

From a River Harbour to an Urban Stage Modelling the City Centre around the San Marco Basin in Renaissance Venice

Paolo Sanvito

Introduction

Venice was manifestly founded as a multiple river harbour in the middle of a large flat region, originally serving the commercial traffic of large territories from North Eastern Italy to the Eastern Alps and Bavaria. There were no less than four rivers flowing into its waters: the Tesina, the Brenta, the Bacchiglione (connecting with Padua), and the Sile. Brenta and Bacchiglione were deviated between 1540 and 1552 by digging new artificial rivers. Also the original islands were parts of the Brenta delta, whose dead arms are still visible today on the immediate vicinity of the lagoon. In this function as a “transitional route” for goods, the city progressively completed its form, as a very particular flexible and dynamic urban structure in the period from the fifth century onwards until the end of the Middle Ages and after. Other cities on the Mediterranean have shared this same destiny, even during Italy’s Greek and Roman Antiquity: one prominent example being Palermo in Sicily, (Fig. 1) a north-south river harbour, comparable to Cristoforo Sabbadino’s “Plan for the development of Venice” of 1557 (from his *Trattato della laguna*, Fig. 2). Another large lagoon settlement was in Taranto, Apulia (Fig. 3).

The largest demographic expansion in Venetian history occurs in the 15th c.; therefore it should be well noted that reflective discussions or debates or negotiations regarding the ambient and urban restructuring begin at this time simultaneously with the re-orientation of the entire San Marco Basin and the Giudecca Channel. This overlapped chronologically with the highest architectural flourishing, in conjunction with the last major financial boom of the city’s history. Nowhere else than in Venice, indeed, did city planning mean the same as water planning, or (specifically) hydrology. These debates did not take place only among architectural circles. Indeed it seems of high relevance that the political authorities decided to involve themselves more with the governing of those waterways from the whole Venetian metropolitan area. In fact, the decision of mapping the territory with a complex system of cadastre maps goes back to a council of the Republic in 1460, which implemented the measuring of all canals, rivers and even lagoon parts outside the city (see also, for the waterways to Padua, Cristoforo Sorte; Fig. 4). Shortly after, in 1501, the institutions of the magistrate of the Savi alle Acque (The Experts of Waters), Collegio alle Acque (1505, fifteen senators from the central senate), and of Savi esecutori alle Acque (the three additional *experts*, added to the Collegio)¹ were created.

These progressive changes brought to a reform of the lines of communication from inside and outside of the city; Sabbadino, Venice’s Magistrate *alle acque*, proposed, and posthumously obtained permission to allow the seawater to penetrate more into the lagoon² while preventing

¹ From Archivio di Stato di Venezia (ASV), Organi amministrativi, publ. in: http://www.archivi.beniculturali.it/Biblioteca/damosto_html/05_.html: „Nel 1530, il Consiglio dei X ordinò che se ne nominassero 3, e se ne riserbò l'elezione; la quale gli fu tolta, nel 1582, dal Maggior Consiglio, che se l'attribuì”.

² *Architettura e utopia nella Venezia del '500*, exhib. cat. Milano 1980, Milano 1980, esp. p. 135-140 with Sabbadino’s maps (in ASV, Savi Esecutori alle Acque; or Biblioteca Nazionale Marciana, Cod. It. IV, 485 (5350)), commented by B. Mazza. Also L. Padoan Urban, *Effimeri palladiani*, in: *ibid.* p. 144-160, and on related subjects *Il palcoscenico Venezia per la politica: gli apparati scenici esterni*, in: *Le théâtre italien et l'Europe (XVII^e - XVIII^e siècles)*, ed. Ch. Bec/I. Mamczarz (Teatro 4), Firenze 1985, p. 159-167.

most of the rivers from flowing into it.³ Sabbadino also restricted the major waterways of Venice and to do so, he became engaged in significant polemics and was sometimes in sharp disagreement with some of the other governmental authorities (Fig. 5).⁴ He may have also been aware of the tidal-flow studies by the mathematician Federico Delfino (author of *De fluxu maris*)⁵.

