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Karen Rose Mathews

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KAREN ROSE MATHEWS

University of Miami

Mapping, Materiality, and Merchant Culture in Medieval Italy (12th-14th Century)

From the twelfth to fourteenth century, Genoa, Pisa, and Venice developed into highly successful port cities whose wealth and prosperity depended on international maritime commerce. As such, merchants played a central role in the political, economic, and cultural life of these three mercantile centers. Merchant patronage can be connected to two distinct cultural endeavors, the creation of lavish and eclectic decorative ensembles for civic churches and the production of practical cartographic tools – the portolan chart and text. Both cultural products share characteristics that connect them to mercantile interests and ambitions, forging a distinct merchant aesthetic that visualized the importance of commercial activities and Mediterranean navigation in these Italian port cities. This essay will analyze these distinct manifestations of merchant visual culture as an integrated unit, assessing the influence of mercantile mentalities on the production and reception of cartographic works and civic architecture produced in Venice, Pisa, and Genoa. These maritime cities developed a sophisticated merchant culture that in turn highlighted the education, cultural knowledge, and civic pride of these sea-borne traders and defined the creation, reception, and use of disparate visual artifacts (Lopez 1979, 65-66; Le Goff 2001, 123-24; Goldthwaite 1993, 179; Nelson

and Zeckhauser 2008, 44; Gautier Dalché 1995, 37).

Recent art historical scholarship has begun to address the tangible connections between artistic production and mercantile endeavors, and the artistic commissions of the maritime republics of Italy have provided fruitful ground for this type of study (Mack 2002; Jardine and Brotton 2000; Howard 2000; Caskey 2004; Mathews 2012; Mathews 2014). The wealth of these republics was based predominantly on international trade in the Mediterranean and the large expenditures by wealthy merchants in these cities on art and architecture raise the questions of how a distinct merchant culture determined a particular aesthetic or approach to artistic production and how this mentality was manifested in the artworks themselves. Though merchant patronage has been characterized as derivative, trickling down from the elite, Michael Baxandall's concept of a cognitive style can provide a framework for determining characteristics that are unique to artworks created by and for merchants (Baxandall 1988, 36-40; Caskey 2004, 22-23, 155-60, 186). Baxandall defines cognitive style as "interpreting skills one happens to possess, the categories, the model patterns, and the habits of inference and analogy" that are socially constructed and culturally relative (Baxandall 1988, 29-30, 40).

The mental equipment that a merchant used to assess an artwork, then, would be distinct from that of someone from another class or profession, as it was based on specifically mercantile education and training. An understanding of a medieval merchant's cognitive style could revolve around the assessment of cartographic works and civic architectural decoration through the framework of a "mapping eye" (Rodini 1995, vol. 1, 58, 71-93). From this perspective, the cultural products of the Italian maritime republics could be understood and categorized as commodities and mementoes, systematized and presented as itineraries and inventories that defined but also reflected a maritime merchant's cognitive style.

The Products of Mercantile Visual Culture

Italian mercantile centers such as Pisa, Genoa, and Venice produced a variety of cartographic works presented in visual and textual formats. One of the oldest texts providing evidence of practical cartography from the medieval period is the *Liber de existencia riveriarum et forma maris nostri Mediterranei* (The Book of the Position of the Coasts and the Form of our Sea, the Mediterranean), compiled in Pisa in the late twelfth to early thirteenth century (Gautier Dalché 1995; Gaspar 2019). The *Liber* was composed by a layman at the behest of a cleric from Pisa. Based on a map, the text provided supplemental information and clarifications to accompany the chart (Edson 2007, 44; Gautier Dalché 1995, 20-24, 39; Gaspar 2019, 6-10, 16). The content of the *Liber* consists of a type of text known as a portolan, a set of sailing directions from port to port around the Mediterranean Sea that included distances and detailed descriptions of ports, natural and manmade

landmarks, and coastline morphology (Debanne, 2011; Pujades 2007; Vagnon 2013). The rare survival of a text such as the *Liber* demonstrates that cartographic mentalities were already being codified and rendered in text and image in the late twelfth to early thirteenth century in one of the most vibrant maritime cities in Europe. The *Liber de existencia riveriarum*, then, was the product of a culture in which civic pride and Pisan identity were inextricably linked to the sea and the economic opportunities it provided (Bellomo 2008, 224, 231; Gautier Dalché 1995, 37, 98, 101, 103).

The *Compasso de Navegare* is the oldest surviving portolan text written in the vernacular, dating to the second half of the thirteenth century (Debanne 2011; Gautier Dalché 1995, 39-40; Bellomo 2008, 229). The work was composed in northern Italy, likely in Venice or Genoa, two cities that were to become major cartographic centers in the following century. The *Compasso* consists of sailing directions across the Mediterranean and Black Seas, divided into three parts. The first section of the text traces coastal routes around the seas; the second consists of a short list of long-distance open sea trajectories; the third enumerates routes along the Mediterranean's major islands. Though the text covers the entirety of the Mediterranean, a comprehensive view of the sea was not the intent of the work; rather the *Compasso* aimed to provide specific information about journeys from one port to another. The Mediterranean experience presented here is one of small, discrete voyages divided into segments or fragments. The vast sea was thus subdivided into manageable, intelligible units to trace the safest and most direct route between one location and another.

