

Venice and Its Lagoon Archipelago

Ludovica Galeazzo

Villa I Tatti, The Harvard University Center for Italian Renaissance Studies

Edited by

Kristen Poole and Suzanne Sutherland

Abstract

Renaissance Venice was strongly tied to the brackish waters and the cluster of islands encircling its city center, each shaping the other to form what was – and is – known as the Venetian lagoon. In early modern times, this singular environment, whose fragile waterscape has drastically changed over time, was viewed with a double face. The first referred to the long-standing imagery forged by early Venetian chroniclers and bolstered by subsequent histories and visual representations that conveyed the myth of a harmonious city reigning almost miraculously over an ordered and peaceful environment. However, the pervasiveness of this image was severely at odds with the less friendly face of the lagoon, whose capricious waters besieged the city for centuries.

Despite natural challenges, the center constantly constructed interdependent relationships with its watery settlements, assigning them various functions according to its needs. At different moments, the islands constituting Venice's archipelago were used as spiritual spaces for religious communities, loci dedicated to the city's food supply, or for hosting defense structures and hospitals.

Venice's unique aqueous environment was also the stage set on which the Republic promoted its exceptional qualities, principal among which was the celebration of a city that seemed to miraculously float on water. Sumptuous festivals, spectacles, processions, and games contested on water fostered a crafted message about the glory, wealth, and power of the state.

The history of the tight relationship of the capital city to its environment suddenly came to an end with the fall of the Venetian Republic in 1797. Political changes and urban transformations significantly altered the geographic configuration and functions of most of the islands, which would ultimately be abandoned and sidelined to their current peripheral roles.

Keywords: Venice; Lagoon; Islands; Archipelago; Myth of Venice; Lagoon environment; Hydraulic interventions; Religious communities; Food supply;

Accommodation structure; Military defences; Plague hospitals; Watery ceremonies

1 Between land and water: the lagoon environment

Venice is the main and biggest settlement of a historic archipelago of over sixty islands of varying size nestled in an enclosed bay in northern Italy known as the Venetian lagoon. This large body of brackish water lies between the Veneto mainland and the northern tip of the Adriatic Sea and stretches in an arch from Chioggia to the Sile River for about 550 square kilometers (210 sq. miles).

The Venetian lagoon constitutes the largest wetland in Europe, although it is all that remains of the ancient Roman marshes and shallow waters celebrated by Pliny as the ‘seven seas’ (*septem maria*), which extended seamlessly between Ravenna and Altinum.¹

Located between land and sea, the Venetian basin is an amphibious environment whose boundaries have never been fixed. A fickle organism, this aquascape was the subject of incessant transformations provoked by the combined action of three factors: the sea, the mainland rivers, and human intervention. Their competing influences profoundly shaped the morphology and societal structure of the site over time, from the Middle Ages to the present day. By early modern times, the lagoon of Venice was a coherent and organised archipelago. The principal islands had been moulded by drainage and reclamation and were widely inhabited by both religious communities and private citizens. The precarious shelter of rushes and wooden huts described by the Roman official Cassiodorus in 537 AD² had given way to an interwoven cluster of stone-built settlements, which collectively constituted one of the largest cities in Western Europe. The waters that lapped these scattered islets were protected and almost completely separated from the sea by a taut cordon of beaches called *lidi*. Five inlets (*porti*) interrupted this embracing cocoon to allow communication between the two aquatic environments, from north to south, at Lio Mazor, Tre Porti, Sant’Erasmus, San Nicolò del Lido, Malamocco, and Chioggia.



Figure 1: Sebastiano Alberti, Map of the lagoon of Venice, 1611

Source: Venice, Library of the Correr Museum, ms. P.D. c 856/4.

However, this seemingly auspicious refuge was a peculiar and harsh environment to which inhabitants always had to painfully adapt. For any travellers who approached Venice's lagoon for the first time, it would have appeared to be a vast, open, and deep-water basin. The reality was rather different: mudflats (*barene*) and salt marshes constituted almost eighty per cent of its surface, while the small islets and canals accounted for only eight and twelve per cent, respectively, of this environment. Treacherously shallow waters extended alongside the network of channels, as the lagoon's average depth was only around forty to fifty centimetres. This meant that most boats and especially big seagoing vessels could navigate the basin only by keeping to the winding, interlaced canals that veined its surface. This challenge was certainly a limitation, but also a formidable asset as it made the lagoon a perfect aquatic maze, impenetrable for any pilot inexperienced in the wetland's hydraulic system.

