



Multisensorial hydrography with Venetian depictions from 1880 to 1895

Daniel A. Finch-Race

University of Bologna, Department of History and Cultures, Via Guerrazzi 20, Bologna, BO 40125, Italy

ARTICLE INFO

Article history:

Received 21 December 2023

Received in revised form

27 September 2024

Accepted 7 October 2024

Keywords:

Cultural memory

Environmental humanities

Hydro-data

Italy

Lagoonal feeling

Mediterranean mobility

Nineteenth-century art

Sensory history

ABSTRACT

This article, prompted by first-hand experience of considerable controversy over cruise ships in the Venetian Lagoon, seeks to take forward reasoning around archipelagic wateriness. In light of the United Nations' Sustainable Development Goals on 'Clean Water and Sanitation' and 'Life below Water', I shuttle between the twenty-first and nineteenth centuries on an experimental trajectory that brings more-than-human ecosystemic matters to the fore. Questions of place identity and mobility in the Carbon Age are set within a Mediterranean framework that rounds out understanding of modern Venice's escalating artificiality. A proposal for a hydrographic method of analysing art — adopting a sensorially immersive mode of liquid attentiveness — is applied to four works by French and Italian painters spanning two noteworthy decades: Giuseppe Pogna's 'Venice' (1880); Pierre-Auguste Renoir's 'The Doge's Palace' (1881); Emmanuel Lansyer's 'Boats in the Environs of San Giorgio Maggiore' (1892); Eugène Boudin's 'Seascape at the Giudecca' (1895).

© 2024 The Author(s). Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

Introduction

The ruminations here are a slice of personal chronology as much as an undertaking in historical geography. Upon arriving in Venice in autumn 2020 for a year-long research grant in environmental humanities at Ca' Foscari University, I went through the full gamut of regional COVID-19 measures, peaking at Red Zone around Easter 2021. I subsequently provided three months' consultancy for the museum associated with the Querini Stampalia Foundation, drawing on artistic knowledge that had been bolstered through visits to the nineteenth-century rooms at Ca' Pesaro. These professional experiences were set against the backdrop of debates over the state of the lagoonal city in the absence of mass tourism. On 5 June 2021, I took part in a gathering under the banner of No Big Ships (*No Grandi Navi*) that sought to highlight the perils of returning to business-as-usual, with concomitant risks to the waterscape's tangible and intangible

heritage.¹ This confluence of intellectual and socioeconomic dynamics spurred me to ponder connections between the twenty-first century and the second half of the 1800s, which has been my academic focal point for a decade and a half. I wanted to delve into recent centuries for evidence of evolving nautical practices and their impact on ecological conditions: the circumstances behind high-density shipping's damage to the Venetian Lagoon did not arise overnight.

Methodologically speaking, I came to meditate on the potential for 'creative criticism [...] which seeks to do justice to what can happen — does happen; will happen; might or might not

¹ No Grandi Navi, 'Indietro non si torna, fuori le grandi navi dalla laguna!', *No Grandi Navi*, 2 June 2021, www.nograndinavi.it/indietro-non-si-torna-fuori-le-grandinavi-dalla-laguna, paragraph 6; Eva Merico, Andrea Gambaro, Athanasios Argiriou, Ana Alebic-Juretic, Elena Barbaro, Daniela Cesari, Leonidas Chasapidis, Spyridon Dimopoulos, Adelaide Dinoi, Antonio Donato, Christos Giannaros, Elena Gregoris, Athanasios Karagiannidis, Athanasios G. Konstandopoulos, Tatjana Ivošević, Natalia Liora, Dimitrios Melas, Boris Mifka, Ivica Orlić, Anastasia Poupkou, Kristina Sarovic, Apostolos Tsakis, Roberto Giua, Tiziano Pastore, Alessandra Nocioni and Daniele Contini, 'Atmospheric Impact of Ship Traffic in Four Adriatic-Ionian Port-Cities: Comparison and Harmonization of Different Approaches', *Transportation Research D* 50 (2017) 431–445; Gian Marco Scarpa, Luca Zaggia, Giorgia Manfè, Giuliano Lorenzetti, Kevin Parnell, Tarmo Soomere, John Rapaglia and Emanuela Molinaroli, 'The Effects of Ship Wakes in the Venice Lagoon and Implications for the Sustainability of Shipping in Coastal Waters', *Scientific Reports* 9 (2019) 19014.

E-mail address: daniel.finchrace@unibo.it.

happen — [...] with an artwork'.² Rather than using materials such as municipal records at the archive on Campo dei Frari to situate anthropogenic changes in the hydropolis over the long term, I turned to paintings as a data bank regarding how the liquid world was perceived at the time.³ The act of dwelling on the not-so-distant past through visual media allowed insights into a variety of geographical issues.⁴ From a historiographical perspective, my enterprise became a matter of probing what constitutes a 'reliable source' — quite how do fine art's representational attributes differ from those of textual accounts? There is considerable value in speculatively thinking with heritage objects by the likes of Giuseppe Pogna and Pierre-Auguste Renoir, however narrow their frame of reference might seem, because they are an important conduit back to people sensing their surroundings at a significant juncture.⁵ I felt concerned about tensions arising from the hybridization of the aquatic and the terrestrial, so my primary criterion in selecting objects for experimental analysis was a noteworthy presence of a body of water in counterpoint to Venice's human-generated architecture. My heterogeneous corpus is geared towards a transnational appraisal of a setting that evokes many different things according to a person's circumstances.