This early portolan text constitutes a decisive shift in mapping mentalities in its practical nature and lack of engagement with scholarly geographic traditions. Gone are biblical references and the centrality of holy sites; churches and monasteries are only mentioned in the *Compasso* as convenient landmarks, navigational aids that were readily visible from the water (Bellomo 2008, 229; Bacci and Rohde 2014). Portolan texts and charts were the products of lay culture, made by mariners for those who engaged in maritime travel. It also reflected the nautical advancements taking place in the late thirteenth and fourteenth centuries. Led by mariners from the Italian maritime cities and ports in the Crown of Aragón, the development of new navigational tools displayed a heightened interest in Mediterranean travel that, in turn, transformed the way that those involved in maritime exploits saw the world (Vagnon 2013, 459-87; Debanne 2011, 12, 15; Pujades 2007, 414-20, 456-63; Gautier Dalché 1995, 103).

The last cartographic work addressed here is the *Carte pisane*, the oldest surviving medieval nautical chart, likely created in the late thirteenth century in Genoa or Venice (figure 1) (Edson 2007, 33-37; Debanne 2011, 17-18; Pujades 2013b; Campbell 2015). It comprises a significant departure from the *Liber* and *Compasso* in its presentation of navigational data in a purely visual format. The *Carte pisane* consists of an entire animal skin on which the outlines and contours of the Mediterranean and Black Seas have been traced. The animal's neck extends to the east with the map oriented north and the various coastal locations and islands bear labels in black, with red reserved for the more important cities and ports. Accompanying the toponyms are wind roses that

extend rhumb lines across the vellum surface. Intended to be used with a magnetic compass, the lines represent compass directions to assist in navigation. This nautical or portolan chart represented the most current data for nautical cartography available at the time, a veritable compendium of navigational knowledge that would have accompanied mariners aboard their ships as they traversed the Mediterranean (Campbell 1987, 371, 377; Hoffman 2013, 30). By the fourteenth century, then, visual formats gained popularity for the presentation of cartographic data with increasingly sophisticated maps presented in large-format charts and atlases.



Figure 1
The *Carte pisane*, late thirteenth century. Photo: Paris, Bibliothèque nationale de France.

A final product of mercantile culture that bridged commercial and cartographic realms is the merchant manual (Lopez and Airdi 1983, 108). Such manuals began to appear in the late thirteenth century, produced by and for professionals engaged in commerce. The earliest documented merchant's manual, the *Memoria de tucte le mercantie*, was compiled in Pisa and dates to 1278. Additional manuals, such as the *Zibaldone da Canal* and Pegolotti's *Pratica della mercatura*, were products of the fourteenth century (Lopez and Airdi 1983, 115; Jacoby

2007, vol. 2, 449-64; Dotson 1994, 13). The standard content of these manuals listed weights and measures, prices for commodities, and customs in port cities across the sea. The information is often arranged in the form of binary pairs relating to exchange between two cities, not unlike the routes listed in portolan texts; in one instance a nautical guide is included in the manual itself (Jacoby 1986, 408-09; Gaspar 2019, 4; Dotson 1994, 15). The manuals clearly represent a merchant's worldview as they contain knowledge necessary to succeed in a competitive commercial space. What the author of a text considered essential information could vary dramatically, as some manuals included math problems, romances, and astrological guides, while others contained urban histories that parallel the civic pride on display in lavishly decorated architectural monuments (Sigler 2002; Giusti 2002; Radicati 2002; Morelli and Tangheroni 1994; Ulivi 2002). One late merchant manual that concretizes the connection between commerce and maritime travel is that of Michael of Rhodes, compiled in the mid-fifteenth century by a mariner who sailed with Venice's commercial fleet. The text contains some of the traditional content seen in merchant manuals, but it might be classified more accurately as a maritime or mariner's manual given its emphasis on shipbuilding and navigation and the inclusion of a portolan text with sailing instructions (Stahl 2010, 153, 158; Falchetta 2009a).

Complementing these mercantile, maritime texts and charts were civic architectural structures in Genoa, Venice, and Pisa that reused ancient and foreign objects, or *spolia*, in dense and heterogeneous decorative ensembles. The materiality of these objects, combined with their

potential to be understood as war spoils and commercial goods, made them potent carriers of meaning for merchant patrons and audiences. One of the earliest manifestations of a merchant visual style in the Italian maritime republics is the highly original *spolia* decoration found in Pisa. Beginning in the eleventh century, Pisan churches featured architectural decoration consisting of ceramic basins (*bacini*) imported from the Islamic world (Berti 1991; Berti and Giorgio 2011; Berti and Tongiorgi 1981). At this time, western Europe lacked the technical knowledge to produce glazed ceramics, making their provenance clear; these colorful glazed vessels were made in Islamic pottery centers and then exported across the Mediterranean. Among the early Pisan structures with *bacini* decoration, the church of San Sisto stands out with its vast number of objects and ceramic types from several production centers (figure 2).



Figure 2
Pisa, Church of San Sisto, west facade, 1087. Photo by author.

