act of agential-cut or as Barad puts it elsewhere, cutting together-apart (one move). On the other hand, with the guidance of Indigenous wisdom, I would also like to think with a different approach to identity: one that is based on relationality.

As the Blackfoot scholar, Leroy Little Bear points out, everything is animate and thus alive and imbued with spirit. Blackfoot metaphysics has a holistic perspective where the expression “all my relations” does not simply mean blood relations and family in a Western sense but humans, animals, rocks, the land, etc., explains Little Bear. Consequently, they think with an ecological relational network where everything is considered and nothing is left out.⁴³⁾ Haudenosaunee and Anishinaabe scholar Vanessa Watts also opposes the Western pursuit of the separation of ontology and epistemology. According to the Haudenosaunee and Anishinaabe conceptions of onto-epistemology habitats and ecosystems are perceived as societies. Nonhuman beings, therefore, are active members of society and they “directly influence how humans organize themselves into that society.”⁴⁴⁾ Thus, as Zoe Todd and AM Kanngieser argue, Land and place are thought of as “sets of relationships between human and nonhuman beings, co-constituting one another.”⁴⁵⁾ Eduardo Viveiros de Castro discusses that Amerindian perspectivism, in contrast to Western cosmologies,

42) AM Kanngieser and Zoe Todd, “Listening as Relation, an Invocation” (Paper presented at the CTM Festival (online), Critical Modes of Listening series, Studio dB, Berlin, January 21, 2021), video last accessed February 3, 2023, https://www.youtube.com/watch?v=kGe0DYMroEg&ab_channel=CTMFESTIVAL.

43) Leroy Little Bear, “Blackfoot Metaphysics ‘Waiting in the Wings’” (Paper presented at the Big Thinking Congress of the Humanities and Social Sciences, University of Calgary, June 1, 2016) video last accessed February 3, 2023, https://www.youtube.com/watch?v=o_txPA8CiA4&list=PLelwQNhyPvTzNNpD4F1JPiXVfp3smXt0Y&ab_channel=FederationHSS.

44) Vanessa Watts, “Indigenous Place-Thought and Agency amongst Humans and Non-Humans (First Woman and Sky Woman Go on a European World Tour!),” *Decolonization: Indigeneity, Education & Society* 2, no. 1 (2013), 23.

45) AM Kanngieser and Zoe Todd, “From Environmental Case Study to Environmental Kin Study,” *History and Theory* 59, no. 3 (2020), 385.

consists of “the ideas in Amazonian cosmologies concerning the way in which humans, animals and spirits see both themselves and one another.”⁴⁶⁾ Accordingly, he proposes that the classical categories of “nature,” “culture” and “supernature” can be redefined based on the concept of perspective or point of view. Viveiros de Castro points out that in Amerindian cosmologies, whatever possesses a soul — human or animal — is a subject and thus able to have a point of view. Therefore, in Amerindian ontological perspectivism “point of view creates the subject,” in opposition to the Saussurean formula according to which “point of view creates the object.”⁴⁷⁾ By accepting that any living creature can have a point of view and can therefore be a subject, the hierarchy between humans and all other living beings is dissolved.

A notion rooted in quantum physics, similar to these relational understandings of the self occurs in Barad’s agential realist onto-epistemology. The key concept here, as mentioned before, is diffraction, which calls into question the idea of binaries and calls for a reworking of terms such as identity and difference. It promotes the understanding of identity not as an essence nor something that is fixed but rather as a conditional reiterative performativity through which the perception of difference is reworked. Difference, as a consequence of this performative reworking, ceases to be seen as an impermeable line between object and subject, this and that, here and there, now and then. Instead, it is revisited as the effects of performed cuts “*in a radical reworking of cause/effect*” (italics by Barad).⁴⁸⁾ Difference is not abolished in the act of concatenation of opposite qualities within. This act rather implies the material profusion of self and the manner it is diffracted beyond realities, imaginaries, times, and spaces.

Both Indigenous metaphysics and certain new materialist approaches suggest that identity is a complex web of relations in which being and becoming are indeterminate. This view negates the self/other binary and also the notion of the self as unity. Building on the arguments folded above, I would like to argue that ecological trauma is best understood from the perspective of relationality and a relational self. Thinking with Barad’s idea, the identity or self that experiences eco-trauma as envisioned here, is a superposition of beings, becomings, here and there, now and then, which multiplicity also includes the animal, plant, and mineral worlds, as well as the land and the waters. I propose that the traumatic Severing that according to Morton determines fundamentally the human-nature relationship, is a mechanism, a product of Eurocentric illusions about superiority and a dualistic worldview. I admit that in societies where nature/culture dualism is the lived experience what seems to be traumatic about our relationships with nature is that one feels disconnected. Consequently, it is difficult for theories with a white, Western bias to recognize that human actors are actually things-in-phenomena, intra-actively entangled with other, more-than-human agencies. I propose that the sense of Severing is actually produced by an agential cut. It is an enactment of agential separability — not a complete separation but rather the act of cutting together-apart (one move) — through which intra-actions create the condition of exteriority-within-phenomena. In the following, I will argue

46) Eduardo Viveiros de Castro, “Cosmological Deixis and Amerindian Perspectivism,” *The Journal of the Royal Anthropological Institute* 4, no. 3 (1998), 469.

47) *Ibid.*, 476.

48) Barad, “Diffracting Diffraction: Cutting Together Apart,” 174.

that what is traumatic about the relationship between humans and nonhumans is in fact the realization that there never has been a complete separation and that an encompassing connectedness of all beings is all there is.

I suggest that this sense of relationality self-evident for most Indigenous metaphysics is largely dormant when it comes to societies of the “Western, Christian, capitalist civilizational matrix,”⁴⁹⁾ hence the dominant narratives of a dualistic worldview, and only awakens when this connectedness manifests itself in the form of ecology-related catastrophic events. Therefore, I argue, that what is actually traumatic in our relationship with nature is the experience of undoubted and irrevocable connectedness. I see the term eco-traumatic connectedness as the sum of aspects that constitute humans’ relationship with nature at the present time’s ever-intensifying climate- and ecology-related anxiety. “Eco” in this equation obviously refers to the eco-relatedness, “trauma” merges into itself both the trauma experience and the events that trigger it, while “connectedness” indicates the nature of the relationship. Thinking with Barad’s notions of diffraction and agential realism, in the following, I will explore how trauma from this equation adheres to the relational self and exerts its effect.

Evoking Benjamin White’s approach to eco-trauma, he claims that not only climate and ecology-related catastrophic events have the ability to traumatize but trauma on a social level itself plays a significant role in the destruction of nature.⁵⁰⁾ Similar to his idea, I also suggest that this anticipatory trauma lies in modern Western rationalism that promotes dualism, which extends to our relationship with nature. This sense of separation fuels the false assumption according to we have the right to dominate, control, and possess nature. One of Freud’s suggestions is that it is not necessarily the event that is traumatic but the repression that comes after that particular event. This implies that events and/or experiences are not traumatic in themselves but only in relation to certain human beings and it largely depends on the way that person constructs him or herself compared to the identity. Building on the idea of diffraction, my notion is to reimagine trauma as an active and relational agent that enacts agential cuts that in turn, produce patterns of interference and create a difference within. This difference, however, is not fixed. The sense of opposition it triggers is only present within specific intra-actions that generate cuts that act out conditional separations but not absolute divisions within phenomena. Difference in this context is more of a differencing: “differences in the (re)making.”⁵¹⁾

As discussed earlier, they are within and constituted through intra-activity, in the creating of ‘this’ and ‘that,’ within the phenomenon that is formed in their entanglement (inseparability). This process according to Barad is a characteristic of onto-epistemological intra-actions involving humans. I argue that it can take place between trauma and the self because they are both fundamentally relational (not fixed) and thus, they are reacting with each other in the act of the coming together of opposite qualities within. The sense of the unassimilability of the traumatic memory, the uncertainty that surrounds it, and the impossibility of both completely isolating it and possessing it can be found in this movement,

49) Deborah Danowski and Eduardo Viveiros de Castro, *The Ends of the World* (Cambridge and Malden: Polity Press, 2017), 2.

50) White, “States of Emergency: Trauma and Climate Change,” 192–197.

51) Barad, “Diffracting Diffraction: Cutting Together Apart,” 175.

described above, that dissolves the boundary between subjectivity and objectivity. The moment when trauma sticks to the self and starts its process of differencing, the line between inside and outside that was believed to be solid and unshakable becomes permeable causing both a sense of indeterminacy and a sense of entanglement. One does not exist anymore within the inside of the safety of a fixed self but neither does one exist on the outside of it. There is no inside or outside; there is relational inseparability with differences in the making. One exists in that unsettled threshold where they are constantly drifting in and out.

In my view this process is very much like quantum superpositions that entirely shatter the concept of a non-relational, fixed identity: they show that being/becoming is an indeterminate matter. This movement of indeterminacy that Barad calls “an always already opening up-to-come” does not only upset the self/other binary but also the notion of the self as unity. The self itself is a superposition. It is a multiplicity. The product of agential cuts, which are the material enactments of differentiating/entangling. In other words, it is just like entanglements that do not erase differences. The self is not a unity in the sense that it is not just one definite thing; it is a multitude of relations and entanglings. This movement of indeterminacy is also acted out when trauma and self, interconnect. This entanglement involves differentiating and differentiating bring about entanglings. With only one move, the entanglement between trauma and self-enacts a *cutting together-apart*. The traumatic memory remains inaccessible yet it is threaded through and through the self. It is a difference, always shifting within. This intra-action, as it rejects binary conceptions, also questions the concept of causality. Causality is usually understood as the interaction between two entities: the one that alters the other is the cause of the effect left on the other. Yet, within the framework of agential realism, causality does not require singular causes, linear relationships, or presumed causes separable from their effects. Barad claims that in agential realism distinctly determinate agencies do not precede their intra-action. Moreover, these agencies are actually things-in-phenomena, rather than things-in-themselves.

For trauma to occur, in this sense, certain things-in-phenomena (human or nonhuman agencies) have to intra-act with other things-in-phenomena (events). Thus, events in themselves are not traumatic. They become traumatic in their intra-action with other things-in-phenomena. Barad suggests that cause and effect also occur through intra-actions thus, agential intra-actions are causal arrangements. Causality in its reworking can also be seen as a consequence of an agential cut. In accordance, beings and objects are continually becoming entangled, transforming, and, exchanging. Through intra-action, they are mutually co-creating one another. In Baradian terms, agency is figured as a relationship and not something that one has. This movement, in this manner, is agency itself. At the core of trauma, there is an ontological indeterminacy, a radical openness, while there is also an epistemological uncertainty. Trauma that pushes the limits of understanding and knowing, and that is inaccessible yet seems to haunt or possess the one who is traumatized, is virtual in the sense as Barad theorizes virtuality. It is “the indeterminacy of being/nonbeing, a ghostly non/existence.”⁵²⁾ Creating a lively tension, it is experimenting

52) Karen Barad, “What Is the Measure of Nothingness?,” *Documenta*, 13 (2012), 14.

with the conditions of im/possibility for non-existence while orientating itself toward being/becoming. When sticking to the relational self, trauma induces such a condition of self that is a difference from and with itself, what Derrida calls the condition of the “stranger at home.”⁵³⁾ The inaccessibility of trauma is not an absence in itself but an infinite abundance of openness.

To sum up, eco-trauma is a manifold of relations, entanglements, and cuts that are constantly rearranging themselves. Trauma, a dynamic force that acts out agential cuts deeply penetrates human-nature relations. On the one hand, the trauma experience profoundly determines humans’ relationship with nature in Euro-Western societies and manifests itself in a general sense of severing — the result of an essentially dualistic worldview that heightens the sense of separation enacted by agential cuts. On the other hand, systems built on such worldviews only veil the fact lying deep within the construct that agential separability is a cutting together apart, thus there is never absolute division within phenomena. Agential cuts produce interference patterns that induce differencing: a relational inseparability with differences in the making. What Indigenous theories of relationality and agential realism affirms is that what underlies the Eurocentric notion of nature/culture dualism is in effect an intimate and reciprocal connectedness of the two spheres. There is no real exteriority. This entanglement, however, at present, most often becomes obvious when e.g. natural catastrophes manifest themselves accentuating the traumatic properties of this relationship. In Baradian terms, agency is understood as a relationship. Eco-trauma is a relationship. It has agency: it enacts agential cuts. My notion of eco-trauma, therefore, refers to a traumatic connectedness (an intimate and reciprocal relationship between nature, humans, and political-ideological systems), which however, is not only traumatic for “us” (like the sense of severing may be) but also to those who already think their existence in terms of relationality.

Capturing Eco-Trauma in *sound of a million insects, light of a thousand stars*

To continue with the analyses of *sound of a million insects*, I will argue that the film is an example of eco-trauma cinema. It is an artwork that employs diffraction both as a formal strategy and as a methodology of knowledge production. It supports different ways of seeing and knowing, emphasizes a complex web of relations, and through that captures a traumatic connectedness I explored above.

Most scholars agree that it was Scott MacDonald who first used the term eco cinema,⁵⁴⁾ not in the sense of envisioning an ideal milieu for nature lovers but as a category for certain films within the cinematic avant-garde. MacDonald developed the concept in his

53) Ibid., 18.

54) The term eco cinema was first coined by Roger C. Anderson in the 60s when he proposed to quiet down the minds of nature lovers. He writes in “Ecocinema: A Plan for Preserving Nature”: “The motion pictures should be shown in certain special theaters (I propose they be called Ecocinemas) in which all the appropriate sights, sounds, and smells would be brought together, refined, and improved to produce an art form vastly superior to nature itself.” Roger C. Anderson, “Ecocinema: A Plan for Preserving Nature,” *BioScience* 25, no. 7 (1975), 452.

2004 article titled “Toward and Eco Cinema,” which was then somewhat revised in 2013 as part of the book *Ecocinema Theory and Practice*. His inquiry is based on the concern about the destruction of nature but he stresses that as the natural world demolishes there is an increasing international engagement in preserving unique landscapes and biota. He defines eco-cinema as a filmmaking tradition that uses technology to create the illusions of preserving “Nature” or to be more exact, a practice “that provides an evocation of the experience of being immersed in the natural world” and as a tool that ensures “visual/auditory training in appreciating the experience of an immersion within natural processes.”⁵⁵⁾ Later, in the revised version of his first article, “The Ecocinema Experience” he writes that

[T]he fundamental job of an ecocinema is not to produce pro-environmental narratives shot in a conventional Hollywood manner (that is, in a manner that implicitly promotes consumption) or even in a conventional documentary manner (although, of course, documentaries can alert us to environmental issues). The job of an eco-cinema is to provide new kinds of film experience that demonstrate an alternative to conventional media-spectatorship and help to nurture a more environmentally progressive mindset.⁵⁶⁾

Nishikawa’s film resonates with MacDonald’s revised idea of eco-cinema despite showing significant differences on the one hand in its formal strategies, on the other hand in engaging socially, politically and ecologically traumatic matters — instead of merely contemplating nature — from those films that MacDonald uses as examples. He mentions such cinematic works as *Riverglass: A Ballet in Four Seasons* (Andrej Zdravic, 1997), Diane Kitchen’s *Wot the Ancient Sod* (2001), and Peter Hutton’s *Study of a River* (1996) among others. Besides being eco-related cinematic works, all these instances are what MacDonald later, in a 2014 book termed “avant-docs.” In it, he discusses that from a historical perspective, avant-garde and documentary cinematic traditions have not only developed side by side but have been also inspiring and influencing each other. Thus the central notion of his book is that the history of avant-garde and documentary is converged. First, he highlights how problematic both categories are, and then he chronologically examines the different alternatives of documentary and experimental filmmaking, emphasizing the links between the two traditions, suggesting that they are not antagonistic but rather affiliated. Films that are at the intersection of avant-garde and documentary cinema, hence he calls avant-docs.⁵⁷⁾ Similarly to MacDonald, Lucas Hildebrand also argues that an experimental documentary, as a documentary, is engaged with the reality of history, politics, and culture but the element of experimentation suggests a concern with form and mediation.⁵⁸⁾

55) Scott MacDonald, “Toward an Eco Cinema,” *Interdisciplinary Studies in Literature and Environment* 11, no. 2 (2004), 108.

56) Scott MacDonald, “The Ecocinema Experience,” in *Ecocinema Theory and Practice*, eds. Stephen Rust, Salma Monani, and Sean Cubitt (New York and London: Routledge, 2013), 20.

57) Scott MacDonald, *Avant-Doc: Intersections of Documentary and Avant-Garde Cinema* (Oxford, UK: Oxford Scholarship Online, 2014).

58) Lucas Hildebrand, “Experiments in Documentary: Contradiction, Uncertainty, Change,” *Millennium Film Journal* 51 (2009), 2–10.

Based on MacDonald's selection, I suggest that eco-cinema in his understanding refers to such eco-related avant-docs that potentially foster a more environmentally progressive mindset. Although it may seem like an unusual form of documentary, I propose that *sound of a million insects* is an avant-doc. Furthermore, I argue that it is not only a cinematic work at the intersection of experimental and documentary cinema but as a film that deals with ecological questions, is an example of eco-cinema. However, it is not merely concerned with nature as in with the contemplation and preservation of the natural environment but being buried under leaves and thus letting its aesthetics determined by the intra-actions of all the non-human agents that participated in the process of decay that eventually produced the organic forms seen on the screen, it is also made in collaboration with nature. As a documentary, it is engaged with the reality of history, politics, and culture. Yet, it contains the element of radical experimentation which suggests a concern with form and mediation. Similarly, Tess Takahashi in her 2021 article also stresses that *sound of a million insects* can be understood as a documentary. She discusses it as a form of "analog data visualization," which is a documentary form that "crystallizes the intersection between our increasing faith in the perspectives offered by big data and a renewed faith in the guarantees of immediate fleshy materiality."⁵⁹⁾

What she calls analog data visualization is present in a variety of artistic practices that render numerical data into quite literally, a more palpable form. Works such as *sound of a million insects*, — using the film's body to make radiation (something that escapes human sight) visible — argues Takahashi, convert data into more affective, experiential, and sensory forms. At first glance, Nishikawa's work reads as an abstract film achieved through direct animation, — a camera-less filmmaking technique that involves working directly on the body of the analog film and that usually comprises painting, scratching, applying different materials on the film strip, or contact printing — however, being aware of the film's context and production it becomes clear that what the viewer sees on the screen is the result of burying negative film stock in an area that is contaminated by radiation. As the film strip takes up light, radiation from the environment and moisture (coming from the air, potentially the leaves, and the bodies of insects) it becomes an archive of the state of that particular space at a certain moment in time. Beyond converting into the literal document of radiation, the insects, leaves, soil, and air imbued with radiation that imprinted themselves into the negative film, stratifies information and experience accumulated over time.

As the film's topic is connected to the aftermath of the nuclear catastrophe triggered by the tsunami — an event that entangles social and political spheres, nuclear physics research, epistemic injustice, and environmental destruction — it is eligible to be discussed as an example of what I would call a sub-category of eco-cinema, namely, eco-trauma cinema. According to Anil Narine, eco-trauma cinema takes three general forms: 1) accounts of people who have been traumatized by the destruction of the natural world; 2) narratives that represent people or social processes that have traumatized the environment or its species; and 3) stories that depict the aftermath of ecological catastrophe.⁶⁰⁾ Although Narine's

59) Tess Takahashi, "Fukushima Abstractions: Sound of a Million Insects, Light of a Thousand Stars as Analog Data Visualization," *ASAP/Journal* 6, no. 1 (2021), 68.

