



Multispecies Alliances Against the Wasteocene: Counter-Narratives and Commoning Practices

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ABSTRACT

In this article, we will not engage with the scientific Anthropocene, rather, we are interested in challenging what Jason Moore has called the popular Anthropocene, that is, a narrative about the present socio-ecological crisis and its causes. The Wasteocene is part of a wider critique of the Anthropocene narrative that stresses the need to look at inequalities and power relationships to understand the socioecological crisis. Those alternative concepts are competing with the Anthropocene on a narrative ground; they are part of an imaginative mobilization to challenge the mainstream production and organization of collective narratives. This article is an apology for the power of narratives. Narratives can oppress, hide, or liberate. We will focus on stories of multispecies alliances against the Wasteocene; narratives are humans' tools. Though employing – actually celebrating – such an anthropocentric tool, we will go beyond the human, exploring the narratives that convey a sense of multispecies oppression and liberation.

Keywords: Wasteocene; Multispecies Alliances; Guerrilla Narratives; Rio Doce; Covid-19

Alianças multiespécies contra o Wasteoceno: contranarrativas e práticas comunitárias

RESUMO

Neste artigo, não nos envolveremos com o Antropoceno científico, mas estamos interessados em desafiar o que Jason Moore chamou de Antropoceno popular, ou seja, uma narrativa

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sobre a atual crise socioecológica e suas causas. O Wasteoceno faz parte de uma crítica mais ampla à narrativa do Antropoceno, que enfatiza a necessidade de analisar as desigualdades e as relações de poder para entender a crise socioecológica. Esses conceitos alternativos estão competindo com o Antropoceno em um terreno narrativo; eles fazem parte de uma mobilização imaginativa para desafiar a produção e a organização convencionais de narrativas coletivas. Este artigo é uma apologia ao poder das narrativas. As narrativas podem oprimir, ocultar ou libertar. Vamos nos concentrar em histórias de alianças de várias espécies contra o Wasteoceno; as narrativas são ferramentas humanas. Embora empregando – na verdade celebrando – essa ferramenta antropocêntrica, iremos além do humano, explorando as narrativas que transmitem um senso de opressão e libertação multiespécies.

Palavras-chave: Wasteoceno; alianças multiespécies; narrativas de guerrilha; Rio Doce; Covid-19

Alianzas multiespecies contra el Wasteoceno: contra narrativas y prácticas comunales

RESUMEN

En este artículo, no nos involucramos con el Antropoceno científico, pero si estamos interesados en desafiar lo que Jason Moore llamó de Antropoceno popular, es decir, una narrativa sobre la actual crisis socioecológica y sus causas. El Wasteoceno forma parte de una crítica más amplia a la narrativa del Antropoceno que resalta la necesidad de analizar las desigualdades y las relaciones de poder para poder entender la crisis socioecológica. Estos conceptos alternativos están compitiendo con el Antropoceno en un terreno narrativo; ellos hacen parte de una movilización imaginativa para desafiar la producción y la organización convencional de narrativas colectivas. Este artículo es una apología al poder de las narrativas. Estas pueden oprimir, ocultar o libertar. Nos vamos a concentrar en historias de alianzas de varias especies contra el Wasteoceno; las narrativas son herramientas humanas. Aunque una herramienta antropocéntrica, iremos más allá de lo humano, explorando las narrativas que transmiten una idea de opresión y liberación multiespecies.

Palabras Clave: Wasteoceno; alianzas multiespecies; narrativas de guerrilla; Rio Doce; Covid19

The Power to Tell Stories; The Power of Stories

Let's start with a disclaimer: in this article, we will not engage with the scientific Anthropocene, we do not question whether there might be a mark in the geosphere

signaling the beginning of a new geological era. Rather, we are interested in exploring and challenging what Jason Moore has called the popular Anthropocene (2017, p. 186-191), that is, a narrative about the present socio-ecological crisis and its causes. According to this narrative, the species *Homo Sapiens* has been able to affect the geo-bio-chemical cycles of the planet; and judging from the state of the Earth, it does not seem that it was for the best. The epitome of this Age of Humans is climate change, precisely a planetary consequence of *Homo Sapiens*'s activities – at least, this is what the mainstream narrative suggests. Instead, cohorts of radical scholars have criticized this species discourse that flattens inequalities, even history in itself. How can we honestly argue that all humans have the same effects on the planet? As Rob Nixon rightly puts it, “We may all be in the Anthropocene but we’re not all in it in the same way” (2018, p. 8).

We are not arguing – and we have never done so – that all those who employ the term Anthropocene are unaware of or unwilling to acknowledge social and environmental inequalities. Some use the label while denouncing racism, classism, and other injustices because they see the potential of that global narrative (*Cf.* PULIDO, 2018, p. 116-128). Others have fiercely and creatively tried to propose other concepts that can make visible what they (we) believe stay hidden within the popular Anthropocene narrative. The list of such alternative labels is too long to be discussed here (see figure 1); undoubtedly, some of them have acquired a stronger currency in the public debate.

