

Flowing Narratives

Sketches from Blasted Waterscapes

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“Insubstantial water incomplete water
smelling of ghost and death
smelling of mint and I already do not know
you
water firefly restless at my feet”.
River at Daybreak, by Andrea Zanzotto (2016:
75)

Rivers, the Bloodstreams of the Earth

There is a recurring metaphor in political, poetical and scientific works on watersheds that compares them to a living circulatory system (Schaffner et al. 2021). Feminist and environmental activist Vandana Shiva once said that “a river is the lifeblood of an ecosystem”,¹ pointing out how these earthly veins are “choked” by dams and other man-made infrastructures. Big dams, in particular, have drawn a certain attention for the major effects they have on animals, plants and communities, and, in many cases, also result in the displacement and loss of both humans and non-humans (Armiero 2013; Luby 2020).

In the context of this growing body of historical and anthropological works on hydropower plants (Elie 2013; Le Mentec 2006), micro dams and smaller infrastructures have gone relatively unnoticed in the humanities. This happened primarily because of the relatively small geopolitical relevance of these projects, which also contributed to the effectiveness of local protests and their impact. An example of this is the case of the megabasins in France that have, simultaneously, proliferated from small streams and torrents, coinciding with the implementation of ecological transition policies in Europe, which, in some cases, directly funded these kinds of green energy projects. Yet, as other scholars have pointed out (e.g. Scotti 2022), these national and international policies on

1 Quote from the 2008 documentary *Blue Gold: World Water Wars*, directed by American filmmaker Samuel Bozzo.

renewables risk fuelling extractivist practices, while ignoring and going past local decision-making processes.

During my Master's in Environmental Humanities at the Ecole des Hautes Etudes en Sciences Sociales, I conducted a two-year field research project on Italian water communities fighting against the ongoing anthropization of the small rivers and streams across their territories. As all major waterways have already been exploited for different purposes by industries, agrobusiness companies and both public and private hydropower sectors, new small-sized hydropower plants have bloomed in the past twenty years to capture the last streams free from dams, water withdrawals and artificial riverbanks. Even though ecologists have long warned us of the impact that these human activities have on waterscapes (from preventing fish migration to the erosion of the soil and the effects of hydropeaking), the construction of new infrastructures and artificial basins never stops. Ecologists have long warned us of the impact that these new power plants and water management structures have on waterscapes, meaning the complex socio and environmental co-construction of hydro-spaces that are influenced by power structures and, at the same time, open to new negotiations (Leonardelli et al. 2023). But projects such as dams and channels have also shaped our collective *memoryscape* (Butler 2008) and our imagination by imposing their impressive and brutalist presence. They have changed the landscape, moving around waterways, drying out wetlands and flooding villages (such as Curon Venosta and the old square of Pieve di Cadore). This is why petitions for the conservation of water bodies talk about a "*torrenticidio*" ("creekcide"), and activist movements, such as *Free Rivers*, provide alternative narratives to call for action. I consider these creative political and artistic acts of public participation part of what Matthew Henry calls "hydronarratives" (2022), an entanglement of past recounts and new perspectives that actively engage with the reimagination of water futures.

I argue in this text that narration plays an important role in current waterscapes, as remembering the past and, at the same time, imagining a thriving future for rivers seems increasingly difficult. I do so through the perspective of multispecies and sensory ethnography to better seize the connections between more-than-human communities and the unpredictable small streams that flow through the Italian peninsula.

In this regard, the *Camille Stories* by Haraway (2016) is a fascinating form of narration as it shows the infinite possibilities of speculative fabulation in narrating both the ruins and the possibilities of our more-than-human world. I find it interesting that the *children of compost* start restoring the earth by taking care of ecological corridors, which "is how they imagine and practice repair of ruined lands and waters and their critters, human and not" (Haraway 2016: 140). In fact, rivers are not only blasted ecological corridors, but also sites of resistance and reparation: the *Camille Stories* inspired me to see them from both perspectives, and to find hope in the concrete banks and muddy riverbeds that I visited during my field research.

I have taken long walks along rivers and streams (Tagliamento, Arzino, Isonzo, Misa and Tanagro, to name a few) during my field research with the people involved for various reasons in the defence of waterways in their local communities. I met with some of the people who participated in the process of the restoration of these ecosystems in May 2023, repairing rivers by taking down old and not operating dams. These social actors and their actions have inspired me to produce a short fictional story, *Ruins Lake*, inter-

secting anthropology and literature. Thanks to a double channel – writing and orality – I have tried to improve the idea of an “eliciting prophetic speech” as an acrobat of my time² (Benedetti 2018). I will, therefore, share just some sketches of narrations and sensory knowledge in this essay – what a town smells like in the aftermath of the flood, the unexpected multispecies encounters – that I would return as such: fragments of prophecies unheard, that as a researcher I felt a response-ability to witness (Rose and van Dooren 2017). The aim of these fragments is to open a breach in the “narrative violence” (Barca 2014) of political and media institutions that practice the active silencing of individual and collective experiences of environmental catastrophes. I, therefore, hope to contribute with this paper to a body of research that focuses on the perceptions and the embodied experiences of disasters, entrenching them in multispecies territories.