60) Anil Narine, "Introduction: Eco-Trauma Cinema," in *Eco-Trauma Cinema*, ed. Anil Narine (New York and London: Routledge, 2015), 1–24.

focus is on narrative cinema, his category has much more potential than simply referring to obvious cases of eco-trauma cinema. Pieces of eco-cinema that deal with eco-traumatic events or the questions of environmental destruction should also fall into this category. Beyond the content level, however, I wish to elaborate on the complex ways avant-docs and specifically *sound of a million insects* tend to work. Naturally, Nishikawa's film can be connected thematically to eco-trauma. In the case of *sound of a million insects* is the aftermath of a nuclear catastrophe in Japan. Yet, eco-trauma is not only present on the content level but is also incorporated in the film form itself. Briefly evoking my previous definition, eco-trauma is a relational phenomenon that at the same time is unaware of its own relationality (see trauma itself that although characterized by a radical discontinuity, is viscous: it sticks to the traumatized person). Its non/existence creates the conditions of a both/and way (rather than an either/or way) of being that also embraces difference within by incorporating both a sense of separation and an intimate connectedness. This may be a non-chosen, inconvenient entanglement nevertheless, it is an entanglement. But, as I proposes earlier, eco-trauma and the connectedness it involves do not only refer to a traumatic human-nature relationship. I see it rather as a complex web of reciprocal entanglements of nature, humans, histories, and political-ideological systems.

The film points to this reciprocal entanglement as a manifestation of multispecies stories and practices of becoming-with. Nishikawa's film is an attempt to capture these characteristics of a less hierarchical worldview. It follows a filmmaking practice that is a process of making with rather than making about. Given that *sound of a million insects* in capturing eco-trauma rejects the classical forms of its representation as the film does not reveal recognizable images, there is no iconic likeness to the place represented or the events connected to that place, yet it emphasizes all kinds of entanglement. I propose that Nishikawa's work translates the idea of diffraction to the level of film form and through that achieves a realism without representationalism. The film negates the idea that representations and entities "awaiting for representation"⁶¹⁾ would be ontologically separate and that representation could assure unburdened access to the real. It does neither intend to reflect back, mirror nor reconstruct the both socially and ecologically traumatic events that led to the leak of radiation as many classical documentaries probably would. Taking up the challenge to convey the eco-trauma experience I propose that this film is an instance of what Astrida Neimanis calls "Nature writing/representing itself,"⁶²⁾ which is a concept that refuses not representation as such but rather representationalism. Drawing on the works developed from quantum physics of Vicky Kirby and Karen Barad, she entertains the idea that "there is no outside of Nature" (being an ideological construct) but "Culture" (and everything it entails) is an instance of Nature representing itself.⁶³⁾ The film

61) Astrida Neimanis, "No Representation without Colonisation? (Or, Nature Represents Itself)," *SOMATECHNICS* 5, no. 2 (2015), 1.

62) Ibid.

63) Naturally, a flat ontology such as this has to be aware of the pitfalls it may hold for ethical questions. Neimanis therefore stresses that a non-hierarchical ontology should not mean flat ethics. She proposes to think with Gayatri Spivak's concept of the planetary in trying to avoid issues concerning the ethics of her idea. Planetary provides a fertile ground for pondering the incongruous distribution of power, bodies, cultures, ideas, and matters, as Neimanis points out, in a global context but without walking into the traps of "the

negotiates realism without representationalism inasmuch as it is produced through intra-actions from within and as part of the phenomena. It does not treat eco-trauma as something that is fully accessible therefore can be known and adequately represented. Rather it is an example of nature and eco-trauma within, configuring and reconfiguring themselves embracing both their dynamism and unknowability.

What the viewer sees on the screen is not conveyed by human actors in the sense that one does not hear the accounts of the persons concerned, nor statements or scientific data given by experts. The human point of view (Nishikawa scratching the film while cleaning it, giving context through a short text) does not even have the most central position in the whole: it is folded into the voices and points of view of other, nonhuman actors (the soil and radiation producing rot and eroding on/within the film strip, the insects that leave marks of their movements on the film and given voice by the damaged soundtrack but also the film strip itself has agency). It activates a gaze as Jennifer Gabrys puts it “within planetary inhabitations.”⁶⁴⁾ Drawing on her argument on forests as planetary media, I propose that the ways radiation registers in the natural environment (in the soil, the leaves, the air, etc. but also in the human body, here the filmmaker's body) and on the film strip can be read at once as a medial event, a planetary event, as well as an event implicating humans. If one accepts the idea that there is no outside of Nature and “Culture could be Nature all along,” one can come to the conclusion that everything that participated in the making of this film is planetary media that registers and operationalizes collective accumulations of radiation: they are proxies that record and register the effects of a nuclear catastrophe. Indeed, what we can see in *sound of a million insects* is that the soil, the insects inhabiting that soil, and the air that carries radioactive molecules are the planetary media that then imprinted themselves into another organic body: the film's body that does not only functions as another medium but also becomes the local manifestation of a hyperobject⁶⁵⁾ called radiation making it visible and audible for a few instances.

There is a lively dialogue to be witnessed that is produced through the encounter of the dynamically mattering bodies of the filmmaker, the insects, the soil, the radiation, and the film's body. This dynamic mattering of bodies serves as a bridge in thinking across human and nonhuman bodies suggesting that they are always already (at times traumatically) intermeshed and ultimately inseparable. As I see it, the film does not exclude tension or conflict but models a both/and way of thinking in the sense that seemingly opposing realities are not defined/treated as opposite to one another. It generates and embraces multiplicity and difference (within). Putting forward entanglement, I consider *sound of a million insects* resisting reductionism and to be an example of thinking with various things, process-

neatly mappable discourse of ‘globalization.’” Since this concept is designed to think of otherness as something that is contained in the common and as a mode of conceiving the incomprehensible that does not call for an ontological split, it serves as an apt way of confronting the risks that the idea of Nature represents itself poses. Neimanis, “No Representation without Colonisation?,” 20.

64) Jennifer Gabrys, “Becoming Planetary,” *e-flux Journal*, accumulation October 2018, accessed February 3, 2023, <https://www.e-flux.com/architecture/accumulation/217051/becoming-planetary/>.

65) The term hyperobject was introduced by Timothy Morton. It refers to such objects that involve profoundly different temporalities compared to human scales, are nonlocal, viscous and interobjective. For further reading see Timothy Morton, *Hyperobjects: Philosophy and Ecology after the End of the World* (Minneapolis and London: University of Minnesota Press, 2013).

es, and beings. It enacts cuts while also creating new relations as it points toward eco-traumatic connectedness as a web of an intimate and reciprocal relationship between nature, humans, and political-ideological systems. The film works through affect: by colliding cumulative haptic images it creates interference patterns rather than trying to mirror or reflect back the same. Nishikawa's work is non-linear, non-narrative, and abstract but without alienating the problem through abstraction: it is almost as if it followed the logic of interference patterns, while on the physical level, it actually captures how humans and non-humans interfere with and extend each other. The film emerges through encounters, entanglements, and the intra-actions of human and nonhuman agents in their process of becoming with. It does not treat nature as something that is waiting for representation by culture/humans. It rather acknowledges and highlights that "both are entangled in the coming-to-matter of the world."⁶⁶

It does not simply capture the relationality of eco-trauma but points towards an uncomfortable, even violent/unwanted relationality that lies within. Lastly, the way Nishikawa engages with the material makes things thicker as Donna Haraway says, and is open to conjoin different (historical) situatedness in the system of knowledge production.

Nishikawa's images — as those of other films made in collaboration with nature (films buried in the earth, submerged in water, etc.) — are haptic due to the extreme closeness of the objects and the graininess and defaults of the hand-processed material, all of which create diffractive layers to the film. These rough pictures are enriched by preserving the literal signs and traces of a sensual embodiment of the filmmaker, plants, insects, minerals, and even radiation. While making the film, Nishikawa engaged his body actively in the process, and through touch, he got entangled with other nonhuman collaborators. Thus, haptics, in this case, is central to theorizing and producing knowledge through bodies (human and non-human alike). And the haptic images — that force the viewers to give up mastery by presuming the observation of a subject from a very short distance that makes identification nearly possible — produced by the imprint of these bodily encounters are the tools of diffraction. Namely, the quality of haptic images allows the viewer to fuse with the material by moving on the surface of the object, almost touching and scanning it with their eyes. The hapticity of the material in Nishikawa's film overwhelms the viewer, offering an opportunity to immerse him/herself into nonhuman territories. *sound of a million insects* offers the chance to be present with whatever there is, with whatever comes. It takes away the certainty of thought, questions overrepresentation, and analysis but opens up the possibility of being with; a being with difference, with how we comport ourselves, with the social-political and epistemic injustices, but also with the sound of insects imprinting themselves into the soundtrack, or radiation. Listening to them is an encounter. To be more exact, it is multiple encounters in their intra-active entanglements. Attending to these encounters brings the recognition of (a traumatic) connectedness.

66) Neimanis, "No Representation without Colonisation?," 14.

Summary

When it comes to the question of eco-trauma and its representation in contemporary audiovisual culture, one always has to face the challenges of capturing the trauma experience itself. Throughout this article, I outlined a context in which ecological trauma (and maybe trauma in general) can be approached through connectedness rather than separation. I argued that breaking through our fundamentally Eurocentric, dualistic worldview, a new materialist framework thought together with Indigenous metaphysics and environmental knowledge, as well as decolonizing theories provide fertile soil for attending to the multiple aspects of eco-trauma just as for how we understand our relationship to other humans, nonhumans, and even to ourselves. With regard to contemporary audiovisual culture and the efforts certain artists make in offering alternatives to the mere intention of “reflecting” (reconstructing, replaying) social-eco-traumatic events through the tools of classical story-telling, I argued that experimental cinema (being a critical response to classical Hollywood-type filmmaking) can more successfully model a different way of seeing and understanding — to what I refer to as a diffractive way of thinking in this article. Through a case study of Tomonari Nishikawa's *sound of a million insects, light of a thousand stars*, I pointed out that this characteristic of experimental films allows for capturing the sense of the traumatic connectedness that lies at the heart of the eco-trauma experience.

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Filmography

sound of a million insects, light of a thousand stars (Tomonari Nishikawa, 2014)

Biography

Bori Máté is a doctoral student in the Department of Media theory, at the University of Applied Arts Vienna. She studied film history and film theory at the Eötvös Loránd University, Budapest. Her current research focuses on contemporary experimental/documentaries that address the questions of ecological trauma. In her work, she employs new materialist, phenomenological and eco-philosophical approaches, as well as, decolonial thinking. Máté has been publishing articles in such journals as the *Quarterly Review of Film and Video* and the *Millennium Film Journal*. She is currently guest editing the special issue (2/2023) called "(Eco)Traumatic Landscapes in Contemporary Audio-visual Culture" at the Czech Journal for Film Theory, History, and Aesthetics, *Iluminace*. As an experimental filmmaker, her works have been screened at festivals like the Berlin Critics' Week, the International Film Festival Rotterdam, or the Jihlava IDFF. In May 2022 Máté also curated the program "Eco Cinema" (screening and lecture) — a collaboration between the joint university program Lectures for Future and the Department of Media theory.

Beja Margitházi (Eötvös Loránd University)

‘Traumatomic’ Encounters

*Trauma through Radioactivity in Photofilmic
‘Experimental Documents’ of Chernobyl*

Abstract

Nuclear trauma has always resisted verbal and visual portrayal, calling for various alternative, form-breaking methods. This article discusses three artistic works which I consider “experimental documents” because of their various photographic and filmic practices of intimately approaching the radioactive contamination still present in the Chernobyl Exclusion Zone. The site-related projects of Alice Miceli (*Chernobyl Project*, 2006–2010), Lina Selander (*Lenin’s Lamp Glows in the Peasant’s Hut*, 2011), and Daniel McIntyre (*Lion* series, 2011–2014) go beyond the journalistic representations of the area and directly engage with the material traces, embodiment and objectification of immaterial radioactivity, devoting key role to the artist’s bodily and sensorial presence in the traumatic landscape. I examine these works of art in a conceptual context that assumes a structural similarity between radioactive radiation and trauma due to their uncontrollable and retrospective nature, their specific aspects of embodiment, and their manifestation through various emotional and physical symptoms. According to my observation, although the artists initially aim to investigate and document the immateriality of toxic radiation through the mediums of photography and film, they not only reveal the original, hyperobjective nature of nuclear trauma, but also touch on its affective qualities. I will argue that these three works, despite their differences, are based on “traumatomic encounters” with the radiation-contaminated sites and have in common the perception of Chernobyl as a “traumascape” (Tumarkin), which is saturated with an invisible, radioactive, and at the same time affective “atmosphere” (Böhme).

Keywords

nuclear radiation, radioactivity, traumascape, affective atmosphere, hyperobject, experimental film, material witness

Introduction

With the nuclear age, a new type of pervasive trauma appeared. The ontological insecurity generated by the invention of the atomic bomb, and the sense of danger and risk resulting from its first military deployment acted as key factors in the formation of a "nuclear subjectivity".¹⁾ Later, with the accidental explosion of power-generating reactors, nuclear trauma extended to the sites of slow or structural violence, leading to complex, long-term environmental, biological damage and physical, psychological consequences.²⁾ While any disaster can cause trauma symptoms, nuclear events are more likely to lead to catastrophic consequences, not only because they can affect large communities or entire countries, but because that the insidious nature of radiation exposure and the lack of knowledge about the effects of nuclear energy allows fear and stress to prevail in different ways from more well-known and understandable disasters (like e.g. natural catastrophes).³⁾

The accident at the Chernobyl RBMK nuclear reactor No. 4. on April 26, 1986, in Ukraine was considered the worst man-made, technological disaster in the history of humanity, receiving the highest possible rating on the international nuclear disaster ranking (7 on INES),⁴⁾ a score that holds alone to this day. The resulting radioactive fallout, including plutonium, iodine, strontium and caesium, was 200 times bigger than the bombs of Hiroshima and Nagasaki; the neighboring town, Pripyat and many surrounding villages were emptied in the next 36 hours, in total 200,000 people were relocated, and the contamination was affecting most of the European areas.⁵⁾ The disaster was traumatic on individual and collective levels as it had a serious negative psychological and physical impact, mostly due to misinformation and unknown health consequences. Chernobyl trauma, in addition, unfolded continuously and retrospectively over time,⁶⁾ creating a general feeling of insecurity and uncertainty in the region. The traumatic cultural, ecological, and biological aftereffects⁷⁾ indirectly and directly undermined the political stability of the Soviet Union, leading to the collapse of the communist system in 1991.

Nuclear catastrophes spreading radioactive contamination and activating human and non-human agencies not only represent a special case of ecological disaster but seem to highlight some ontological similarities between the concept of trauma and the nature of nuclear radiation.⁸⁾ The Holocaust-based theories of trauma formed at the beginning of

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- 1) Gabriele Schwab, *Radioactive Ghosts* (Minnesota: University of Minnesota Press, 2020).
 - 2) Gabriele Schwab, "Transgenerational Nuclear Trauma," in *The Routledge Companion to Literature and Trauma*, eds. Colin Davies and Hanna Meretoja (London and New York: Routledge, 2020), 438–451.
 - 3) Shannon Moore, "Nuclear Trauma," in *Encyclopedia of Immigrant Health*, eds. Sana Loue and Martha Sajatovic (New York and London: Springer, 2012), 1128–1129.
 - 4) *INES: The International Nuclear and Radiological Event Scale User's Manual*, 2008 edition (Vienna: International Atomic Energy Agency, 2013), 2, 152, accessed January 19, 2023, <https://www-pub.iaea.org/MTCD/Publications/PDF/INES2013web.pdf>.
 - 5) "Frequently Asked Chernobyl Questions," *International Atomic Energy Agency*, accessed January 18, 2023, <https://www.iaea.org/newscenter/focus/chernobyl/faqs>.
 - 6) Ekatherina Zhukova, "From Ontological Security to Cultural Trauma: The Case of Chernobyl in Belarus and Ukraine," *Acta Sociologica* 59, no. 4 (2016), 332–346.
 - 7) Lynn Barnett, "Psychosocial Effects of the Chernobyl Nuclear Disaster," *Medicine, Conflict and Survival* 23, no. 1 (2007), 46–57.
 - 8) For a discussion of the metaphorical 'radioactivity' of trauma, in a different context, see: Yolanda Gampel,

the 1990s (which understandably did not yet reflect the events of Chernobyl as trauma at all), especially the writings of Cathy Caruth, Shoshana Felman, Dori Laub, and Geoffrey Hartman, defined trauma as a hidden, unrepresentable, inner affective experience, which is related to an “event without a witness”⁹⁾, and is understood and processed retrospectively. The reception and assimilation of the original event begin only later because it is “registered rather than experienced,” thus it is not so much the event itself, but the “*structure of the experience*” that explains the traumatic consequences.¹⁰⁾ Some later theories on the other hand emphasized the physical registration of trauma, which hides in the body as an invisible scar and generates long-lasting effects.¹¹⁾ These features show strong similarities with the phenomenon of nuclear radiation, which despite its pervasive presence, cannot be detected by the human senses. According to the scientific descriptions, radiation is invisible, inaudible, odorless and intangible, tasteless and colorless, its presence is hardly experienced. Intrinsically immaterial, it manifests itself in other substances and living organisms; its effects become visible “only after a delay, as the diseases come to the surface of the body.”¹²⁾ Based on these correlations I propose to think of radiation as an illuminating conceptual metaphor for trauma, taking up the idea of the “radioactivity of trauma,” which refers to its uncontrollable, retrospective status, embodied aspects, and manifestations through various emotional and physical symptoms. I see the works of art presented below as situated in this conceptual interrelatedness, raising questions and pointing to further sensual, affective details of this web of similarities and reflections between radiation and trauma.

The unrepresentable and inexpressible nature of (nuclear) trauma has always posed a challenge bordering on provocation to the visual and verbal media and arts, prompting all kinds of alternative, unconventional, form-breaking methods.¹³⁾ In the following, I will discuss three artistic works which I consider “experimental documents” because of their various photographic and filmic (photofilmic) practices of intimately approaching the radioactive contamination still present in the Chernobyl Exclusion Zone. These works form a special group in the rich and diverse corpus of documentary depictions and interpretations of the Chernobyl disaster, whose history began immediately after the explosion at the end of April 1986, and has remained a popular topic of documentaries, tourist videos,

“Historical and Intergenerational Trauma: Radioactive Transmission of the Burdens of History — Destructive versus Creative Transmission,” in *Approaches to Psychic Trauma: Theory and Practice*, ed. Bernd Hupertz (London and New York: Rowman & Littlefield, 2018), 53–63.

- 9) Shoshana, Felman and Dori Laub, eds., *Testimony: Crises of Witnessing in Literature, Psychoanalysis, and History* (London and New York: Routledge, 1992).
- 10) Cathy Caruth, “Trauma and Experience: Introduction,” in *Trauma: Explorations in Memory*, ed. Cathy Caruth (Baltimore: Johns Hopkins University Press, 1996), 3–12.
- 11) Bessel Van der Kolk, *The Body Keeps the Score: Mind, Brain and Body in the Transformation of Trauma* (New York: Penguin Books, 2014).
- 12) Trond Lundemo’s words from a conference presentation are quoted in: Hannah Goodwin, “Atomic Tests: Experimental Filmmaking in the Nuclear Era,” *Journal of Film and Video* 73, no. 2 (2021), 11–25.
- 13) The idea of unrepresentability typically appeared in the classic, Holocaust-related, post-structuralist trauma theories, and was later criticized by various philosophical and aesthetic discourses and therapeutic practices. For a more recent comprehensive overview of the topic, see e.g.: Anna-Lena Werner, *Let Them Haunt Us: How Contemporary Aesthetics Challenge Trauma as the Unrepresentable* (Bielefeld: transcript Verlag, 2020).

and TV broadcasts ever since.¹⁴ Leaving behind the journalistic representation of the area, in the case of the *Chernobyl Project* (Alice Miceli, 2007/2011), *Lenin's Lamp Glows in the Peasant's Hut* (Lina Selander, 2011), and *Lion* series (Daniel McIntyre, 2011–2014) the artists act as translators or mediators who, sensing and scanning the atmosphere of the traumatic site, turn their work of art into a medium of an embodiment for the invisible, ethereal radioactivity.¹⁵ I will refer to these embodiments as "traumatomic encounters" and I will argue that by the examination and documentation of the immateriality of toxic radiation through the sensory, and material aspects of photography and film, these artworks actually come closer to exploring and exposing the hyperobjective and affective nature of nuclear trauma.