Figure 1: The spires of the counter-Anthropocene



Source: Marco Armiero

The Capitalocene is probably the strongest of these alternatives to the Anthropocene¹. It clearly states that it is not the species but a mode of production and consumption that has affected so deeply the planetary life cycles. When the mainstream narrative says that humans are responsible for the planetary mess in which we find ourselves, it is erasing past and present inequalities. The Plantationocene narrative is equally powerful (DAVIS *et al.*, 2019; HARAWAY; TSING, 2019), as it stresses the causal connections linking empires, racial capitalism, human enslavement, and the present socioecological crisis. The Wasteocene belongs to the same family of radical alternatives to the Anthropocene narrative (ARMIERO, 2021). It has been defined as the age of wasting relationships producing wasted people and ecosystems. The divide between who and what is worth and who and what is worthless is the key feature of this concept that states loud and clear that we are not in this crisis together. Someone is paying the price for someone else's well-being.

Those alternative labels, including that of the Wasteocene, are not competing to become a scientifically certified geological era. To our knowledge, none of their proponents has presented a petition to the International Commission on Stratigraphy to see their labels officially recognized. We argue that those concepts are competing with the Anthropocene on a narrative ground; for us, they are part of an imaginative mobilization to challenge the mainstream production and organization of collective narratives. As Armiero and De Angelis have argued, the Anthropocene is a global grand narrative because it proposes universal truths, or laws, and considers universal agents, working rather poorly with the nuisances of the specific, which is, instead, the daily bread of social scientists and humanities scholars. There is no room for differences in the geological strata or in planetary boundaries. The Anthropocene is the age of one planet and all humans as a whole; never has the "We" been more powerful in a historical narrative than now (ARMIERO; DE ANGELIS, 2017, p. 346)

If Ursula LeGuin was right in stating that we do live in an age marked by a crisis of imagination, the struggle for emancipation and a truly revolutionary project cannot disregard the struggle over competing narratives. We would dare to say that a revolutionary project must take control of the means of production of narratives about both the past and the future. The focus on narratives as means of oppression and liberation is a crucial point in the Wasteocene's conceptual framework. As Armiero has explained, the production of wasted people and ecosystems goes hand in hand with the wasting of subaltern memories and imaginaries. In order to transform a community into a socioecological dump, the Wasteocene regime has to erase their stories while imposing what Armiero calls a toxic narrative infrastructure:

¹ Jason Moore, the most vocal proponent for the Capitalocene, has acknowledged the rhizomatic genesis of the term, from Andreas Malm's initial intuition to the independent employment of the concept by David Ruccio, Donna Haraway, and himself with Tony Weis (MOORE, 2016, p. 5).

Toxic narratives – Armiero explains – build the storytelling infrastructure which hinders the possibility to even see the injustice while blaming the affected communities for problems caused not by them, of course, but rather by the Wasteocene logic of othering people and places (2021, p. 21).

Narratives do not produce contaminants, but they can intoxicate our ways of thinking of the world and our place in it. The toxic narrative infrastructure of the Wasteocene invisibilizes, normalizes, and naturalizes injustice. It is an infrastructure because, as with almost all infrastructures, this one also affects our lives without us even noticing. But, as with all infrastructures, it is possible to sabotage this toxic narrative infrastructure. As Sergio Ruiz Cayuela and Marco Armiero have written, guerrilla narrative is the ensemble of practices that resist toxic narratives while proposing alternative (hi)stories and identities. In this sense guerrilla narrative is not simply the unheard story of oppression reclaimed from the memory dump; rather, guerrilla narrative is the practice of reimagining subaltern stories, storying them, and making collective identities (ARMIERO; CAYUELA, 2022, p. 84).

This article is an apology of the power of narratives. Narratives can oppress, hide, or liberate. Mainstream narratives are more pervasive: they are global and, as such, have the strengths to impose their version of the story as the universal one. Nonetheless, there are legions of counter- hegemonic narratives everywhere that are struggling to change the ways in which we tell our stories and imagine our future. We will focus on stories of multispecies alliances against the Wasteocene; narratives are humans' tools. Telling stories about ourselves as well as others – including other animals, spirits, gods, and aliens – is perhaps a distinct feature of what it means to be human. By employing and actually celebrating such an anthropocentric tool, we will attempt to go beyond the human, exploring the narratives that convey a sense of multispecies oppression and liberation.

Towards a Multispecies Fourth State

a. Rio Doce

The Rio Doce disaster in Brazil seems to be the perfect example of the trans-species oppression implemented by the Wasteocene logic. Extractivism is the ultimate manifestation of wasting relationships since nothing more than this economic activity reproduces profits for a few through the extraction of value and othering; in other words, through the wasting of human and more than human lives.

On November 5, 2015, the Fundão Basin collapsed, releasing some 50 million cubic meters of mineral waste and mud. Nineteen people were killed; entire villages destroyed.