Further, while this commodious basin easily fed its inhabitants with plentiful and varied fish, it could not supply any drinking water. This was perhaps the principal paradox of Venice that the late fifteenth-century historian Marino Sanudo deftly summarised in the renowned motto, 'Venice is in water but it has no water.'³ Indeed, it was only through a complex system of rainwater harvesting that Venetians were able to endure.

2 The two faces of the lagoon: myth and materiality

Nonetheless, the vocabulary of contemporary historiographers was replete with positive attributes. Since the earliest Venetian chronicles (dating to the eleventh century),⁴ the lagoon waters were portrayed as the holy and inviolable walls of Venice, its canals as the main routes for maritime trade, and the islands as the ideal shelters for mainlanders escaping barbarian invasions. Following in that vein, early modern accounts perpetuated this misleading imagery. They variously described the lagoon as a beneficial space, a sanctuary providentially founded on benevolent waters. Cartographic maps and drawings also contributed to this *mise-en-scène*. One of the most emblematic images of the lagoon is the *Vinegia* (the dialect term for Venice) engraved by Benedetto Bordone (c.1450–1530) in 1528, which embodies the metaphoric ideals of the capital at the beginning of the sixteenth century.



Figure 2: Benedetto Bordone, *Vinegia* from the *Isolario* (Venice: Nicolò d'Aristotile, 1528)

Source: Venice, Library of the Correr Museum, E 564.

The site appears as a composite, although simplified, archipelago. Venice stands out as a successful artifact seated over placid waters and surrounded by an orderly protective belt of islets arranged in circle. But the urban reality was a far cry from the literary and iconographic fiction. Archival sources reveal that Venice was a city besieged by its own waters. Rivers from the mainland carried huge amounts of sediment into the lagoon that caused serious silting up. From the other side, the sea threatened the ports by filling them with sand. The depth decrease of the inlets, especially that of San Nicolò, which was closest to Venice, hampered maritime trade, and also prevented the tide from evacuating polluted water from the basin.⁵

These two antithetical visions of the early modern lagoon are somehow reconciled in the celebrated manifesto written by the Venetian humanist Giovanni Battista Cipelli (1478–1553), better known as Egnatius:⁶

By Divine Providence, the city of the Veneti is founded on water, surrounded by water and protected by water instead of by a wall. Hence, whoever dares in any way to damage the public waterways, let him be condemned as an enemy of the Fatherland and punished no less gravely than someone who has undermined a city's walls. Let this Edict remain in force immutable and perpetual.

Egnatius's edict was not only a celebration of the holy walls of Venice, but also a strong call for the inviolability of public waters. In glorifying the miraculous morphology of the Venetian basin, the humanist warned against what was commonly considered the main enemy of the lagoon: man. Man's negligence or, worse, harmful actions weighed heavily on the vulnerable environment. He should therefore be treated like any other offender against the state.



Figure 3: Egnatius' edict, sixteenth century

Source: Venice, Correr Museum. Cl. XXV no. 522.

It is no coincidence that his Latin verses, carved on a marble slab, were hung in the office of the Water Authority. As early as the twelfth century, the waters were considered – even from a legal standpoint – as a vital public good, so much so that the Republic set up various offices to oversee hydrological welfare. Initially the judges administering the city’s public facilities (*Giudici del Piovego*) and, from the beginning of the sixteenth century, the water officials (*Savi ed esecutori alle acque*) were in charge of overseeing the navigability of the canals, the silting of coastal channels, and the incursion of marshland. The continuously renewed hydraulic policy benefited from a broad range of figures – experts, government officials, and engineers but also navigators and fishermen. Their mastery of waterscapes was mobilised in securing the basin’s fragile ecosystem through day-to-day interventions and occasional drastic action (such as the halting of all freshwater inflow to the lagoon by diverting the Brenta, Sile, and Piave rivers into the Adriatic Sea to prevent further silting). This transformation began tentatively in the fourteenth century and expanded massively in the succeeding three centuries. Due to such measures, sediment inputs almost vanished from the watershed, rapidly reversing the silting up process into the progressive erosion that characterises the present morphological trend of the basin.⁷

These ‘macrohydraulic’ efforts, inspired by a grandiose project conceived by the most renowned Venetian engineer, Cristoforo Sabbadino (1487–1560), were backed up by unrelenting small-scale works.