The following pages are structured around a multisensorial conceptualization of *lagoon feeling* that can be construed from nineteenth-century paintings. In response to Venice's mutable nature, I propose an analytical framework that touches on a variety of complementary approaches and disciplines, each helping to define the contours of my knowledge-making practice based on art's rich textures in terms of content and form. I initially focus on contextualising the twenty-first-century hydropolis by bringing together aspects of natural and social science with reference to concerns about cruise ships' impacts on lagoon dynamics, which provide a link to monitoring by inhabitants over centuries. The connection is fitting because of centuries of local and global concern about the finely balanced ecosystem being affected by traffic beyond a certain volume, as is expressed in a range of cultural production. I ponder the closing decades of the 1800s with reference to how types of mobility and escalating artificiality shaped the site's identity within the Mediterranean milieu. My interscalar technique of zooming-out and zooming-in is indebted to the environmental humanities, on the basis of which I propose a creative take on hydrography. Through 'bring [ing] the unnaturally unisensorial character of pictures into line with the multisensoriality of life', my article lays out innovative ruminations on how paintings conjure up sounds and smells.⁶ Insofar as geographers have rarely approached tangible cultural forms in a speculative mode associated with sensory history, I offer a fresh contribution to knowledge that has significant conceptual potency in terms of re-examining locations by means of artistic artefacts as stimuli for the senses.

² Stephen Benson and Clare Connors, 'Introduction', in *Creative Criticism: An Anthology and Guide*, ed. by Stephen Benson and Clare Connors (Edinburgh: Edinburgh University Press, 2014), pp. 1–47 (p. 5).

³ Nina J. Morris, 'Teaching Sensory Geographies in Practice: Transforming Students' Awareness and Understanding through Playful Experimentation', *Journal of Geography in Higher Education* 44 (2020) 550–568 (p. 551).

⁴ Mike Crang, 'Qualitative Methods: Touchy, Feely, Look-See?', *Progress in Human Geography* 27 (2003) 494–504 (p. 501).

⁵ Angela Last, 'Experimental Geographies', *Geography Compass* 6 (2012) 706–724 (p. 713).

⁶ Constance Classen, *The Museum of the Senses: Experiencing Art and Collections* (London: Bloomsbury, 2017), p. 32.

Blending the natural and social sciences between past and present

The Venetian Lagoon's 270 square miles — designated as a World Heritage Site by the United Nations Educational, Scientific and Cultural Organization in 1987 — are significant for the planet as a canary in a coal mine. Among the many ecological issues afflicting the hydropolis, which range from sea-level rise to contaminated sediment, a pressing concern in the 2010s proved to be hefty cruise ships. Regional and transnational activism coalesced around incidents including the MSC Opera crashing into a dock along the Giudecca Canal in summer 2019, as well as revelations in 2018 to do with fluid displacement from a run-of-the-mill departure.⁷ Summer 2021 saw the situation reach boiling point, to the extent that the Italian government's Ministerial Council under Mario Draghi legislated to protect certain waterways under provisions for cultural assets.

High-density water-based tourism is a focal point for vociferation and direct intervention on the part of Venetian residents and associations. Thanks to the likes of We Are Here Venice under the leadership of Jane da Mosto, whose rowboat confrontation with the MSC Orchestra on 5 June 2021 flashed around the world, there is more and more 'awareness of the lagoon's unique ecology and the challenges posed by over-shipping and sea level rise'.⁸ Cruise ships' environmental consequences are myriad, not least pollution and lagoon-bed erosion, all of which outweighs any economic benefits.⁹ A further problem is how the 'tin cans' occupy space, often to a height exceeding 200 feet, resulting in 50-foot buildings being done visual violence.¹⁰ It is very apparent how 'cruise tourism in Venice is associated with [...] aesthetics conflict' because documentation abounds.¹¹ Ships' obscuring of water and land, as exposed by the local photographer Anna Zemella, can be extrapolated to a quasi-blindness in relation to lagoon geophysics and biochemistry (Fig. 1). One vessel alone would be disturbing enough — the stakes are higher here. The marginalisation of Venice's watery essence hits home due to the liquid relegated to a greyish slip at bottom-left: the aquatic ecosystem of the tourist-inundated site appears nigh forgotten beneath the ocean liners' bulk. It is a short step to imagining the smell of exhaust fumes and the sound of machinery adding to the overwhelm.

In the context of profit-driven ecological disconnect in the Capitalocene, the Venetian Lagoon is far from alone in having become beholden to short-term extractivism.¹² At the microscale, the

⁷ Rosie Spinks, 'Venice's Big Money Conundrum to Solving Its Cruise Ship Crisis', *Skift*, 19 August 2019, <https://skift.com/2019/08/19/venices-big-money-conundrum-to-solving-its-cruise-ship-crisis>, paragraphs 2–3; We Are Here Venice, 'Video Showing the Water Displacement from a Cruise Ship Prompts Widespread Reaction', *We Are Here Venice*, 6 July 2018, www.weareherevenice.org/video-showing-the-water-displacement-from-a-cruise-ship-prompts-widespread-reaction; Luca Zaggia, Giuliano Lorenzetti, Giorgia Manfè, Gian Marco Scarpa, Emanuela Molinaroli, Kevin Ellis Parnell, John Paul Rapaglia, Maria Gionta and Tarmo Soomere, 'Fast Shoreline Erosion Induced by Ship Wakes in a Coastal Lagoon: Field Evidence and Remote Sensing Analysis', *PLoS ONE*, 12 (2017), 187210.