Nuclear trauma: (hyper)objective and affective

Studying the traumatic effects of the Chernobyl explosion in the context of the environmental culture of the Soviet Era, Anna Barcz highlights the iconic and symbolic significance of the location, which was developed despite the fact that beginning with the mid-1950s several nuclear accidents occurred in the Soviet Union. Among other things, the reason for this was that the reactor incident could not be kept a secret because of the obvious consequences, so it received international publicity within a short time, and the news caused existential shock and transnational human and ecological trauma in the entire region.¹⁶ From then on by mentioning Chernobyl we no longer mean the village or the place itself, as its multiple meanings exceed into what Olga Briukhovetska calls 'master signifier' or 'key symbol', comparable to "Hiroshima" in quotation marks.¹⁷

14) These documentaries usually combine interviews (with experts, scientists, historians, doctors, journalists, researchers, survivors and relatives, tourists and guides), and typically alternate between four representative locations of the Exclusion Zone: the reactor site (the Sarcophagus), natural landscapes, village households and the abandoned buildings of Pripyat (Nikolaus Geryhalter, *Pripyat*, 1990; Frederic and Blandine Huk Cousseau, *A Sunday In Pripyat*, 2006; Phil Grabsky, *Heavy Water*, 2006). A group of these films deal with the natural life, the animals living in the area and the environmental effects of radiation (e.g.: Peter Hayden, *Chernobyl: An Animal Takeover*, 2007; Luc Riolon, *Tchernobyl: Une histoire naturelle*, 2010; Otto Clemens, *Radiactive Wolves*, 2012; Chiara Belatti, *Life After Chernobyl*, 2016); others with the different group of people affected by the events, like the liquidators (Serhiy Zabolotnyi, *Chernobyl 3828*, 2011), villagers (Anne Bogart and Morris Holly, *The Babushkas of Chernobyl*, 2015), children (Maryann DeLeo, *Chernobyl Heart*, 2003), or follow individual stories of some survivors (Gunnar Bergdahl, *The Voice of Lyudmilla*, 2001; Christopher Bisson and Maryann DeLeo: *White Horse*, 2008; Garcia Chad, *The Russian Woodpecker*, 2015); while some others reconstruct the original events with archive footage and digital visualizations (Rollan Serghienko, *The Bell of Chernobyl*, 1987; Kurt Langbein, *The Bell of Chernobyl — 10 years later*, 1997; BBC Horizont: *Inside Chernobyl Sarcophagus 1.–2.*, 1991–1996).

15) Other experimental multimedia projects related to Chernobyl, which mix animation, live recording, photography and artistic reenactments, but do not specifically build on the physical presence of the artists and the embodiment of radioactivity are e.g.: Galina Adamovich, *Once upon a time*, 2001; Rainer Ludwigs and Tetyana Chernyavska, *Leonid's Story*, 2011; Ksenia Simonova, *Eternal Tears*, 2011; Jane and Louis Wilson, *Toxic Camera*, 2012; Emilija Skarnulyte, *Aldona*, 2013; Pol Cruchten, *Voices from Chernobyl*, 2016; Maxim Dondyuk, *Untitled Project from Chernobyl*, 2019.

16) Anna Barcz, *Environmental Cultures in Soviet East Europe: Literature, History and Memory* (London: Bloomsbury Publishing, 2020), 127.

17) Olga Briukhovetska, "Nuclear Belonging: 'Chernobyl' in Belarusian, Ukrainian (and Russian) films," in

In the recollections of Chernobyl witnesses and the literary writings of Christa Wolf and Svetlana Alexievich, Barcz distinguishes two main difficulties in approaching nuclear trauma. She even observes “a tension between the need to objectify this catastrophe [...] and the affective side of nuclear risk narrative.”¹⁸⁾ In the traumatized language of cultural memory about Chernobyl, the accident appeared as an ontological shock and epistemological challenge from the beginning; the survivors and witnesses struggled with understanding the so-called objective nature and side effects of nuclear radiation. This complexity is well conceptualized in Timothy Morton’s hyperobject theory, by which Morton marks the ecological aftereffects of human interventions into the ecosystem in the Anthropocene. Hyperobjects are “hyper” in relation to other entities, regardless of whether they were produced by humans or not. By definition, these are the largest, longest-lived objects humanity knows, existing beyond our comprehension, enveloping us, attacking and penetrating the physical body at every opportunity.¹⁹⁾ In Morton’s vision hyperobjects such as radiation, climate change, oil- and plastic pollution are “massively distributed in time and space relative to humans” entailing unpredictable consequences.²⁰⁾

Nuclear trauma, on the other hand, similar to post-Holocaust definitions, is not caused directly by the accident, but by the serious affective aftereffects related to nuclear pollution, which through the contamination of water, air, soil, plants, and animals led to human losses, cancer cases and genetic mutations. These effects of radiation become visible only gradually; the destruction is delayed, and scattered in time and space, being a typical example of what Rob Nixon calls stratified slow violence, by which Nixon highlights cases when chemical or radiological violence is “driven inward, somatized into cellular dramas of mutation that [...] remain largely unobserved, undiagnosed, and untreated.”²¹⁾ Barcz also mentions the anti-representational and philosophical character of the Chernobyl narrative, which shows how the event “shook memory and disrupted the borders between the visible and the invisible, the known and the unknown.”²²⁾ In my view, it is precisely this “hyperobjective nature” of nuclear trauma that poses a double dilemma for any artistic and aesthetic practice, in the sense that both the objective phenomenon and its affective consequences resist direct portrayal.

The Chernobyl-related artistic projects of Alice Miceli, Lena Selander, and Daniel McIntyre discussed in the following were inspired by direct, first-hand contacts with the site of past traumatic events and the experience of entering and crossing the marked area around the exploded reactor. The artists do not strive to capture the effects of nuclear trauma directly; still, they get closer to it through the phenomenological study and reproduc-

Contested Interpretations of the Past in Polish, Russian, and Ukrainian Film: Screen as Battlefield, ed. Sander Brouwer (Leiden and Boston: Brill, 2016), 97–98. The symbolic interpretation of Chernobyl has been studied by many, see e.g. Sarah D. Phillips, “Chernobyl’s Sixth Sense: The Symbolism of an Ever-Present Awareness,” *Anthropology and Humanism* 29, no. 2 (2004), 159–185; Hiro Saito, “Reiterated Commemoration: Hiroshima as National Trauma,” *Sociological Theory* 24, no. 4 (2006), 353–376.

18) Barcz, *Environmental Cultures in Soviet East Europe*, 133.

19) Timothy Morton, *Hyperobjects: Philosophy and Ecology after the End of the World* (Minneapolis and London: University of Minnesota Press, 2013), 85.

20) *Ibid.*, 1.

21) Rob Nixon, *Slow Violence and the Environmentalism of the Poor* (Cambridge, MA, and London: Harvard University Press, 2011), 6.

22) Barcz, *Environmental Cultures in Soviet East Europe*, 134.

tion of radiation and radioactivity. This reminds us of the critical approach of Griselda Pollock, who, in relation to artistic representation, proposes the demystification of the idea of trauma as an effect, a condition, a shadow, or an event that we cannot know, and instead suggests to think about it as "an encounter that assumes some kind of space and time, and some kind of gap as well as a different kind of participating otherness."²³⁾ This encounter is created here through experiments to collect or reproduce visual samples of nuclear radiation existing in the area, how the artists initially attempt to approach the hyperobjective phenomenon, yet they also touch on its affective qualities. The shift or transition between the hyperobjective and affective is produced by the way in which the artistic projects perceive Chernobyl as a *traumascape*, which is saturated with a specific, invisible, radioactive, and at the same time affective *atmosphere*, that can be grasped in its sensuality, embodied and enclosed in works of art.

Traumascape, radiation and the photofilmic: *Chernobyl Project*

The visit to the reactor site is an event of key importance in the case of the three works. The evacuated, closed and essentially uninhabited Chernobyl Exclusion Zone, a 30-kilometer radius area around the exploded reactor No. 4. redefines the notion of a traumatic landscape in its own way. The empty, apocalyptic, post-urban areas of the past atomic city, Pripjat, and surrounding rural landscapes, rewilded by animals and plants in a flourishing "radioactive paradise,"²⁴⁾ simultaneously show a haunting, post-human radioactive future and the natural world's vitality in the human absence. As a still severely contaminated area, various prohibitions and restrictions govern its visit, and despite being a popular destination for dark tourism, Chernobyl has never been, nor can it be such a memorial site or place of pilgrimage like for example Auschwitz-Birkenau, Ground Zero, Hiroshima or the Cambodian Killing Fields.

The idea of approaching trauma through location recalls the concept of 'traumascape', by which Maria Tumarkin wishes to draw attention to the importance of physical places of traumatic events, in contrast to the temporal dimensions that have long been emphasized in trauma theories.²⁵⁾ In these haunted and haunting places constituted by particular past experiences and their aftermath, "visible and invisible, past and present, physical and metaphysical come to coexist and share a common place."²⁶⁾ Pointing to the essential affectivity of these sites, Tumarkin states that the significance of traumascares lies in the specific

23) Griselda Pollock, "Art/Trauma/Representation," *parallax* 15, no. 1 (2009), 40–54, 40.

24) Barcz, *Environmental Cultures in Soviet East Europe*, 132.

25) With the concept of traumascape, Tumarkin reflects on a long-standing asymmetry in trauma theories. Although time and temporal dimensions appeared from the beginning as basic definitional elements of trauma, which was envisioned as something that can be processed retrospectively, the importance of physical locations was recognized in these theories only recently. Tumarkin cites several examples of descriptive terms given to locations of violent, tragic events, like wounded space (Deborah Bird Rose), places of colonial uncanny (Ken Gelder and Jane M. Jacobs), spaces of death (Michael Taussig), landscape of violence and tragedy (Kenneth Foote), or Dominic LaCapra's engagement with Claude Lanzman's *non-lieux de la mémoire*. See: Maria Tumarkin, "Twenty Years of Thinking about Traumascares," *Fabrications* 29, no. 1 (2019), 4–20.

26) *Ibid.*, 5.

cultural work they perform, and the way they become involved in individual and collective rituals of grieving, remembering and interpreting of specific traumatic events. In *Chernobyl Project* (2006–2010), Brazilian artist Alice Miceli researches the possibilities of “recording radiation [...] embedded into other physical matter,” with particular regard to the (in)visibility of traumatic aspects of a place.²⁷⁾ According to the IAEA measurements, more than a hundred radioactive elements were released into the atmosphere at the time of the explosion, most of them though decayed in the meantime; the isotopes Caesium-137 and Strontium-90 however are still present in the area.²⁸⁾ As indicated by the title and duration of Miceli’s work (*Chernobyl Project*, 2006–2010), the artist borrowed the methods of a scientific experiment, when first replicated the conditions of Chernobyl radiation (especially Caesium-137), in a controlled, laboratory environment. The recordability test was refined following further on-site visits. After laying and leaving radiographic films used for X-rays on the surfaces of trees, ground, and houses in the Chernobyl Exclusion Zone, Miceli realized that the ideal direct exposure time is 2–8 months, for the gamma rays to become clearly visible on the radiation-sensitive substrates. The series of more than 30 large-format (11.9 × 15.8 inches) radiographic negatives in this way stand before us as silent, ruthless material witnesses of the radiation still present in the highly contaminated landscape, mediating their hyper-objective nature into visible evidence.

By letting radioactivity “expose itself,”²⁹⁾ Miceli’s ‘experimental document’ joins those hundred-year-old efforts, which aimed to visualize radiation in the form of contact prints (or radio-autographs) through direct contact with photosensitive materials. Artist-researcher Susan Schuppli outlines an imaginary timeline of these accidental or planned occurrences, starting with Wilhelm Conrad Röntgen’s discovery of X-rays (1895), the “ghost pictures” of mysterious agency, and Henri Becquerel’s experiments with uranium salt and phosphorescence (1896). Vladimir Shevchenko’s first documentary film (*Chronicles of Difficult Weeks*, 1986) shot at the exploded Chernobyl reactor, right after the day of the tragedy is another example of what Schuppli calls “material witness.” Shevchenko first suspected that the film stock used was defective, as he noticed speckles, extraneous static interference, and strange noise in the developed 35mm footage. He realized only after a while that what he had captured involuntarily on film was “the image and sound of radioactivity itself.”³⁰⁾ Shevchenko’s spontaneous filmic discovery, together with such projects as *The Chernobyl Herbarium* (2016)³¹⁾ can be included in the list of later examples this time

27) As her artist’s statement says: “If a place does not reveal itself in the visual, the question then becomes how to look. By what means? The project was rooted in this question, therefore developing a means by which to see it.” See: Alice Miceli, *Portfolio*, accessed March 19, 2022, https://nararoesler.art/usr/library/documents/main/30/gnr_alice-miceli_portfolio-eng.pdf.

28) “Frequently Asked Chernobyl Questions.”

29) Susan Schuppli, “Radical Contact Prints,” in *Camera Atomica*, ed. John O’Brian (Toronto: Art Gallery of Ontario, 2015), 280.

30) Susan Schuppli, *Material Witness: Media, Forensics, Evidence* (Cambridge, MA: MIT Press, 2020), 62. In Schuppli’s opinion this damaged film stock proposes a rethinking of the ontological nature of the image itself, as it “reconceptualizes the sudden emergence of radiation as a ‘capture of the real’ rather than a continuation of the representational program of the documentary film.” Ibid., 64.

31) Michael Marder and Anaïs Tondeur, *The Chernobyl Herbarium: Fragments of an Exploded Consciousness*. (Open Humanities Press, 2016). See: <https://library.oapen.org/bitstream/handle/20.500.12657/32750/1/606220.pdf>.

already related to nuclear events.³²⁾ The “radicalism” of Miceli’s radiographic negatives lies in their interpretation of the idea of ‘encounter’, which is overshadowed by the possibility of real danger to life present at the site. As Schuppli declares, the provocation of these radical contact prints “is ultimately that of bearing witness to processes, in which images do not merely represent events but are themselves continuous *with* and materialized *as* events.”³³⁾ In her previous photographic works, like the *in depth (landmines)* series, Miceli investigated post-war, mine-contaminated traumascapes of Angola, Bosnia, Colombia, and Cambodia to capture the (in)visible, present, and future aspects of past traumas, still haunting these locations, maintaining the real potentiality of death. Her photographs do not show anything tragic or traumatic, their affectivity is not figural; it rather states in their indexical, haptic, and uncanny closeness to the atmosphere of past and possible future catastrophes.

The design of the *Chernobyl Project*’s exhibition room served the same purpose; as an important interior spatial effect, the original black-and-white radiographic negatives were displayed backlit. The dark room, resembling a developing lab, with the glowing, life-sized boards offered the opportunity for a close investigation of the actual matter entrapped in Chernobyl.³⁴⁾ As Miceli did not transform, copy or reprint the originals in any way, the dark areas in the negatives indicated the immediate and intimate presence of radiation, expressing itself through textural alternations, repeating patterns of blurred and saturated areas, a Rorschach test-like, unknown visual language of radioactivity (Fig. 1). Such a sensuous, dynamic and at the same time static exposure of a “temporally undulating”, “non-local” hyperobject³⁵⁾ creates the sense of facing the swirling *force* of radiation, accumulat-

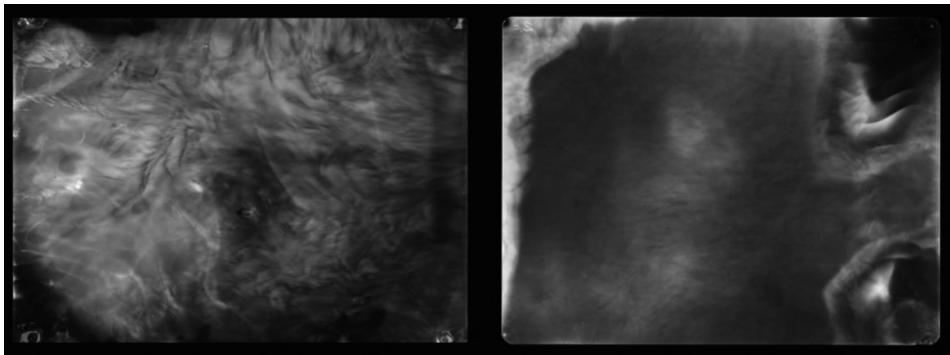


Fig. 1. Alice Miceli: “fragment of a field III — 9.120 μ Sv (07.05.09–21.07.09)”, “fragment of a field V — 9.120 μ Sv (07.05.09–21.07.09)”

32) See e.g. David Bradley’s contact prints of animal tissues after the atomic tests in the Bikini Atoll in 1946, or the “atomic shadows” appearing in Hiroshima and Nagasaki after the bombings. Schuppli, “Radical Contact Prints,” 277–291.

33) Ibid., 291.

34) Emily Watlington, “Alice Miceli on X-raying Chernobyl,” *Art in America*, November 11, 2019, accessed April 2, 2022, <https://www.artnews.com/art-in-america/interviews/alice-miceli-chernobyl-radiographs-americas-society-56497/>.

35) Nonlocality and temporal undulation are two of the five interrelated aspects of hyperobjects described by Timothy Morton, which is discussed in the last section of this article about Daniel McIntyre’s work. See: Morton, *Hyperobjects*, 38–54, respectively 55–70.

ed over months and condensed onto the photosensitive surface of a single still image. The fingerprints on the edges of the images, and the scratch marks of the on-site anchorage on the surfaces appear as subtle but perceptible traces of a human agency, indicating the past *presence* of the artist, whose intention was to (in)visibly embed her off-screen operation and penetration into the atmosphere of a traumatic area.³⁶⁾

Nuclear atmosphere and hyperobjects: *Lenin's Lamp*

Radiographic contact prints of uranium-rich rocks, reminiscent of Becquerel's early experiments, appear in a different context in Swedish Lina Selander's 2011 mixed-media installation. The series of white paper sheets with various rock-shaped black spots were not only part of the exhibition but also 'offered up' for direct touch by becoming the main visual motif on the cover of the accompanying book.³⁷⁾ After exposing radiation and its visual recording in such transmedial ways, Selander's 25-minute silent, black-and-white film, another important piece of the installation, further developed the idea of radioactivity, placing it into the historical, cultural, and political context of civilizational energy demand, and the human-nature relationships. The title "*Lenin's Lamp Glows in the Peasant's Hut*" was borrowed from an intertitle of Dziga Vertov's *The Eleventh Year* (1928), a silent film about the building of a dam on the Dnieper, shot for the 10th anniversary of the Soviet State. Although Selander's project is anchored in the Chernobyl accident, the film pays little attention to the events or their aftermath, its significance being configured rather by an imaginary chronology beyond history and a web of photographic and physical documents through which Selander associates certain temporal, spatial and visual echoes to the region.³⁸⁾

Some of the spatial and visual echoes are directly related to the site of the Exclusion Zone, in the sense of what Gernot Böhme describes as the "atmosphere" of a place. The post-apocalyptic mood of the emptied Zone, still under the effects of the constant radioactive radiation, the potential danger, the visiting rules, and the haunting past life all contribute to this atmosphere, which Miceli's work also attempted to capture. Atmosphere in Böhme's interpretation refers to everything that is first and immediately perceived in space, appearing in the interplay of environmental properties and human presence, something that "mediates the objective qualities of an environment with the subjective, bodily-

36) As Miceli states about her work on traumatic landscapes in general: "What I propose is an action that is both a performance (that of my own body off-screen) and an exploration of what this action, the penetration into mined areas, means for the image, creating a visual narrative with which to experience treks across the topography of mine-contaminated lands where space, positioning and movement lay interconnected, embedded in the images." See: Miceli, *Portfolio*.