The foundation of the church of San Sisto is generally dated to 1087, immediately after a successful joint military cam-

paign conducted by the Pisans and Genoese against the North African cities of al-Mahdiya and Zawila (Berti 1993, 127-28; Garzella 1991, 189). The church was built to celebrate this victorious expedition and was funded with the proceeds from the military campaign (Cowdrey 1977, 18; Scalia 2007, 813-14). San Sisto originally had 129 eleventh-century bacini ornamenting its stone exterior (figure 3). The fifty-two remaining ceramics on San Sisto's facade and side walls, all placed above blind arches immediately below the roofline, consist of products from North Africa, Sicily, Egypt, and Spain (Berti 1997, 25; Berti and Tongiorgi 1981, 49-61). The bacini might have been chosen as appropriate decoration for Pisan churches because of their connection to Mediterranean commerce, a significant source of wealth for Pisa in the eleventh to fourteenth century (Mathews 2014, 16-19). The Pisan fleet battled valiantly to secure safe passage for the city's commercial vessels and the bacini could index this great struggle for maritime supremacy and the material fruits of those labors, with international trade goods such as the foreign and exotic ceramics so proudly displayed on the city's churches.



Figure 3
San Sisto, detail of bacini decoration
on west façade. Photo by author.

San Sisto's interior also displays objects and building materials acquired across the

Mediterranean. The church's space is articulated by ancient Roman capitals and columns, objects that might have been purchased in port cities or plundered from North Africa. Mounted on an interior wall is a funerary stele from al-Andalus. The stele dates to the eleventh century and is associated with the figure of 'Abd Allah al-'Aziz ibn Aghlab al-Murtadā, governor of the Balearic Islands from 1076 to 1094 (Stasolla 1980; Barral 1994; Scalia 2007, 812). It is not known when the object arrived in Pisa, but a likely scenario is that it formed part of the plunder from the Balearic expedition of 1113-1115 (Déléry 2009, 48-49; Scalia 2007, 813; Barral 1994, 122). San Sisto, then, was an early manifestation of a decorative style in Pisa that juxtaposed objects acquired through trade with artworks seized as plunder of war.

The Basilica of San Marco, the doge's chapel, was the showcase for the fame and fortune of Venice as the central religious monument in the city (Vio 2003; Maguire and Nelson 2010). The Fourth Crusade in 1204 constituted a significant moment in Venice's history when the Venetians conquered the Byzantine capital of Constantinople. Complementing the city's new political identity as an empire, then, was a visual culture that highlighted Venice's centrality in the Mediterranean. Luxury objects flowed into the city from Byzantium and the Basilica of San Marco came to be encrusted with a dazzling array of *spolia* and spoils from Mediterranean locales (figure 4) (Fortini Brown 1996, 15-17) (Ciriacono 2017, 8-10; Kovesi 2018, xvi, xviii). The exterior decoration displays an assemblage of columns and capitals, hundreds of them so densely packed that they no longer serve a structural function. More visually intriguing are the reused sculptural panels and other

foreign objects on the church's three façades. The west façade features the greatest ornamentation, consisting of an array of columns and capitals combined with Byzantine reliefs, while the crowning artwork is the set of bronze horses taken from the Hippodrome in Constantinople (figure 5) (Jacoff 1993; Favaretto 2003, 188-91; Galliazzo 1984). The eclectic spoliata assemblage on San Marco, like that on San Sisto in Pisa, defined a distinctive aesthetic that combined plunder of war with objects acquired in Mediterranean markets to express Venice's new civic identity and imperial aspirations.



Figure 4
Venice, Basilica of San Marco, west façade, thirteenth to fourteenth centuries. Photo by Gary Houston.



Figure 5
San Marco, original bronze horses from west façade (Museo di San Marco). Photo: Ttescke.

The church of San Matteo in Genoa, like the Basilica of San Marco, served as a civic religious space and private chapel simultaneously (figure 6). The structure was built by the Doria family, whose members served in the city government, led the Genoese navy, and actively participated in Mediterranean commerce. Their church enjoyed a central location in the city and competed with the cathedral as a potent symbol of Genoese civic identity. The thirteenth-century façade of the Doria family church displays the standard black and white stripes of Genoa's medieval structures and, similar to numerous other churches in the city, is adorned with an array of ancient Roman *spolia* (Müller 2002, 107-64; Toncini Cabella 2001, 21-27; Müller 2003). On the right side of the façade, immediately below a small window, is an ancient sarcophagus (figure 7) (Dufour Bozzo 1967, 23, 45-47; Faedo 1984, 142; Conti 1990, 300, 318-19; Müller 2002, 116-22, 226-29). Two other Roman artworks rest on consoles on either side of the rose window. A bust length figure, now missing its head, is placed on the left and a nude torso is located on the right. Complementing the Roman objects on display were inscriptions incised into the façade (Müller 2003, 15; Müller 2002, 126-33).



Figure 6
Genoa, Church of San Matteo, west façade, thirteenth century. Photo by author.



Figure 7
San Matteo, detail of ancient sarcophagus on the west façade. Photo by author.