Everyday practices included the excavation of canals and ports, the consolidation of littoral islands and, most importantly, an effective monitoring program. In this regard, from the late sixteenth century, the Republic felt the need to identify precisely the areas covered by the water regulations. The lagoon’s legal contours (*conterminazione*) were defined through a hundred stone markers placed – until 1791 – around its perimeter.

3 The archipelago as the chessboard of the Republic

Occupying a hybrid position between Venice and the mainland, the ring of islands has always been profoundly tied to the urban fabric, even following the Republic’s territorial and maritime expansion (fourteenth to sixteenth centuries). More than an ornamental frame, these satellite places functioned as natural extensions of the city’s boundaries. They were densely-populated, complex industrial and residential environments. Like pieces on a skilled player’s chessboard, at various moments they addressed the different needs of Venice’s urban framework.

The great majority of the islands hosted ecclesiastical communities of different orders: Benedictine, Franciscan, Dominican, Carthusian, and Augustinian, to name but a few. However, these spiritual spaces were more than retreats for people seeking isolation and the contemplative life. They were key sites in a capillary network called upon to sustain the social and economic life of the territory. First of all, the islands helped maintain its food supply.⁸ Absurdly enough, Venice, the capital celebrated by travelers as the ‘most abundant city,’ was without any agricultural territory. Thus, the compelling need for food became the business of peripheral settlements. Orderly orchards, vegetable gardens, vineyards, and watermills were established within the walls of the religious houses. Panegyric writings and literary sources paint the lagoon gardens as paradisiacal riots of colors and scents in which fruit trees, grapevines, flowers, medicinal plants and aromatic herbs abounded. In the distinctive Venetian coexistence of sacred and secular activities, these green spaces primarily supported the monasteries themselves, but were also commonly rented out to private citizens, contributing to the overall food production.



Figure 4: Bird's-eye view of the island and monastery of Sant'Andrea della Certosa, seventeenth century

Source: Venice, State Archive, *Miscellanea Mappe*, dis. 825.

However, islands were no less essential socially, as they housed infrastructures and commodities that served the daily needs of the larger Venetian community: public boathouses (*cavàne*), customs houses, and gunpowder magazines (*torresini da polvere*).

These latter were transferred outside the city centre following a devastating fire that almost destroyed the Arsenal in 1569. Moreover, the water-bound religious houses opened their spaces to welcome passengers in transit across the lagoon, as well as for state lodging services. The famous public guestrooms in San Secondo granted hospitality to sailors, merchants, and fishermen, but also to imperial ambassadors. Conversely, at least since the sixteenth century, papal nuncios and diplomats from France, Spain, and England were accommodated in Santo Spirito, while representatives from Mantua were hosted in Santa Maria delle Grazie.⁹



Figure 5: Vincenzo Maria Coronelli, *The island of San Giorgio in Alga*, 1697, showing a public shelter for boat on the left and a gunpowder storage on the right

If the ‘impregnable’ water walls offered a natural protection against aggressors, over the centuries the human hand systematically added fortified outposts to reinforce the lagoon’s defensive belt. A series of military structures – forts, garrisons, and watchtowers – were located close by strategic sites, in particular along the inlets. Since the fourteenth century, a small castle (Castel Vecchio) watched over the port of San Nicolò and was later flanked by the Renaissance fort of Sant’Andrea (Castel Nuovo) designed by the architect Michele Sanmicheli in 1543. The Castello della Lova controlled the harbor of Chioggia while, from the first half of the seventeenth century, the Alberoni Fort prevented access to Malamocco.¹⁰