37) Helena Holmberg, *Lina Selander: Echo: The Montage, the Fossil, the Sarcophagus, the X-ray, the Cloud, the Sound, the Feral Animal, the Shadow, the Room, and Lenin's Lamp Glows in the Peasant's Hut* (Stockholm: The Swedish Contemporary Art Foundation, 2013).

38) The word "Echo" is also borrowed from one of the intertitles of Vertov's film, from a sequence that juxtaposes the images of construction with a close-up of a Scythian skeleton. At the same time, 'Echo' as a concept illuminating the relationship between the layers of the work, appears in the title of the publication accompanying the exhibition, see: Holmberg, *Lina Selander: Echo*.

sensual states of a person in this environment"³⁹). This essentially spatial concept refers to the way spaces are "pregnant with moods" and "quasi-objective sentiments, feelings that are *suspended in the air*," which can be sensed immediately when entering the respective locale.⁴⁰ With all this, atmosphere does not only refer to particular forms of circulation and dynamic interactions between individuals, affects, and spaces, but also recalls the nature of radioactivity, which allows us to think in terms of a 'nuclear' atmosphere in the case of Chernobyl traumascape. Here radioactive contamination intervenes in the engagement with the place, and the (im)materiality of sensual qualities becomes intermingled with the invisible, spectral presence of nuclear radiation, resulting in an extra affective charge.⁴¹ Nuclear atmospheres, as affective atmospheres, thus embrace and connect such opposite concepts as presence and absence, cognition and emotion, materiality and immateriality, between which they simultaneously maintain a vibrant, oscillating tension.

Embedded into the aforementioned thematic and medial context in *Lenin's Lamp*, there appear some emblematic shots filmed in the present in the Zone, which show the touch of this atmosphere of the traumascape. The interiors of the abandoned, decaying buildings of the ghost town of Pripjat are presented in two different photofilmic modes in the first part of the film: on the high-contrast, perfectly composed, black and white stills the neatness of careful, photographic framing stands in sharp tension with the ghostly assemblage of disintegrating elements and materials. This sequence of images is interrupted by a close-view video footage of ruined, neglected, dusty clothes, household items, books, and furniture left in the buildings of Pripjat in a chaotic jumble, now appearing as a pile of useless objects. The handheld camera follows the artist's bending, constantly moving, off-screen body, sometimes revealing a balancing foot, but mainly mapping the narrow field of vision of the recording person. As it hardly stops for a second, there is no time to focus; due to the movement fluctuations, we move from blurry images to more blurry ones. The abandoned Pripjat blocks of flats filmed from a moving car appear in a tracking shot very similar to this: here the sharp sunlight constantly breaking into the camera lens only gives us a hint of the real scene (Fig. 2). In this sense, the camera image figuratively destroys and spoils further the already decaying and ruined objects, transmitting the haunted and haunting⁴² atmosphere of the place, formed in the in-betweenness of the

39) Gernot Böhme, "The Theory of Atmospheres and Its Applications," *Interstices: Journal of Architecture and Related Arts* 15 (2014), 92. Böhme's phenomenological and aesthetic approach may recall Walter Benjamin's concept of aura for the respect and distance exclusively possessed by original works of art, and lacked by their mechanical reproductions. Although it is worth mentioning that Benjamin refers to the concept of aura not only in an artistic sense; in the epilogue of his 1936 essay, talking about the destructive power of war and its entanglement with technology, he also writes about how destruction is extended into the gaseous sphere, poisoning the breathable air: "through gas warfare the aura is abolished in a new way." Benjamin Walter, "The Work of Art in the Age of Mechanical Reproduction" (1936), in *Illuminations*, ed. Hannah Arendt (New York: Schocken Books, 1969), 217–251. (This idea can also be linked to the harmful, gaseous nature of nuclear radiation.) However, Böhme's atmosphere as a new aesthetic program, as Ben Anderson emphasizes, goes further than Benjamin's aura and engages both with the materialist roots and the affective potential of the concept. See: Ben Anderson, "Affective Atmospheres," *Emotion, Space and Society* 2, no. 2 (2009), 80.

40) Böhme, "The Theory of Atmospheres and Its Applications," 93. [emphasis in original]

41) This undoubtedly correlates to Ben Anderson's extension of Böhme's concept into "affective atmospheres," which refers to the affective 'excess' with which these intensive space-times are saturated. Anderson, "Affective Atmospheres," 80.



Fig. 2. Lina Selander: *Lenin's Lamp Glows in the Peasant's Hut*, 2011 (stills, black and white)

perceiving body and the uninhabited place. The contrast is further 'echoed' by alternating these shots with photographs of the interiors of museum and archive warehouses, showing the sites of classification, conservation, and preservation as sterile, tidy but similarly silent, lifeless, and haunting places.

Selander's other interpretational framework of the Chernobyl traumascape seems to evoke a logic and perspective of Mortonian hyperobjects, which exist in a time and space "relative to humans." Digging down to the focal point of the nuclear explosion, Selander follows a thread taking to underground areas, where in the first hours after the accident, the radioactive leak and the fire had to be urgently smothered with sand and earth. In an intermedial collage, the news footage about Chernobyl liquidators' hasty and claustrophobic mining work is alternated with glorious images of hydroelectric power plant construction from the twenties, as documented by Vertov's film. The two iconic events mark the beginning (twenties) and end (eighties) of a utopian political system, the start and fall of a social and technological revolution, the optimistic dreams of electrification and nuclear power, and, implicitly, the collapse of the Soviet system.⁴³⁾ The fossils of prehistoric plants and animals collected from geological excavations and preserved in museums are contrasted with the image of a 2000-years-old Scythian skeleton from Vertov's film, possibly uncovered during the construction of the dam (Fig. 3). The evocation of these archeolog-

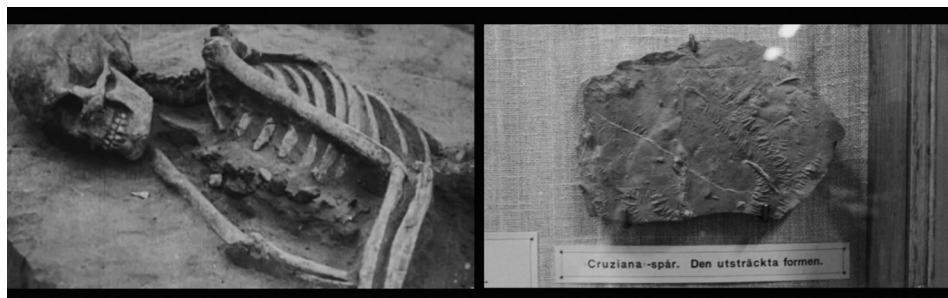


Fig. 3. Lina Selander: *Lenin's Lamp Glows in the Peasant's Hut*, 2011 (stills, black and white)

42) Tumarkin, "Twenty Years of Thinking about Traumasces," 5.

43) On the Soviet socialist dream about modernization see Lisa E. Bloom, "Hauntological Environmental Art: The Photographic Frame and the Nuclear Afterlife of Chernobyl in Lina Selander's *Lenin's Lamp*," *journal of visual culture* 17, no. 2 (2018), 223–237.

ical layers activate the presence of these different past, (pre)historical periods, and outline an imaginary timeline that in another direction can be extended towards a posthuman, radioactive future, which may only be populated by humanity-surviving, large-scale hyperobjects.⁴⁴⁾ The trace fossils like Curziana, which preserved the movement of such 500 million years old early animals as trilobites and arthropods, appear here as the earliest 'contact prints,' distantly related to the exhibition opening imprints of radioactive uranium-rich rocks, and the radiographs of hands, fishes and little animals, which are edited together into another intermedial, photofilmic montage of the Selander's video.

Celluloid hyperobject and personal traumatope: *the Lion* series

Daniel McIntyre's collection of seven short films shot on 16mm celluloid (*Lion*, 2011–2014) addresses the hyperobjective and affective nature of nuclear trauma in a personal and medium-specifically experimental way. McIntyre invites those explicit, geographical details of the Chernobyl incident into his subjective, lyrical celluloid universe, with which he can associate family relationships, poetic impressions, and personal experiences.⁴⁵⁾ Some of the short films explicitly create the site-specific layers of an imagined affective atmosphere of the traumatope: in episode *forever*, for example we follow the voice-over recollections of a Chernobyl survivor, who was a teenager in the spring of 1986 when the annual Peace Bike Race and the May Day Parade were held despite the accident; the Chernobyl liquidators' heroism is imagined in the episode *cowboys and iodine*, while their self-sacrifice is unfolded in episode *water*. Beyond this, McIntyre creates a celluloid-compatible metaphor for radiation contamination, imagined as radioactive particles traveling in waves,⁴⁶⁾ a technique reminding of the emulsion-manipulating, avant-garde experiments of Stan Brakhage, Kurt Kren, or Malcolm LeGrice in the sixties and seventies. These visually disturbing, photochemical, hand-made interventions in the continuity of the emulsion damage and destroy the filmstrip as radiation would — that is, they attempt to display a nuclear atmosphere materializing on celluloid. Unlike the contact prints of Miceli and Selander, in which radiation was let "to expose itself," McIntyre's images are the material imprints of an artistic re-exposure, equally penetrating each piece of the series.⁴⁷⁾

In addition to devoting some episodes to different radioactive elements,⁴⁸⁾ the 'radioactivity' of the *Lion* series can also be detected through the appearance of the five interre-

44) Morton defines hyperobjects recurrently as scale-changing entities, that involve "knotty relationships between gigantic and intimate scales." Morton, *Hyperobjects*, 47.

45) For the personal background of the series, see Bombardini's interview with artist: Silvia Bombardini, "Lion," *Zoo Magazine*, no. 43 (2014), 2–5.

46) *Ibid.*, 3.

47) McIntyre first experimented with different techniques of getting the radiation effects on film "by shooting it." As he explains: "Essentially, to get the same effect on film from radiation, the radioactive source would have to be too strong and it would be unsafe for humans. [...] after some more research, exposing film in the precise way I needed wasn't possible and would just yield a product that was filmed with a layer of fog on it." Personal communication of the artist, via correspondence, May 7, 2022.

48) The emulsion destruction techniques are inspired by the different aftereffects of radioactivity specific to the Chernobyl area. Some of the still present radioactive elements are related to different diseases, like thyroid

lated properties of hyperobjects described by Timothy Morton. ‘Phasing’ (1) for example refers to how hyperobjects, due to their transdimensional quality “phase in and out of the human world,” and thus cannot be fully perceived in the usual three-dimensional human scale.⁴⁹⁾ *Lion* not only experiments with going against this concept of undetectable radiation but also endows the filmic medium with the sensitivity to perceive and express radioactivity via its medial devices. By distributing these effects in a recurring manner in all the episodes, the series implements another characteristic, that of ‘viscosity’ (2), the all-penetrating power of radiation, by which it sticks to everything, making escape or resistance impossible.⁵⁰⁾ The experimental techniques fluently transpose ‘nonlocality’ (3) and ‘temporal fluctuation’ (4), the invisible and irreversible travel of radiation as “unseen alpha, beta, and gamma particles, floated in air currents across Europe and the Pacific,”⁵¹⁾ mixing profoundly different temporalities.⁵²⁾ McIntyre edits together various archive images from different cultural backgrounds and different registers (e.g. North American and Soviet commercials, news footage of first May parade, scenes from the Hollywood musical *The Sound of Music*, shots of radiation panic films) with his own, recent recordings, which are all equally permeated and contaminated by the ‘airborne particles’ of emulsion destructions (Fig. 4).⁵³⁾

The fifth property refers to the ‘interobjectivity’ (5) of hyperobjects, as they exist in the interplay between different objects, revealing themselves by their imprint, their intrusion into something else. Radiation as “floating among objects, »between« them; pointing to the strange interconnectedness of things”⁵⁴⁾ is re-exposed by the dip split process which resulted in the fracture between positive and negative in the same strip of film.⁵⁵⁾ McIntyre’s film thus not only refers to Chernobyl’s hyperobjective nature, but it is meta-

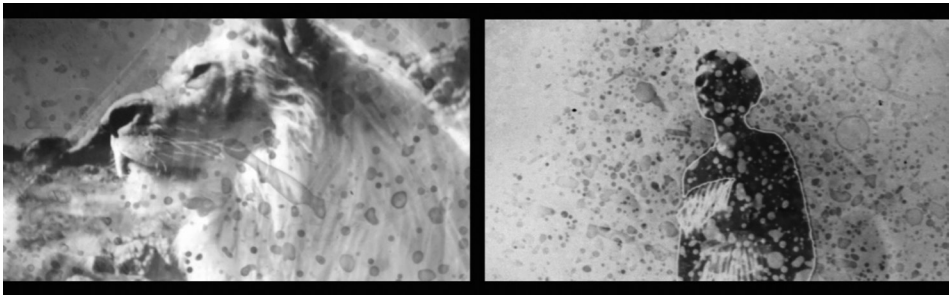


Fig. 4. Daniel McIntyre: *Lion* series (stills, black and white)

cancer (iodine), leukemia (strontium), liver and spleen damage (caesium). See: *Frequently Asked Chernobyl Questions*. Episode *sodium lamp study* is dedicated to Iodine-131, and the treatment of thyroid cancer; and *cure* to Radium-88 used in cosmetic products; while Strontium-90 appears in the episode *the weight of snow*.

49) Ibid., 70–71.

50) Morton, *Hyperobjects*, 36.

51) Ibid., 38.

52) Ibid., 55.

53) For the details of the photochemical techniques (e.g. hand-applying developer, spray process) applied on the 16mm Kodachrome film strips, see Bombardini, “Lion,” 3–4.

54) Morton, *Hyperobjects*, 85.

55) Bombardini, “Lion,” 3–4.

phorically contaminated by nuclear radiation and its prolonged consequences.⁵⁶⁾ In a similar way to Shevchenko's recording, but through a conscious imitation, the analog film here also appears as a medium affected by radiation, "a type of nuclear sensor narrative,"⁵⁷⁾ making visible and perceptible something that cannot be empirically experienced.

Although on-site recordings and atmosphere sensing are key motives in Miceli's and Selander's works too, the rituality and affective consequences of the visit to the reactor site in McIntyre's work is explored in a more personal way. The penultimate piece of the *Lion* series, the essay-film-like *the weight of the snow*, is a diary-style chronicle of the transatlantic travel from Canada to Kyev, Pripyat, and the Chernobyl Exclusion Zone, jumping in time back and forth through associations, reminding of Tumarkin's question about the human agency related to traumas: "what do these places do to us?"⁵⁸⁾ (Fig. 5) For

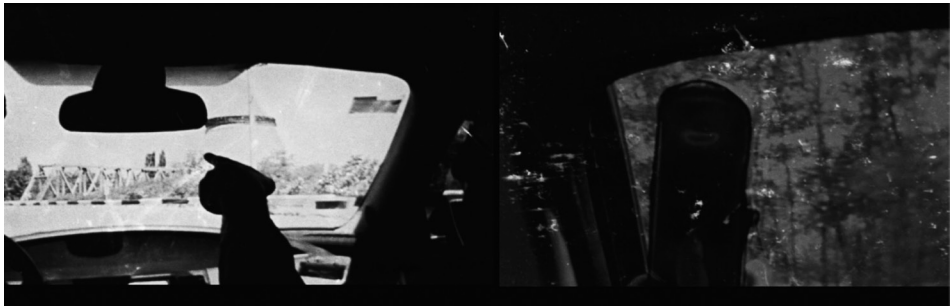


Fig. 5. Daniel McIntyre: *Lion* series (2 stills, color)

McIntyre, the affectivity of the Chernobyl trauma becomes a personal experience when he enters the nuclear atmosphere of the site and perceives it as a personal traumascape. The home video shot during the journey and the diary-like voice-over also document this cathartic effect, which was triggered not by what was actually seen or experienced there, but because of the fantasies and memories evoked by the Zone. The constantly measured and documented level of radioactivity reminds of the sister's cancer treatment and radiation therapy reflected in *sodium lamp study* episode; while the wild horses seen from afar vividly recall one of the past journeys with the then-dead grandmother.⁵⁹⁾ *Lion* is permeated by the nostalgia of remembering the grandmother's religious devotion with a reference to the biblical story of Daniel in the lion's den, which is also a distant allegory of the artist's journey to Pripjat. The encounter with the radiation-contaminated zone generates private expressions of grief, fear, and anxiety — and at the same time relief, which seems to be related to the peculiarity of the atmosphere, that it can fill the space with emotional nuances, and at the same time makes the subject aware of its own presence.⁶⁰⁾

56) Barcz expresses a similar idea in relation to literary works, see Barcz, *Environmental Cultures in Soviet East Europe*, 135.

57) Ibid., 137.

58) Tumarkin, "Twenty Years of Thinking about Traumas," 10.

59) After beginning to work on the project, the coincidence of some tragic family events — the death of her grandmother and her sister's cancer — contributed to elaborating the original plan into an extended work. For details see the interview with McIntyre, Bombardini, "Lion."

60) Gernot Böhme and Jean-Paul Thibaud, *The Aesthetics of Atmospheres* (London: Routledge, 2016), 89.

Conclusion

The three works of art discussed show that even after three decades, the Chernobyl Exclusion Zone appears as a traumascap saturated with an affective atmosphere that is equally accessible and perceptible to visual artists and filmmakers from different cultural backgrounds and continents. This is also influenced by the globalization of the Chernobyl phenomenon and the strengthening of its symbolic importance, which was not only served by the awareness of the risks associated with nuclear energy, but also events that keep it on the agenda, such as the Fukushima Daiichi triple disaster in 2011. At the same time, it becomes more and more visible that, due to the interdependence of capitalist systems, natural disasters can no longer be completely separated from the technological, economic, and political entanglements that exist behind them,⁶¹⁾ which may also contribute to the creation of such transcultural projects.

As I've argued above, the radiographic negatives of *Chernobyl Project* recording the invisible, spectral presence of gamma rays, the pre- and posthistorical contextualization of atomic energy, and the capturing of the haunted and haunting atmosphere of Pripyat in *Lenin's Lamp Glows in the Peasant's Hut* and the artistic re-exposure of the nuclear atmosphere to celluloid in the *Lion* series all contribute to the exploration of the affective nature of nuclear trauma through the hyperobjective qualities of radiation. Their non-narrative and experimental strategies use both the medial properties of photography and film, representing radiation on a scale between movement and immobility, present and past, life and death: while Miceli's contact prints freeze the swirling dynamism of invisible rays into still images, Selander's work operates with archive and recorded, black and white, still and moving images, as McIntyre explores the imaginative representation of nuclear radiation and implements movement onto different cinematic layers (moving images, montage and exposure).