Even a generation after the city planners Alvise Cornaro and Cristoforo Sabbadino (after the accomplishments of new urban plans), the Vitruvianist Daniele Barbaro judged the situation of water surfaces in the city as follows in his *Ten Books of Architecture* of 1567,⁶ in Chap. V., *De i Porti* (On harbours): he writes the Senators should “straighten the canals, convert the course of the waters, avoid the mixture of fresh and salt waters, and in the final phase they will re-direct the large and small rivers as far as possible away from the city”:

„drizzeranno i canali, & i corsi delle acque, impediranno la mescolanza delle dolci con le salate, ... & e finalmente condurranno quanto piu da lontano si puo i fiumi grandi, et piccioli, e queste cose sono molto bene considerate da i Senatori.“

Cornaro, on his part, would completely agree with this, but he did not just want to ‘repair’ Venice, but rather build a completely new city. He had written one year earlier (1566) his famous project for reshaping the Basin of San Marco, in which he foresaw building at its centre a classicising theatre and artificial forested mountain (Monticello) and fountain utilizing the flow of fresh water from the river Sile flowing into a water fall.⁷

However, around 1565 Cornaro had authored a *Scrittura sopra la regolazione dei porti* (ASV, ms, Papers of the Savi esecutori, busta 986), which describes how to dig the canals deeper as well as how to fortify the city (which he would have provided with a surrounding wall of bulwarks).

³ G. Mazzi, *La città e le lagune*, in: *Le Venezie possibili: da Palladio a Le Corbusier*, ed. L. Puppi/G.-D. Romanelli, Milano 1985, p. 45-52, esp. 45-7.

⁴ See M. Tafuri, *Un teatro, una "fontana del Sil" e un "vago monticello": la riconfigurazione del bacino di San Marco a Venezia di Alvise Cornaro*, in: *Lotus international* 42, 1984, p. 41-52, 41. Sabbadino was edited by R. Cessi (and R. Magistrato alle acque. Ufficio idrografico), *Discorsi sopra la laguna: Parte I^a*, Venezia 1930 (Sabbadino’s plan for 1540 on p. 3).

⁵ *De fluxu et refluxu aquae maris, subtilis et erudita disputatio*, Venetiis 1559.

⁶ *I dieci libri dell’architettura di M. Vitruvio tradotti & commentati da Daniel Barbaro, da lui riveduti & ampliati, & hora in piu commoda forma ridotti*, in Venetia, appresso Francesco de’ Franceschi Senese & Giovanni Chrieger Alemano Compagni, 1567, p. 271. First edition: *I dieci libri dell’architettura di M. Vitruvio tradotti & commentati da Mons. Daniele Barbaro eletto patriarca d’Aquilegia*, in Venetia, appresso Francesco Marcolini, 1556. The whole very interesting sentence reads: “...sarà opera di speculatori della natura, & de i pratici, inuestigare le cause della atterratione di queste lagune, come sogliono fare i medici, che prima considerano le cause delle infermità, & poi danno i rimedij opportuni: troueranno, che la terra usa i fiumi in questa usurpatione, che ella uuol fare, & da quelli si fa portare nelle acque salse: troueranno, che le acque salse di loro natura rodeno, è consumano le immonditie: troueranno, che piu acqua, salsa, che entra in questa laguna è meglio, perche uscendo con maggiore empito porta uia poco terreno: troueranno, che si deue leuare gli impedimenti alla natura, accioche ella operi da se, & faccia quello, che non si puo fare con ingegno, forza, & spesa alcuna. Però moueranno quelli terreni, che gia sono alquanto induriti, & daranno facilità alle acque di portarli uia, drizzeranno i canali, & i corsi delle acque, impediranno la mescolanza delle dolci con le salate, faranno de gli argini, & non lascieranno molto spacio. oltra quelli arare, & mouere i terreni. & finalmente condurranno quanto piu da lontano si puo i fiumi grandi, & piccioli, & queste cose sono molto bene considerate dai Senatori...“.

⁷ Tafuri (note 4), p. 45.