The texts on either side of the entrance portal and around the sarcophagus record military victories won by various members of the Doria family and refer to the plunder taken in those battles that came to be housed in the church of San Matteo. The battles recorded here, however, were not fought against foreign adversaries but rather against Italian commercial rivals and the spoils of war collected in San Matteo came exclusively from Pisa and Venice. The Genoese took the sarcophagus from the Venetian-controlled island of Curzola and used it as the burial place for the great general Lamba Doria (Silva

1987, 72-73; Müller 2003, 14). San Matteo's decoration also featured plunder from Pisa; pieces of the great harbor chain taken from the Pisan port after the Genoese victory over the Pisan fleet in 1284 were hung on the façade of the church to complement the ancient Roman objects. On San Matteo, like San Sisto and San Marco, ancient and foreign objects combined with contemporary war spoils highlight the role of the church as a triumphal monument.

The decoration on all these churches defines a merchant aesthetic characterized by beautiful, colorful, textured objects and materials acquired through trade or military conquest. As such, they index the two most important activities of the cities' merchant mariners: war and commerce. Luxury commodities were displayed side by side with war plunder, with the distinction between the two often blurred. Just as important as their means of acquisition was the ability of these objects to reference locales across the Mediterranean with which Pisan, Genoese, and Venetian merchants would have been familiar. This rich and eclectic visual vocabulary was the ideal vehicle for displaying civic pride and mercantile wealth on each city's public monuments.

What all these cultural products of the maritime cities share, then, is a connection to maritime commerce. They could be trade goods themselves, commercial objects acquired across the Mediterranean by the merchants whose success contributed to the wealth and prestige of these Italian cities. They could also be important tools for navigating the seas and conducting trade, focusing on data that was essential to mercantile endeavors. As such, this diverse group of objects, texts,

and maps manifests a mercantile mentality that saw the world through the lens of voyages and trade goods and formulated visual and textual systems that organized, categorized, and contextualized the material culture of merchant cities. The relationship between the objects and materials in a maritime merchant's world and the worldview of international traders was reciprocal; the artworks manifested the mentality of these influential members of society while they also served as the physical basis for a merchant cognitive style. A maritime merchant worldview, then, could encompass the analysis and assessment of material culture through a number of diverse but complementary frameworks: commodities, collections, inventories, itineraries, mementoes, and souvenirs.

Interpretive Frameworks for Merchant Visual Culture

Commodities

These three merchant-oriented cultural products – manuals, maps, and architectural decoration – share a focus on economic and symbolic value. In the economic realm, they enumerate or categorize commodities or can be characterized as consumer goods themselves (Sheehan 2013, 133; Carlton 2012, 29). A merchant manual's primary aim was to present data on trade in luxury goods such as spices and textiles. Knowledge of their provenance, price, and movement around the Mediterranean was essential for successful and lucrative commercial transactions. A mercantile world view, then, made sense of places and things from the perspective of commerce and trade goods, a system in which everything could be esti-

mated in terms of its financial value in relative and absolute terms (Mathews 2017, 208).

If anything was a commodity, then both nautical charts and architectural *spolia* could be perceived and appreciated as commercial products. Both were available for sale in Mediterranean markets; increasingly elaborate maps were made in Genoa, Venice, and Majorca while reused architectural elements could be acquired in numerous port cities across the sea (Fortini Brown 1996, 15; Mathews 2018, 153). The very merchants who participated in Mediterranean commerce were the ones who bought and sold these goods and could estimate their value in economic terms. As commodities, nautical charts and *spolia* began their life histories as functional objects. Portolan texts and charts were meant to be consulted by mariners to assist in navigation (Gautier Dalché 1995, 203; Falchetta 2009b, 269-76). Architectural ceramics or bacini were originally tableware intended for use in middle and upper-class homes (Mathews 2014, 9-10, 19). Their understanding as functional, commercial objects shifted, however, as these objects were put on display or changed physical contexts. In the case of maritime maps, some continued to be used shipboard but others moved into domestic spaces, where they became status symbols and aesthetic objects (Sheehan, 2013; Sheehan 2014, 326). The understanding of bacini and other architectural *spolia* as commodities diminished in significance when they were removed from circulation and became fixed on church façades.

Commodity status, then, was not a state as much as it was a process, and these objects were subject to various classifica-

tions and reclassifications, uses and re-contextualizations, as they traveled over distances both conceptual and physical. Their very durability in essence contributed to their long and complicated biographies (Rowlands 2005, 267; Kopytoff 1986, 90). Stone sculptures and ceramic bowls became singularized when they moved from the commercial realm to that of architectural decoration – they became unique, “priceless” artefacts. They could be classified as diverted or terminal commodities in that their new function placed them permanently outside the mercantile realm (Appadurai 1986, 26-29; Kopytoff 1986, 77). Their placement on churches arrested their commodity stage, restricting their circulation and intensifying their symbolic force. The display of architectural *spolia* on public structures and maps in elite homes advertised their value, further enhancing their symbolic worth, while confirming if not elevating the value of similar goods that remained in the commercial sphere of exchange (Rowlands 2005, 267; Appadurai 1986, 28).