Floods in the Making

I first became interested in the political and social mechanisms behind the escalating anthropization of rivers in 2018, when the Rio Carne, a small stream in the Ligurian Alps, was threatened by the construction of a small hydropower plant. A seven-year-long process at the Public Water Court in Rome finally led the private enterprise to abandon the project, and the local collective of the village of Pigna won the case.

Following a chance meeting with some of the collective members, I suddenly discovered that it was far from being the only case. Watching the cartography of new and old projects on both national and European scales I began to feel a sort of distress: multi-colour points covered almost every one of the slim light-blue stripes representing waterways on the map.³

Italy has a long history of hydro-power infrastructures which started in the 19th century and had a boom during and after the Second World War. In more recent days, two laws had a major impact on the production of energy: the first one in 1999, known as Bersani’s Decree, set in motion the market opening and the end of the state monopoly on the energy sector. The Law 99/2009 came in second, following the European Directive 2009/28, introducing “green certificates” and funding for the implementation of the renewable energy sector.

Consequently, in 2022 there were more than 2450 new hydropower plants in the last remaining free-flowing waterways, the majority of which are the delicate Alpine streams.⁴

2 All quotations in languages other than English in the original have been translated by the author of this chapter.

3 The *Tracked Barrier Map* is still incomplete and there is a clear lack of data on the Italian peninsula, but it still shows the fragmentation of river connectivity caused by dams and weirs in Europe. It was produced by Amber citizen scientists and is available at: <<https://portal.amber.international/>> [Accessed 10 June 2024].

4 Hydropower chart from 20 April 2023, published by Terna S.p.A, the Italian transmission system operator and available at: <<https://www.terna.it/it/sistema-elettrico/dispacciamento/fonti-rinnovabili>> [Accessed 10 June 2024].

The recent floods that have followed one another in Italy are not only the symptoms of climate change – this hyperobject that seems to escape our imagination – but also the very real effects of poor management, uncontrolled concreting of waterways and swamps, and the dangerous expanding of cities inside the riverbeds.

I have attempted to follow the river flow in the Italian peninsula, starting from the northern Alpine streams in Piemonte, Veneto and Friuli Venezia Giulia, and then descending through central Italy, where, in September 2022, the Misa River flooded, in the province of Ancona (Marche). In 2014, four people had already died from a flood, and I felt the need to go there and witness the second dramatic foretold catastrophe occurring in less than ten years.

One month had already passed since the flood when I arrived in the city, yet the smell of mud mixed with the sewage blackwater continued to exude from the drain covers. Long brown lines marked the flood peaks on every wall of the historical centre, just a few metres from the Misa River. Yet, walking along the promenade, I could not see the water: two-metre high riverbanks completely hid the Misa, and were deliberately built to slow down its recurring floods.

But this effort was at odds with the fact that the riverbed is in concrete, and the estuary was narrowed down to make space for the city development, to the point of being narrower than the river itself. As a result, when there are floods, the water gains speed right where the population density increases.

A little out of the city, I took a longer walk with Luciano, a retired elementary teacher and environmental activist, in one of the worst affected areas, known as Bettolle. The landscape is flat here, and the river runs slowly. Looking at the Misa at that moment, no one could imagine its disruptive power. Not much energy can be produced in these lands, yet Luciano was telling me that the region had approved, and later abandoned, the project of a new hydropower plant in the place of an old weir on this same capricious stream. Two people died in the house just in front of the weir when the river flooded on 15 September 2023. Another controversial project, an artificial basin in the farmlands, was under construction at the time of the flood: walking in the disaster zone, Luciano mentioned the thousands of dead animals, mainly the pigs from the farms that dot the countryside. Never to be found, some of them are still decomposing under the mud.

Crayfish Encounter

Further south on the boot-shaped peninsula, in the region of Campania, I encountered for the first time the rare Italian crayfish, *Austropotamobius pallipes*, an endangered species living in quiet and clean waters. I was visiting the mystical early Christian Baptistery of San Giovanni in Fonte (5th century) that is known thanks to an annual miracle: during Easter, at night, the spring inflates itself until it fills the basin with pure water.