(Fig. 6) The issues of harbour sustainability and durability were thus a genuine obsession for several generations of Venetians. And with good reason: Barbaro once more refers to the bad destiny of another lagoon settlement in Italy, comparing it with the ancient settlements of the Romans (from the edition of 1556, in the marshes “*che sono intorno Altino*”, the roman “Pre-Venice”)⁸ on the northern side of the Venetian Lagoon. Cornaro compares it to the city of Salapia, near Trinitapoli and Posta di Salpi in Apulia,⁹ founded anew by the roman consul M. Hostilius. Its “inhabitants“, according to Vitruvius, “applied to M. Hostilius, who caused them to move to a healthier situation, about four miles from the former site, closer to the sea, while at the same time opened fresh communications between the lagoon and the sea“. It is now today’s city of Margherita di Savoia, surrounded by vast lakes.

Also the famous physician Girolamo Fracastoro was a relevant witness of similar interests, i.e. of the “*interesse collettivo*” (Tafari), as this is illustrated by his copious correspondence with his colleagues scientists and urban planners; on their part the latter also exchanged letters on the lagoon plan among one another. Fracastoro had also corresponded at length with Cornaro in 1556.¹⁰

Limiting the subject of the water trade and communication to microcosmic boundaries, it has been widely recognised that the possibility to use a river or a canal as a commercial street may be applied to the rivers Brenta or Tesina (Palladio’s villas Angarano and Foscari - Malcontenta di Mira). See the territory between Padua and Venice, in a map by Annibale Maggi (fig. 8).

From other points of view the importance of the *vista* is evident for Palladio: the view, which he in the *Quattro Libri* describes, among others, with regard to villa Trissino di Meledo and the villa Rotonda.

The presence of open visual perspectives are also well considered, such as with villa Barbaro in Maser; sometimes even with panorama-points distributed throughout the villa (at villa Godi di Lonedo). Another example is Villa Badoer at Fratta, built on the Canal Bianco. This again shows how territorial and hydraulic planning is closely relating to emerging concepts at the very core of urban space for this period (and later periods). In its truest sense, Venetian architecture can be defined as born from the water. For example, later in the 1560/70’s, Palladio’s re-design of the San Marco Basin is exemplary in its use of perspectival axes of scenography *crossing the waters*.

⁸ Barbaro 1556 (note 6), p. 29. In Barbaro’s Vitruvius manuscript Marcianus, commentarii, Cod. it. IV 37, 5133, f. 19r.: “Nella Puglia l’antica Salapia”.

⁹ *Der neue Pauly. Encyclopädie der Antike*, vol. 10, Stuttgart 2001, col. 1265-6 s.v. *Salpia*; *Dictionary of Greek and Roman Geography*, ed. W. Smith, London 1872, p. 878-880 s.v. *Salapia*: “(Σαλαπία Eth., Salapinos; Salapinus: Salpi), one of the most considerable cities of Apulia, situated on the coast of the Adriatic, but separated from the open sea by an intervening lagune, or saltwater lake, which was known in ancient times as the Salapina Palus.

¹⁰ Tafari (note 4), p. 45, speaks of a „fittissima rete (che coinvolge anche Andrea Navagero, Michele Sanmicheli e i Della Torre) di scambi e testi e informazioni che porteranno, soprattutto, alla raccolta di materiali per le *Navigazioni*“, also on Mexiko City, cf. *Lettera sulle Lagune di Venezia ad Alvise Cornaro illustrata ... insieme ad una lettera dichiarativa di Simone Stratico all’ ab. Daniele Francesconi*, Venezia 1815, p. 9 (other transcriptions in: Venezia, Biblioteca Marciana, Cod. It., IV. 150 [Simone Stratico] and Museo Correr, P.D. 233c, c. 26ff. [Leonardo Donà]).

The historian Enrico Guidoni pointed out in 1997¹¹ that an abrupt turnabout, a change of trend in the urban planning of most cities in the Venice Republic took place right after 1511, as Venice regained all of the territories on the mainland once upon defeating the League of Cambrai armies (1508/10). Most of their urban structures had been reorganised. For instance:

A new awareness for ideals of *beauty of the civic space* imposed itself (if ever these ideals had been addressed before) in this context. Morosini's treatise *De bene instituta re publica* addresses the special beauty of public buildings.¹²