The symbolic and aesthetic force of commercial objects complemented their economic worth for merchant patrons and audiences. In an elemental way, their materiality and physical beauty made them attractive (Mathews 2015, 10-11). The gleaming, reflective, and colorful surfaces of glazed ceramics and the bright white marble of ancient tomb sculptures heightened their appeal. The symbolic significance of these reused objects and materials resided in part in their role as trophies. This plunder manifested dominance over political enemies and economic competitors through its public display on important religious structures (Mathews 2016, 67-74). In a competitive

Mediterranean environment, appropriated objects visualized a civic identity for these Italian maritime cities that elevated them above their commercial rivals and referenced control of key trade routes and the commodities exchanged along them.

Nautical charts also became increasingly elaborate in the fourteenth and fifteenth centuries as they served as navigational tools, but also decorative objects for the home. Para map or epicartographic additions complemented the basic information provided on portolan charts (Sheehan 2013, 133). These maps were created to outline the coasts and islands, but over time the inland spaces were filled with flags, crests, portraits, topographic features, representations of cities, and animals both real and mythical. Such enhancements created a taste for navigational charts to new owners while appealing to an established merchant clientele in novel ways. As the maps themselves developed into aesthetic objects, the context of their viewing transformed as well. Too precious or beautiful to be used at sea, nautical charts came to grace the public areas of middle class and elite homes (Houssaye Michienzi and Vagnon 2019, 29; Sheehan 2013, 133; Sheehan 2014, 322, 326). In an analogous manner to their *spolia* counterparts on religious structures, the maritime map manifested a merchant identity defined by knowledge of the sea and the port cities located along its coastline. Instead of a visualizing a broader civic identity, the display of a map in a private home was rather a personal status symbol, indicating a cosmopolitan worldview and familiarity with distant locales (Carlton 2012, 28-29, 36). It signaled belonging to an elite social group defined by mercantile education,

cultural sophistication, and maritime knowledge.

The Collection

A merchant mentality informed but was also defined by the gathering of places and things into collections. Such collections were purposeful combinations of disparate elements into a meaningful whole. A collection gained significance through the sheer quantity of items brought together while also highlighting the variety and singularity of the individual elements. Spoliate ensembles were meant to impress through the vast number of objects on display as well as their varied colors, materials, and origins. The significance of a specific object, however, was downplayed as it was subsumed into the collective force of the totality. The places and things compiled in portolans and merchant manuals also comprised vast collections. The merchant manuals listed all the goods circulating across the Mediterranean and the commercial transactions that defined the wealth and prosperity of the Italian maritime cities. The manuals and nautical charts collected the port cities where these goods were traded, demonstrating the extent of each city's economic network and familiarity with numerous locales.

Vast and varied collections implied mastery on the part of the collector, whether an individual or corporate entity (Baudrillard 2009, 49, 53). The trophy ensembles in all these Italian cities allowed each republic to claim dominance over a bitter rival through the sheer number of stolen artifacts put on public display. The numerous objects taken from the enemy enhanced the quality of the victory and painted a picture of concerted and long-

standing triumph over a specific adversary. Appropriation thus deprived the enemy of meaningful things and their display in an eclectic plunder collection created a powerful type of politicized decoration on urban monuments that highlighted the dominance of the victorious city (Kinney 1995, 58; Kinney 1997, 120). The plunder could reference military victories that allowed a city to take possession and hold dominion over strategic Mediterranean sites.

Collections of commodities and ports created the illusion of dominance and mastery based on extensive knowledge of the Mediterranean environment. The entire volumes of the *Liber* and the *Compasso* or the overall view of the Mediterranean in the *Carte pisane* visualized dominion over the sea by those who possessed these compendia. The bird's-eye or omniscient view of a map has been addressed at length in the context of charts made for sovereigns who could claim control of territories by having them depicted in cartographic form, either painted on palace walls or incorporated into lavishly illustrated books (Rosen 2015; Birkholz 2004; Carlton 2012). Humbler, mercantile-oriented portolans generally have not been associated with notions of sovereignty, but they should be understood as both political and economic instruments. In the thirteenth and fourteenth centuries, the greatest competition for the Italian maritime republics came from one another and the production of portolan charts in Venice and Genoa could be seen as a manifestation of competitive mapmaking, where each republic attempted to display its control of Mediterranean routes and spaces at the expense of the other (Rosen 2015, 6-7). In both visual and textual formats, the collective force of objects argued for the

political, economic, and cultural supremacy of the city that possessed them, displaying them in visual ensembles or recording them in written works. The vast number of things ornamenting Italian churches attested to their abundance in the city and the wealth and prosperity that brought so many beautiful and luxurious objects to Italy. The hundreds of sites incorporated into the *Liber*, *Compasso*, and *Carte pisane* presented them as known quantities, presuming knowledge of locales Italian merchants and mariners may or may not have visited. The excess of things and the places where they could be procured displayed the economic opportunities offered by Mediterranean trade. Italian maritime cities vied with each other to accrue the great riches garnered from control of maritime commercial networks.