Many observers and scientists have argued that the entire Rio Doce had been killed. Unequivocally the Brazilian journalist Luiz Fujita Jr. has entitled his documentary on the Mariana disaster “Rio Doce Rio Morto”². In the reportage, Fujita provides a deeply socioecological explanation of the mining disaster: the contamination of the river kills the fish but also affects the provision of drinkable water, pushing towards a change in the urban/rural ecologies with the spreading of more water tanks and, consequently, the explosion of mosquitoes, bringing Zika, dengue and other diseases. Perhaps the images of a documentary are better suited to show how the Wasteocene regime oppresses in the same way humans and nonhumans; the entire river, its fish, and the subaltern people living around it are paying the price of the extractivist industry that transforms them into a socioecological dump.

Scientists confirm what the images express with a different language. According to Bernardino *et al.*, the residues from the mining company “traveled 600 km downriver and reached the Rio Doce estuary, permanently increasing sediment metal(loid) concentrations, burying, and killing benthic organisms and generating a tailing layer approximately 5 cm deep” (2021, p. 418). Both scientific publications and journalistic reportages insist on the uncertainty that characterizes this post-disaster reality. Bernardino *et al.* underline that the ban on fishing was prolonged for five more years given the uncertainty about the contamination, while Fujita illustrates the controversy about the possibility of purifying the water for human consumption. Espindola, Nodari and dos Santos (2019, p. 8) rightly focus on the conflict between divergent narratives: was it an accident, a disaster or a crime? Their approach brings us back to the power of narratives in defying the socioecological crisis. But focusing on narratives should not mean to elude ecology; as Espindola, Nodari and dos Santos write, “studies of mining disaster also need to include a biocultural ethics, which equally considers all the coinhabitants (human and nonhuman), their habitats and habits, attributing the same value/weighting to the losses suffered individually without any kind of distinction” (2019, p. 16).

Walison Vasconcelos Pascoal and Andréa Zhouri (2021) add a crucial layer to this analysis of the Mariana disaster. The killing of the river was not only an ecocide involving humans and non-human animals and the entire ecosystem; spirits and culture were killed too. For the Krenak people living in the area, Rio Doce is not only a source of livelihoods but a relative, known by the name of the Watu, providing cultural and spiritual support for the community. How could Westerner laws and evaluation procedures make sense of the richness of these intertwined connections? Vasconcelos Pascoal and Zhouri remind us that the Wasteocene logic is rooted in the colonial project because it is based on the same assumption and consequent practice: that there is a safe and worthy we on the one hand, and all the others on the other

² This disaster is known by different names. Mariana is the name of the city close to the dam disaster. Fundão is the name of the tailings dam that collapsed. Rio Doce is the river where all the waste from the mining operations ended up following the collapse of the dam.

hand, and that the well-being of the former is based upon the oppression of the latter, be them Indigenous people, fish, rivers, or subalterns of any kind and species.

Vajont

This year of 2023 marks the sixtieth anniversary of the Vajont Dam Disaster, which occurred in Italy in 1963 (ARMIERO, 2023). Two thousand people, together with an unknown number of nonhuman animals, were killed in a disaster that was announced years before it occurred. The inhabitants of this Alpine valley repeatedly denounced the risks coming from the reservoir. Tina Merlin, a communist journalist writing for the party's newspaper, tried to amplify their voices, but all was in vain. The Vajont story, like the Rio Doce story, clearly shows that the wasting relationships, imposed by the capitalist way of producing, unify human and non-human nature in a coherent project of oppression and extraction.

An entire mountain was subjugated to the interest of a hydroelectric corporation. In a theatrical piece dedicated to the disaster, author and actor Marco Paolini describes the precise moment when the gigantic landslide – almost 300 million cubic meters of rocks – precipitated into the reservoir:

Up there, perched were the woods, a whole world that on the surface had stables, a dairy, had houses, a road, cultivated fields, two streams, a pond, hills, forests, a whole world with the animals in the stables bellowing in despair, with those on the chain choking to escape, with the humans who are there to rule the beasts and suddenly realize it is too late, a whole world goes from 60 cm to 100 km per hour. Now.³

The Vajont is a perfect Anthropocene tale. In that valley humans really became geological forces able to literally move mountains. The story can easily be told in terms of human hubris; the disaster would be the tragic effect of human arrogance. But looking at that story from the Vajont cemetery, things seem quite different. On those tombstones, we will not find the names of the executives of the hydroelectric corporation because the Vajont, as the Anthropocene, is not a story about the greed of *Homo Sapiens* but it speaks of a way of producing and consuming. And power mattered among the rocks of the Vajont as well as everywhere else in the Anthropocene.

The multispecies oppression at the Vajont implied the enslavement of the entire valley ecosystem to the interest of the hydropower corporation. In the memories of all survivors,

³ This passage is from a monologue on the disaster broadcasted by the Italian Public Television in 1997. Marco Paolini, *Vajont*, 9 ottobre 1963. *Orazione civile*.

we find the signs of nature's struggle with the dam: the trees inclined on the slope of the mountain, the cows refusing to pasture there, and the animals running away from the forest. A very special eviction caused by the disaster was that of thousands of butterflies that arrived in the nearby villages after the landslide. Although this was the effect of their ecosystem's destruction, in the local tradition the butterfly represents the souls of dead people visiting those who are alive⁴. As in Rio Doce, also at the Vajont, the multispecies oppression seems to overcome the rationalistic divide between what is real and what is only a story, perhaps because there is nothing more real than a story.