⁸ Jane da Mosto, 'Acqua Alta: One Year on', *We Are Here Venice*, 19 November 2020, www.weareherevenice.org/acqua-alta-one-year-on, paragraph 4; Michele Gallucci, 'La dea Atena a difesa della laguna contro il gigante d'acciaio', *Instagram*, 9 June 2021, www.instagram.com/p/CP5Br6PLnVH.

⁹ Giacomo-Maria Salerno, 'Estrattivismo contro il comune: Venezia e l'economia turistica', *ACME* 17 (2018) 480–505 (p. 495).

¹⁰ Silvio Testa, *E le chiamano navi: Il crocerismo fa boom in Laguna* (Venice: Corte del Fontego, 2011), p. 5–6.

¹¹ Alexander Araya López, 'Saint Mark's Square as Contested Political Space: Protesting Cruise Tourism in Venice', *Shima* 15 (2021) 137–65 (p. 145).

¹² Jason W. Moore, 'The Capitalocene, Part I: On the Nature and Origins of Our Ecological Crisis', *The Journal of Peasant Studies* 44 (2017) 594–630 (p. 603–07); Jason W. Moore, 'The Capitalocene, Part II: Accumulation by Appropriation and the Centrality of Unpaid Work/Energy', *The Journal of Peasant Studies* 45 (2018) 237–79 (p. 245–47).



Fig. 1. Anna Zemella, *No Grandi Navi*, 2011, digital photograph (Source: Anna Zemella).

predicament is deep-seated: 'many people, including governors, have ceased to correctly "read" Venice and [...] the unstoppable flux of extra-large cruise ships [...] cause[s] a supplement of wave power that [...] erod[es] the *caranto* piles that constitute the city's foundations'.¹³ Material disruption goes hand in hand with shortcomings in thinking about the best interests of the whole, as opposed to a handful of humans coining it in. Even where it is obvious that 'high-tonnage vessels are turning the sea [...] into deserts' as the more-than-human realm is blighted by the Global North's maritime operations, there is a tendency for responsibility to be shirked.¹⁴ In totting up 'the social and the ecological dimensions of the degradation caused by the cruise ship presence in Venice', a long-range perspective allows fully rounded comprehension.¹⁵ This is a prime opportunity for historical analysis: 'today's Venice is about [...] cruise ships dwarfing dilapidated palaces, looming environmental threats [...]. Despite the enduring uncertainty about its physical survival and the challenges in regenerating itself, Venice has never ceased to inspire architects, artists and [...] it still contains lessons for other cities'.¹⁶ I wish to demonstrate that a wealth of hydro-data

is to be gleaned from artistic sources pertaining to a half-dozen generations before the deluge of mega-shipping.

Venice's challenges around the turn of the 2000s are the outcome of policies and deeds going back centuries. Notwithstanding Venetians' monitoring of threats to navigability from the Republic's heyday in the Middle Ages onwards, a reduction in lagoon-sea exchange ensued from accessibility-motivated decisions during the 1800s like constructing jetties at each inlet.¹⁷ From a geophysical perspective, 'the nineteenth[-]century intervention [...] aimed at giving Venice back a strong port vocation and at turning it back into a centre of traffic and commerce. In this way, [it] favoured the demands of the city over those of [the] (rather artificial) environment'.¹⁸ The 1870s–90s were marked by an uptick in port traffic crossing St Mark's Basin, facilitated by the revamped Lido waterway and a new large-scale harbour at the Giudecca Canal's west end.¹⁹ Art from those years gives a sense of human and more-than-human elements in tension (Fig. 2). Venice's buildings appear wafer-esque in Eugène Boudin's painting — looking towards the Church of the Holy Redeemer and Giudecca's east end, with San Giorgio Maggiore's bell tower beyond — that is effectively

¹³ Serenella Iovino, *Ecocriticism and Italy: Ecology, Resistance, and Liberation* (London: Bloomsbury Academic, 2016), p. 55.

¹⁴ Michel Serres, *The Natural Contract*, trans. by Elizabeth MacArthur and William Paulson (Ann Arbor: University of Michigan Press, 1995), p. 28.

¹⁵ Emiliano Guaraldo, 'Resisting the Tourist Gaze: Art Activism against Cruise Ship Extractivism in the Venice Lagoon' *Lagoonscapes* 1 (2021) 101–24 (p. 104).

¹⁶ Sophia Psarra, *The Venice Variations: Tracing the Architectural Imagination* (London: UCL Press, 2018), p. 6.

¹⁷ Piero Bevilacqua, *Venezia e le acque: Una metafora planetaria* (Rome: Donzelli, 1995), p. 22.

¹⁸ Andrea Rinaldo, 'On the Natural Equilibrium of the Venice Lagoon', in *Sustainable Venice: Suggestions for the Future*, ed. by Ignazio Musu (Dordrecht: Springer, 2001), pp. 61–94 (p. 80).

