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WALKING A SICILIAN RIVER

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On the sandy shoreline of eastern Sicily, the Simeto River meets the Ionian Sea against the dramatic backdrop of the volcano Etna. Groves of reeds surround small seawater coves nestled among the dunes. Seagulls fish and ducks hide in reedbeds along the riverbank. Walking on the beach accompanied by the sound of the waves makes us feel part of that windy and solitary landscape. We are here as researchers on the EU-funded project "BIOTraCes: Biodiversity and Transformative Change for Plural and Nature-Positive Societies." Our branch of the project, based at the University of Catania, aims to work with local communities to facilitate social change that may enhance socioecological relationships with the Simeto River.¹



Not a trace of the river in sight. It flows to the left of the path, between deep artificial banks. Nature reserve Oasi del Simeto. Photo by Paolo Gruppuso. <u>CC-BY NC 4.0</u>.

Our perspectives on this landscape differ markedly. Erika, a geographer, was born and bred in Catania, some 15 kilometers north of the river's mouth. As she walks, she feels both in and out of place, with a persistent question on her mind: Shouldn't this landscape be familiar? She gradually realizes that, until she started working on this research project, she had only seen this place through car windows while crossing the highway bridge. Paolo, a social anthropologist, has only lived in Catania for a few months and before that, had never been to Sicily. This is the first physical encounter with the Simeto River for both of us.

We are walking within the Oasi del Simeto, a nature reserve established in 1984 to preserve the river mouth as a stopover site for migrating birds and a nesting area. The reserve is the lowest part of the Simeto's hydrographic basin, the largest in Sicily, which flows from the Nebrodi Mountains to the Ionian Sea, south of Catania. Before the process of embankment construction and channelization began in the twentieth century, the Simeto River found its way through the mountains, brushing the west side of Mount Etna and entering the Plain of Catania.² There, it meandered between low banks, flooding the surrounding land and providing rich hunting and fishing grounds for local people.³



Mount Etna, as seen from the mouth of the Simeto River. Nature reserve Oasi del Simeto. Photo by Paolo Gruppuso. <u>CC-BY NC 4.0</u>.

As we approach the calm water of the river on the beach, the sight of fishing lines tied to sticks in the sand makes us realize that we are not as alone as we thought. Fishing is now prohibited in the reserve, and yet someone has cast lines in these waters. This scene makes us recall the conversations we had while conducting fieldwork in Paternò, a town some 30 kilometers upriver, where elders still remember the muddy taste of carp from the Simeto. Archival material tells us that the Simeto River played a crucial role in the local economy until the 1950s, especially in relation to fishing—and that it was also central to social life, shaping community relationships along its course. Fishers would strategically slow down the water flow near the river's mouth, using fixed fishing structures that obstructed water movement to ensure a more fruitful catch. In the early twentieth century, these practices generated tensions with upstream fishing communities, which regularly demanded the removal of these structures to allow fish-particularly eels (Anguilla anguilla) and river herring (Alosa fallax)—to swim upstream, lay eggs, and sustain local fishing economies.⁴ The Simeto thus was not only a source of sustenance but also of rivalry between communities—a fitting manifestation of the etymological root of the word "rival," derived from the Latin rivalis meaning "one who uses the same stream." These documents, together with our conversations in the field, portray the Simeto River as a dynamic ecosystem and a living presence in the landscape, one that could both sustain and divide the people who depended on its waters.



The mouth of the Simeto River. Nature reserve Oasi del Simeto. Photo by Paolo Gruppuso. CC-BY NC 4.0.

While walking in the burning Sicilian sun, we realize that the reality of the present differs drastically from what we found in the archives. Despite being the largest river in Sicily, the Simeto now looks like a stream. It flows into the sea with a mouth only a few meters wide—which is doubly surprising since it is March, and at the end of winter, rivers in Sicily would usually have a larger mouth. Likewise, the plain, once the largest marshland in Sicily, is now ravaged by warehouses, factories, coastal resorts, and the Catania-Fontanarossa Airport, which besiege the nature reserve. Indeed, rather than being in an oasis, as the name of the reserve suggests, we feel like we are walking through a wasteland. The Simeto, in its current state, is the materialization of what James Scott would term "high modernism": the belief that engineering the world, by making it simpler and more "legible," would improve the human condition.⁵ Such a process of simplification has turned the river into a water conduit that, at times, completely disappears under concrete and steel, deprived of its natural flow and swallowed by water infrastructure designed to feed hydropower plants and agroindustry.



Traversa di Santa Domenica, Contrada Manganelli, Adrano, one of the main water-infrastructure features in the Simeto River. It was built in the 1960s to divert water from the river to the Contrasto hydropower plant, owned by ENEL Green Power. Since then, the environmental flow of the Simeto River has been compromised. Photo by Paolo Gruppuso. <u>CC-BY</u> <u>NC 4.0</u>.