Pandemic Justice

The Covid-19 pandemic was an unprecedented clash between human and nonhuman forces that reflected both the horrifying power of global capitalism to create zoonotic diseases as well as the extraordinary influence of an invisible virus to shape the course of human history. When, in early 2020, it became clear that Covid-19 was making millions of people sick and killing thousands every week, governments were issuing mandatory "shelter-in-place" orders and "lockdowns" in an attempt to slow the spread of the virus. Because Covid-19 is a zoonotic disease, its very existence is an alarming indication of the harm and lack of wellbeing that extends across species, necessitating a multispecies justice approach to public health and environmental protection. During this age of global anthropogenic climate disruption, the continuous invasion of human activity into already vulnerable habitats and ecosystems has rendered the well-being of both humans and nonhumans more precarious.

As state-mandated lockdown measures contributed to the widespread unemployment of "non-essential" workers, people were unable to pay their housing bills and rent. Despite government efforts to provide emergency funding to citizens and protections against evictions, many people's finances were dwindling and evictions occurred nonetheless. In the United States, as with a range of other types of environmental and public health threats, Covid-19 disproportionately impacted communities of color, because those populations were already experiencing housing instability, lower levels of access to quality health care, and medical vulnerabilities stemming from generations of racial and environmental injustices (FUNK; GRAMLICH, 2020; BUDIMAN; LOPEZ; RAINIE, 2020). In response, tenants' rights groups around the U.S. and the world encouraged and led Covid-19 rent strikes, withholding rent until the state implemented a rent freeze until the public health crisis was over, protesting for moratorium on tenant evictions, and demanding that unhoused

⁴ We own this story to the amazing research done by Giacomo Braulin for his MA thesis on the memories of the Vajont disaster at the University Roma Tre.

people be provided housing. In other words, while Covid-19 was indeed ravaging the health of millions of people around the world, rent strikers told stories with a message that the fundamental drivers and amplifiers of this problem were the actions of capitalist and other dominant institutions that produced and exacerbated these risks.

Among other dynamics, this story reflects a tension between seeing nonhuman agents like a virus as the enemy versus creatively identifying with their power. Collard and Gillespie offer some analysis of this move and its prospects for multispecies justice:

We argue that in some cases, it may be that multispecies justice is found in spaces where distance is sought after more than proximity, difference more than similarity. This may be a world in which the project is not to enlarge the circle of beings that matter...but rather to re-examine the practice of circling itself. For what is at the heart of the circle? What or who does the circle defend? If it is a figure of the human that is exceptional and entitled, then perhaps this needs to be rethought (COLLARD; GILLESPIE, 2017, p. 9).

The above point reflects a view that Kathryn Yusoff (2021, p. 663-676) articulates in her call to consider the “inhumanities” as an intellectual and political project that advances the humanities away from an uncritical embrace of a human subject that is at once racialized as white and dominant and that also tends to treat people of color as things and property. That figure of the human is also assumed to be superior to and exists in opposition to nonhuman natures (PLUMWOOD, 1993). In other words, racism and speciesism work together to maintain white supremacy and human dominionism – two outcomes that produce extraordinary harm for humans and more-than-humans. Therefore, reimagining and redefining the human subject is absolutely critical to rethinking and transforming our relationship with our more-than-human species relatives.

In the case of the Covid-19 rent strikes, these struggles illuminate the many complex ways in which the lives and deaths of nonhumans and humans are deeply entangled. Covid can be seen as a threat, but we can identify with its agency and power to effect change, and we can also devise more protective and sensible ways of learning to live with rather against and in fear of these relations. Rent strikes were also methods devised by ordinary people to implement strategies of caring for their community members when the state was unwilling or unable to do so (VALENTINE, 2022). The rent strikes also reflect the necessity of countering toxic narratives that link racism, speciesism, and public health with stories – and actions that embody storytelling – that provide alternate visioning of what multispecies justice might look like in the age of the Wasteocene.

Oppressed from all Species, Unite!

a. Ruins, Purity, and Inequalities

One might frame the stories we have presented above as examples of ruined landscapes. The Wasteocene's most evident manifestations are precisely wasted landscapes, places transformed into socioecological dumps through the imposition of wasting relationships. In other words, the Wasteocene is not a metaphor but something very concrete, material as the mephitic smell coming from a dead river, invasive as rats or virus taking over humans' spaces and bodies, destructive as a landslide changing forever an Alpine valley.