I had been looking to find this particular species of crayfish since the beginning of my research. Maria, the guide I was with, said she was going to show me some rare crabs, so I was really surprised to see many small crayfish lying on the wet floor of the baptistery. These very rare animals are threatened by yet another new hydroelectric power project,

this time on the Tanagro river. Activists from different regions have taken this animal as a common symbol of resistance against the extractivism of water resources.

The *Austropotamobius* are endangered by the degradation of their ecosystem, as they prefer to live in clean and calm waters. If I could not meet any before, it was because I was looking for them in northern Italy, where it is increasingly difficult to find free-running rivers that are clean and not invaded by allochthon species, such as the Louisiana crayfish. I saw many Alpine streams that still had transparent and cold water but were continuously interrupted by dams and small pipes that can take up more than 80 % of the water flow.

River connectivity is the possibility of encounter: “[...] the desire for connectivity”, writes Deborah Bird Rose, “is a statement of the ecological fact that organisms and environments permeate each other, are mutually constitutive and thus mutually necessary and sustaining” (2011: 118). When a river is free of flowing (and remembering, as Nobel Laureate in Literature Toni Morrison [1995] wrote), the water levels create safe meanders of slow and low water. Here, fish and amphibians lay their eggs, and you could find one or two crayfish hiding under some round rocks. Deer and other mammals come to drink, and during the hot summers, humans enjoy bathing in the fresh, silver waters. These places of encounter are flooded once an architectural barrier, such as a dam, is built: water stops flowing and stagnates. Migrant fish that cannot overcome the new obstacle repeatedly jump and die hitting the concrete. Many of them – some of whom are considered endangered species, such as the European bullhead, trout and pike – also die when dams are cyclically emptied for management purposes.

Another devastating effect of this infrastructure is hydropeaking, which is the discontinuous release of turbid water due to peaks of energy demand. Water may suddenly rise, endangering the sites of reproduction, while generating a flow so powerful that many animals cannot resist it. That is why swimming in mountain rivers has become more dangerous than it was ever before and is, in many cases, prohibited by law. Lucia, one of the activists I met during my research fieldwork in Veneto, talks about an annual grief that she feels cyclically every year when she witnesses this massive non-human death. She, similar to many other residents, fights for a more democratic decision process, where the local people who dwell in these waterscapes are the ones that have a say concerning those ‘green’ projects. To do so, Lucia travelled a lot to strengthen the ties with other territories, participating on a local level as well as in the European network of events and meetings. Andrea Muehlebach, a researcher of the cultures of waters, notes in her book *A Vital Frontier* that stories which seek to capture the complexity of these collectives must, in fact, “circulate as much as the members of these movements” (2023: xi), to put their own fight at the centre of a broader political agenda of river politics.

Remembering, Imaging, Flowing

Talking about the craft of writing and writer’s imagination and attentive memory, Toni Morrison compares this capacity with the ability of a river to remember and follow its course, saying that “all water has a perfect memory, and wants to go back to where it was” (1995: 99). Writers are like that: remembering where we were, what valley we ran through,

what the banks were like, the light that was there and the route back to our original place. It is an emotional memory – what the nerves and the skin remember as well as how it appeared. And a rush of imagination is our “flooding”. Waters remember: that is why, now more than ever before, it is necessary to talk about what marine geographers Phil Steinberg and Kimberly Peters call “wet ontologies” (2015) and to reflect about how we can live in the waterscapes of the Anthropocene.

When it comes to river management, memory of past waterscapes and images of river futures are always part of the discussion. In writing *Ruins Lake*, a short fictional story on the future of dammed rivers, I was particularly inspired by Ursula Le Guin's *The Carrier Bag Theory of Fiction* as a breakthrough in her understanding of evolutionary theory (1989). When Le Guin writes the mesmerizing list “a leaf a gourd a shell a net a bag a sling a sack a bottle a pot a box a container. A holder. A recipient”, as an environmental anthropologist studying the anthropization of Italian rivers, my thought went to yet another kind of recipient: the river dam. Set in an undefined future, this writing experiment gave me the possibility to play with “hydronarratives” (Henry 2022), water stories that can shape an ecological and political change. At the centre of my story was the possibility to restore rivers by taking down dams, a possibility that already exists in some countries and is openly invoked by activists, artists and riparian communities all over the world. In the words of human ecology researcher Andreas Malm, “blowing up” (2021) these infrastructures is an ecological action itself.