This modernist approach has produced profound social, ecological, and economic disruptions since the nineteenth century. Carlo Afan de Rivera, the general director of the Corps of Bridges and Roads, Waters, Forests and Hunting of the Kingdom of the Two Sicilies, epitomized this perspective. This institution, critical for the early industrialization of southern Italy, was established in 1826, setting up standards and practices for infrastructure development and natural-resource management in the Kingdom of the two Sicilies. By describing these lands as a place "from which modern civilization could extract extraordinary wealth," Afan de Rivera foreshadowed the landreclamation projects of the Fascist era a century later, when the regime launched a "war against water" that aimed to turn marshlands, perceived as disorderly wastelands, into productive fields for agriculture.⁶ Though these projects were implemented with limited success in Sicily, draining only part of the coastal marshlands on the island, they triggered irreversible transformations that contributed to the ecological degradation of the landscape we are walking through today.⁷

Like many rivers in Italy, the Simeto has undergone significant hydraulic modifications since the 1950s. These interventions were funded by the Cassa per il Mezzogiorno, a state agency created in 1950 to promote development in southern Italian regions through infrastructure projects. Along the lower and middle course of the Simeto, the agency constructed diversion wokrs and artificial embankments designed for hydropower production and to support the expansion and modernization of the orange-growing industry in the Plain of Catania.⁸ This industry, along with hydropower production—also highly dependent on water—has profoundly transformed the Simeto River and the surrounding landscape.



Unknown photographer, water-arrangement works on the Simeto River, 1963, gelatin silver print. Courtesy of historical archive Touring Club Italiano. <u>Wikimedia Commons. CC BY-SA 4.0</u>.

We observed the outcome of these transformations while following a path that, from the river mouth, unfolds upstream, crossing the Plain of Catania for 13 kilometers. Despite our different backgrounds, we both approach the river as an unfamiliar landscape, from which we don't know what to expect. For us, walking serves as both a research methodology and a form of environmental engagement. It allows us to become familiar with this landscape and to gain unexpected insights into the social and ecological lives of the river while bringing its recent history of environmental degradation to the surface.

A century of modernist water infrastructuring turned the Simeto into a ghost river, a lingering shadow of its former self. Eels and birds, after traveling thousands of miles across the sea, nowadays arrive at the Simeto only to find a hostile environment of high artificial banks, dams, and diversion weirs. Across the communities that once thrived along its banks, a shared sentiment prevails: The river, once the lifeblood of the area, is now widely perceived as a sewer, entirely marginalized from social life.

Walking along the riverbanks we experienced this marginality. It is a disorienting walk; a form of wayfaring that allows us to explore, reflect on, and engage with environmental change, while feeling the hostility of a landscape consecrated to waste and shaped by new "green" energy-production chains.



Solar panels along the path. Nature reserve Oasi del Simeto. Photo by Paolo Gruppuso. <u>CC-BY NC 4.0</u>.

From the beach, as we walk upstream, we begin to grasp the dimensions of the artificial embankments, as the river vanishes behind a high curtain of castor oil plants (*Ricinus communis*), Mediterranean shrubs, and reeds. A few hundred meters from the river mouth we encounter a faded sign reading "Welcome to the Simeto Oasis." Above us, dozens of cars speed by on the Primosole Bridge. Not a trace of the river is in sight: Our path seems to run in the opposite direction, through what seems to be an empty, postindustrial meadow. A sense of solitude creeps in, while the forces of capital, far from being dematerialized, emerge and shape this nearly desolated terrain. To the right, a fence guarded by security cameras surrounds one of the many solar farms that are now replacing agricultural areas. Solar panels reflect the scorching sun, making this dusty landscape even more alienating.



Tarp-covered landfill of Grotte San Giorgio-Bonvicino seen from the path along the Simeto River. Nature reserve Oasi del Simeto. Photo by Paolo Gruppuso. <u>CC-BY NC 4.0</u>.

Alongside hydropower and "green" energy projects, waste infrastructure marks the local landscape. On the left side of the plain, the largest private landfill in Sicily looms over the river from afar, blending into the surrounding hills. As the sunrays hit the surface of the tarp cover, it sparkles like silver. During most of our silent walk those silvery hills made of garbage were looking at us. It is the landfill of Grotte San Giorgio-Bonvicino, established in 2009, which is constantly drawing closer to the perimeter of the Oasi del Simeto-by a few hundred meters each year. Four other large wastedisposal plants have been established since the landfill has become active. A project to build a waste incinerator right outside the reserve is advancing while we write this piece. It is a wasted landscape, sacrificed to the interests of industrial and extractive development, where even orange trees appear as ghosts in a burial ground.