This form of urban planning aimed primarily to be the signifier of the state's rule with expectations or requirements (Foucault 2007¹³) of the acknowledged, official order of society, represented by various authorities. The central square of the city principally took over a crucial role from this point of view: therefore it had to be newly re-established or refurbished. In Venice, as much as in other capitals of the Italian Renaissance, that central square became emptier and emptier, by losing its function of emporium through various provisions (the slaughterhouse and the granary were displaced afar). But Venice benefitted in terms of the supervision and surveillance of real-estate properties. In later periods of the Modern Era, the main squares of capital cities were increasingly promoted by their governments as critical spaces, indispensable in defining the identity of modern cities. This phenomenon can be observed on a European scale, and for its investigation I refer to Foucault's work, which hardly deals with the Venetian case, but offers a large number of comparative examples.

The mentioned changes are numerous: when considering the small city of Vicenza in the *Terraferma*, since the middle of the fourteenth-century a comparable plan that had changed there involved the completion of the urban complex of Piazza Maggiore - Palazzo del Podestà, financed by the central government of Venice. The renovation process had begun already in the 15th century - concern a surface of nearly 10,000 m², and this accomplished only through the Palladian intervention between 1549 until circa 1564.¹⁴

How did these *piazze* respond to the needs of the inhabitants who were visiting and using them? They were, primarily, functionally pragmatic and reflective of governmental practices: for example, in San Marco square, the meetings of the Republic's Major Council, or of the *Consiglio dei Pregadi*, i.e. the Senate; or to the preparatory, unofficial or half-private meetings of the deputies which had to take place in the Loggetta in the very centre of the square (the collective memory of this function was for a long time lost, and has only recently been rediscovered). At the same time Sansovino's Loggetta was imagined and designed in such a highly political context as a monument with a two-fold function. In a similar way it was exactly what Duke Ercole Ist Este had earlier planned for neighbouring Ferrara. Instead of alongside the main square, his idea for a monument would be "erected at the centre of the *piazza nuova* in the *Addizione*", in other words, in the central square of the "extension district" that Ercole had realised, called the *Addizione erculea* (literally "Hercules's extension". Here the central position of square and monument in Pellegrino Prisciani's view from the *Imprese dei duchi* is remarkable (Modena, Archivio di Stato, ca. 1492/3, Fig. 7).¹⁵

¹¹ *Nota introduttiva*, in: Atti del I convegno nazionale di studio, *Lo Spazio nelle Città Venete (1348-1509) urbanistica e architettura, monumenti e piazze, decorazione e rappresentazione*, Verona, 14-16 Dicembre 1995, ed. E. Guidoni/U. Soragni, Roma 1997, p. 15-16.

¹² Ed. C. Finzi (Collectanea Caralitana 4), Milano 1969, esp. pp. 172-3, 201ff.

¹³ M. Foucault, *Security, territory, population: lectures at Collège de France, 1977 - 1978*, Basingstoke 2007, p. 333ff: "Urbanisation of the territory".

¹⁴ The same has to be observed in Padua, for the complex area of P.za delle Erbe, or Palazzo della Ragione.

Incidentally, the entire settlement of Ferrara has to be considered an unsafe river harbour which is subject to floods. This settlement, analogous to Padua, is located at the end of a long river, and very close to the Adriatic Sea. The description of these characteristics leads to some of our major arguments in the context of *Cityscapes*:

2. *The theatricalization as a general trend of the cities with court ceremonies in the 16th century - and especially of Venice.*

A strong theatricalization of public spaces began increasing in Venice since the generation of Serlio (Fig. 9; like in the latter's idealised view of San Marco) and Sansovino from 1527 onwards, i.e. after the Sack of Rome (which compelled these, and many other artists, to escape from Central Italy and settle in Venice). Again this theatrical character is evident at San Marco Square in the use of an "entrance", analogous to an urban gate. It is traditional, but also very peculiarly venetian. The entrance built by Sansovino at San Marco invites visitors through symmetrical columns that are not only blatantly eloquent during the Cinquecento, but also before. This is visible in the drawing by Serlio (or Peruzzi), referring to the processions taking place in the St. Mark's basin.

In the 1570's Palladio also made extensive use of scenographic principles in his general plan for the San Marco Basin, which included the staging of the three major church squares (or church docks) and facades: the Redentore, San Giorgio Maggiore and the Zitelle.