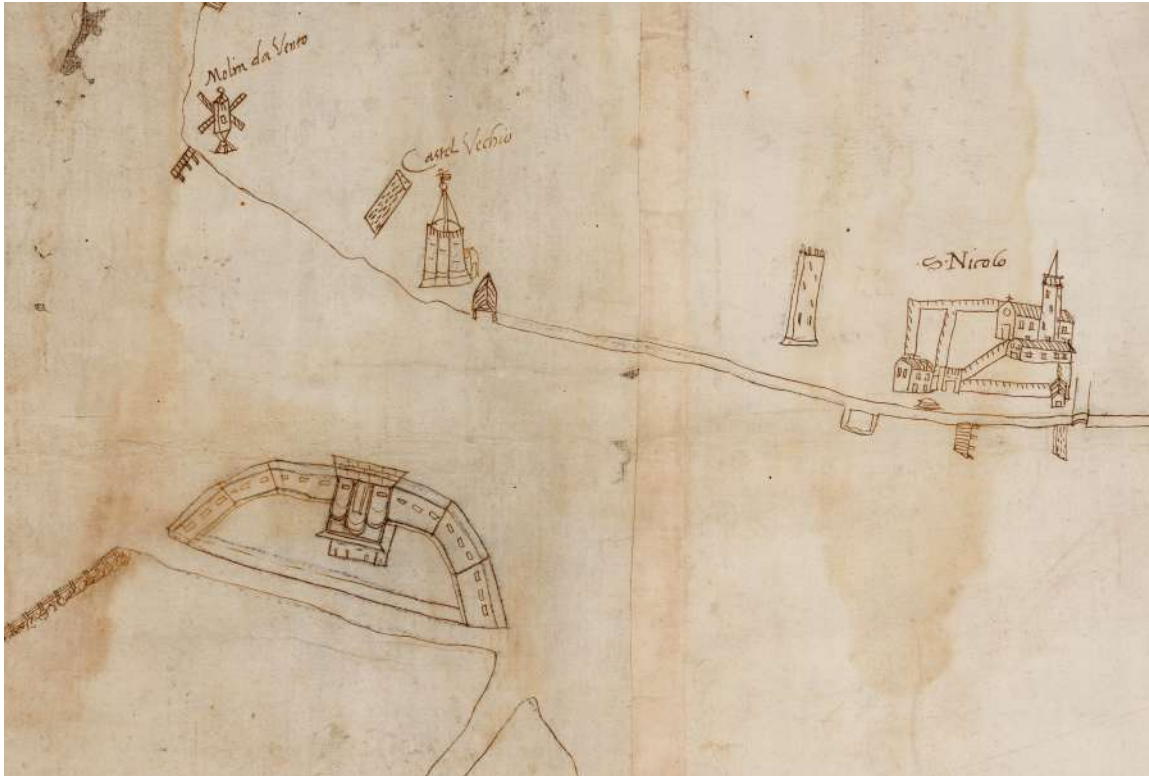


Figure 6: The old castle of San Nicolò del Lido (top right) and the fort Sant’Andrea (bottom) in the late sixteenth century

Source: Venice, State Archive, *Savi ed esecutori alle acque, Lidi*, dis. 63.

Naturally and artificially well-protected from external enemies, by contrast the lagoon’s frequented waters themselves represented the most fearsome adversary for the Republic as they were the principal path along which epidemic diseases entered Venice. Yet, balancing the positive and negative aspects of this unique environment, this difficulty was perhaps sufficiently counterpoised. Their innate condition of insularity and consequent isolation made the islands the ideal place to house health facilities and, in doing so, to protect the city, as well as its trade economy. The Lazzaretto Vecchio (founded in 1423) and Nuovo (established in 1468 but opened in 1471) were permanently used to quarantine both goods and people suspected of being infected by the plague. While the first structure isolated sick patients, the second accommodated those convalescing, while a number of other islands functioned as supplementary shelters in times of crisis.

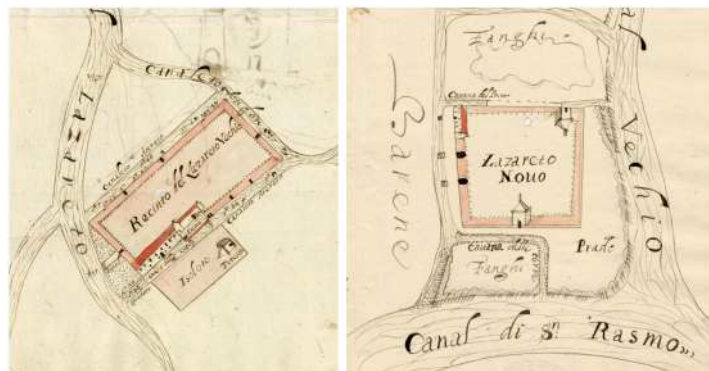


Figure 7: The Lazzaretto Vecchio and Nuovo in 1720 and 1717

Source: Venice, State Archive, *Savi ed esecutori alle acque, Atti*, b. 54, dis. 27 and 8.