Inventory and Itinerary

Geographical data and *spolia* ensembles could be understood from the broader perspective, then, of a comprehensive collection in which the totality of items amassed highlighted the collector's mastery and dominion. The organization systems used to understand and display the collection's contents, however, present another facet of a merchant mentality: the tendency to see places and things through the lens of an itinerary or inventory. The discrete units of the map or chapters of the text encouraged those consulting portolans to think about the Mediterranean in a non-holistic manner, concentrating on individual places and peoples as allies or adversaries (Goldie 2015, 703-04; Campbell 1987, 387). A particularly evocative manifestation of this emphasis on sequential, modular units of space can be seen in a type of text known as an *isolario*, or book of islands, that first appeared in

the fifteenth century. Combining text and maps in a book format, the *isolario* highlighted the importance of these discrete land masses while displaying their role as connecting nodes across the Mediterranean (Conley 1996; Tolias 2007; Cachey 2010). In a cartographic framework, points on the map represented metonymically a culture or political entity just as the architectural fragments did on Italian civic structures. The organization of space on a map resembled the encrusted exteriors of public architectural structures as the chart pinpointed the origin and traced the circulation of the consumer goods exchanged by Italian merchants. Both organizational systems focused on individual elements arranged in a sequential inventory or catalogue. The bacini ringing the exterior of San Sisto and the disparate spoliated objects covering San Marco were analogous to the succession of ports and cities in portolan texts and charts (figures 8A and 8B).



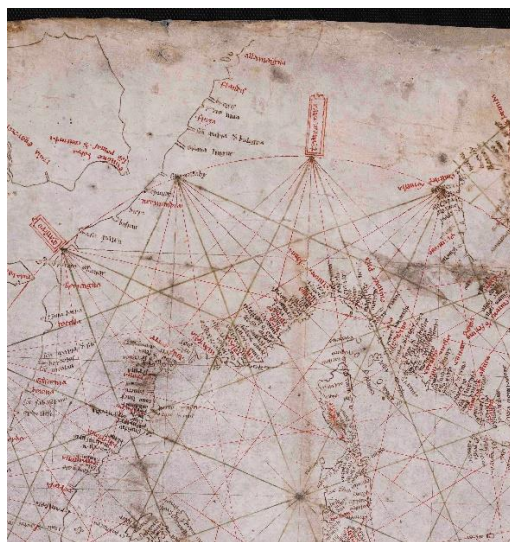


Figure 8A (facing) & 8B (above)
(A) bacini on San Sisto west façade
and (B) *Carte pisane* place names
along the Mediterranean coast.
Photo: (A) by author; (B) Paris, Bibli-
othèque Nationale.

Lists provided a comprehensive catalogue to allow viewers and readers to make sense and manage the consumption of the vast amount of data compiled. As such, they were the central organizing principle for merchants' manuals and portolan texts that assembled geographical locations, goods, weights, measures, interest and exchange rates. A spatial sequence subdivided the data into comprehensible units, mimicking the physical travel from one port to another undertaken by Italian maritime merchants. The logical sequence of coastal cities in portolan charts and manuals could also have been mapped on the public architecture of these Italian ports, with distinct spoliated objects corresponding to sites on a map. Mercantile-oriented audiences would have recognized the provenance of the objects on display and appreciated their spatial arrangement that echoed the visual systems of cartography, albeit on a

monumental scale. Such inventories were not disinterested, however, and conveyed the perspective and worldview of those who created them. The inventory and itinerary thus presented and perpetuated a maritime merchant's viewpoint that focused on taxonomies, hierarchies, and relationships between people, places, and things (Yale 2014, 289, 294-95).

Memory and Souvenirs

A characteristic that maps, manuals, and architectural *spolia* share is a tension between tradition and innovation. Portolan charts, texts, and merchant manuals contained data that required continual emendation to be accurate and up to date. Nonetheless, older texts and charts continued to be used for decades if not centuries after they were written or drawn (Pegolotti 1936, xxvii; Jacoby 1986, 409-10; Dotson 1994, 17, 24; Vagnon 2013, 454). In a more general sense, what these mercantile instruments offered was the appearance of comprehensiveness and mastery of a vast array of knowledge. The universalizing symbolic force that reinforcing traditional beliefs counterbalanced the detail-oriented content in these mercantile maritime instruments that assisted traders and mariners in their professions. As instruments of power for the Italian maritime republics, architectural spoils, navigational charts, and merchant manuals had the potential to construct narratives, configure cultures, and define memory in a way that highlighted the economic and political predominance of each city.

The presentation of data in portolans and merchant manuals could thus be as evocative as it was authoritative. The visual and textual content central to a mer-

chant's worldview may have been recorded and displayed as a mnemonic device (Campbell 2013, 51-53; Sheehan 2014, 325; Gautier Dalché 1995, 40). The transcribing and preservation of this data could assist merchants in remembering places, prices, and merchandise (Goldie 2015, 723; Pujades 2013a, 65). The goods on the architectural structures could visualize the Mediterranean locales plotted on nautical charts, evoking voyages and the interaction with various cultures as Italian mariners traversed the sea to engage in war or conduct commerce. Memories of journeys, transactions, and cultural exchange and interaction were preserved and shared in a concrete manner through physical objects that served as souvenirs (Houssaye Michienzi and Vagnon 2019, 29; Rodini 1995, vol 1, 84-87). Mementoes of places and events ornamented civic structures and graced private homes to be shared with small groups of friends, colleagues, and rivals or larger communal audiences. The invocation of memory gave this predominantly spatial data a temporal dimension, highlighting continuity over centuries or the volatility of the current Mediterranean environment that was in a constant state of redefinition. Memory could be corporate as well in these Italian cities where mercantile endeavors were central to political identity and economic prosperity. Maps, manuals, and *spolia* recorded a Pisan, Genoese, or Venetian worldview and the connection to strategic places and valuable things that distinguished each city from one another.