With regard to the ceremonies of the Republic, we know that there was a procession, *corteo*, guided by the doge which – "... attraverso ponti e fondamenta legava, nella giornata votiva"¹⁶ – bound, in the votive and festive day instituted in 1577 by doge Alvise Mocenigo, San Marco to the Church of Redentore. A facade form like the one at Redentore (which was explicitly meant to show the matrix of an ancient temple) was echoed by another one of the "stations", at S. Giorgio. For the votive building on Giudecca, once again, the architect had hoped he would be allowed to erect a *rotunda* shape, with the support in the commission by his patrons, the "procuratori sopra Rialto" Jacopo Foscarini, Contarini, and by Marc' Antonio Barbaro (Procuratore di San Marco, as well as Savio di Terraferma). But the Council of Trent had not only suggested, it had recommended longitudinal ground plans, a memory of the traditional basilical ground plan in form of the Latin cross, because the latter would have allowed for it to conclude better the last station of the long procession. This is due to the larger space possible for hosting the numerous participating crowds. In both cases Palladio chose for the facade a model for a temple of the ancients.

For the famous ceremony of the *Sposalizio del Mare* (Marriage with the Sea) or other feasts the Compagnie della Calza built floating stages, *teatri del mondo*, with performances of dance, serenades and representations, sometimes even *naumachie*.¹⁷

Let's now resume two specific phenomena that emerged in our analysis:

- a. The ceremonial function of the buildings which were either institutionally or ontologically considered as essential ingredients of the city's deepest heart - according to ideals of renovation of the city plan in this period; and
- b. The reform of urban planning and the historical process which it enacted, as it is perceivable in the elaborated concepts of lavish renovation and decorating of the entire San Marco district,

¹⁵ See C. Rosenberg, *The Este monuments and urban development in Renaissance Ferrara*, Cambridge 1997, pp. 135 and 152.

¹⁶ E. Bassi, *I luoghi palladiani*, in: *Architettura e utopia* (note 2), p. 249-50.

¹⁷ Padoan Urban (note 2), p. 488.

which foresaw:

1. a building for the General Council (in this case: Senate House in the Doge's Palace; see its reconstruction drawings in Palladio's *Quattro Libri*, in the so called *Piazza dei Latini* and in the *Forum dei Romani*);
2. a Mint;
3. a classicising "Basilica" (not in Early Christian terms, but in modern terms: the Temple of the Sciences, or the Temple *stricto sensu*, i.e. the Cathedral);
4. the Loggetta as "the Arch of Triumph", just like in ancient Roman forums, in the middle of the new-born, modern *Forum Venetiarum* of the Republic.

The Loggetta functioned as a sort of ancillary space for the encounters of the Senators, which took place upfront in the square, in the Sala del Maggior Consiglio (Tafari defines the Loggetta a triumphal arch. It had also the function of a "Machine for Feasts", "macchina da festa",¹⁸ i.e. a symbolic interface, theatrical in its features, between what was officially called the state *da terra* (mainland) and the state *da mar* (coastal territories, extending from the Lido to Cyprus).

All of these changes involving the northern shore of the basin (or to the entrance into the city) were,

as I have shown, successively voted and approved as a consequence of several deliberations in The Senate and by a vast circle of experts. These changes also involved major interference of the architectural commissions, as a joint cooperation between different authorities. They took a long time, however, to become an accomplished form. Because of this entire development of the city centre in the 16th century it may be allowed to designate Venice as a kind of "city as an artwork" (referring to Augusta McMahon's formula at the *Cityscape* conference):¹⁹ a city where the separation, or opposition, between governmental and aesthetical issues had been hardly perceived during the period of analysis.

Conclusion.

The ancient urban planning and urbanism as a model of sustainability for the Venetian Cinquecento.

Venetian architectural and urbanised changes were evidently accompanied by a ,theatricalization' of the spaces, in which, after Andrea Gritti's appointment as the Doge in 1523, the lagoon and the Giudecca began to constitute the urban scenography. This became a backdrop to the processions that were the intended event, regularly celebrated on the square, on the docks, and on water.