According to Freud's conceptualization, an event is registered as traumatic only by deferred action (*Nachträglichkeit*), through a later event. In other words, there is a need for something else to happen, to retrospectively recognize the trauma of the original incidence. This idea echoes the theories of Caruth, Felman, and Hartmann, who emphasized that trauma is not directly triggered by the original happening, but is formed in the subsequent processing. "It always takes two traumas to make a trauma." — as Jean Laplanche puts it.⁶²⁾ In this sense Miceli, Selander, and McIntyre's contemporary 'traumatonic encounters', their photofilmic explorations created decades after the reactor accident, provide a more nuanced and contoured insight into the nature of the Chernobyl trauma, joining the discourse of its understanding and processing, which in itself attests that the interpretation of the original trauma event is still under construction.

61) Jean-Luc Nancy, *After Fukushima: The Equivalence of Catastrophes* (New York: Fordham University Press, 2015), 4.

62) Quoted by Hal Foster, *The Return of the Real: Art and Theory at the End of the Century* (Cambridge and London: MIT Press, 1996), 29.

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The Sound of Music (Robert Wise, 1965)

The Voice of Ljudmila (Ljudmilas röst; Gunnar Bergdahl, 2001)

Toxic Camera (Jane and Louis Wilson, 2012)

Untitled Project from Chernobyl (Maxim Dondyuk 2019)

Voices from Chernobyl (La supplication; Pol Cruchten, 2016)

White Horse (Christophe Bisson and Maryann DeLeo, 2008)

Biography

Beja Margitházi is an assistant professor at the Department of Film Studies at Eötvös Loránd University in Budapest, Hungary. She is the author of the book *The Cinema of the Face. Close-up and Film Style* (in Hungarian, 2008); editor of the anthology *Visual Communication* (in Hungarian, 2010); and co-editor of *Metropolis* Hungarian journal of film theory and film history. As a member of the research project The Social History of Hungarian Cinema (1931–2019) she examined how the representation of women changed in the post-communist era. Besides these, her research interests include classic and cognitive film theories, visual studies, contemporary documentary film and theories of trauma. Her articles and critical essays were published in Hungarian, Romanian, German and English in different periodicals and anthologies.

Oldřich Nový vlastně nikdy neodcházel

Šárka Gmiterková, *ON: Kristian v montérkách* (Praha: Národní filmový archiv, 2022).

Obsáhlá kniha Šárky Gmiterkové o Oldřichu Novém, kterého si většinová společnost pamatuje zejména jako hvězdu prvorepublikových a protektorátních filmů, je výsledkem autorčina dlouholetého a systematického výzkumu. Jde také o průlomovou studii, neboť se doposud žádné domácí star nedostalo takto rozsáhlé monografie ukotvené ve filmovědné metodologii, která navíc v mnohém překračuje rámec pouhé případové studie. Přestože mezera v bádání na poli hvězdné slávy již dnes není tak velká jako před deseti lety, Gmiterková se odvětví star studies v Česku věnuje patrně nejdéle a nejsystematičtěji. Již v roce 2012 editorsky zaštitila číslo *Iluminace*, které se vůbec poprvé tematicky věnovalo právě českým filmovým hvězdám. Publikovala v něm text¹⁾ vycházející z její magisterské práce²⁾ o Jiřině Štěpničkové, která se stala východiskem i pro další zahraniční publikace v periodikách jako *Celebrity Studies*,³⁾ ale také základním výchozím bodem na poli průzkumu hvězdné slávy v prvorepublikovém a protektorátním filmu, kde do popředí vystupuje mimo jiné vztah mezi hereckou filmovou slávou a divadlem. Logicky pak na tento výzkum navázala svou disertační prací. Ta si kladla za cíl ze stejného bodu překročit do systému poválečného filmového průmyslu v zestátněné československé kinematografii, a to právě na specifickém případě Oldřicha Nového.⁴⁾ Vyústila až v recenzovanou knižní publikaci, kde je tvůrčí působení herecké ikony vymezeno do tří tematických kapitol. Ty nad ústředním subjektem klenou primárně časový oblouk: Gmiterková se v souladu s cílem své disertační práce zabývá dialogem mezi vrcholnou slávou prvorepublikové a protektorátní hvězdné osobnosti a jeho obrazem v centrálně řízeném kinematografickém systému státního socialismu. Nadto však ještě zkoumá pozdní období Nového kariéry — od poloviny 50. let až do konce šesté dekády, které dalo základ nostalgickému vnímání jeho hvězdného obrazu v podobě, jaká je dodnes v podstatě nezměněná.

Tato kniha vychází v období, kdy je disciplína star studies v českém prostředí (i výraznou zásluhou Gmiterkové) poměrně integrována a aplikována na výzkum různých období v regionálních i zahranič-

1) Šárka Gmiterková, „Filmová ctnost je blond: Jiřina Štěpničková (1930–1945)“, *Iluminace* 24, č. 1 (2012), 45–68.

2) Šárka Gmiterková, „Jiřina Štěpničková: česká národní hvězda 1930–1945“ (Magisterská diplomová práce, Filozofická fakulta Univerzity Karlovy, 2010).

3) Šárka Gmiterková, „Betrayed by Blondness: Jiřina Štěpničková between authenticity and excess — 1930–1945“, *Celebrity Studies* 7, č. 1 (2016), 45–57.

4) Autorka záměr své disertační práce představila v roce 2013. Šárka Gmiterková, „Od Kristiána k Zachovi: Oldřich Nový 1935–1969“, *Iluminace* 25, č. 1 (2013), 138–144.

ních kinematografiích. Studie českých teoretiků přitom nejsou omezovány lokálním prostředím, naopak. Například kniha Milana Haina o hollywoodském producentovi Davidu O. Selznickovi⁵⁾ navazuje na badatelskou tradici zaměřující se na studiový systém v klasickém a postklasickém období. Stejně tak není obor limitován filmovým médiem, například texty Miroslavy Papežové se zabírají hvězdností napříč různými kulturními průmysly.⁶⁾ Zájem o hvězdné obrazy v českém, potažmo východoevropském prostoru napříč obdobími a médii prozrazuje například speciální číslo časopisu *Studies in Eastern European Cinema* „Special Issue on Stars and Stardom in Eastern European Cinema“, kde Richard Vojvoda publikoval článek o Zdeňku a Janu Svěrákových.⁷⁾ Obor je navíc komplementárně využíván v širším badatelském poli, jak dokazuje i kapitola Ewy Ciszewské o hvězdách na karlovarském filmovém festivalu v knize *Proplétání světů: Mezinárodní filmový festival Karlovy Vary v období studené války*.⁸⁾ Dále témata hvězd i v transnacionálním prismatu pronikají do sféry audiovizuálních esejí: nedávno například v časopisu *Tecmerín* vyšla esej Veroniky Hanákové a Jiřího Angera o popularitě hvězdy telenovel Natalie Oreiro v ČR a bývalém východním bloku.⁹⁾ V neposlední řadě filmovědné katedry v Česku generují čím dál více diplomových prací ukotvených ve star studies metodologii, dosud vznikajících nejčastěji právě pod vedením Gmiterkové, jež metodologii star studies šíří dál.¹⁰⁾

Je to právě rozvětvenost tohoto oboru, v mezinárodním prostředí již dlouhodobá, ale projevující se v posledních letech i v regionálním prostoru, která mne přivádí k první velké kvalitě této monografie. Gmiterková v úvodu představuje metodologický přehled disciplíny star studies, první takového typu v českém jazyce — dílčí teoretické přístupy byly doposud aplikovány na konkrétní výzkumné texty. Například již zmíněná monografie Milana Haina, která této knize předcházela, se v souladu se zaměřením knihy soustředí primárně na představení metodologických textů souvisejících spíše s badáním v oblasti studiového systému.¹¹⁾ Gmiterková naproti tomu nabízí metodologický aparát v průřezu touto disciplínou, od kanonických textů Richarda Dyera¹²⁾ nebo Barryho Kinga¹³⁾ až po přiblížení novějších trendů v této oblasti, jako je studium transnacionální slávy nebo redefinice aktuálního hollywoodského stardomu. Tato část knihy (31–65) zpřehledňuje dnes už bohatě rozvětvený obor a zpřístupňuje stručný exkurz do terminologie i vývoje metod v závislosti na regionech zkoumání (Hollywood vs. národní kinematografie) schůdnějším způsobem než například zatím nepřeložená přehledová publikace Martina Shinglera,¹⁴⁾ na kterou byl student se zájmem o star studies dosud odkázán.

5) Milan Hain, *V tradici kvality a prestiže: David O. Selznick a výroba hvězd v Hollywoodu 40. a 50. let* (Praha: Casablanca, 2021).

6) Například Jiří Anger – Miroslava Papežová, „Kdo se otáčí za Slunečnicí? Nostalgický konstrukt hvězdného obrazu Inky Zemánkové“, *Iluminace* 34, č. 3 (2022), 25–68.

7) Richard Vojvoda, „Selling ‘Czechness’ abroad: images of Jan and Zdeněk Svěrák in promotion and reception of *Kolya*“, *Studies in Eastern European Cinema* 13, č. 2 (2022), 196–210.

8) Ewa Ciszewská, „Slovanské krásky: Strategie formování socialistických hvězd na příkladu polských hereček na MFF Karlovy Vary“, in *Proplétání světů: Mezinárodní filmový festival Karlovy Vary v období studené války*, ed. Jindřiška Bláhová (Praha: Národní filmový archiv, 2023), 171–187.

9) Veronika Hanáková – Jiří Anger, „Natalia Oreiro: Screen Stars Dictionary“, *Tecmerín*, č. 11 (2023), *vimeo*, cit. 5. 10. 2023, <https://vimeo.com/828945268>.

10) Například Adam Lukůvka, „Šašek předává své herecké žezlo: Hvězdné osobnosti Bolka, Anny a Vladimíra Polivkových“ (Bakalářská diplomová práce, Filozofická fakulta Masarykovy univerzity, 2019).

11) Hain, *V tradici kvality a prestiže*, 26–41.

12) Například Richard Dyer, *Stars* (London: BFI, 1998).

13) Například Barry King, „Articulating Stardom“, in *Stardom: Industry of Desire*, ed. Christine Gledhill (London: Routledge, 1991), 169–185.

14) Martin Shingler, *Star Studies: A Critical Guide* (London: Palgrave Macmillan – BFI, 2012).

Metodologická kapitola tak může být přínosná pro začínající vědce, teoretiky a historiky filmů, ale díky své přístupné formě, která přibližuje koncepty bádání na konkrétních příkladech, i pro laickou veřejnost. Zároveň si Gmiterková připravuje metodologické pole, ze kterého v jednotlivých kapitolách vychází, aniž by se daných teoretických rámců striktně držela. Takový přístup dává autorce interpretační volnost a jejím závěrům původnost v rámci specifického kontextu. I přesto, že je její téma logicky více ukotveno v textech zkoumajících lokální hvězdné systémy, pro které jsou zásadní autoři jako Ginette Vincendeau¹⁵⁾ nebo Joseph Garncarz¹⁶⁾, neváhá v některých případech aplikovat i srovnání se závěry publikací soustředících se výhradně na hvězdnost ve studiovém systému. Pro takové paralely však autorka vždy nachází oporu v jasně předestřeném a shromážděnými materiály podloženém kontextu. Například když jí analýza záznamů z dramaturgických porad nebo nerealizovaných scénářů dovoluje tvrzení, že státem řízená kinematografie po roce 1948 programově cílila na výrobu filmů přímo určených pro hvězdný typ Oldřicha Nového, které autorka označuje převzatým termínem „star vehicle“ (225).

Přes úvodní metodologický exkurz do specializovaného oboru filmové vědy je ale kniha bez přehánění interdisciplinární — autorka je vybavena znalostí historickým kontextem podmíněných textů i publikací současné teatrologie. Obeznamena s fungováním a vývojem divadelních scén a žánrů v předválečném Československu otevírá druhou kapitolu obsáhlým exkurzem do prostředí, které bylo pro pozdější filmovou hvězdu formativní z hlediska typu, ale i komunikace a interakce s diváctvem a profesními insidery. Rámováním lokální hvězdy coby osobnosti rozkročené mezi vícero mediálních průmyslů zdůrazňuje důležitost divadelních scén a hereckých průníků mezi filmem a divadelními institucemi, nabízí vhled do repertoárové skladby předválečných divadel, historie a systémově podmíněné variace operetního žánru i fungování konceptu star divadel. To vše pak na základě analýzy programových skladeb divadel, rozhlasových záznamů, propagačních materiálů i výkazů o návštěvnosti přesně interpretuje v popisu vývoje kariéry Oldřicha Nového. Ten, vycházející z divadelního prostředí, právě zde cizeloval a dovedl k vrcholu svůj typ, který stvrdila v podstatě až protektorátní kinematografie. Jeho kariéru pak Gmiterková stále nutně vnímá v paralele k divadelnímu světu a podrobný popis chaotických změn v zestátněné kinematografii, na který je český filmový historik už zvyklý, nezůstává detailnímu přehledu obdobného dění v divadelním prostředí nic dlužen. V těchto pasážích sice nabobtnává poznámkový aparát a fakt, že některé souvislosti jsou v různých kontextech připomínány vícekrát, může text znejasňovat i pro poučenějšího čtenáře, zvláště když jsou místy podstatné a navíc velmi podnětné informace rozkryty právě až pod čarou. Nicméně je to ono množství interpretovaných materiálů, co umožňuje autorce demytizaci příběhů slavných prvorepublikových herců. Té se jí daří dosáhnout nejen deklarovanou ambicí vyplnit mezeru, kterou přehlíží u nás hojně vydávaná popularizační životopisná literatura, ale podrobné čtení rozličných nashromážděných zdrojů nabízí skrze uvažování nad hvězdným systémem a star obrazy i alternativní pohled na fungování kulturních průmyslů. Jde patrně o nejsilnější stránku knihy, neboť přesahuje z filmovědného oboru do historických i širších uměnovědných disciplín, aniž by její závěry byly dogmatické. Naopak otevírají pole, na kterém se dá při analýze dalších hvězdných osobností (ale nejen jich) dále plodně pracovat.

Zmínila-li jsem v úvodu, že tři kmenové části této knihy (kapitoly 2–4) kopírují vývojový oblouk v kariéře zkoumané hvězdy, není toto tvrzení úplné. Gmiterková sice rozdělila dráhu Nového do časo-

15) Ginette Vincendeau, *Stars and Stardom in French Cinema* (London: Continuum, 2000). Je zásadní pro metodologické ukotvení knihy, navíc zakládá i většinový autorčin pojmový aparát („stars“ vs. „hvězdné osobnosti“).

16) Joseph Garncarz, „Hvězdný systém ve výmarské kinematografii“, *Iluminace* 24, č. 1 (2012), 31–43.

vě vymezených období, která artikulovaně souvisí s dílčími změnami státního a filmového zřízení, a nabízelo by se tedy hercovo působení vztahovat vždy k určitým aspektům kulturní politiky. Autorka ale tuto zkratku nedělá: ke každé z částí přistupuje odlišně, hierarchizuje jednotlivé informace a volí různé koncepty k jejich rozkrytí. Místo toho, aby byly jednotlivé fáze uzpůsobeny primárnímu čtení režimů, k jakému by takové dělení svádělo, ze správného vyhodnocení relevance materiálů více než cokoliv jiného vystupuje jistá kontinuita vztažená k hvězdnému obrazu. V kapitole 2 je první fáze Nového kariéry líčena jako v mnohém normativní pro jeho hvězdný typ, který v závislosti na lokálním tržním systému rozkročeném mezi rozhlas, divadlo a film zůstával pod hercovou kontrolou. Autorka vcelku klasickou metodou¹⁷⁾ rozkrývá jednotlivé znaky jeho projevu, postihuje ho na pozadí autorské divadelní činnosti, jež měla v začátcích jeho filmového působení klíčovou roli na finálním ustálení jeho typu v podobě *Kristiana* (Martin Frič, 1939). Rámuje Nového jako svébytného aktéra, který si vlastní iniciací podmínil žánrové ustálení v dobovém divadelním odvětví a obklopil se tvůrčím kolektivem, s jehož přispěním uvedl svůj budovaný obraz do filmové a divadelní synergie. Zatímco v analýze jeho divadelního působení se autorka spoléhá na interpretační rovinu programových skladeb, rolí a ohlasů, z rozhlasových nahrávek už abstrahuje prvky typizovaného projevu, který detailněji popisuje na konkrétních filmech. Je ale pravdou, že oproti dalším dvěma kapitolám tu analyzované snímky nevystupují příliš samy za sebe — slouží více jako vzorový segment, z kterého jasněji vystupuje Nového ustálený typ, což potvrzují i analyzované dobové ohlasy. Detailní rozbor gest, kostýmů, interakce s hereckými partnery i pnutí v jeho obrazu v závislosti na spolupráci s různými režiséry a snahou o inovaci umožňuje postihnout znaky, z nichž se hvězdná osobnost skládá. Ve srovnání s následující kapitolou ale může trpět kromě disproporčního fokusu na konkrétní snímky i lehce citelnou absencí závěru.

Třetí kapitola knihy, která mapuje pokusy o přerod protektorátní salonní hvězdy v socialistickou star, je obsáhlejší a co do analýzy systému i jednotlivých rolí konkrétnější, a tvoří tak těžiště celé monografie. V této části je viditelné, že důsledná analýza předúnorových žánrů a hvězdné typologie v části předchozí vznikla za cílem aplikovat tyto poznatky do analýzy zhruba pěti let snahy o přizpůsobení výjimečného a stále oblíbeného typu a vyrovnání se s hercovou minulostí. Toto schéma pravděpodobně logicky vychází z původního konceptu disertační práce, která měla právě v tomto bodě pointovat. Přidávám tento poznatek do textu pouze jako dramaturgický postřeh, rozhodně se nejedná o výtku, neboť pole dílčích prvků, ze kterého autorka v rozboru Nového úloh v zestátněném režimu vychází, je připraveno velmi pečlivě. Tento kontext ještě rozšiřuje vyčerpávajícími exkurzy do struktur dramaturgie a kulturního vývoje, jejichž absolvování ale čtenáře odmění třemi čtivě vystavěnými případovými studii v podobě nekonvenčního čtení konvenčně vnímaných snímků. Tyto analýzy jsou vyvrcholením třech podkapitol, kterými kniha zastrešuje fáze raně socialistického filmového systému a jeho pokusy o zúčtování s minulým režimem pomocí tří metod — parodie, vytěsnění a relativizovaného návratu. Kniha tak odmítá premisy dosud publikovaných životopisných publikací a dokumentárních cyklů, které absenci zájmu o toto na materiály nesmírně bohaté období dávají na vrub hořkému osudu herce, jenž se stal režimní obětí. Gmíterková naopak díky průzkumu dokumentů a dobového étosu dokazuje, že některé hvězdy na svém poúnorovém působení minimálně částečně participovaly a díky stabilitě znaků jejich osobnosti, která se do filmů promítá, relativizuje i často skloňovaný regres jejich

17) Opírá se o některé z kanonických textů představených v úvodní kapitole jako Dyer, *Stars*. V analýze hereckých projevů například vychází z King, „Articulating Stardom“, 169–185 nebo James Naremore, *Acting in the Cinema* (Berkeley – Los Angeles: University of California Press, 1988).

hvězdného obrazu. S oporou nejen žánrových teorií vede v analýze budovatelských filmů s Novým v hlavní roli zábavný dialog s jeho protektorátním milovníckým typem. Dochází tak k unikátním závěrům, ve kterých na feministickou podnikovou agitku aplikuje operetní schéma nebo zpochybňuje i dnes často neproblematizovaně vnímanou podvratnost parodického snímku *Pytlákova schovanka aneb Šlechtný milionář* (Martin Frič, 1949). To vše si může dovolit díky pečlivě vystavěné struktuře korpusu hvězdných znaků, jejichž sledovaná kontinuita má demystifikační účinek oproti normativnímu čtení (filmové) historie.