¹⁹ Maurizio Reberschak, 'L'industrializzazione di Venezia (1866–1918)', in *Venezia: Itinerari per la storia della città*, ed. by Stefano Gasparri, Giovanni Levi and Pierandrea Moro (Bologna: Il Mulino, 1997), pp. 369–404 (p. 377).



Fig. 2. Eugène Boudin, *Venice — Seascape at the Giudecca*, 1895, oil on canvas, 37.1 × 50 cm (Source: Princeton University Art Museum, Princeton, NJ).

two-thirds sky and one-third lagoon. This optical thinness is suggestive of a measure of tenuousness in the hubris of shaping the environment to the populace's ends, with the foregrounded water seeming a good deal less ephemeral than the activities taking place on it. In terms of the sound- and smellscape, the lapping of waves against the timber piles in the centre would create splashing noises and a pungent aroma, something of a contrast to societal hubbub and odours. At left and right, the density of nautical infrastructure gives a flavour of industrial-era intensity. The tall ship, on a whole other scale than the rowboat approaching it, heralds bulky cruises through the narrow passage some hundred years afterwards. Air pollution is portended by the vessel's black and white funnel, set to release fumes once the combustion engine gets revved up.

Place and mobility in the Carbon Age

Sites with the complexity of Venice are naturalcultural hotch-potches in constant evolution. A significant part of this composite identity has to do with 'rhythms of mobility constitut[ing] place'.²⁰ Long- and short-range journeys, intersecting trajectories and

willed or unexpected stoppages have contributed to the settlement's socioeconomic and geophysical evolution from the moment in late antiquity of people taking refuge in the archipelago that came to be subjected to centuries of place-making, especially at the Serene Republic's apogee. There is something special about this location where water and earth rub up against each other: 'a doorway between sea and land, a port is a transfer point or channel of exchange'.²¹ Twenty-first-century Italy's most contested nexus of cruise traffic encompasses a host of multispecies mobilities, though the human component's impact is wildly disproportionate. A notable waypoint within the trajectory towards this predicament is Boudin's era: 'the Mediterranean in the middle of the nineteenth century was [transformed by] the coming of steamships, followed by the arrival of ironclad vessels. [...] The fundamental new features of steam navigation were speed, reliability and regularity'.²² Mid-century Venice ended up marked by industrial forms of ocean-going mobility that sent its ecological fortunes tumbling.

Venice constitutes a 'thinking machine [...] for a possible future' that might be achieved through facing down the industrial era's

²⁰ Tim Edensor, 'Introduction: Thinking about Rhythm and Space', in *Geographies of Rhythm: Nature, Place, Mobilities and Bodies*, ed. by Tim Edensor (Farnham: Ashgate, 2010), pp. 1–18 (p. 5).

²¹ Hannah Freed-Thall, 'Introduction: Beaches and Ports', *Comparative Literature* 73 (2021) 131–49 (p. 132).

²² David Abulafia, *The Great Sea: A Human History of the Mediterranean* (New York: Oxford University Press, 2011), p. 555.

polycrises in accordance with the principles of environmental justice.²³ Conceptual framing is fundamental to bringing about better conditions: ‘attitudes towards climate change mitigation may be effectively promoted by discussing the gains produced through climate change mitigation (as opposed to the losses of not mitigating climate change) and by focusing individuals on the social impacts (perhaps in addition to the personal impacts) of climate change mitigation’.²⁴ Leveraging community-wide benefits, instead of dwelling on complications for individuals, is just one way of building up a broad commitment to ecosensitive behaviour, which the Venetian Lagoon direly needs. Navel-gazing has to cease: ‘the human must acknowledge, collaborate with, and curate the stories of the nonhuman others that traverse [...] Italy’s history, its significant literary and artistic heritage, its importance in shaping the Western construction, appreciation, and aesthetics of nature’.²⁵ Engaging with otherness is not the simplest task but there are many routes to getting up close with the more-than-human in mutually beneficial fashion. A painting like Boudin’s provides an opening for ‘feeling place and reading the liveliness of non-human others’, i.e. a way of travelling through time and space to connect with entities and experiences of a comparable kind.²⁶

Mediterranean configurations of the environmental humanities

The Venetian Lagoon, enmeshed within a sea stretching over 970,000 square miles, is a fruitful point of entry into how ‘weaving together the ecological conditions of Mediterranean coastlands with the nature of seaborne connectivity produces an approach to Mediterranean distinctiveness’.²⁷ A multisensorial reading of artworks like Boudin’s permits a fathoming of Venice’s terraqueous circumstances as a microcosm of ‘shifting political and economic regimes, winds and currents, global capital, petroleum, contested border regions, colliding tectonic plates, and volcanic landscapes’.²⁸ Material and immaterial components are at work in the drainage basin, though its liquidity is not universally recognised: ‘the Mediterranean [...] often [...] has been defined by the lands that surround it, relegating the body of water to [...] secondary or nonexistent status’.²⁹ A primary concern for me is bringing out the value of hydro-data by means of cultural production.