Numerous drawings, engravings, literary programmatic texts and sources endorse this interpretation. Only in this hermeneutical perspective is the entrance to the *Piazzetta* deeper understandable as the portal of Venice, set between the columns of the civic patron saints. I would like to speak about *sustainability* in this case study, because the design of the city centre was planned functionally for the circulation of the human masses who were expected to use it; and also about its *reliability*, because the rules of the ancient urban theoreticians were rational and self-demonstrative through the reference to such authors as Vitruvius and Pliny the Elder, or (from the Late Empire) Cassius Dio and Cetus Faventinus. The city planning by Sansovino and his successors has been closely related to Gritti's "Romanism", which was also, at the same time, an enlightened trend among the numerous other trends simultaneously present in Venice.²⁰

¹⁸ M. Tafuri, *Jacopo Sansovino e l'architettura del '500 a Venezia*, Padova 1969, p. 72.

¹⁹ A. McMahon, *The ancient Mesopotamian City as Process*, in *Cityscapes in History. Creating the Urban Experience*, Munich 28.-30. July, 2010.



Figure 1. Palermo.

²⁰ M. Tafuri, *Politica, scienza e architettura nella Venezia del '500*, in: *Cultura e società tra riforme e manierismi*, ed. V. Branca and C. Ossola, Firenze 1984, p. 97-133, 106.



Figure 2. Sabbadino's "Plan for the development of Venice" 1557.