V závěrečné čtvrté kapitole se Gmiterková vrací k důležitosti zmnožené mediální přítomnosti. Zde však již citelně více než divadlo vstupuje do popředí televize, která začala uvádět vzpomínkové pořady. Autorka tím odhaluje pozoruhodný oblouk spojující generace, když se v nostalgizujícím programu vedle sebe objevuje stárnoucí hvězda připomínající minulou dobu po boku tehdy vycházející star Jiřiny Bohdalové. Zpřítomňující efekt, s jakým autorka Nového do tohoto kontextu dosazuje společně s portrétem kulturní situace 60. let, odhaluje kořeny vnímání Nového legendy, která je dodnes aktuální. V této pasáži také těží z dobové korespondence a analýzy menších rolí, které předznamenávají jeho návrat v nostalgické podobě vrcholící v notoricky známých *Světácích* (Zdeněk Podskalský, 1969). Jsou to ale právě vedlejší role, jejichž popisem autorka stvrzuje typ celoživotního milovníka, kterému typovou profilací nepřekazila toliko ani změna režimu, jako mnohem prozaičtější okolnost — stáří. Fakt, že role záporných postav nebo ztrápených manželů jsou pro čtenáře spíše pozoruhodným objevem než připomínkou, jen přidává tečku k dovětku za autorčiným bezchybným postihnutím typu, který se v určité podobě vtiskl do kolektivní kulturní paměti. Jako by se nikdy nezměnil a neodešel.

K vyjmenovaným kvalitám monografie nutno přiřadit grafickou úpravu v čele s obrazovou přílohou, která doplňuje analytickou stránku určitých pasáží, použití fotografií navíc není nadužíváno, jejich zapuštění v textu je případné. Ovšem nemohu se ubránit dojmu, že i fotografie v těle samotných částí by mohly být opatřeny určujícím popiskem, jak je tomu v přehledové části po konci každé kapitoly. Je sice pravdou, že pokud fotografie slouží k reprezentaci analyzovaných gest a projevů, jako je tomu v části druhé, nebo ilustrují analýzu snímků ve třetí a čtvrté kapitole, kontext je buď jasný, nebo nepotřebný. Nicméně u grafických ukázek plakátů či propagačních materiálů by rámcové určení vhodné bylo. Text je jinak přehledně členěn do jasně vymezených podkapitol, jejichž obsah dostává mnohdy poutavým názvům. Autorčin sebevědomý vhléd do problematiky přes zábavně postulované dílčí závěry rytmizuje hutnost informací a kniha je i přes své akademické ukotvení opravdu čtivá. Nedovolím si odhadnout přístupnost textu pro čistě laickou veřejnost mimo uměnovědné nebo historické obory. Faktem je, že i pro studenta nebo filmovědného teoretika a historika může představovat zábavný vhléd do dosud jen málo rozkrytých kontextů, zároveň však díky bohatému poznámkovému aparátu a přehlednému rejstříku pojmů nabízí soustředěný ponor do výzkumné problematiky. Může tak být velmi nosnou příručkou pro další výzkumy, které se nutně nemusí metodou star studies omezovat. V každém případě se pisatelka této recenze připojuje k upřímné naději Šárky Gmiterkové, že její opravdu výjimečná a průlomová monografie, dokládající badatelskou relevanci a přínos zájmu o komplexní obrazy filmových hvězd, bude následována dalšími podobně obsáhlými studiemi, které obzory úzce profilovaných uměnovědných oborů dalece přesahují.

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Cesty za *Cestou do pravěku*

Lukáš Skupa, ed., *Cesta do pravěku: Dobrodružná věda* (Praha: Academia – Casablanca, 2023).

Kolektivní monografii nazvanou *Cesta do pravěku: Dobrodružná věda* vydala nakladatelství Academia a Casablanca jako druhý svazek edice České kino, kterou před čtyřmi lety zahájila monografie *Král Šumavy: Komunistický thriller*. Soubor jedenácti autorů a autorek z různých oborů pod vedením filmového historika Lukáše Skupy si vytyčil úkol pohlédnout na film, jež režisér Karel Zeman začal natáčet před sedmdesáti lety, z co nejširšího spektra hledisek a s využitím maximálního množství dostupných materiálů. V editorském úvodu Skupa zmiňuje, že cílem autorského kolektivu nebylo prezentovat film jako „nedotknutelný muzejní exponát“, nýbrž přijít s „pohledem roku 2023“ (9). Jakkoliv se pozitivní část tohoto záměru těžko hodnotí, lze konstatovat, že se publikaci podařilo představit *Cestu do pravěku* (Karel Zeman, 1954) vhodně aktualizovanou optikou a zároveň se vyhnout nebezpečí odcizování filmu od kontextu doby jeho vzniku.

Zemanův první celovečerní film kombinující animaci s živými herci byl z různých stran v různých obdobích nahlížen jako dílo ukazující nové možnosti vzdělávání obyvatelstva, především dětí, skrze kinematografii, jako zázrak techniky filmové animace, jako vědeckofantastická atrakce i jako výchovný („skautský“) příběh. A stejně tak jako dílo vpravdě revoluční (coby první film zobrazující cestu časem do pravěkých dob), nebo alespoň narušující dobové žánrové kategorie československé audiovizuální produkce. Vedle interpretace Zemanova díla jako autorského filmu je tu také odstupem desetiletí způsobený shovívavý pohled na *Cestu do pravěku* jako na roztomile naivní kuriozitu (u starších diváků spojenou s nevyhnutelným nostalgickým podtextem) a z obou těchto přístupů pramenící status snímku jako uznávané klasiky české kinematografie, jejíž popularita dostala v nedávné době nový náboj díky digitálnímu restaurování.

Pojmenování významové šířky *Cesty do pravěku* jako filmového díla, dobového artefaktu, proměnlivého mediálního textu a v jistém smyslu fenoménu lze vnímat coby ústřední sdělení knihy, která právě díky své komplexitě působí velice soudržně, a to přes to, že na sebe jednotlivé příspěvky navazují pouze částečně a vycházejí z výzkumů aplikujících různé metodologie.

Publikace reprezentuje proměny chápání i využívání snímku napříč obdobími a lokalitami, od kořenů usazených pevně v ideologicky podmíněné filmové produkci stalinistického Československa přes exploataci v amerických televizních vědecko-popularizačních pořadech pro nejmenší diváky až po začlenění do obrazu Karla Zemana jako výjimečného autorského filmaře, který si mezitím svými dalšími díly vydobyl mezinárodní renomé. Interpretační variabilita Zemanova díla je srovnatelná

s proměnlivostí krajiny střídajících se epoch, kterými filmoví protagonisté proplouvají po řece času: zdánlivě malý posun nabízí badateli podstatně rozdílný úhel pohledu.

Mnohohrstevnatost reflexe Zemanova snímku je rovněž dostatečným důvodem, proč v edici České kino po sborníku o *Králi Šumavy* (Karel Kachyňa, 1959), otevřeně ideologickém a z principu problematickém díle, vychází monografie o subjektu, který nejen že byl zkoumán již mnohokrát (což avizuje sám editor), ale který zdánlivě stojí mimo dobu svého vzniku. Právě tuto představu o mimočasovosti *Cesty do pravěku* ovšem několik textů úspěšně vyvrací. Některé příspěvky sledují produkční historii snímku a jeho využití v československé a zahraniční distribuci. Jiné jej podrobují textuální analýze se zaměřením na dosud přehlížené prvky. Ještě jiné se zabývají obdobně málo známými souvislostmi, mezi něž náleží například dobová ateizační politika. Autoři a autorky se přitom nenechávají samotnou *Cestou do pravěku* limitovat. Většina studií rozšiřuje svůj záběr na větší část Zemanovy tvorby nebo na delší kapitolu z vývoje vědeckofantastického žánru v českém prostředí.

Dalším nepochybným kladem knihy je její výjimečná koherence z hlediska literárního. Vysoká úroveň erudice se v případě autorů nevyklučuje se čtenářsky přístupným stylem a rozumným rozsahem. Z nastaveného modu vyjadřování částečně vybočuje pouze jediný zahraniční příspěvek (přeložený z japonštiny do češtiny Annou Krivánkovou), jehož autorem je historik animovaného filmu z Kyoto Seika University Nobujuki Cugata. Tento text představuje v České republice nepříliš diskutovaný subjekt recepce díla Karla Zemana v Japonsku, a nese se tudíž ve spíše informativním a lehce osobním duchu.

K publikaci je přiložen scénosled rané verze filmového příběhu, tehdy ještě zvaného „Výlet do vesmíru“. Monografie tak částečně umožňuje čtenáři činit vlastní závěry v souvislosti s produkční historií snímku a v průběhu vzniku filmu mírnějším podtextem podmíněným dobovou dominantní ideologií.

Autorské příspěvky jsou rozděleny do čtyř oddílů o dvou až třech textech nazvaných „Zeman a Verne“, „Produkce, distribuce, recepce“, „Film pro děti a výchova“ a „Fantastika jako žánr“. Tematická souvislost v rámci jednotlivých oddílů je ovšem poměrně obecná a příspěvky se napříč knihou vzájemně doplňují.

Publikaci otevírá text filmového historika Martina Mišúra nazvaný „Umění nemožného: Kombinované filmy Karla Zemana v žánrové praxi zestátněné kinematografie“. V souvislosti s opuštěným plánem Zemana a jeho spolupracovníků nechat hrdiny poznat pravěk skrze cestu na jinou planetu zkoumá Mišúr komplikovaný vztah filmové výroby, distribuce i publicistiky pozdního stalinismu k žánru science-fiction, na Západě tehdy triumfujícímu. Svůj zájem rozšiřuje z *Cesty do pravěku* také na následující dva režisérovy snímky, *Vynález zkázy* (1958) a *Barona Prášila* (1961). V prvních dvou vidí kombinaci aspektů různých dobově užívaných administrativních žánrů¹⁾ (dobrodružného a populárně-naučného, respektive futurologického a protiválečného), ve třetím pak vtipnou polemiku s oficiálním narativem o socialistickém vědeckotechnickém pokroku. Především však dochází k závěru, že Zemanova tvorba si časem dokázala vydobýt žánrovou výlučnost spojenou s filmařovým jménem. Stalo se tak díky tvůrčově specifické poetice kombinující vědeckofantastické a historizující prvky. Mišúrova stať slouží jako správný informační úvod, co se týče produkčního zázemí snímku (čemuž se plněji věnuje až druhý oddíl sborníku). V první řadě je však přehledným a přísně logickým popisem způsobu, jakým mohl být v praxi zestátněné kinematografie Karel Zeman uznán jako v podstatě autor-ský tvůrce.

1) Petr Szczepanik, *Továrna Barrandov: Svět filmařů a politická moc* (Praha: NFA, 2016), 302.

Autorkou příspěvku „Poetika vědecko-fantastických děl Julesa Verna v trikových filmech Karla Zemana“ je filmová historička Lea Mohylová. Jak název napovídá, studie pracuje především formou textuální analýzy a zkoumá vztah Zemana k tvorbě autora, jehož romány se staly předlohami pro mnohé režisérovy filmy (*Vynález zkázy*, 1958, *Ukradená vzducholoď*, 1966, *Na kometě*, 1970). Mohylová se zabývá také nerealizovanými projekty dalších Zemanových verneovských adaptací. Především však zkoumá vliv Verna na režisérovu specifickou poetiku. Stopy francouzského literáta tak nachází i v ostatních Zemanových snímcích včetně *Cesty do pravěku*. Jedná se o přímé odkazy (zmínka o *Cestě do středu Země*²⁾ a užití dobových ilustrací k tomuto románu v úvodu filmu, obecná dějová podobnost) i hlubší etické souvislosti v díle samotném (význam umění pro člověka) a také v přístupu tvůrců (důraz na vzdělávací rozměr díla a humanistický světonázor obecně). V pozdějších režisérovcích filmech se napojení na Verna více projevuje přímo ve formálních a stylistických podobnostech. Mohylová současně upozorňuje na jeden téměř postmoderní aspekt Zemanových filmů. Spočívá v jejich sebe-reflexivním vztahu k verneovským „romanticko-fantastickým světům“, které jsou v režisérovcích dílech částečně dekonstruovány, ale současně má jejich evokace značný nostalgický náboj. Text také přibližuje některé podstatné rozdíly mezi Vernovým a Zemanovým viděním světa. Součástí Vernova pozitivistického přístupu k poznávání světa a zdokonalování člověka je tak i otevřená oslava imperialismu. Vrcholná Zemanova díla se oproti tomu nesou v deklarativně antikolonialistickém duchu. Tento aspekt je součástí obecnějšího kritického postoje režiséra k lidstvu jako takovému, který je patrný zejména ve filmu *Na kometě*. Vernův vývoj směrem k technologickému pesimismu, manifestující se v jeho posledních prózách, přitom vlastně nebyl až tak rozdílný. Mohylové se daří zmíněné překryvy i protiklady zorganizovat v koherentní celek a vytvořit plastický obraz dvou názorově spřízněných lidí, žijících ovšem ve velmi rozdílných dobách.

Druhý oddíl monografie zahajuje editor Lukáš Skupa s textem „Z filmařů průzkumníky: K historii produkce a mediální reflexe *Cesty do pravěku*“. Popisuje v něm produkční historii Zemanova filmu, včetně očekávání, která byla s projektem od počátku spojována ze strany institucí i veřejnosti. Zabývá se výjimečnou pozicí, jíž se ve státě řízené kinematografií těšil animovaný film i Zeman sám, a okolnostmi, které umožnily vznik finančně velmi náročného snímku, jenž navíc svým obsahem vstupoval na neprobádanou půdu. Studie přibližuje, jak se status vznikajícího filmu a jeho tvůrců v očích veřejnosti blížil postavení výzkumného projektu a vědců, a dává tyto představy do kontextu pozitivistického vztahu k vědeckému poznání a dobových idejí o výchově uměním či edukačním rozměru kinematografie (garantovaným v případě *Cesty do pravěku* vědeckým poradcem Josefem Augustou). Přílohou k příspěvku jsou autentické výrobní dokumenty a ručně kreslené technické plány. Skupův čtivý text je přínosný zejména umným nastíněním dobového nekritického vztahu k možnostem „moderní pokrokové vědy“ (86) a historického poznání, který se přenesl také na Zemanův vznikající film.

Zahraniční distribuci filmu se zabývá filmový historik a jeden ze zakladatelů Národního filmového muzea Jakub Jiříš v textu „Názorná pomůcka, dětská atrakce a umělecká klasika: Evoluční vývoj druhů v zahraniční recepci *Cesty do pravěku*“. Popisuje okolnosti dobové socialistické ekonomické dogmatiky, která umožňovala distribuční styky se zahraničím pouze formou směny, nikoliv obchodu, a spoléhala na uváděcí společnosti pohybující se na periferii zájmu veřejnosti. Přibližuje nasazení filmu na Přehlídce filmů pro děti a mládež při šestnáctém ročníku mezinárodního filmového festivalu v Benátkách v roce 1955, které opětovně ukazuje *Cestu do pravěku* jako dílo překračující dobové žán-

2) Jules Verne, *Cesta do středu Země* (Praha: Omega, 2015).

rové kategorie (nejen v domácím, ale i v zahraničním festivalovém prostředí). Jiříšť se mimo jiné zabývá pozoruhodným přijetím filmu ze strany západoevropských dětí, a jeho neméně fascinujícími osudy ve Spojených státech, kde byl Zemanův film v rámci praxe repackagingu předabován, doplněn o racionalizující narativní rámec a uváděn jako součást televizních vzdělávacích pořadů. Stojí za povšimnutí, že zatímco v Japonsku byl film (v souvislosti s tehdy se rozvíjejícím žánrem kaidžú) přijímán především jako fantastický spektakl, američtí distributoři a komerční televizní stanice k němu zaujali podobný postoj jako československá k socialismu směřující filmová výroba. Rozsáhlý korpus informací se Jiříšťovi naštěstí daří přeměnit v souvislý text nastiňující vývoj interpretace *Cesty do pravěku* v různých obdobích a společensko-hospodářských systémech.

Oddíl doplňuje již reflektovaný stručný příspěvek Nobujukiho Cugaty zvaný „Karel Zeman v Japonsku: Několik poznámek k distribuci a recepci“. Popisuje složitý vývoj vztahu japonských diváků a odborné veřejnosti k režisérovi dílu, od přijetí *Inspirace* (1949) coby avantgardního díla přes ztrátu kontaktu v 60. a 70. letech až po návštěvu Zemana na druhém ročníku Mezinárodního festivalu animovaného filmu v Hirošimě v roce 1987 a znovuobjevení jeho díla novou generací filmařů, vědců a diváků. Podle Cugaty přitahuje mnohé japonské tvůrce na Zemanově animaci především její oddání se fantazii, které působí kontrastně k realistickým snahám vizuálních efektů v hollywoodských filmech.

Třetí část knihy začíná studií „Zemanovi malí dobrodruzi: *Cesta do pravěku*, film pro děti a dětské filmové herectví“ od filmové historičky Kateřiny Šrámkové. Šrámková upozorňuje na velmi různorodé herecké styly čtveřice hereckých protagonistů, od expresivního výkonu Vladimíra Bejvala (Jirka) přes ostentativní pózy Josefa Lukáše (Petr) a minimalistický výkon Petra Herrmanna (Tonda) spoléhající především na chlapcovu výraznou typologii až po umírněné, realistické, poněkud nevýrazné vystupování Zdeňka Hustáka (Jenda). Tato inkoherece byla filmu v době uvedení vyčítána, ovšem Šrámková vidí v popsaných způsobech herecké práce základ pro utváření hereckých typů později v Československu tak rozvinutého žánru dětského filmu. Popisuje rovněž Zemanovo minimalistické (ne)vedení čtveřice představitelů založené na hře a rozvíjení fantazie. V *Cestě do pravěku* proto autorka vidí milník v práci s dětskými herci a v historii daného žánru obecně. Vzhledem k zaměření jinak velmi precizního výzkumu Šrámkové je pochopitelná maximální stručnost zmínky o faktu, že Josef Lukáš byl ve výsledném filmu předabován Bedřichem Šetenou (později velmi vytíženým dabérem). Výrazný a na patnáctiletého chlapce nezvykle školený hlasový projev, který díky němu získal vyprávěč příběhu a hlavní komentátor viděné fauny, je ovšem bezpochyby jedním z dobře zapamatovatelných prvků filmu.

Výchovný aspekt snímku je blíže rozebírán v eseji historika Martina France nazvaném „Pedagogické poselství *Cesty do pravěku* aneb Družný kolektiv bez velitele“. Při hodnocení tohoto rozměru filmu mimo jiné reflektuje výsledky dobového výzkumu mezi jeho dětskými diváky v Západním Německu. Všímá si přítomných výchovných poselství: houževnatosti, kreativity a slušného chování chlapců, jejich samostatnosti, která se ovšem nevylučuje se sounáležitostí v rámci party, umírněného řešení jediného konfliktu, ale také již v příspěvku Mohylové zmiňované důležitosti umění pro (již jeskynního) člověka. Upozorňuje i na některé dobové netypické prvky, jako je fakt, že výprava nemá jasného velitele (v čemž lze vidět částečnou návaznost na tradici *Rychlých šípů*). Síle výchovného rozměru příběhu ovšem podle France padla za obět možnost individuálnější a hlubší charakteristiky chlapců. Poznatky příspěvku jsou pozoruhodné, zvláště uvědomíme-li si, jak důležitou úlohu sehrával kolektiv v myšlenkovém světě státního socialismu.