At the root of the Mediterranean’s effervescent heritage are more-than-human matters that deserve to be front and centre. When it comes to ruminating on ‘the infinite intersections of cultures, commodities, narratives, and histories that constitute the

shifting surfaces of the [...] cross-Mediterranean’, humanity’s achievements are indissociable from its milieu.³⁰ The Venetian Lagoon is a richly entangled micro-world: ‘between the *longue durée* of geo-physical settings and [...] cultural narratives, the Mediterranean acquires its unique “form” through [...] co-emerging stories of changing ecosystems, interplays of migrations and extinctions, bio-political encounters, microecologies of culture, and macroecologies of memory’.³¹ Such complexity necessitates cross-cutting appreciation of contextual specificities through ‘geographical praxis [...] favouring dialogue and exchange’.³² My undertaking is running the gamut from the geological to the cultural: ‘the multidimensionality and great temporal depth of the Mediterranean call for a holistic and multidisciplinary study [...] between [...] the natural sciences and the humanities/[social sciences]’.³³ The multifaceted environment is distinctly suited to acting as a litmus test for experimental means of engaging with pressing issues.

Escalating artificiality

Attempts to manage Venice’s marshiness have been occurring for centuries under the umbrella of socioeconomic logic. It can be appreciated that ‘Venice was the forerunner of the modern world city, [...] situated both as the terminus of trade routes between the east and the west, and [...] between land and water’.³⁴ The criss-crossed site has a hybrid nature: ‘Venice, as an aquapelagic assemblage, is conceived as emerging from the interaction of heterogenous components and as evolving in time through processes of territorialisation and deterritorialisation’.³⁵ Manipulations of the hydropolis might have been well intentioned but outcomes have generally proven negative over the long term. Diminished biodiversity and weakened resilience are just two indicators of a failure to comprehend that ‘Venice and its lagoon depend on their co-existence. The health of the dynamic lagoon system is integral to protecting the city’.³⁶ Profound care would be an antidote to short-sighted conduct that runs the risk of further destabilising the more-than-human fabric.

Tinkering with the archipelago like some contraption is to make light of its ecological and ethnological peculiarities. A planet-scale problem is evident in miniature: ‘the well-rooted cultural dimension of “Venetianness” is now severely tested by the global challenges of the Anthropocene. It is an unequal and complex survival challenge where the disappearance of the local lagoon culture is at stake’.³⁷ One-and-a-half millennia of tangible and intangible heritage are on the verge of being wiped off the map by changes associated with extractivist practices in the Global North. Dissonance is palpable: ‘Venice’s aquapelago has become an urban

²³ Salvatore Settis, *If Venice Dies*, trans. by André Naffis-Sahely (Toronto: House of Anansi Press, 2016), p. 170.

²⁴ Alexa Spence and Nick Pidgeon, ‘Framing and Communicating Climate Change: The Effects of Distance and Outcome Frame Manipulations’, *Global Environmental Change* 20 (2010) 656–67 (p. 664).

²⁵ Serenella Iovino, Enrico Cesaretti and Elena Past, ‘Introduction’, in *Italy and the Environmental Humanities: Landscapes, Natures, Ecologies*, ed. by Serenella Iovino, Enrico Cesaretti and Elena Past (Charlottesville: University of Virginia Press, 2018), pp. 1–13 (p. 4).

²⁶ David Kelly, ‘Apprehending Felt Futures in Broome, Australia’, *Geoforum* 106 (2019) 385–92 (p. 391).

²⁷ Peregrine Horden and Nicholas Purcell, ‘The Mediterranean and “the New Thalassology”’, *American Historical Review* 111 (2006) 722–40 (p. 735).

²⁸ Elena Past, ‘Mediterranean Ecocriticism: The Sea in the Middle’, in *Handbook of Ecocriticism and Cultural Ecology*, ed. by Hubert Zapf (Berlin: De Gruyter, 2016), pp. 368–84 (p. 373).

²⁹ Pasquale Verdicchio, ‘This Nostrum that Is neither Sea nor Remedy: Mediterranean Re-Visions’, in *Italy and the Environmental Humanities: Landscapes, Natures, Ecologies*, ed. by Serenella Iovino, Enrico Cesaretti and Elena Past (Charlottesville: University of Virginia Press, 2018), pp. 203–14 (p. 206).

³⁰ Ian Baucom, ‘Hydrographies’, *The Geographical Review* 89 (1999) 301–13 (p. 308).

³¹ Serenella Iovino, ‘Introduction: Mediterranean Ecocriticism’, *Ecozon@* 4 (2013) 1–14 (p. 8).

³² Claudio Minca, ‘Guest Editorial: Venetian Geographical Praxis’, *Environment and Planning D* 18 (2000) 285–89 (p. 288–89).

³³ Adam Izdebski et al., ‘Realising Consilience: How Better Communication between Archaeologists, Historians and Natural Scientists Can Transform the Study of Past Climate Change in the Mediterranean’, *Quaternary Science Reviews* 136 (2016) 5–22 (p. 7).

³⁴ Rod Giblett, *Cities and Wetlands: The Return of the Repressed in Nature and Culture* (London: Bloomsbury Academic, 2016), p. 87.

³⁵ Monica Porzionato, ‘Assemblages in the Venetian Lagoon: Humans, Water and Multiple Historical Flows’, *Shima* 15 (2021) 121–36 (p. 125).

³⁶ Jane da Mosto, Carolyn Smith and Kasia Ruzskowska, ‘On Failure: The Venice Paradox’, *Aroop* 4 (2020) 71–80 (p. 74).