Someone has argued that the more-than-human nature has the ability to regenerate itself. Capitalism and its wasting relationships are producing ruins; many people already live within the ruins of capitalism. Nonetheless, those ruins are not always the end of the story. There is life in the ruins of capitalism, at its extreme edges – so they say. Plants and animals might flourish in the midst of an abandoned factory, and even dismissed oil platforms can become homes for various kinds of species. We might also read the Covid-19 experience as one of ruins. Especially during the lockdown, it was common to see images of wild animals roaming in the deserted streets of our cities. Easily those images could bring us to certain dystopic representations of post-apocalyptic futures with lions peeping from ledges of the New York Library⁵. For some observers, Covid-19 seemed like some kind of nature's revenge; while humans were retracting into their homes, other animals were gaining back the spaces that they had lost in the past. In the ruins of a pandemic world, nature was coming back, even in unexpected places. A world of ruins is also a toxic world. Many scholars have stressed that purity is an illusion, a dream that looks so much like a nightmare, filled as it is with racist references. Nothing is pure, they have taught us, because toxicity is everywhere.

Certainly, these discourses are all true. The Wasteocene regime does transform everything around us in toxic ruins, but life seems to be able to come back. Yet, there is something disturbing about such a narrative. Perhaps we are still obsessed with the fact that not all humans inhabit the toxic ruins of the Wasteocene. It may be easier to reflect on the regenerative power of ruins if you are not trapped in one of them. It may be easier to say that everything is toxic if your level of everyday toxicity is not making your kids sick every time they drink water. Purity does not exist, but toxicity does. Life can regenerate, perhaps even thrive, among the ruins of the Wasteocene; some would call it resilience. But do we need to be resilient and survive amidst the ruins of capitalism? Or, perhaps, we should resist and fight against the wasting relationships that produce ruins for the most and palaces for a few?

⁵ We are referring to the iconic image from the film *12 Monkeys* (1995).

The Wasteocene is based on this founding principle and practice: someone and something is to be wasted, and what matters is the separation between who – and what – is worth and who and what is worthless.

Commoning & Multispecies Alliances

We argue that what will subvert wasting relationships are neither the ruins nor the disaster brought about by a pandemic – how something that reinforces inequalities and privilege can build a new world would remain a mystery to us. It is, for example, the commoning that transforms the socioecological dumpsites of the Wasteocene into community gardens. Those are certainly not the gardens of gated, sanitized, purified communities; they do not spring from capitalist consumption, nor are they the wilderness that would spread after humans' disappearance.

Commoning is a project, a revolutionary project; it is the antidote to the Wasteocene. Just as the Wasteocene produces and reproduces through relations of exploitation and consumption, commoning, on the other hand, is made up of relations of reproduction and care. We have seen gardens flourish, we have seen communities born from commoning practices. Often those are multispecies communities, even when people will be unaware of this fact. In the following pages, we tell the stories of a few of these multispecies alliances sprouted through commoning.

Post-capitalist Community

The hip-hop group Assalti frontali has beautifully told the story of the Snia Viscosa Factory in Rome, Italy, through their videoclip “The Fighting Lake” (2016). Spectators can interpret that story as a perfect example of the “ruins narrative”: in the midst of the post-industrial remains, nature bounces back, almost taking over the legacy of the past. Although this is true and we do not dismiss nature's resilience, we argue that resistance, not resilience, can defeat the Wasteocene through commoning and multispecies alliances. The Snia is the story of the construction of an alternative to the wasting of communities that requires a political and narrative project. But let us start from the beginning. In 1923, under Mussolini's rule, the Snia Viscosa factory was created in Rome to produce synthetic fiber through the use of carbon disulfide, an extremely toxic chemical. The production grew in the following years, especially with the autarkic turn of the fascist regime in the 1930s. However, by the 1950s the production had already declined and in 1954 the Snia Viscosa closed, remaining abandoned for decades. In the 1990s-2000s the

abandoned area of the Snia became the target of several projects of development. The plan aimed to transform the area either into a shopping mall or into a residential complex. The communities living in the area – mostly working-class neighborhoods – had, instead, a radically different plan for the former factory. In a desert of public green areas and spaces for social and cultural activities, the former Snia Viscosa represented a unique opportunity. Instead of another privatized space, the activists started envisioning the area as a commons around which a new community could be born. While the vegetation was already expanding among the ruins of the factory, “nature” entered into the struggles over the fate of the former factory in an even more dramatic way. The factory lies on a rich reservoir of underground water because its very production process was water consuming. During the construction of the shopping mall, this underground water started to surface, creating a small lake. The developer tried to hide the lake by pumping the water into the sewage system, which resulted in a colossal flooding of the surrounding areas. The lake started attracting migratory birds while the entire area assumed another aspect. It was no longer an abandoned industrial space but a strange cyborg park with plants, animals, the lake, and the ruins of industrial modernity.

Indeed, the story of Snia Viscosa tells us that even a destroyed landscape, filled with the ghosts of technology and capitalism, can become the fertile terrain for new hybrid ecologies. And this explanation would not be wrong. Our point is not whether life will come back among the ruins; most likely it will. We are rather interested in exploring the conditions under which the regenerative power of the ruins can conspire with the regenerative power of commoning and resistance, thus creating alternative socioecological relationships to the Wasteocene. In that specific case, the lake, the birds, and the vegetation intersected in the commoning project of a subaltern community creating an alternative to the ruins as well as to their valorization.