Text „Cesta do tajů vědeckého ateismu: Film ve službách nenásilné indoktrinace“ od historičky Doubravky Olšákové se v rámci monografie nejpříměji zabývá výsostně ideologickými otázkami. Aniž

by sugerovala, že *Cesta do pravěku* vznikla primárně za účelem propagace darwinistických tezí, ladících s oficiálním ateismem a marxistickým materialismem (byť náznaky tohoto záměru lze nalézt ve starším scénosledu, jenž je k publikaci přiložen), Olšáková zkoumá využití filmu v rámci ateizačního programu schváleného Ústředním výborem Komunistické strany Československa v červenci roku 1955, tedy jen krátce po premiéře snímku. Nástrojem tohoto indoktrinačního programu, reagujícího na nesnižující se počet věřících, se dále stalo rozšířené vydávání spisů Charlese Darwina či jeho pokračovatelů typu Trochyma Lysenka, pořádání výstav o evoluci druhů, které současně útočily na „církevní tmářství“, a popularizační akce soustředěné kolem Československé společnosti pro šíření politických a vědeckých znalostí. Atraktivní tematika pravěku, populární v českých zemích již mezi válkami (především díky malíři Zdeňku Burianovi), se tak stala nástrojem protináboženské agitace. Poutavý příspěvek Olšákové opětovně dokazuje důležitost interdisciplinarity, která filmově-historickému bádání dodává kontext klíčový pro plné docenění významu zkoumaného subjektu ve společenských podmínkách doby jeho zrodu. Lze dodat, že pozoruhodný kontrast k vědeckému ateismu *Cesty do pravěku* představuje animovaný film *Stvoření světa* (Eduard Hofman, 1957), letmo zmiňovaný v textu Ivana Adamoviče. Nikoliv proto, že by tento snímek předával kreacionistickou teorii, jak se může na první pohled zdát, ale pouze z toho důvodu, že ateizační záměr realizuje skrze její humorné a líbivé zesměšnění vedoucí k ideové neutralizaci biblického námětu.

Poslední oddíl monografie začíná esejistickým příspěvkem filmové teoretičky Kateřiny Svatoňové nazvaným „Konečně archeologie: *Cesta do pravěku* jako předchůdce digitální imaginace“. Text spadající do oblasti archeologie médií řazuje Zemanův film do dlouhodobější modernistické tradice, pro niž je typický kult racionality a techniky, a k jejímž plodům patřil na přelomu 19. a 20. století také kinematograf. Svatoňová *Cestu do pravěku* vnímá skrze Zemanovu fascinaci technickými možnostmi filmového média, kterou tvůrce sdílel s Georgesem Mélièsem (jehož mnohé postupy přímo přejímal). Podobnosti s ranou kinematografií atrakcí se objevují i v oblasti výstavby narace a práce se zaujetím diváka. Svou přísnou snahou o realismus ovšem současně *Cesta do pravěku* předjímá exhibicionismus děl založených na digitálních efektech. Technické nedokonalosti mohou podle Svatoňové podporovat nostalgický nádech současně recepce snímku, ne nepodobný Zemanovu vzhlížení k Mélièsovi. Text rovněž zmiňuje metodu koláže, kterou český režisér aplikuje na vícero úrovních (v kombinaci animace, loutek a živých herců, stejně jako v práci se zdrojovými materiály). Detailně rovněž definuje rozdíl mezi hloubkovou (realistickou) koláží *Cesty do pravěku* a koláží plochy v Zemanových pozdějších filmech. Zasluhou příspěvku je mimo jiné to, že vsazuje snímek do teoretického kontextu, jenž objasňuje souvisle se vyvíjející mentální paradigmatata, která formují představu diváka o realističnosti efektů dosažených filmovou technikou.

Příspěvek historika výtvarného umění a filmu Matěje Forejta s názvem „Dobrodružství z povzdálí: (Ne)realismus *Cesty do pravěku*“ zasazuje Zemanův film do souvislosti filmů států tzv. lidově demokratického bloku řazených do fantastického žánru. Všimá si, že na rozdíl od západních zemí tyto snímky nebyly na Východě řazeny do kategorie pokleslé zábavy, nýbrž „začaly sloužit politickým účelům, formulovat vize budoucnosti a naznačovat cesty k *lepším zítřkům*“ (kurziva použita autorem, 197). V Zemanově snímku se toto vztahování se z minulosti k budoucnosti objevuje zejména ve scéně, kdy chlapec Petr zmiňuje, že pravěké přesličky a plavuně se postupně změní v uhlí, které bude člověku k užitku. Zejména tento příspěvek tak na film aplikuje interpretačně přínosnou optiku 21. století. V návaznosti na Daniela Barratta Forejt dále diskutuje otázku statusu reality a realismu ve fantastickém žánru. Právě v pevném ukotvení starších československých filmů užívajících vizuální efekty v dobové realitě vidí možný důvod jejich přetrvávající popularity. Dobou vzniku daná technická omezení,

kterých si byl například Zeman dobře vědom a dokázal s nimi pracovat, se dle Forejta stávají „svěbytným stylotvorným prvkem“ (206).

Sérii příspěvků uzavírá text kulturního publicisty Ivana Adamoviče nazvaný „Zmocnit se minulosti: Topos pravěku a literárně-filmové kontexty *Cesty do pravěku*“, jenž zkoumá kořeny Zemanova filmu ve starších literárních a filmových zpracováních tématu vstupu člověka do reality pravěkých dob, stejně jako v dobových populárně-naučných publikacích. Zabývá se rovněž produkční historií snímku, zejména příloženým scénosledem. K jedné z výčitek dobové kritiky o *Cestě do pravěku*, týkající se muzejního nádechu celé cesty (kdy jsou zvířata většinou pozorována ze vzdálenosti a chlapci se málokdy ocitají v ohrožení), Adamovič dodává zajímavý kontext v podobě podobně koncipovaného románu Arnošta Caha *V pravěkém světě* z roku 1927.³⁾ Srovnává rovněž tematiku pravěku a cestování časem obecně, jak k němu přistupovala v dekáдах před *Cestou do pravěku* literatura a kinematografie, přičemž dochází k pozoruhodným poznatkům o povaze filmového média jako takového.

Jak již bylo uvedeno, jednotlivé příspěvky v monografii *Cesta do pravěku: Dobrodružná věda* vycházejí z různých metodologických základů. Některé jsou ryze historiografickými pracemi, jiné film textuálně analyzují a interpretují. Publikace není přelomovým dílem ani jako celek, ani ve způsobu práce jednotlivých dílčích výzkumů. Různorodé přístupy v něm jsou ovšem na určený subjekt aplikovány velmi zručně a s výsledky hodnými pozornosti. To neznamená, že se jedná ve vztahu k Zemanovu filmu o práci vyčerpávající a definitivní. Překvapivě malou pozornost například monografie věnuje domácí dobové recepci *Cesty do pravěku*, zejména pak přijetí ze strany cílové skupiny, tedy dětí a dorostu. Orálně-historický výzkum by vzhledem k výjimečné zapamatovatelnosti snímku byl pro publikaci užitečným doplněním. Záměry tvůrců totiž monografie konfrontuje s diváckou reakcí pouze skrze dobový západoněmecký sociologický průzkum.

Kniha je přesto velkým přínosem pro českou filmovou historiografii a vzhledem ke své čtenářské přístupnosti také pro filmové vzdělávání jako takové.

Jakub Egermajer (Národní filmový archiv)

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3) Arnošt Caha, *V pravěkém světě* (Praha: Millenium Publishing, 2008).

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Configuring Computer Labor in Film and Audiovisual Media

Deadline for abstracts: November 15, 2023; deadline for submissions: February 15, 2024.

Guest Editor: Veronika Hanáková (Charles University)

The implementation of computers into audiovisual culture has been articulated on many levels, such as changes and technological developments regarding production,¹⁾ distribution,²⁾ exhibition,³⁾ consumption, and archives.⁴⁾ However, the interconnection between information technology and motion pictures has not been asymptomatic as new questions have arisen in terms of remediation,⁵⁾ re-defining the characteristic of audiovisual medium,⁶⁾ or postulating a different visual system and representation.⁷⁾ To summarize, computer technology has had an incredible impact on the development of the audiovisual medium, at least for the last half-century. The central perspective has emphasized the advancement of audiovisual representation, content availability, and other applications for the film and video game industries. However, what if we turned our perspective around and, instead of asking what impact the computer has had on moving images, we wondered what computer iconography looks like in and through the audiovisual medium?

At this moment, artificial intelligence is a buzzword, phenomenon, magic, fear, and panic. Another step in the development of information technology, which will affect not only the production, structuration, and consumption of film but also our everyday tasks and labor, is already happening. Therefore, we want to reflect on the cultural, visual, and social phenomenon of computer labor as it has been portrayed, constituted, and depicted through audiovisual materials from the 20th century to the present day.

The computer was first associated with information laboratories. Nonetheless, it is part of the everyday household, bedroom, and pocket in which it is always presented to help, work, render, visualize, summarize, structuralize, produce, share, and connect.⁸⁾ It is like a constantly working device, whether to maintain a process or a necessary mechanism for opening a program, representing a graphical user interface, or connecting to a network. However, it may not be the computer itself that is working, but it may be the work of the user, the human subject who uses the information technology for a job-related task, to maintain relationships, or to have fun.

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- 1) John Mateer, "Digital Cinematography: Evolution of Craft or Revolution in Production?," *Journal of Film and Video* 66, no. 2 (2014), 3–14.
 - 2) Nigel Culkin and Keith Randle, "Digital Cinema: Opportunities and Challenges," *Convergence* 9, no. 4 (2013), 78–98.
 - 3) D. N. Rodowick, *The Virtual Life of Film* (Cambridge, MA; London: Harvard University Press, 2007).
 - 4) Paolo Cherchi Usai, *The Death of Cinema: History, Cultural Memory and the Digital Dark Age* (London: British Film Institute, 2001).
 - 5) Jay David Bolter and Richard Grusin, *Remediation: Understanding New Media* (Cambridge: MIT Press, 1999).
 - 6) Lev Manovich, *The Language of New Media* (Cambridge: MIT Press, 2001).
 - 7) Jacob Gaboury, *Image Objects: An Archaeology of Computer Graphics* (Cambridge: MIT Press, 2021).
 - 8) Noah Wardrip-Fruin and Nick Montfort, eds., *The New Media Reader* (Cambridge: MIT Press, 2003).

In the 20th century, a computer has been understood as a calculator, a tool, a machine, a gadgetry, a medium, and an (intelligent) assistant. Similarly, the metaphors and positions of information technology have been modulated, structured, and shifted depending on the period.⁹⁾ As the vision of the computer changed, so did the vision of the subject that used it.¹⁰⁾ Thus, there was a gradual reconfiguration of what work was in relation to the computer. These transformations, visions, ideas, and desires are imprinted on the representation of the computer in audiovisual media, be it film, computer games, or web content. Our main goal is to ask how the phenomenon of computer labor has been reflected, imagined, and reinvented in and through audiovisual media.

The quest of the special edition is to examine closely the rich but contradictory iconography of information technology presented in audiovisual materials regardless of genre, production, time, or location. To collect metaphors, systems, narratives, and visualization of the medium that has structured and will structure our audiovisual culture. The task is not only to collect but to observe how the contours of the grasp of it have changed: what the computer can do, how this labor is audiovisually represented, how the human subject is (or is not) connected to it, and how this relationship is reflected through means of moving pictures.

For this issue, we welcome articles (6000–7500 words) or audiovisual essays (5–15 minutes) with written statements (1000–2500 words). The audiovisual construction of the computer labor can be understood and redefined through various analysis (aesthetic, formal, narratological, ideological, queer, feminist, and others) or approaches (videographic, media-archeological, or digital humanities, and others). There is no limitation in terms of applicable method and used audiovisual material. Proposals on the following topics or others considered pertinent in the context of this call are suited to submit within the fields of cinema, games, and other visual arts:

- *A computer is working*: how a working computer is audiovisually portrayed. This theme suggests opportunities to focus on how the representation of graphical user interface (or on any other previous interfaces) is performatively constituted to be understood as working. This phenomenon makes it possible to pay attention, for example, to detective environments (in which the computer compares fingerprints, searches for perpetrators based on geographical data, or navigates a system of security cameras), bureaucratic setting, programmer communities. Or from a different point of the view allows us to focus on screens of everyday use, which offers a reflection on the phenomenon of the desktop audiovisual essay, how communication through social networks is depicted, or, more generally, what movements the computer screen gets into when it is framed in a film or computer game.
- *The potentialities of computer vision*: what new or different systems of representation the computer medium offers, what tendencies, desires, dreams, and technological limitations are present or absent, how computer vision is calibrated, what are the limits of computer vision, what are the blind spots, what is beyond the boundaries of what is possible in the information age. These questions also offer an emphasis on the broader ideological framework in relation to the use, reproduction, and application of computer representations of reality.
- *How the relationship between the computer and the human subject is constituted*: who is the working subject, who has the agency, who is depicted as the one who drives, and who, on

9) Fred Turner, *From Counterculture to Cyberculture: Stewart Brand, the Whole Earth Network, and the Rise of Digital Utopianism* (Chicago: The University of Chicago Press, 2006).

10) Donna Haraway, *A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century* (New York: Routledge, 1991).

the other hand, is the instrument to carry out labor obligations? Into which space have been computers integrated, what stimulates these transformations and who, on the contrary, is pushed out of the work environment as a subject who loses opportunities to work. This direction suggests an inclination towards, for example, a feminist analysis of the representation of work.¹¹⁾

- *Computer interfaces*: how different computer interfaces were constituted through the audiovisual medium, how their work was represented, what visions they encompassed, and how the contemporary reception of these representations was discussed.
- *AI and labor*: The emergence of artificial intelligence into the popular imagination is a long-term trend. In relation to the theme of the issue, we welcome contributions that trace the evolution of how AI has been framed, what trends and visions have been reflected in the audiovisual articulation of AI. However, artificial intelligence is not a symptomless entity, it is a product of a particular time, technology and prism. It is this cultural, social, political and economic determination of the phenomenon of artificial intelligence that has been imprinted in its audiovisual representation. Artificial intelligence is now being labeled as a working (sometimes creative) agent that we encounter on a daily basis. How the working subject is constructed through audiovisual media, who can work and who cannot, what does the working coexistence of an artificial intelligence and another subject look like? Can we see AI in terms of fulfilling the promise of an automated, mechanized, and wholly solitary non-human worker? For whom did this idea arise? Or is it possible to look for subversive moments or unfinished gestures in the audiovisual representation of artificial intelligence?
- *Techno-pessimistic / techno-optimistic visions*: how have computers in the social imagination transformed from dehumanizing machines into tools of self-expression and shared consciousness? The evolution of communication technologies from military, industrial, and university research.¹²⁾ There are multiple examples of media fantasies, imaginary media, and original ideas associated with information technology; what are today's fantasies and concepts related to computer labor?
- *Vaporware*: visions of the unrealized, forgotten, never implemented information technologies projects and their visual representation.
- *Spam*: how the threads of digital and virtual have been modulated and reimagined, how the aspect of malfunction is depicted, is there potential for subversion or, on the contrary, spam is an inseparable component of the system ?
- *Materiality and degradation of computers*: computers as material which is going to deteriorate, decay, decline.
- *Cyberspace*: the establishment of a new workspace, who is the main character and who is the NPC) how has the idea of cyberspace changed? What is the current shape of cyberspace? What new metaphors of cyberspace are emerging today?

Please send an abstract (250 words) and a short bio (150 words) to lucie.cesalkova@nfa.cz and veronika.hanakovaxp@gmail.com by **November 15, 2023**. The authors will be informed of the decision by **December 15, 2023**. The deadline for submitting the full article is **February 15, 2024**.

11) Kylie Jarrett, *Feminism, Labour and Digital Media: The Digital Housewife* (London and New York: Routledge, 2016).

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Illuminace 3/2024

Animation Studios: People, Spaces, Labor

*Deadline for abstracts: November 30, 2023;
deadline for submissions: April 30, 2024.*

Guest Editors: Ewa Ciszewska (University of Lodz),
Pavel Skopal (Masaryk University)

In the 1980s, after a long hiatus, Film Studies began to pay attention to the division of labor in the film industry from a historical perspective. Much of this was due to the publication of *The Classical Hollywood Cinema* by David Bordwell, Janet Staiger, and Kristin Thompson. At the beginning of the 21st century, American media scholar John T. Caldwell spurred a major revival of so-called production studies and research on the media industry and film studios as places of work, careers, and shared values and norms. The methodological impetus for research on film studios has been provided by the work of media and visual culture historian Brian Jacobson, who has put forward the possibilities of studying film studios as virtual and material environments; as symbols that take on a wide range of meanings; or as points at which different forms of scientific and technical knowledge, different technologies, resources, and materials, and groups of professionals of different competencies intersect. This has been followed up by a recent project led by British film historian Sarah Street *Film Studios: Infrastructure, Culture, Innovation in Britain, France, Germany, and Italy, 1930–60*.

The project of comparative research on Czechoslovak and Polish animation studios, led by the editors of the forthcoming issue of *Illuminace*, Pavel Skopal and Ewa Ciszewska, seeks to provide new methodological inspiration. The project draws on the prosopographical approach as applied in relation to the field theories of the French sociologist Pierre Bourdieu; the concept of art worlds of the American sociologist of art Howard S. Becker; the actor-network theory of Bruno Latour; and social network analysis, which allows to describe and explain the role of social contacts, distribution of knowledge and different types of capital, or the role of intermediaries in the professional environment. Investigating the history of two social worlds of animation film production operating in Central Europe allows for a new path of research on film history by internalizing the objectives of film production studies and combining them with the tools of art sociology and relational sociology.

Animation production has specific demands and conditions depending on the animation technique, the size of the studio, or possible collaboration with other film production sectors. Studio spaces impose specific architectural demands on lighting, equipment, workshop facilities, and support staff, whether it is a puppet, cartoon, computer animation, or filmmaking combining animation and live action. An animation studio is a stimulating object of investigation as a site of work, careers, and shared values and norms. At the same time, many animation techniques were already very flexible in terms of space requirements before the advent of digital animation. Some phases of work did not require studio conditions, which created space for non-standard types of collaboration between animators and studios. It is possible to study the impact of technological change and its effect on collaboration, communication, conventions, and artistic solutions. Another set of specific questions relates to the coordination of animation and sound, dialogue, dubbing, the process of education, and craft training.

There is an opportunity for a prosopography of the professional group of animation filmmakers. Also, the issue of adaptation to artistic conventions and production practices, when filmmakers leave the place of training and early career for a country with a different animation tradition, presents a fascinating research problem.

For this issue, we invite research papers inspired by the sociology of art, cultural anthropology, and production studies that focus on the past and present of the animation film industry. The papers might deal with working conditions, work coordination, or social, architectural, urban, technical, and technological aspects of animation studios. Possible topics include but are not limited to:

- emigration and adaptation to working standards and artistic conventions in a new professional milieu
- structuring the field of animated film, analysis of the relative autonomy of the filmmaking field, and heteronomous influences
- analysis of the conventions of animation production in a selected studio
- analysis of the professional and social ties of the studio staff working in creative and technical professions
- description of the actor-networks involved in the process of animation production.
- the process of professionalization of amateur filmmakers and adaptation to studio conditions
- spatial, architectural, and urban dimensions of animation film studios
- social or gender characteristics of animation production in the studio
- the history of education in the field of animation film, cooperation between educational and production institutions, art schools, and film studios
- international cooperation and coordination between animation studios

Please send an abstract (250 words) and a short bio (150 words) to lucie.cesalkova@nfa.cz, ewa.ciszewska@uni.lodz.pl, and skopal@phil.muni.cz by **November 30, 2023**. The authors will be informed of the decision by **January 31, 2024**. The deadline for submitting the full article is **April 30, 2024**.