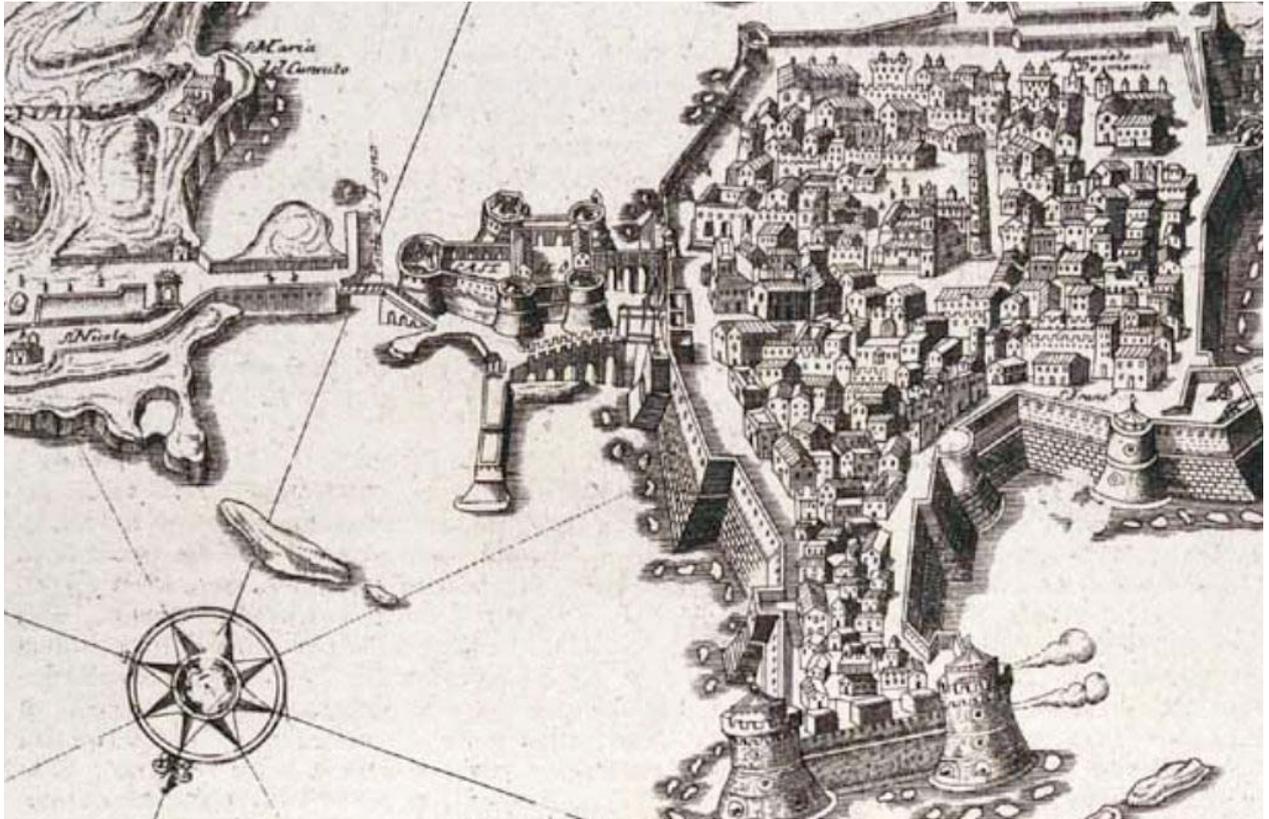


Figure 3. Taranto (from Vincenzo Coronelli, f. 65v).

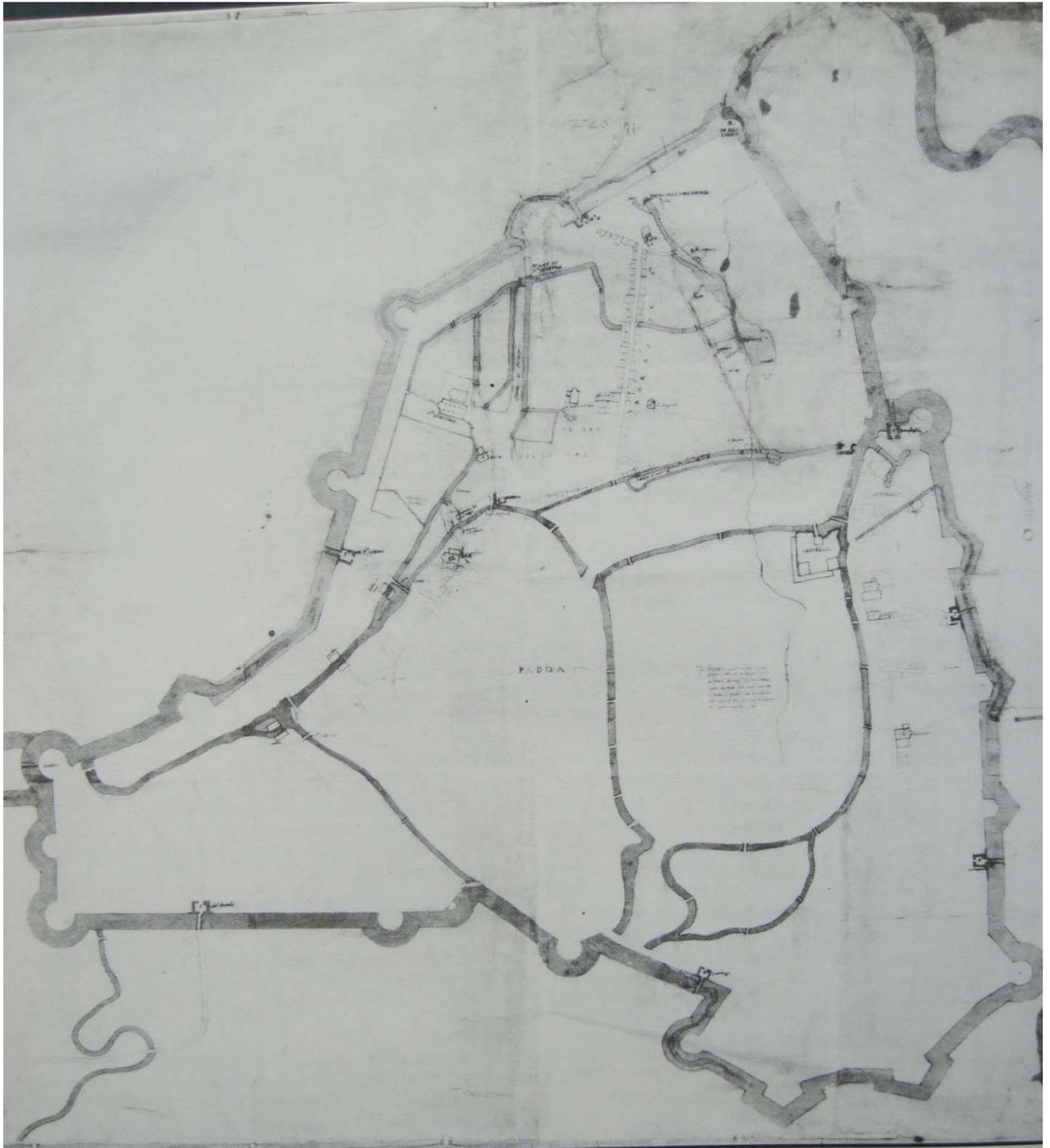


Figure 4. Cristoforo Sorte.