³⁷ Rita Vianello, ‘The MoSE Machine: An Anthropological Approach to the Building of a Flood Safeguard Project in the Venetian Lagoon’, *Shima* 15 (2021) 94–120 (p. 101).

agglomeration of islands [...] without the integrated water-land dynamic'.³⁸ Insufficient sensitivity to the dynamics of the liquid realm has played a part in flood damage to highly vulnerable locations like Burano and Torcello, as in the catastrophic cases of 4 November 1966 and 12 November 2019. In blunt terms, 'Venice has lost 60 cm of its historical buildings to the sea and the walls are at risk of rapid decay'.³⁹ Worsening circumstances have become a fact of life in the hydropolis but the situation was not always thus — looking back in the direction of the Industrial Revolution can lay bare a number of occasions where things took a wrong turn.

During the decades following Venice's integration into the Kingdom of Italy in 1866, the waterscape was a hive of activity. Infrastructural concerns welled up: 'the 1880s were years of industrial growth and related building, particularly in the area of the Giudecca [...]. The debate on the port was continuous'.⁴⁰ Looming ecological problems were the backdrop to sociocultural liveliness, with the historic centre exerting a pull for visitors from every corner of Europe. Painters offered up a multitude of visions of major sites, as well as less famous spots on occasion.⁴¹ Impressionism worked its way into Italian climes from the late 1870s and Venice received ample attention from French artists enamoured with its quirks.⁴² Peculiarities of light and colour proved inspirational for renderings analogous to port scenes by Berthe Morisot and Camille Pissarro.⁴³ The close of the century witnessed a flowering of true-to-life responses to material realities, with a rooting in experiential immediacy.⁴⁴

A creative hydrographic method

Water deserves to be taken more seriously in ruminations touching on sustainability. It is a fact that 'the construction of human cultures [...] is a story of progressive, continuing human ambition to control the spatial and temporal pattern of water'.⁴⁵ How might planet-scale history be revised to take stock of the consequences of this domineering behaviour, chiefly in the Global North? Aquatic reasoning is a valuable complement to the rock-based logic for the Golden Spike signalling the epoch of humans acquiring geological force: 'what flows beneath the lithic stories of the Anthropocene in [...] liquid habitats is [...] the geophysical properties and discursive constructions of waterscapes'.⁴⁶ The Venetian Lagoon is the very picture of 'environmental interseeping'.⁴⁷ A great deal of the hydropolis's culture comes down to 'water

management activities that began in the past [...] ha[ving] an impact on the present communities and places'.⁴⁸ When it comes to following the flow of this state of affairs back to its source, historical geographers are in pole position. Copious representations of the geomorphologically adapted setting are indicative of the extent to which 'social and hydrological relationships are interconnected and mutually constitutive'.⁴⁹ Seeking to figure out Venice's identity without mulling over its status as a much-altered wetland would be to miss a fundamental chunk of the story.

My creative approach to hydrography in the lagoonal context involves weighing up the connotations of water in art. In common with parts of the oceanic humanities revolving around 'the sea as a material actant', I look for qualitative information about liquid micro-worlds in cultural production akin to Boudin's.⁵⁰ This method amounts to being mindful of how 'water is [...] a socio-natural force — an active agent of overflow, creation, and destruction [...], carrying along, dropping off, and [...] materially communicat[ing] where it has been [...] and even what is possible'.⁵¹ Positing hydro-data as conceptually and physically functional, I imagine qualities that might be sensed in bodily fashion such as smelling or hearing. My aim is to point up the revelatory potential of nineteenth-century paintings as 'a site of passage between differently "wet" bio/media', i.e. bringing the portrayed wetland's liquidity into contact with what is internal to a human observer via the transubstantial medium of paint.⁵² On the basis of such elemental attunement, which has somewhat fallen by the wayside under industrial modernity, people would likely care more about waterscapes.⁵³

Lagoonal feeling in nineteenth-century paintings

Venice's terraqueous milieu is an emblem of multidimensionality that is ripe for contemplation from a range of perspectives, some less obvious than others. I am all for combing through artistic sources to address their 'layered associations' in terms of watery knowledge, with sensory history in mind.⁵⁴ This approach has to do with 'think[ing] beyond "the visual" in geographies of art [...] through attention to creative processes, embodiment, the "interactivity" of art, and temporal themes'.⁵⁵ Fundamental to that endeavour is recognising the affordances of a variety of senses in the case of *visual culture*: 'artworks already and always come with and are immersed in sound [...], images fill our minds with sound'.⁵⁶ In my multisensorial account of three paintings below, moving from the Lagoon's inner realms to its outer reaches, I look to

³⁸ Ilan Kelman, 'Does Flooding Define the Aquapalago? Constructing Venice's Flood Disaster Risk Personality', *Shima* 15 (2021) 80–93 (p. 84).

³⁹ Dario Camuffo and Giovanni Sturaro, 'Sixty-Cm Submersion of Venice Discovered Thanks to Canaletto's Paintings', *Climatic Change* 58 (2003) 333–43 (p. 342).

⁴⁰ Margaret Plant, *Venice: Fragile City, 1797–1997* (New Haven, CT: Yale University Press, 2002), p. 173.