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ILUMINACE

je recenzovaný časopis pro vědeckou reflexi kinematografie a příbuzných problémů. Byla založena v roce 1989 jako půlletník. Od svého pátého ročníku přešla na čtvrtletní periodicitu a při té příležitosti se rozšířil její rozsah i formát. Od roku 2004 je v každém čísle vyhrazen prostor pro monotematický blok textů. Od roku 2005 jsou některé monotematické bloky připravovány ve spolupráci s hostujícími editory. Iluminace přináší především původní teoretické a historické studie o filmu a dalších audiovizuálních médiích. Každé číslo obsahuje rovněž překlady zahraničních textů, jež přibližují současné badatelské trendy nebo splácejí překladatelské dluhy z minulosti. Velký prostor je v Iluminaci věnován kritickým edicím primárních písemným pramenů k dějinám kinematografie, stejně jako rozhovorům s významnými tvůrci a badateli. Zvláštní rubriky poskytují prostor k prezentaci probíhajících výzkumných projektů a nově zpracovaných archivních fondů. Jako každý akademický časopis i Iluminace obsahuje rubriku vyhrazenou recenzím domácí a zahraniční odborné literatury, zprávám z konferencí a dalším aktualitám z dění v oboru filmových a mediálních studií.

POKYNY PRO AUTORY:

Nabízení a formát rukopisů

Redakce přijímá rukopisy v elektronické podobě v editoru Word, a to e-mailem na adrese lucie.cesalkova@gmail.com. Doporučuje se nejprve zaslat stručný popis koncepce textu. U původních studií se předpokládá délka 15–35 normostran, u rozhovorů 10–30 normostran, u ostatních 4–15; v odůvodněných případech a po domluvě s redakcí je možné tyto limity překročit. Všechny nabízené příspěvky musí být v definitivní verzi. Rukopisy studií je třeba doplnit filmografickým soupisem (odkazuje-li text na filmové tituly — dle zavedené praxe Iluminace), abstraktem v angličtině nebo češtině o rozsahu 0,5–1 normostrana, anglickým překladem názvu, biografickou notickou v délce 3–5 řádků, volitelně i kontaktní adresou. Obrázky se přijímají ve formátu JPG (s popisky a údaji o zdroji), grafy v programu Excel. Autor je povinen dodržovat citační normu časopisu (viz „Pokyny pro bibliografické citace“).

Pravidla a průběh recenzního řízení

Recenzní řízení typu „peer-review“ se vztahuje na odborné studie, určené pro rubriku „Články“, a probíhá pod dozorem redakční rady (resp. „redakčního okruhu“), jejíž aktuální složení je uvedeno v každém čísle časopisu. Šéfredaktor má právo vyžádat si od autora ještě před započatím recenzního řízení jazykové i věcné úpravy nabízených textů nebo je do recenzního řízení vůbec nepostoupit, pokud nesplňují základní kritéria původní vědecké práce. Toto rozhodnutí musí autorovi náležitě zdůvodnit. Každou předběžně přijatou studii redakce předloží k posouzení dvěma recenzentům. Recenzenti budou vybíráni podle kritéria odborné kvalifikace v otázkách, jimiž se hodnocený text zabývá, a po vyloučení osob, které jsou v blízkém pracovním nebo osobním vztahu s autorem. Autoři a posuzovatelé zůstávají pro sebe navzájem anonymní. Posuzovatelé vyplní formulář, v němž uvedou, zda text navrhuji přijmout, přepracovat, nebo zamítnout. Své stanovisko zdůvodní v přiloženém posudku. Pokud doporučují zamítnutí nebo přepracování, uvedou do posudku hlavní důvody, respektive podněty k úpravám. V případě požadavku na přepracování nebo při protichůdných hodnoceních

může redakce zadat třetí posudek. Na základě posudků šéfredaktor přijme konečné rozhodnutí o přijetí či zamítnutí příspěvku a toto rozhodnutí sdělí v nejkratším možném termínu autorovi. Pokud autor s rozhodnutím šéfredaktora nesouhlasí, může své stanovisko vyjádřit v dopise, který redakce předá k posouzení a dalšímu rozhodnutí členům redakčního okruhu. Výsledky recenzního řízení budou archivovány způsobem, který umožní zpětné ověření, zda se v něm postupovalo podle výše uvedených pravidel a zda hlavním kritériem posuzování byla vědecká úroveň textu.

Další ustanovení

U nabízených rukopisů se předpokládá, že autor daný text dosud nikde jinde nepublikoval a že jej v průběhu recenzního řízení ani nebude nabízet jiným časopisům. Pokud byla publikována jakákoli část nabízeného textu, autor je povinen tuto skutečnost sdělit redakci a uvést v rukopise. Nevyžádané příspěvky se nevracejí. Pokud si autor nepřeje, aby jeho text byl zveřejněn na internetových stránkách časopisu (www.iluminace.cz), je třeba sdělit nesouhlas písemně redakci.

Pokyny k formální úpravě článků jsou ke stažení na téže internetové adrese, pod sekci „Autoři článků“.

Knihovna Národního filmového archivu nabízí zahraniční filmové databáze

<https://nfa.cz/cz/knihovna/licencovane-database/>

Ve studovně Knihovny NFA (KNFA) jsou v roce 2020 uživatelům (pro registrované uživatele i ve vzdáleném přístupu) k dispozici pro náš obor vybrané elektronické informační zdroje (EIZ). Kromě původních databází NFA (Filmový přehled, Digitální knihovna NFA, Online katalog Knihovny NFA), jsou to licencované elektronické zdroje (mediální databáze, zahraniční filmové databáze). Konkrétně v případě zahraničních filmových databází se jedná v rámci České republiky o jedinečnou kombinaci EIZ, která bude navíc našim čtenářům dostupná až do roku 2022.

Zahraníční filmové databáze v Knihovně NFA:

1. Screen Studies Collection (dříve FIO — Film Indexes Online)

nabízí komplexní nástroj pro přístup k aktuálním publikacím zaměřeným na filmovou vědu spolu s podrobnými a rozsáhlými filmografiemi.

Kolekce zahrnuje indexy a filmografie

- a) American Film Institute (AFI) Catalog
- b) Film Index International (FII)
- c) FIAF International Index to Film Periodicals

a) American Film Institute (AFI) Catalog

Filmografická databáze zaměřená na americkou produkci poskytující podrobné informace o dlouhometrážních hraných filmech vyrobených na území USA nebo financovaných americkými produkčními společnostmi v období 1893–1972. Databáze obsahuje více než 48000 záznamů filmů s produkčními informacemi, technickými údaji, údaji o tvůrcích, hereckém obsazení a ztvárněných postavách; dále záznamy obsahují podrobný obsah filmu, poznámkový aparát, žánrové zařazení filmu a citační odkazy. Nové údaje jsou vkládány dvakrát ročně. Klíčový zdroj doporučený pro výuku, výzkum a studium filmového umění.

b) Film Index International (FII)

Filmografický informační zdroj vytvářený British Film Institute (BFI). Představuje světově nejrozsáhlejší profesionálně budovanou filmovou knihovnu s více než 100000 podrobných záznamů o filmech ze 170 zemí od prvních němých filmů do současnosti s více než miliónem odkazů na herecké obsazení a technické údaje. Dále 500000 odkazů na bibliografické citace k jednotlivým filmům a filmovým tvůrcům, 40000 profesních profilů filmových tvůrců, informace o získaných cenách na prestižních filmových festivalech.

c) FIAF International Index to Film Periodicals

Databáze obsahuje více než 230 000 záznamů o člancích s filmovou tematikou od roku 1972 do současnosti z více než 345 filmových akademických i populárních periodik z celého světa. Roční přírůstek činí 12000 záznamů. Každý záznam sestává z bibliografických údajů, abstraktu a záhlaví (jména autorů, filmové tituly, předmětová hesla). Databáze obsahuje také záznamy o televizi od roku 1979 (cca 50000 záznamů), od roku 2000 se omezila na články s televizní tematikou pouze z filmových periodik.

2. JSTOR

zkratka z anglického Journal Storage (úložiště časopisů)

Digitální knihovna pro studenty a výzkumníky poskytující přístup k více než 12 milionům akademických článků, knih a primárním zdrojům z mnoha disciplín včetně filmu.

Představuje špičkovou on-line databázi digitalizovaných plných textů z více než 2000 vědeckých časopisů. Každý časopis je plně digitalizován od prvního čísla prvního ročníku až po pohyblivou hranici (moving wall), což je obvykle „tři až pět let od současnosti“.

3. EBSCO

Megazdroj vědeckých informací pro společenské a humanitní obory.

Databáze EBSCO vychází vstříc požadavkům všech výzkumníků a nabízí elektronickou knihovnu obsahující desítky tisíc časopisů, magazínů a reportů a mnoha dalších publikací v plném textu.

EBSCOHost je jednotné rozhraní umožňující přístup k vybraným bibliografickým a plnotextovým databázím.

V Knihovně NFA jsou k dispozici dvě databáze megazdroje EBSCO:

a) Academic Search Ultimate

Databáze byla vytvořena v reakci na zvyšující se nároky akademické komunity a nabízí nejširší kolekci recenzovaných plnotextových časopisů, včetně mnoha časopisů indexovaných v předních citačních indexech. Obsahuje tisíce plnotextových časopisů v angličtině i jiných jazycích, publikovaných na severoamerickém kontinentu, v Asii, Africe, Oceánii, Evropě a Latinské Americe, a nabízí tím pádem jedinečné regionální pokrytí. Databáze integruje lokální obsah předních územně specifických zdrojů z celého světa a umožňuje tak studentům pohled na jejich studium a výzkum z globální perspektivy. Cennou součástí obsahu je i kolekce videozáznamů (více než 74000) od agentury Associated Press. Při vyhledávání se na seznamu výsledků zobrazují v karuselu relevantní videa. Databáze obsahuje videa předních zpravodajských agentur publikovaná od roku 1930 do současnosti a je aktualizována každý měsíc.

b) Film and Television Literature Index with Fulltext

Online nástroj pro výzkum v oblasti televize a filmu. Databáze pokrývá problematiku filmové a televizní teorie, uchovávání a restaurování, produkce, kinematografie, technických aspektů a recenzí. Obsahuje kompletní indexování a abstrakty 380 publikací (a selektivní pokrytí téměř 300 publikací), dále plné texty více než 100 časopisů a 100 knih. Databáze Film & Television Literature Index with Fulltext navíc obsahuje i filmové recenze z předního zdroje Variety, datované od roku 1914 do současnosti, a více než 36 300 obrázků z archivu MPTV Image Archive.

Databáze Evropské audiovizuální observatoře (European audiovisual observatory)

O Evropské audiovizuální observatoři

Evropská audiovizuální observatoř (EAO) vznikla roku 1992 jako následnická organizace Eureka Audiovisuel, jejím sídlem je Štrasburk. Činnost této instituce spočívá ve sběru a šíření informací o audiovizuálním průmyslu v Evropě. V současné době sdružuje 41 členských států a Evropskou unii, zastoupenou Evropskou komisí. Je financována přímými příspěvky členských zemí a příjmy z prodeje svých produktů a služeb.

Posláním EAO je poskytovat informace profesionálům v oblasti audiovize a tím také přispívat k větší transparentnosti audiovizuálního sektoru v Evropě. EAO sleduje všechny oblasti audiovizuálního průmyslu: film, televizní vysílání, video/DVD a nová média. O každé z těchto oblastí poskytuje informace ve sféře trhu a statistiky, legislativy a financování výroby audiovizuálních děl. EAO sleduje a podrobně analyzuje vývoj audiovizuálního sektoru v členských státech.

Působí v právním rámci Rady Evropy a spolupracuje s řadou partnerských a profesních organizací z oboru a se sítí korespondentů. Kromě příspěvků na konference jsou dalšími hlavními činnostmi vydávání ročenky, zpravodaje a zprávy, kompilace a správa databází a poskytování informací prostřednictvím internetových stránek observatoře (<http://www.obs.coe.int>).

Česká republika je členem EAO od roku 1994.

LUMIERE VOD je adresář evropských filmů dostupných na vyžádání v Evropě. Najděte služby a země, kde je film uveden na VOD, a zkombinujte vyhledávací kritéria a vytvořte seznam dostupných filmů podle režiséra, země nebo roku výroby.

Prezentační video je k dispozici https://www.youtube.com/watch?v=Wxp_SwD3BZg.

Tento projekt, spravovaný Evropskou audiovizuální observatoří, je podporován programem CREATIVE EUROPE Evropské unie.

LUMIERE VOD je databáze evropských filmů dostupných na placených videích na vyžádání (transakční a předplatné VOD). Poskytuje seznam filmů dostupných v daném okamžiku ze vzorku služeb na vyžádání působících v Evropské unii.

LUMIERE VOD je primárně určen pro profesionály v audiovizuálním průmyslu : autory, producenty, distributory, filmové fondy a regulátory, aby jim pomohl sledovat využití filmů na VOD a posoudit složení katalogů VOD. Účelem není usnadnit pronájem nebo nákup filmů ani předplatné služby.

LUMIERE VOD řídí Evropská audiovizuální observatoř na základě maximálního úsilí. Adresář je aktuálně v beta verzi a obsahuje asi 300 katalogů VOD. Počet sledovaných katalogů a frekvence aktualizací se bude postupně zvyšovat.

Poskytnuté informace

Databáze je prohledávatelná podle řady kritérií. Upozorňujeme, že:

- všechna metadata jsou poskytována s maximálním úsilím;
- zahrnuli jsme možnost vyhledávat filmy podle originálních nebo alternativních titulů. Na stránkách výsledků se zobrazí pouze původní název;
- země produkce uvádějí různé země podílející se na výrobě filmu. Země produkce uvedené na

prvním místě označuje zemi, která údajně nejvíce přispěla k financování filmu. Nejedná se o oficiální státní příslušnost filmu, jak je posouzeno národním filmovým fondem nebo národním regulátorem.

I když byla věnována maximální pozornost zajištění přesnosti, není poskytována žádná záruka, že materiál neobsahuje chyby nebo opomenutí. Naším cílem je udržovat tyto informace aktuální a přesné. Pokud budeme upozorněni na chyby, pokusíme se je vyřešit. Můžete nás kontaktovat ohledně jakýchkoli technických informací v adresáři pomocí kontaktního formuláře.

Evropská audiovizuální observatoř (EAO) vznikla roku 1992 jako následnická organizace Eureka Audiovisuel, jejím sídlem je Štrasburk. Činnost této instituce spočívá ve sběru a šíření informací o audiovizuálním průmyslu v Evropě. V současné době sdružuje 41 členských států a Evropskou unii, zastoupenou Evropskou komisí. Je financována přímými příspěvky členských zemí a příjmy z prodeje svých produktů a služeb.

Posláním EAO je poskytovat informace profesionálům v oblasti audiovize a tím také přispívat k větší transparentnosti audiovizuálního sektoru v Evropě. EAO sleduje všechny oblasti audiovizuálního průmyslu: film, televizní vysílání, video/DVD a nová média. O každé z těchto oblastí poskytuje informace ve sféře trhu a statistiky, legislativy a financování výroby audiovizuálních děl. EAO sleduje a podrobně analyzuje vývoj audiovizuálního sektoru v členských státech.

EAO vydává Statistickou ročenku, měsíčník IRIS se speciálními suplementy (v tištěné i elektronické podobě), účastní se různých konferencí a workshopů. Na webových stránkách EAO jsou veřejnosti dostupné tyto informační databáze: LUMIERE (obsahuje údaje o sledovanosti filmů distribuovaných v evropských kinech), IRIS MERLIN (informace o legislativě upravující audiovizuální sektor v Evropě), databáze poskytovatelů AVMS. Informace o provozování televizního vysílání v členských státech obsahuje databáze MAVISE. Všechny tyto informace jsou poskytovány v angličtině, francouzštině a němčině.

Nejvyšším orgánem EAO je Výkonná rada, v jejímž předsednictví se každý rok střídají jednotlivé členské země.



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Sbírka orální historie v Národním filmovém archivu


NFA pečuje o nejrůznější typy dokumentů se vztahem k historii českého filmovnictví včetně zvukových a zvukově-obrazových nahrávek.

Vlastníte-li takové typy materiálů (rozhovory, záznamy událostí či jiné druhy audiozáznamů, eventuálně audiovizuálních záznamů rozhovorů, vztahující se k tématu české kinematografie, a to z jakéhokoliv období), a máte zájem o jejich bezpečné uchování, nabízíme vám bezplatné uložení v depozitářích NFA.

NFA splňuje všechny podmínky, které zaručují nejvyšší možnou kvalitu archivace.

Jakékoliv obohacení naší sbírky z vašich zdrojů je cenným příspěvkem k rozšíření povědomí o minulosti českého filmu a současně i naší kulturní historie.

Kontakt: kurátorka sbírky Marie Barešová
Marie.Baresova@nfa.cz



Filmový přehled, databáze Národního filmového archivu

Objemná filmografická databáze *Filmový přehled* Národního filmového archivu přináší rozsáhlá, ověřená a doposud dohledatelná data a filmografické údaje od počátků české kinematografie. Aktualizuje a nahrazuje tak informace, které byly dříve vydány v katalozích *Český hraný film I–VI* a *Český animovaný film I*. Uživatel tak nalezne především údaje o českých **hraných** (všechny od roku 1898), **dokumentárních** (prozatím výběrově 1898–1991, všechny od 1992) i **animovaných** (všechny 1922–1945 a od 1992, prozatím výběrově 1946–1991), studentských, dlouhých i krátkých filmech, jež byly uvedeny v kinech. Databáze je pravidelně aktualizována a stále doplňována.

Údaje o filmech: filmografická (všichni tvůrci, členové výrobního štábu, herecké obsazení a další), produkční (výrobci, všechny názvy, žánry, první a poslední natáčecí den, datum cenzury, schválení literárního a technického scénáře, první kopie a celého filmu, ateliéry, lokace a další), distribuční (předpremiéry, distribuční, slavnostní, festivalové premiéry, popřípadě obnovené premiéry, distribuční slogany nebo premiérová kina) a technická (distribuční nosič, poměr stran, barva, zvuk, mluveno, jazyková verze, podtitulky, mezititulky, úvodní/závěrečné titulky, animační technika, minutáž, původní metráž) data, anotace, obsahy, zajímavosti, fotografie i plakáty.

Údaje o osobnostech a společnostech: filmografie, profese, zjištěná data i místa narození a úmrtí, alternativní jména, životopisy, fotografie.

Údaje o ocenění a dotacích: česká ocenění, festivaly a přehlídky, zahraniční ocenění udělená českým filmům. Plánováno je též zveřejnění filmových dotací za léta 1992–2022.

<https://www.filmovyprehled.cz/cs/databaze>

Rešerše ve sbírce Národního filmového archivu

Odborné i laické veřejnosti nabízíme možnost **vypracování tematických rešersí** ve sbírce Národního filmového archivu. S žádostmi o ně se prosím obračejte na e-mailovou adresu **reserse@nfa.cz**.

Podrobnější informace viz

<https://nfa.cz/cz/sbirky/reserse/>.

Přehled jednotlivých částí sbírky Národního filmového archivu viz

<https://nfa.cz/cz/sbirky/sbirky-a-fondy/>.



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a estetiku filmu

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