Figure 5. Sabbadino, "stato della laguna", 1552.



Figure 7. Modena, Archivio di Stato, ca. 1492/3

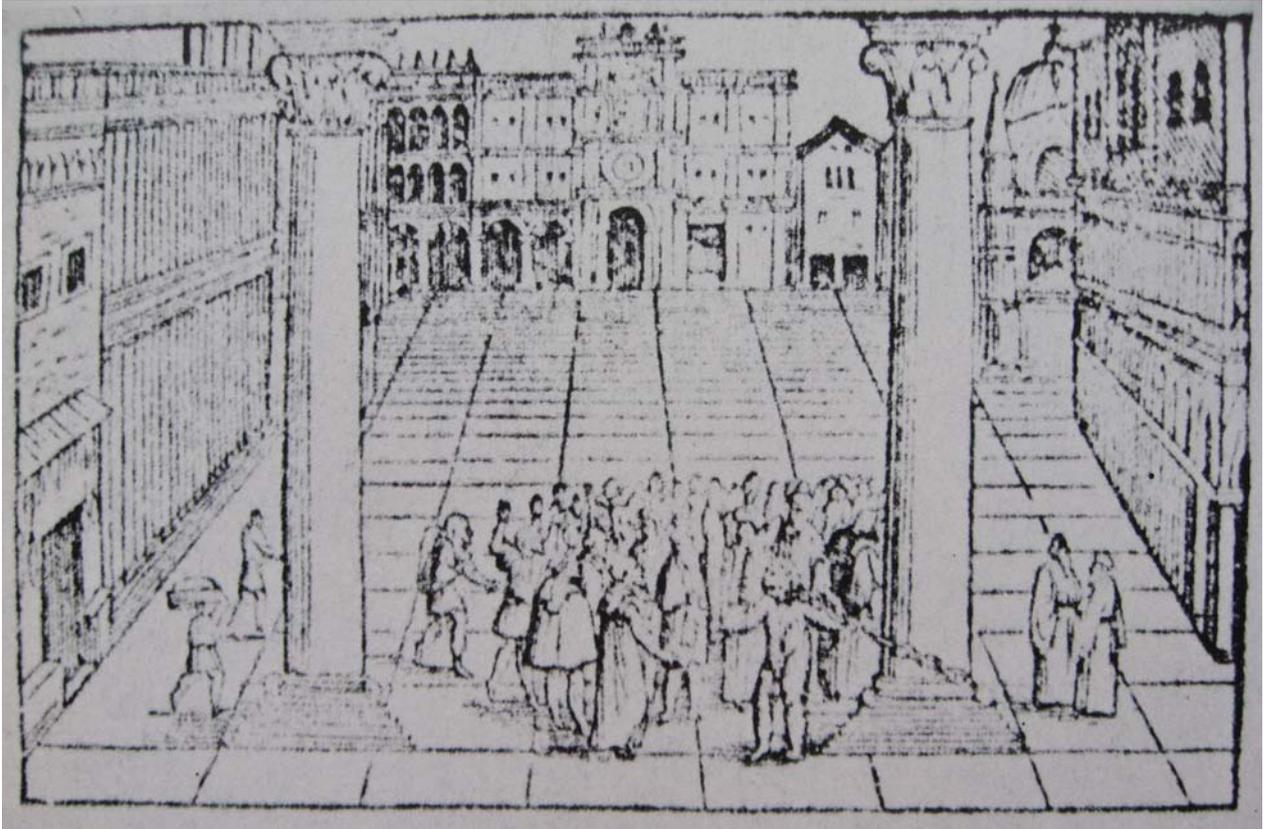


Figure 9. Sebastiano Serlio, idealised view of San Marco.