⁴¹ Nico Stringa, 'Realtà e pittura: Itinerari del colore', in *Ottocento veneto: Il trionfo del colore*, ed. by Giuseppe Pavanello and Nico Stringa (Treviso: Canova, 2004), pp. 43–66 (p. 46).

⁴² Nico Stringa, 'Il paesaggio e la veduta: Appunti per una storia', in *La pittura nel Veneto: L'Ottocento*, ed. by Giuseppe Pavanello, 2 vol (Milan: Electa, 2003), II (2003), 593–628 (p. 614).

⁴³ Denys Sutton, 'Il fascino di Venezia', in *Venezia nell'Ottocento: Immagini e mito*, ed. by Giuseppe Pavanello and Giandomenico Romanelli (Milan: Electa, 1983), pp. 260–63 (p. 262).

⁴⁴ Giovanni Soccol, 'Venezia Ottocento: Dal trattato alla pittura', in *Ottocento veneto: Il trionfo del colore*, ed. by Giuseppe Pavanello and Nico Stringa (Treviso: Canova, 2004), pp. 67–92 (p. 83).

⁴⁵ Francesco Visentin, 'Liquid Conclusion: Towards a Humanistic Hydrology', in *Waterways and the Cultural Landscape*, ed. by Francesco Vallerani and Francesco Visentin (London: Routledge, 2018), pp. 244–56 (p. 247).

⁴⁶ Serpil Oppermann, *Blue Humanities: Storied Waterscapes in the Anthropocene* (Cambridge: Cambridge University Press, 2023), p. 11.

⁴⁷ Steve Mentz, 'Seep', in *Veer Ecology: A Companion for Environmental Thinking*, ed. by Jeffrey Jerome Cohen and Lowell Duckert (Minneapolis: University of Minnesota Press, 2017), pp. 282–96 (p. 283).

⁴⁸ Elisa Corrà, 'Heritage Thinking: Approaching Communities with Communication in the Venice Countryside', in *Knowledgescape: Insights on Public Humanities*, ed. by Eugenio Burgio, Franz Fischer and Marco Sartor (Venice: Edizioni Ca' Foscari, 2021), pp. 135–59 (p. 137).

⁴⁹ Franz Krause and Veronica Strang, 'Editorial — Thinking Relationships through Water', *Society & Natural Resources* 29 (2016) 633–38 (p. 633).

⁵⁰ Laura Winkiel, 'Introduction: Hydro-Criticism', *English Language Notes* 57 (2019) 1–10 (p. 1).

⁵¹ Cecilia Chen, 'Mapping Waters: Thinking with Watery Places', in *Thinking with Water*, ed. by Cecilia Chen, Janine MacLeod and Astrida Neimanis (Montreal: McGill-Queen's University Press, 2013), pp. 274–98 (p. 277).

⁵² Julian Yates, 'Wet?', in *Elemental Ecocriticism: Thinking with Earth, Air, Water, and Fire*, ed. by Jeffrey Jerome Cohen and Lowell Duckert (Minneapolis: University of Minnesota Press, 2015), pp. 183–208 (p. 184).

⁵³ Carlotta Favaro and Francesco Vallerani, 'Paesaggi d'acqua e idrofilia: Luoghi, letteratura, percezioni tra geografia letteraria e coscienza ecologica', *Bollettino della Società Geografica Italiana* 14 (2019) 59–72 (p. 67).

⁵⁴ Malcolm Miles, 'Commentary — Geographies of Art and Environment', *Social & Cultural Geography* 7 (2006) 987–93 (p. 989).

⁵⁵ Sarah G. Cant and Nina J. Morris, 'Editorial — Geographies of Art and the Environment', *Social & Cultural Geography* 7 (2006) 857–61 (p. 859).

⁵⁶ Caleb Kelly, *Gallery Sound* (New York: Bloomsbury Academic, 2017), p. 5.

provide an ecosensitive alternative to ocean liners' contentious trajectories.

Cruise operators around the dawn of the twenty-first century lionised a central Venetian view that had drawn the eye of artists from different walks of life during the second half of the 1800s, including one of France's leading exponents of Impressionism (Fig. 3). Even if Pierre-Auguste Renoir's title puts the focus on the once-proud Serene Republic's keystone edifice, a good third of the painting is water, with another third devoted to sky. Whereas tourists would privilege the Bridge of Sighs to the right and the astronomical intricacies of St Mark's Clock in the middle, the Frenchman provides food for thought with respect to a capacious understanding of the hydropolis. St Mark's Bell Tower, a major locus of verticality in Venetian iconography, seems less important than the horizontality of the lagoon and the vessels upon it. Such insignificance of humanity compared to more-than-humanity encourages consideration of the aquatic more than the terrestrial. Sounds and smells would be predominantly lagoonal, given the distance from goings-on on land: splashing waves and salty air in abundance. Multicoloured flecks in the foreground suggest submerged flora and fauna at risk of disruption from growing volumes of traffic.