Conclusion

A spoliative aesthetic had a long pedigree in the Italian merchant republics, emerging in the eleventh century as an apposite way to visualize mercantile and military

endeavors through the use of *spolia* and spoils of war. In the late twelfth century, portolan texts and charts offered a new way of conceptualizing this relationship in terms of mapping. Cartography provided the technological mechanism to plot the origin and movement of the highly mobile objects that decorated Italian civic monuments. The explosion of cartographic instruments in the thirteenth and fourteenth centuries, however, had the potential to create new forms of merchant visuality, a "mapping eye," where artistic production in the cities of Venice, Genoa, and Pisa was perceived and interpreted through the conceptual logic and organization of the nautical chart. The propensity of Italian maritime merchants to view their world through a mapping mentality defined the cultural products of these cities and encouraged mercantile-oriented audiences to consume visual and textual culture in a particular way, perpetuating and concretizing this world view. *Spolia* collections and mercantile tools – manuals and portolan charts and texts – became increasingly more complex and intertwined to reflect the opportunities and challenges faced by these merchant mariners in the fluid Mediterranean environment of the later Middle Ages.

References

- Appadurai, Arjun. 1986. "Introduction: Commodities and the Politics of Value." In *The Social Life of Things: Commodities in Cultural Perspective*, edited by Arjun Appadurai, 3-63. Cambridge: Cambridge University Press.
- Bacci, Michele, and Martin Rohde, eds. 2014. *The Holy Portolano: The Sacred Geography of Navigation in the Middle Ages*. Berlin: De Gruyter.

- Barral, José. 1994. "Encontrada la lauda del emir al-Murtada, primer rey independiente de las Islas." *Anuario Ibiza Formentera* 12: 119-26.
- Baudrillard, Jean. 2009. "Subjective Discourse or the Non-Functional System of Objects." In *The Object Reader*, edited by Fiona Candlin and Raiford Guins, 41-63. London: Routledge.
- Baxandall, Michael. 1988. *Painting and Experience in Fifteenth Century Italy: A Primer in the Social History of Pictorial Style*. Second edition. Oxford: Oxford University Press.
- Bellomo, Elena. 2008. "Sapere nautico e geografia sacra alle radici dei portolani medievali (secoli XII-XIII)." In *Dio, il mare, e gli uomini*, edited by Luciano Fanin, 215-41. Verona: Cierre Edizioni.
- Berti, Graziella. 1991. "Bacini." In *Enciclopedia dell'arte medievale*, vol. 2. Rome: Istituto della Enciclopedia Italiana.
- . 1993. "Pisa: Dalle importazioni islamiche alle produzioni locali di ceramiche con rivestimenti vetrificati (seconda metà X–prima metà XVII secolo)." In *Pisa, Piazza Dante: Uno spaccato della storia pisana, la campagna di scavo 1991*, edited by Stefano Bruni, 119-43. Pontedera: Cassa di Risparmio.
- . 1997. *Le ceramiche medievali e post-medievali: Pisa, Museo Nazionale di San Matteo*. Florence: All'Insegna del Giglio.
- Berti, Graziella, and Liana Tongiorgi. 1981. *I bacini ceramici medievali delle chiese di Pisa*. Rome: L'Erma di Bretschneider.
- Berti, Graziella, and Marcella Giorgio. 2011. *Ceramiche con coperture vetrificate usate come "bacini"*. Florence: All'Insegna del Giglio.
- Birkholz, Daniel. 2004. *The King's Two Maps: Cartography and Culture in Thirteenth-century England*. New York: Routledge.
- Cachey, Theodore. 2010. "From the Mediterranean to the World: A Note on the Italian 'Book of Islands' (isolario)." *California Italian Studies* 1: 1-13.
- Campbell, Tony. 1987. "Portolan Charts from the Late Thirteenth Century to 1500." In *The History of Cartography, volume 1: Cartography in Prehistoric, Ancient, and Medieval Europe and the Mediterranean*, edited by Brian J. Harley and David Woodward, 371-463. Chicago: University of Chicago Press.
- . 2013. "Why the Artificial Shapes for the Smaller Islands on the Portolan Charts (1330-1600) Help to Clarify Their Navigational Use." *Comité français de cartographie* 216: 47-65.
- . 2015. "Map History: History of Cartography." <http://www.maphistory.info/CartePisaneTEXT.html>.
- Carlton, Genevieve. 2012. "Making an Impression: The Display of Maps in Sixteenth-century Venetian Homes." *Imago Mundi* 64 (1): 28-40.
- Caskey, Jill. 2004. *Art and Patronage in the Medieval Mediterranean: Merchant Culture in the Region of Amalfi*. New York: Cambridge University Press.