To cope with outbreaks of plague, settlements such as San Clemente, San Giacomo in Paluo, San Francesco del Deserto, and San Secondo were repeatedly used as overflow sites. In addition, San Giorgio Maggiore and San Lazzaro degli Armeni often welcomed people from the mainland during periods of famine. In line with the dynamic nature of the lagoon environment, the archipelago served to enlarge the capacity of the public health care system.¹¹

4 The lagoon as a ritual display of power

The islands and waters of the lagoon were also a place of recreation and ostentatious display. The Most Serene Republic celebrated its inimitable status by sponsoring events that harnessed the watery backdrop of the aquascape to create unique forms of entertainment. Ingeniously staged dazzling parades, well-orchestrated marine fêtes, competitive games, regattas, and musical dinners on the water offered extravagant pleasures to participants and spectators alike.



Figure 8: Giacomo Franco (c. 1550–1620) *Music in the Grand Canal*, from *Habiti d'huomeni et donne venetiane* (Venice, Insegna del Sole, 1610)

Source: Venice, Library of the Correr Museum, St. E 9 bis, c. 40r.

One of the most elaborate annual festivities was the Feast of the Ascension (*Sensa*), which climaxed with the doge's symbolic marriage to the sea. On this occasion, the head of state, accompanied by a great variety of craft, embarked on his ceremonial barge (the *bucintoro*) and processed to the point at which the lagoon met the Adriatic, just past the Lido. There he tossed a wedding ring out into the water and proclaimed: 'We wed you, O Sea, as a sign of our true and perpetual domination.'¹² The ritual was intended to express Venice's dominance over the sea, but it was also part of the state's carefully constructed identity, one of great wealth and power, a message intended to impress foreigners.

Choreographed festivities and ceremonies within waterscapes were an integral part of the statecraft of the period. Awestruck chronicles, travellers' memoirs, and prints vividly record the pageantry laid out for popes, emperors, kings, cardinals, and ambassadors visiting the city. The wreath of islands encircling Venice were pressed into service as intermediate stately reception points. Each guest's solemn entry was personally tailored, though it would usually entail a procession through the lagoon. This operated not only as a symbolic display of the aqueous setting, but also a potent rhetorical reminder of the sacred geography of the Venetian environment.¹³

For visitors of higher rank, islands were often used for staging spectacles complete with ephemeral architecture. Foremost among these was the ceremonial welcome of the new French monarch Henry III in 1574 for which the mature Palladio helped to prepare a series of triumphal structures erected on the Lido. Carefully curated diplomatic visits like this turned a visitor's arrival into theatre proper. During such ceremonies, notable foreign guests were displayed to the city but, conversely, the uniqueness of the lagoon ambient was progressively revealed to them and, through their eyes, to the wider world.



Figure 9: The Arrival of Henri III of France at the Lido in 1574, 1591

Source: Venice, Library of the Correr Museum, P.D. 2416.

5 A distressing trajectory

The centuries-old relationship between Venice and its aqueous surroundings was brusquely interrupted by the fall of the Republic in 1797, which had far-reaching consequences for the lagoon's history and profoundly altered its societal perception. The dissolution of ecclesiastical orders by Napoleon and the islands' conversion to accommodate warehouses, military hospitals, and troops' quarters led to radical change. Places which, despite their peripheral position, had nevertheless remained open to cultural relations suddenly became inaccessible spaces. Along with political change, later interventions significantly transformed the islets' morphology and functions. Settlements such as San Giacomo in Paluo and the Madonna del Monte now lie abandoned at the mercy of tides; others, like Santo Spirito and San Giorgio in Alga, have been privatised; and the more fortunate places have been converted for new uses but at the cost of losing their identity, like San Clemente that, since 2003, hosts a luxury hotel.