People like Luciano try to imagine a future in which the river vegetation is respected as an important part of the riverine ecosystem. After each flood, excavators are once again the protagonists of what is called the ‘cleaning’ of the riverbed itself, as trees, roots and algae are considered dangerous in case of overflows. That is why many activists are now reappropriating the local practices of care that had been lost in between a few generations, after the economic boom of the 1970s. Caring for a river means deciding exactly which tree needs to be cut down, and which is strong enough to resist the next flood, and stories of past floods were rooted in the local knowledge that was once transmitted through oral histories and collective memories. Filippo, a river activist from Piemonte, told me his personal flood memory:

In 1958, I had not yet been born, but in Val Bognanco, the torrent Bagna, a tributary of the Toce, filled the bed from one side to the other, then began to flood the houses. My mother, born in Paris to an anti-fascist family, told me about a night in which she participated in a procession, with the Capuchin monks, in which they blessed the water and the day after, the river was all calm. It rained cats and dogs, umbrellas were useless. Lost men trust the divine. They seek protection, like a sick man who confides in the saints. I remember this scene because the monks lived near us, and I always imagined them walking with the umbrella to pray on the banks of the river.⁵

What I find particularly interesting in his recount of the 1958 flood, that was transmitted to him by his mother as a piece of local memory, is that he admits adding fictional um-

5 Extract from an interview with Filippo P. in the small village of Beura Cardezza, in the region of Piemonte, Italy, on 15 May 2023.

brellas to the monks praying. It is a good example of how stories are transformed through sharing, and how imagination also plays a role in the intergenerational transmission of catastrophic events. Lucia also shared with me the memory of one particular flood that touched her region, Veneto:

During the flood of '66 I was here, I remember, it was the 4th of November. It was the same flood that hit Florence. Here, it was a disaster, it completely changed the appearance of the valleys. I was small, in 1966 I was only eight years old. It was November, it had rained a lot, and it carried everything with it, the village, and the bridge that was made out of cork. Where there is now the market gardener of fruit and vegetables, there was a wooden bridge. I do not think it caused any deaths, but it changed everything.⁶

The use of commemorative plaques accompanying these intimate and oral stories used to be a physical sign of the collective effort to build a local historical counter-memory. However, nowadays, after each new flood, the first reaction is the complete erasure of these same marks. It starts with the obsession of cleaning each trace of mud, debris and every object that has come into contact with the sludgy water. This practice stirs up the fear of waterways, and leaves behind a strong feeling of loss, as was the case for Francesca, a woman living alone in her mother's house near the Misa River. The municipality of Senigallia paid for the waste disposal only if everything was thrown away in the first week following the floods. Francesca's first floor was where she stored all her belongings, and it was completely flooded: everything had to be thrown out, including shoes, summer dresses, family photo albums, a carnival mask bought in Venice and so much more. She, similar to many others, did not have time to try to save and clean up each object carefully, and one month after the disaster she could not hold back her tears.

The material loss and alteration of her home following the disaster could be defined with Glenn Albrecht's neologism *solastalgia* (2019), the feeling of psychological distress provoked by an environmental disaster in which one feels estranged and homesick while still being in one's own home – a home that is forever transformed by the effects of climate change and anthropization.

Unleashed Water in the Anthropocene

This paper brings together different sketches and interviews collected during my research fieldwork along the Italian peninsula: in doing so, I wanted to paint a picture of waterscapes, their human and non-human inhabitants, their sense of grief and urgency, but also their actions and hopes. I gathered hydronarratives of trouble and recovery, and even material objects that shape space and memory from which new hybrid narratives originate. Starting from these ethnographic sketches, I wanted to briefly introduce the ecological, historical and political issues I encountered along the way, and that were

6 Extract from an interview with Lucia R. in Forno di Zoldo, in the region of Veneto, Italy, on 20 May 2023.

constantly brought up in conversation with the people living in these waterscapes. I particularly insisted on local memories of past disasters as a starting point to reimagine river futures, their restoration and the parallel dismantling of anthropogenic infrastructures. If free-flowing is an act of remembering, I suggest that we let our memories also flow with the currents, and let them mix with our fantasies of what our waterscapes could look like. Coming back to our opening metaphor of watersheds as a living circulatory system, the tactical anthropomorphization of the earth could be our way out of human narcissism, as Bennett suggests (2010: ivi, xvi). Storying rivers as the veins of the earth – or forests as its lungs – participates in a transformative action that reconfigures watersheds under a political perspective of resistance against the devastating consequences of extractivism and climate change.

Finally, I would like to conclude this paper by doing a small act of remembering: in the final stages of writing this text, three young people died during a flooding that hit one of the rivers I visited during my field research, the Natisone in Friuli Venezia Giulia. Trying to resist the power of the water, they hugged each other. Here are their names: Patrizia Cormos, Bianca Doros and Cristian Casian Molnar.

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