Just as the Wasteocene manifests itself through the imposition of toxic narratives and the erasure of narratives of resistance, so the struggle against it involves the construction of insurgent archives, such as those created by the activists at the former Snia in Rome. Interestingly enough, this insurgent archive merges both humans and nonhumans: the activists have found and recovered old documents related to the workers, memories reduced to garbage in the abandoned factory, but they have also started studying and tracing the memories of the nonhumans inhabiting that space, learning about the plants and animals living there.

Beavers, Indigenous Peoples, and the Multispecies Violence that Produced New York City

The North American Beaver (*Castor canadensis*) is what biologists call a “keystone species” because of its significance to the health and integrity of the local ecosystems it inhabits. Many scholars have also realized that the beaver is a “cultural keystone species” because of its great significance to certain Indigenous nations (GARIBALDI; TURNER, 2004).

Beaver dams and associated ponds can increase surface and groundwater storage, improve water quality, repair eroded channels, reconnect streams to their floodplains, sequester carbon and create and maintain wetland and riparian habitats. Beavers create habitat complexity and diversity in otherwise simplified stream systems; they can prolong critical summer streamflow or provide perennial flow to degraded streams that would otherwise run dry. Beaver dams, canals, burrows and food caches greatly expand off-channel, wetland and wet meadow habitats providing many benefits to fish, birds, mammals and other wildlife (DOLMAN; LUNDQUIST, 2020, p. 6).

The dramatic and rapid decline of beaver populations in North America closely paralleled the patterns of European colonization (DOLIN, 2010). While Indigenous peoples had been trapping and consuming beavers prior to colonization, the arrival of European settlers led to a massive increase in the demand for beaver fur and pelts, contributing to a catastrophic collapse of the population. Before it was called New York City, the settlement of New Amsterdam in the 1600s was a Dutch colony that was founded largely because of the prevalence of beavers in the area. Beaver furs were the colony’s most valuable export. In 1665, Adriaen van der Donck (a Dutch settler and lawyer living in New Amsterdam) wrote, “[t]he beaver is the main foundation and means why or through which this beautiful land was first occupied by people from Europe” (JACOBS, 2009, p. 109). Fur coats and hats made from beaver pelts were highly prized by consumers across Europe and yielded enormous profits for the Dutch West India Company. The decline of the beaver populations in the Hudson River Valley directly contributed to the decline of the region’s ecosystems, negatively affecting numerous other species. Thus, the storytelling in this case is one of irony: the beaver was absolutely foundational to the very existence of one of the most economically and culturally important cities on Earth, and yet that robust metropolis also decimated its nonhuman benefactor. Fortunately, another story is in the making in both New York and elsewhere.

In recent years, efforts by conservation groups and government agencies have successfully led to the re-emergence of the beaver in the Hudson Valley – an outcome that many observers have described as miraculous, considering that most people thought the beaver to be all but

extinct on the U.S. east coast. On the U.S. west coast, Indigenous communities like the Maidu nation of Northern California are similarly successfully working to restore the habitat of, and their cultural connections to, the beaver, after centuries of colonization (ALAGONA *et al.*, 2023). These are successful multispecies alliances that are producing positive results despite massive countervailing forces aligned against them. Thus, the storytelling in this case reveals that the ecocidal and speciesist practices that nearly annihilated the beaver can ultimately be challenged by actions that are motivated by the recognition of the beaver's centrality to the region's ecosystem.

The story of the beaver is one that closely tracks the onset of the Anthropocene, which many scientists now date to the early 1600s, when New Amsterdam was founded (LEWIS; MASLIN, 2015). The ravenous and rapacious extraction of beavers from their habitats coincided with the onset of settler colonialism in North America, producing a process of genocide and ecocide—both are hallmarks of the Wasteocene. The toxic narrative that claims settler colonialism is an example of unquestioned and unqualified “progress” and “advancement” is challenged by the storytelling and actions that reveal the twin violence of this process and how it impacted both Indigenous and beaver communities. The actions of Indigenous peoples, conservationists and governments to restore beaver habitat constitutes a powerful counter narrative that produces both hope and ecological justice in a time of great uncertainty and peril.

Conclusion

In this article we have explored the power of narratives to oppress and liberate. We have employed the concept of the Wasteocene to illustrate the present condition of multispecies oppression under the regime of wasting relationships. The transformation of communities in socioecological dumps implies the imposition of a toxic narrative infrastructure that silences, normalizes, and invisibilizes injustices. We have argued that as wasting relationships oppress both humans and more than humans, the insurgency against them cannot be anything but a series of multispecies alliances based on commoning, that is, practices of sharing and caring.

A crucial part of this rebellion against the Wasteocene is what we call a guerrilla narrative. Not only do we believe that insurgent multispecies communities are experimenting with new narratives about themselves, their past and futures; our own article is clearly marked by narratives. We believe in the power of storytelling, in the possibility to shape the world by the stories we tell about it and ourselves.