Moreover, the gradual abandonment of aquatic settlements has erased the idea of the lagoon and the city as a single entity. Sabbadino's famous 1552 anthropomorphic reading of the waterscape seems to have gone unheard. As a man would feel sick if his head had only a mouth and not eyes or ears, he warned, so would the lagoon encounter severe consequences if any of its watery spaces were neglected.¹⁴ In contrast to today's detachment, the early modern Venetian basin was a unique organic environment where the mingling of human action and natural ecosystem was for centuries enduring and profound.

Notes

- 1 Pliny, *Naturalis Historia*, III, 120.
- 2 Cassiodorus, 'Epistulae variae,' in Theodorus Mommsen, *Monumenta Germaniae Historica Auctores Antiquissimi*, XII/24 (Berolini: Weidmannos, 1894), 379.
- 3 Marin Sanudo il giovane, *Cronachetta*, ed. Rinaldo Fulin (Venice: Tipografia del commercio di Marco Visentini, 1880), 63.
- 4 The oldest Venetian chronicle is by Giovanni Diacono, 'Chronicon Venetum,' in *Cronache veneziane antichissime*, ed. Giovanni Monticolo (Rome: Forzani e C. tipografi del Senato, 1890), 57–171.
- 5 Élisabeth Crouzet-Pavan, 'Toward an Ecological Understanding of the Myth of Venice,' in *Venice Reconsidered. The History and Civilization of an Italian City-State, 1297–1797*, ed. John Martin and Dennis Romano (Baltimore: Johns Hopkins University Press, 2000), 39–64.
- 6 The inscription is preserved today in the Correr Museum in Venice.
- 7 Luigi D'Alpaos, *Fatti e misfatti di idraulica lagunare. La laguna di Venezia dalla diversione dei fiumi alle nuove opere alle bocche di porto* (Venice: Istituto Veneto di Scienze, Lettere ed Arti, 2010).
- 8 Fabien Faucher, *Nourrir la ville. Ravitaillement, marchés et métiers de l'alimentation à Venise dans les derniers siècles du Moyen âge* (Rome: École française de Rome, 2014), 310–28.
- 9 Stefanie Cossalter, 'Dai porti alle isole. Cerimoniali di accoglienza nella Serenissima,' in *Spazi veneziani. Topografie culturali di una città*, ed. Sabine Meine (Rome: Viella, 2014), 125–48.
- 10 Ennio Concina, 'Fortificazioni lagunari fra il tardo Medioevo e il secolo XIX,' in *La Laguna di Venezia*, eds. Giovanni Caniato, Eugenio Turri, and Michele Zanetti (Verona: Cierre, 1995), 249–69.
- 11 Jane L. Stevens Crawshaw, *Plague Hospitals. Public Health for the City in Early Modern Venice* (Farnham: Ashgate, 2012), 83–7.
- 12 Francesco Sansovino, *Venetia città nobilissima, et singolare, [...] con aggiunta di tutte le cose notabili della stessa città, fatte, & occorse dall'anno 1580 sino al presente 1663 da d. Giustiniano Martinioni* (Venice: Stefano Curti, 1663), 501.
- 13 On the elaborate water festivities see Evelyn Korsch, 'Renaissance Venice and the Sacred-Political Connotations of Waterborne Pageants,' in *Waterborne Pageants and Festivities in the Renaissance. Essays in Honour of J.R. Mulryne*, ed. Margaret Shewring (Farnham: Ashgate, 2013), 79–97.

- 14 Cristoforo Sabbadino, ‘Aricordi di Cristoforo Sabbattino [...]’, in *Antichi scrittori d’idraulica veneta*, II/1, *Discorsi sopra la laguna di Cristoforo Sabbadino*, ed. Roberto Cessi (Venice: Tipoffset Gasparoni, 1987), 206.