Walking a Sicilian River



Orange orchard along the path. Nature reserve Oasi del Simeto. Photo by Paolo Gruppuso. CC-BY NC 4.0.

The cemeterial silence of our walk is infringed upon by the sound of cars, which becomes stronger as we get closer to the bridges of the state highways that run across the trail and the river. Yet the silence persists; it is an eerie sort of silence. Just below the second bridge, another faded information plaque announces another entrance to the trail and the protected area. It reads: "Welcome. Here nature is protected." Beside the sign lies garbage. In front of it, a farm that has seen better days blends in with the landscape. Behind the sign is an unfinished and rusty bridge. Cracks on deteriorating asphalt make the river visible. To reach the water, we cross the rusty bridge via an underpass. Fresh mud reveals traces of sheep. Then, a steep path through tamarisk and shrub, sprinkled with rabbit footprints, leads us to a narrow access way to the river, possibly a landing place for illegal fishers. In the background, the songs of blackbirds and warblers seem to counterpoint the pervasive noise of cars and the earlier silence of the meadow. They dwell in the thick shrubs along the riverbanks, just under the bridge, where concrete amplifies the voice of the river speaking through birds and the sound of flowing water, which were not audible before.



Informal path under the highway bridge. Nature reserve Oasi del Simeto. Video by Paolo Gruppuso. <u>CC-BY NC 4.0</u>.

We are tired and sweaty, and walk back deeply immersed in thought. Along our path, we have seen hydraulic infrastructure that fragments the river, creating a hostile environment for both humans and more-than-human beings. We feel the violence of modernity while witnessing how its forms of development have disrupted the river and the web of relations it once sustained. Agroindustry has turned orchards into industrial plantations that resemble graveyards. A new crop-green capitalism-is now colonizing the land, fueling new forms of accumulation that transform agricultural fields into photovoltaic plants. Nevertheless, sonic and visual traces of birds, rabbits, and sheep make us think that the river is still inhabited, and its voice can still be heard by those willing to approach its murky and sludgy shores. This is a radical standpoint from which to look at the socioecological crisis. From that uncomfortable position, the river looks like a margin, a profound edge, a risky place. As social critic bell hooks reminds us, "locating oneself there is difficult yet necessary." Our act of walking this landscape then becomes a "politics of location" and a defiant political gesture.¹⁰ A gesture of care toward a landscape that nobody wants to see. Walking has made visible what was previously invisible to us. It pushed us to look amid a ruined landscape to discover that a river runs through it. Spring is coming, and it is not entirely silent.



Life thrives in the hidden meanders of the river mouth, despite eutrophic waters. Nature reserve Oasi del Simeto. Photo by Paolo Gruppuso. <u>CC-BY NC 4.0</u>.

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Notes

- ² The largest coastal plain in Sicily (430 square kilometers).
- ³ Roberto De Pietro, Un paradiso siciliano ritrovato (Cavallotto Edizioni, 2013).
- ⁴ Historical Archive of Paternò, folder: Caccia e Pesca. Regolamenti 1888–1940.

⁵ James C. Scott, Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed (Yale University Press, 1998).

⁶ Carlo Afan de Rivera, 1842, quoted in: Luca Ruggiero, "Le opere di bonifica nella Sicilia sud-orientale: la Piana di Catania e il Biviere di Lentini," *Memorie della società geografica italiana 92* (2013): 163–87, p. 169; Piero Bevilacqua, "The Distinctive Character of Italian Environmental History," in Nature and History in Modern Italy, ed. Marco Armiero and Marcus Hall (Ohio University Press, 2010), p. 18; Paolo Gruppuso, "In-Between Solidity and Fluidity: The Reclaimed Marshlands of Agro Pontino," Theory Culture & Society 39, no. 2 (2022): 53–73, <u>https://doi.org/10.1177/02632764211038669</u>.

¹ "BIOTraCes: Biodiversity and Transformative Change for Plural and Nature-Positive Societies" project's official website, accessed 11 April 2025, <u>https://www.biotraces.eu/</u>.

⁷ Ruggiero, "Le opere di bonifica nella Sicilia sud-orientale"; Francesco Di Bartolo, Terra e Fascismo. L'azione agraria nella Sicilia dopoguerra (XL Edizioni, 2009); Maria Sorbello, Irrigazione e bonifica nella Piana di Catania (Università di Catania, 1992).

⁸ Salvatore Lupo, "Tra società locale e commercio a lunga distanza: la vicenda degli agrumi siciliani," Rivista Meridiana, no. 1 (1987): 81–112; Giuseppe Barbera, Agrumi: Una storia del mondo (Il Saggiatore, 2023).

⁹ Bell Hooks, "Choosing the Margin as a Space of Radical Openness," Framework: The Journal of Cinema and Media, no. 36 (1989): 15–23.

¹⁰ Ibid.



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