Subcomandante Marcos, the former spokesperson of the Mexican popular movement known as Zapatista Army of National Liberation, used to say that “the word is our weapon.” Perhaps there has never been a revolutionary group that has cared so deeply for storytelling.

And in their narratives our idea of a multispecies alliance against capitalism, colonialism, and oppression is significantly present. It is astonishing that in the introduction to a volume collecting the communiqués of the Zapatista Army, Subcomandante Marcos decided to tell a story precisely of a multispecies alliance. Marcos tells the love story between a parrot and a macaw and his involvement in it; apparently the parrot asked him to take care of the egg born from this relationship. In the end the egg will give birth to a tapir, making this connection even more multispecies. The odd family presented in this introduction is not the only reference to a multispecies alliance. The Durito story is perhaps the clearest discourse on this topic. Durito is a beetle that engages in a conversation with Marcos about the resistance of neoliberalism and the chances for the Zapatistas to win against it. Durito explains that he is concerned about the duration of the war because beetles are always risking being smashed under the Zapatistas' boots.

“Now – Marcos said – I’m going to give orders to my *compañeros* that it is forbidden to step on the beetles. I hope that helps” (MARCOS, 1995, p. 193). Durito’s story explains that the revolution against neoliberalism cannot be pursued without caring for the non-humans who are also struggling for liberation. The sense of cooperation – we would say complicity – between human and non-human nature is well explained in a passage from the Zapatistas’ story “We Who Came After Did Understand.” In that story, a man was scoffed at by everyone because he planted trees he would not be able to even see, but those trees became a shelter for birds and humans in the years to come (MARCOS, 2022, p. 34).

In his legendary speech in Aguascalientes at the national democratic convention in 1994, Marcos beautifully described the intertwined reality of human and more-than-human nature in the struggles for liberation:

Aguascalientes, Chiapas: graded terraces of hope, hope in the little palm trees that line the steps, reaching for the sky, hope in the conch shell that calls out from the jungle through the breeze, hope in those who didn’t come but are with us, hope that the flowers that die elsewhere will flourish (MARCOS, 1995, p. 243).

All of the cases we have considered in this article reflect a lesson that the environmental humanities have long articulated – that stories and storytelling can be highly effective means for communicating the urgency of our socioecological crises and inspiring people to mobilize for addressing the challenges associated with the Wasteocene. A multispecies approach to scholarship and storytelling also reflects an important lesson that some courageous environmental scientists have concluded, based on research that reveals that flora have survived and thrived throughout the eons largely because they function without steep hierarchies: that confronting and dismantling systems of power and rank is absolutely necessary for ensuring a healthier planet (MANCUSO, 2023). In other words, in addition

to “thinking like a mountain” (LEOPOLD, 1996, p. 137-141), it may be wise and just as important to “act like a plant”.

References

- 12 MONKEYS. Dir. Terry Gilliam. Prod. Charles Roven. United States: Universal Pictures, 1995.
- ALAGONA, Peter; CANNON, Clare; DENISS, Martinez; MCINTURFF, Alex; PELLOW, David. Back to the Future: Indigenous Relationality, Kincentricity and the North American Model of Wildlife Management. *Environmental Science and Policy*, v. 140, p. 202-207, 2023.
- ARMIERO, Marco. *La tragedia del Vajont: ecologia politica di un disastro*. Torino: Einaudi, 2023 (forthcoming).
- ARMIERO, Marco; CAYUELA, Sergio Ruiz. Cooking Commoning Subjectivities: Guerrilla Narrative in the Cooperation Birmingham Solidarity Kitchen. In: FRANKLIN, Alex (ed.). *Co-Creativity and Engaged Scholarship: Transformative Methods in Social Sustainability Research*. Cham: Palgrave Macmillan, 2022. p. 75-105.
- ARMIERO, Marco. *Wasteocene: Stories from the Global Dump*. Cambridge: Cambridge University Press, 2021.
- BERNARDINO, Angeo F.; FERREIRA, Amanda D.; FERREIRA, Tiago O.; GABRIEL, Fabrício; QUEIROZ, Hermano M.; VASCONCELOS, Ana Luisa S. Long-Term Contamination of the Rio Doce Estuary as a Result of Brazil’s Largest Environmental Disaster. *Perspectives in Ecology and Conservation*, v. 19, n. 4, p. 417-428, 2021.
- BUDIMAN, Abby; LOPEZ, Mark Hugo; RAINIE, Lee. Financial and Health Impacts of Covid-19 Vary Widely by Race and Ethnicity. *PEW Research Center*, 5 may 2020. Available at: <https://www.pewresearch.org/short-reads/2020/05/05/financial-and-health-impacts-of-covid-19-vary-widely-by-race-and-ethnicity/>. Accessed on: 20 Aug. 2023.
- COLLARD, Rosemary-Claire; GILLESPIE, Kathryn. Introduction. In: COLLARD, Rosemary-Claire; GILLESPIE, Kathryn (eds.). *Critical Animal Geographies*. New York: Routledge, 2017. p. 1-16.
- DAVIS, Janae; MOULTON, A.; SANT, Levi Van; WILLIAMSET, Brian. Anthropocene, Capitalocene, ... Plantationocene? A Manifesto for Ecological Justice in an Age of Global Crises. *Geography Compass*, v. 13, n. 5, p. 124-138, 2019.
- DE ANGELIS, Massimo; ARMIERO, Marco. Anthropocene: Victims, Narrators, and Revolutionaries. *The South Atlantic Quarterly*, v. 116, n. 2, p. 345-362, 2017.
- DOLIN, Eric Jay. *Fur, Fortune, and Empire: The Epic History of the Fur Trade in America*. New York: W.W. Norton and Company, 2010.