References and further reading

- Calabi, Donatella & Galeazzo, Ludovica (eds) (2015) *Acqua e cibo a Venezia. Storie della laguna e della città*. Venice: Marsilio.
A compendium of the lagoon city’s history and its organic relationship with its surroundings. The exhibition catalogue analyses Venetian long-term environmental and planning policies regarding water security, food supply, and hydraulic activities.
- Caniato, Giovanni (2005) ‘Between Salt and Fresh Waters’, in Caroline Fletcher & Tom Spencer (eds) *Flooding and Environmental Challenges for Venice and its Lagoon: State of Knowledge*. Cambridge: Cambridge University Press, pp. 7–14.
A brief essay on some of the hydraulic projects designed by the Venetian Republic to protect the lagoon environment between the fourteenth and late eighteenth centuries.
- Caniato, Giovanni, Turri, Eugenio, & Zanetti, Michele (eds) (1995) *La Laguna di Venezia*. Verona: Cierre.
A significant series of contributions on the environmental features and delicate mechanisms of the lagoon over time, the balanced relationship between Venice’s inhabitants and their habitat, the architectural and artistic lagoon treasures, as well as the travellers, writers, and artists’ impressions of this distinctive site.
- Coronelli, Vincenzo Maria (1696) *Isolario dell’Atlante veneto*. Venice: a spese dell’autore.
A two-volume collection of maps and views of islands compiled by the seventeenth-century Franciscan cosmographer Father Coronelli. The first book contains engravings of the majority of the lagoon’s settlements along with their textual descriptions.
- Crawshaw, Jane L. Stevens (2012) *Plague Hospitals. Public Health for the City in Early Modern Venice*. Farnham: Ashgate.
A monograph on the multiple functions of the Venetian lazarettos. The book focuses on Venice’s distinctive use of many of its islands as hospitals, quarantine centres, and cemeteries during plague epidemic spreads.
- Crouzet-Pavan, Élisabeth (2013) ‘Venice and Its Surroundings’, in Eric R. Dursteler (ed.) *A Companion to Venetian History, 1400–1797*. Leiden–Boston: Brill, pp. 25–46.
A magisterial examination of the determining impact of Venice’s physical setting on its history. The chapter describes the urban transformations carried on by Venetians as a collective enterprise that ultimately developed the highly centralised and stable structures of the Venetian state.
- Crovato, Giorgio & Crovato, Maurizio (2008) *Isole abbandonate della Laguna. Com'erano e come sono = The abandoned islands of the lagoon. How they were and how they are now*. Teddington: San Marco Press.
An accurate historical investigation of the abandoned islands of the Venetian lagoon written in both Italian and English. The book includes significant visual materials as well as extracts from ancient books and chronicles.
- D’Alpaos, Luigi (2010) *L’evoluzione morfologica della laguna di Venezia attraverso la lettura di alcune mappe storiche e delle sue carte idrografiche*. Venice: Comune di Venezia.
Through a detailed analysis of the historical maps on the lagoon, the book reconstructs Venice’s policy of re-routing the major mainland rivers to reduce sediment inputs.
- Fortini Brown, Patricia (1990) ‘Measured Friendship, Calculated Pomp: The Ceremonial Welcomes of the Venetian Republic’, in Barbara Wisch and Susan Scott Munshower (eds) ‘*All the World’s a Stage ...*’. *Art and Pageantry in the Renaissance and Baroque*, part I, *Triumphal Celebrations and the Rituals of Statecraft*, vol. 6. University Park, PA: The Pennsylvania State University, pp. 136–186.
An important chapter on Venice’s diplomatic policy regarding the welcoming of notable foreigners. A wide-ranging series of historical accounts depict the extravagant and pompous display of wealth and power put in place through receptions, spectacles, and processions.
- Galeazzo, Ludovica (2017) ‘Mapping Change and Motion in the Lagoon: The Island of San Secondo’, in Kristin L. Huffman, Andrea Giordano, and Caroline Bruzelius (eds) *Visualizing Venice. Mapping and Modeling Time and Change in a City*. London: Routledge, pp. 43–50.
A short chapter on the historical transformations of the abandoned island of San Secondo and the project of its digital reconstruction developed by the international research group *Visualizing Venice/Visualizing Cities*.

Lorenzetti, Giulio (1961) *Venice and its Lagoon. Historical-artistic Guide*. Rome: Istituto poligrafico dello Stato.

One of the most detailed and still valid historical-artistic guides to Venice and its lagoon.

Marzo, Mauro (2012) 'A Theme, a Place: Defense of the Lagoon', in Mauro Marzo (ed.) *Fortified Places in the Venetian Lagoon*. Parma: Festival architettura, pp. 31–75.

A summary chapter on the impressive military defence system developed by the Venetian Republic over the centuries to protect the lagoon and the city centre.