An almost diametrically opposite perspective, facing San Giorgio Maggiore from the vicinity of the Grand Canal's southern exit, is to be found in the work of another French artist with a penchant for the archipelago (Fig. 4). Emmanuel Lansyer's depiction possesses features similar to Renoir's a decade earlier: between the two-thirds of cirrus-filled sky and the placid waters occupying most of the foreground, there is something diminutive about the religious architecture in the centre, the buildings of eastern Giudecca on the right, or the Schiavoni waterfront towards the gardens of lower Castello on the left. The painting's title stimulates ruminations on forms of mobility in the liquid micro-world by virtue of its emphasis on the light vessels moored across the midground and alongside the jetty at front-left. It appears to be a matter of minimum-impact use based on familiarity with the wetland, rather than high-density shipping's morphology-altering severity. Due to the white and dark specks on the aquamarine expanse plus the middle craft's bright reflection, wateriness comes to absorb the senses. Much like Boudin's painting, damp wood would be pungent and fluid motions would be audible, occasionally mingling with mariners' voices in a way intimating the interconnectivity of the more-than-human and the human.



Fig. 3. Pierre-Auguste Renoir, *Venice, the Doge's Palace*, 1881, oil on canvas, 54.5 × 65.7 cm (Source: The Clark Art Institute, Williamstown, MA).



Fig. 4. Emmanuel Lansyer, *Venise, bateaux en vue de l'île Saint-Georges Majeur*, 1892, oil on canvas, 46 × 55.5 cm (Source: Musée Lansyer, Loches — François Lauginie).

Insights into the Venetian Lagoon's less traversed zones are offered by an Italian who predated Renoir by one year and Lansyer by twelve (Fig. 5). Giuseppe Pogna's rendering is all about the lagoonal in continuity with the Mediterranean — land barely registers on the horizon. The succinct title can be interpreted as reframing the hydropolis to emphasise the *hydro* ahead of the *polis*, with the latter component amounting to little more than the foregrounded fishermen and the figures in the sailboat to the left. Aside from the wide blue sky spanning two-thirds, water is given pride of place as the basis of multispecies as-

semblages and ecosystem services. When it comes to the sound- and smellscape, the environment's stillness implies not much breeze diffusing noise and aromas within the brackish site. The pale liquid's practically unruffled surface might be perceived as some sort of barrier, though the red fishing-net's transversal function spurs the mind's eye towards the fluid depths containing a wealth of life threatened by the excesses of the industrial era. Awareness of such relationality between humanity and more-than-humanity is fundamental to valuing fragile intricacies.



Fig. 5. Giuseppe Pogna, *Venezia*, 1880, oil on canvas, 36.3 × 57.8 cm (Source: Museo dell'Ottocento, Pescara).

Conclusion

My aquatic exploration sought to connect twenty-first-century and nineteenth-century affairs associated with the Venetian Lagoon by addressing controversy over cruise ships in conjunction with paintings from the early years of high-density shipping in the Mediterranean. I drew on testimony of evolving nautical practices and their influence on ecological conditions to give an idea of the long-term trajectory leading to the deterioration of the waterscape in the era of the MSC Opera and the MSC Orchestra, as part of a process of comparing periods to reveal a pattern of stressors feeding into an ecosystemic polycrisis. My focus on place identity in a time of intensifying mobility laid the foundations for consideration of the hydropolis's artificiality, which art from the 1880s–90s evokes in spades. As a counter-current to the Carbon Age's problem of inattentiveness to more-than-human elements, I expanded on the oceanic turn in the environmental humanities by deliberating on a corpus of paradigmatic paintings. Through a creative method of gleaning hydro-data on the basis of sensorial immersion beyond the visual, with smell and hearing brought into play, I set forth a concept for deeper understanding of liquid micro-worlds like Venice so as to bring about more respect for planetary boundaries. My contribution to enriching narratives of transformation has methodological implications for historical geography and cognate disciplines ranging from sociology to civil engineering, in that a multidimensional approach to human-environment interactions can shed light on challenges facing coastal cities across the globe. It is to be hoped that the innovative knowledge-making here shall inspire wide-ranging study of heritage objects in a speculative mode associated with sensory

history, thereby bringing about a step-change in appraising locations by means of artistic stimuli.

Funding

My work is co-funded by the European Union through Italy's National Operational Programme for Research & Innovation 2014–20 (PON R&I Green) as administered by the Ministry of Universities & Research in line with decree 1062 from 10 August 2021.

Acknowledgements

My method was honed during 2021–23 through presenting at Ca' Foscari University in Venice (Centre for the Humanities and Social Change & European Centre for Living Technology), the European University Institute in Florence (Mobilities in the Early Modern and Contemporary Mediterranean), the University of Bristol (Centre for Environmental Humanities), and the University of Hull (Centre for Water Cultures).

Daniel A. Finch-Race FHEA FRGS is Assistant Professor in Geography at the University of Bologna, Communications Consultant for Economia&Ecologia, and Deputy Treasurer of the European Society of Comparative Literature. He sits on the editorial boards of *Modern & Contemporary France* and *Storicamente*. His solo work includes a guest-edited issue of *Nineteenth-Century Contexts* plus diamond open-access articles in *European Journal of Creative Practices in Cities and Landscapes*, *Lagoonscapes* and *Literary Geographies*. Studies co-authored by him span journals such as *ACME*, *cultural geographies*, *Human Geography* and *Journal of Cultural Geography*. He co-edited *French Ecocriticism* (Peter Lang), *Italian Science Fiction and the Environmental Humanities* (Liverpool University Press), and *Textures* (Peter Lang), as well as three issues of *Dix-neuf* and *L'esprit créateur*.