- DOLMAN, Brock; LUNDQUIST, Kate. *Beaver Recruitment Strategy for Tasmam Kóyom*: prepared for the Maidu Summit Consortium. [S.l.]: Occidental Arts & Ecology Center, 2020.
- ESPINDOLA, Haruf Salmen; NODARI, Eunice Sueli; SANTOS, Mauro Augusto dos. Rio Doce: riscos e incertezas a partir do desastre de Mariana (MG). *Revista Brasileira de História*, v. 39, n. 81, p. 141-162, 2019.
- FUNK, Cary; GRAMLICH, John. Black Americans Face Higher Covid-19 Risks, are More Hesitant to Trust Medical Scientists, Get Vaccinated. *PEW Research Center*, 3 jun. 2020. Available at: <https://www.pewresearch.org/short-reads/2020/06/04/black-americans-face-higher-covid-19-risks-are-more-hesitant-to-trust-medical-scientists-get-vaccinated/>. Accessed on: 21 Aug. 2023.
- GARIBALDI, Ann; TURNER, Nancy. Cultural Keystone Species: Amplications for Ecological Conservation and Restoration. *Ecology & Society*, v. 9, n. 3, 2004.
- HARAWAY, Donna; TSING, Anna. *Reflections on the Plantationocene*: a Conversation with Donna Haraway and Anna Tsing Moderated by Gregg Mitman. *Edge Effects Magazine*, Wisconsin, 18 Jun. 2019. Available at: <https://edgeeffects.net/haraway-tsing-plantationocene/>. Accessed on: 21 Aug. 2023.
- IL LAGO che combatte. Performer: Assalti Frontali. *In: Mille gruppi avanzano*. Performer: Assalti Frontali. [S.l.]: Daje Forte Daje, 2016. Track 12 (5 min. 22).
- JACOBS, Jaap. *The Colony of New Netherland*. Ithaca: Cornell University Press, 2009.
- LEOPOLD, Aldo. Thinking Like a Mountain. *In: LEOPOLD, Aldo. A Sand County Almanac*. New York: Oxford University Press, 1966. p. 137-141.
- LEWIS, Simon L.; MASLIN, Mark A. Defining the Anthropocene. *Nature*, v. 519, p. 171-180, 2015.
- MANCUSO, Stefano. *The Nation of Plants*. New York: Other Press, 2023.
- MARCOS, Subcomandante. *Zapatista Stories for Dreaming An-Other World*. Oakland: PM Press, 2022.
- MARCOS, Subcomandante. *Shadows of a Tender Fury*: The Letters and Communiques of Subcomandante Marcos and the Zapatista Army of National Liberation. New York: Monthly Review Press, 1995.
- MOORE, Jason. Confronting the Popular Anthropocene: Toward an Ecology of Hope. *New Geographies*, v. 9, p. 186-191, 2017.
- MOORE, Jason (ed.). *Anthropocene or Capitalocene?: Nature, History, and the Crisis of Capitalism*. Oakland: Pm Press, 2016.
- NIXON, Rob. The Anthropocene. The Promise and Pitfalls of an Epochal Idea. *In: ARMIERO, Marco; EMMETT, Robert S.; MITMAN, Gregg (eds.). Future Remains: A*

Cabinet of Curiosities for the Anthropocene. Chicago: Chicago University Press, 2018. p. 1-18.

PASCOAL, Walison Vasconcelos; ZHOURI, Andréa. Os Krenak e o desastre da mineração no Rio Doce. *AMBIENTES: Revista de Geografia e Ecologia Política*, v. 3, n. 2, p. 360-394, 2021. Available at: <https://saber.unioeste.br/index.php/ambientes/article/view/28271>. Accessed on: 9 Jun. 2023.

PLUMWOOD, Val. *Feminism and the Mastery of Nature*. New York: Routledge, 1993.

PULIDO, Laura. Racism and the Anthropocene. In: ARMIERO, Marco; EMMETT, Robert S.; MITMAN, Gregg (eds.). *Future Remains: A Cabinet of Curiosities for the Anthropocene*. Chicago: Chicago University Press, 2018. p. 116-128.

VALENTINE, Riley. 'It's Time for a Rent Strike': Covid-19 Rent Strikes and the Absence of State Care. *Open Philosophy*, v. 5, n. 1, p. 636-649, 2022.

YUSSOFF, Kathryn. The Inhumanities. *Annals of the American Association of Geographers*, v. 111, n. 3, p. 663-676, 2021.