- Ciriaco, Salvatore. 2017. *Luxury Production, Technological Transfer and International Competition in Early Modern Europe*. Leipzig: Leipziger Universitätsverlag.
- Conley, Tom. 1996. "Virtual Reality and the 'Isolario'." *Annali d'Italianistica* 14: 121-30.
- Conti, Graziella. 1990. "I Doria e l'antico'." *Storia dell'arte* 73: 297-331.
- Cowdrey, H.E.J. 1977. "The Mahdia Campaign of 1087." *English Historical Review* 92 (362): 1-29.
- Debanne, Alessandra. 2011. *Lo Compasso de navigare: Edizione del codice Hamilton 396 con commento linguistico e glossario*. Brussels: P.I.E. Peter Lang.
- Déléry, Claire. 2009. "Using *Cuerda Seca* Ceramics as a Historical Source to Evaluate Trade and Cultural Relations between Christian Ruled Lands and Al-Andalus, from the Tenth to Thirteenth Centuries." *Al-Masāq* 21 (1): 31-58.
- Dotson, John. 1994. *Merchant Culture in Fourteenth Century Venice: The Zibaldone Da Canal*. Binghamton: Medieval and Renaissance Texts and Studies.
- Dufour Bozzo, Colette. 1967. *Sarcophagi romani a Genova*. Genoa: Fratelli Pagano.
- Edson, Evelyn. 2007. *The World Map, 1300-1492*. Baltimore, MD: Johns Hopkins University Press.
- Faedo, Lucia. 1984. "Conoscenza dell'antico e reimpiego dei sarcofagi in Liguria." In *Colloquio sul reimpiego dei sarcofagi romani nel Medioevo*, edited by Bernard Andreae and Salvatore Settis, 133-54. Marburg: Verlag des Kunstgeschichtlichen Seminars.
- Falchetta, Piero. 2009a. "The Portolan of Michael of Rhodes." In *The Book of Michael of Rhodes: A Fifteenth-century Maritime Manuscript*, edited by Pamela Long, David McGee, and Alan Stahl, 193-210. Cambridge, MA: The MIT Press.
- . 2009b. "The Use of Portolan Charts in European Navigation during the Middle Ages." In *Europa im Weltbild des Mittelalters: Kartographische Konzepte*, edited by Ingrid Baumgärtner and Hartmut Kugler, 269-76. Berlin: De Gruyter.
- Favaretto, Irene. 2003. *Il Museo di San Marco*. Venice: Marsilio.
- Fortini Brown, Patricia. 1996. *Venice and Antiquity: The Venetian Sense of the Past*. New Haven, NH: Yale University Press.
- Galliazzo, Vittorio. 1984. "I cavalli di San Marco: Una quadriga greca o romana?" *Faventia* 6 (2): 99-126.
- Garzella, Gabriella. 1991. "Il Tempio di S. Sisto in Corte Vecchia nell'assetto urbano di Pisa medioevale." In *Momenti di storia medioevale pisana: discorsi per il giorno di S. Sisto*, edited by Ottavio Banti and Cinzio Violante, 189-98. Pisa: Pacini.
- Gaspar, Joaquim Alves. 2019. "The *Liber de existencia riveriarum* (c. 1200) and the Birth of Nautical Cartography." *Imago Mundi* 71 (1): 1-21.
- Gautier Dalché, Patrick. 1995. *Carte marine et portulan au XII^e siècle: Le Liber de existencia riveriarum et forma maris nostri Mediterranei (Pise, circa 1200)*. Rome: École française de Rome.

- Giusti, Enrico. 2002. *Un ponte sul Mediterraneo: Leonardo Pisano, la scienza araba e la rinascita della matematica in Occidente*. Florence: Edizioni Polistampa.
- Goldie, Matthew Boyd. 2015. "An Early English Rutter: The Sea and Spatial Hermeneutics in the Fourteenth and Fifteenth Centuries." *Speculum* 90 (3): 701-72.
- Goldthwaite, Richard. 1993. *Wealth and the Demand for Art in Italy, 1300-1600*. Baltimore, MD: Johns Hopkins University Press.
- Hoffman, Catherine, et al. 2013. "How Portolan Maps Were Made and Used Through the Centuries." In *The Golden Age of Maritime Maps: When Europe Discovered the World*, edited by Catherine Hoffman, Hélène Richard, and Emmanuelle Vagnon, 30-36. Buffalo, NY: Firefly Books.
- Houssaye Michienzi, Ingrid, and Emmanuelle Vagnon. 2019. "Commissioning and Use of Charts Made in Majorca c. 1400: New Evidence from a Tuscan Merchant's Archive." *Imago Mundi* 71 (1): 22-33.
- Howard, Deborah. 2000. *Venice & the East: The Impact of the Islamic World on Venetian Architecture 1100-1500*. New Haven, NH: Yale University Press.
- Jacoby, David. 1986. "A Venetian Manual of Commercial Practice from Crusader Acre." In *I comuni italiani nel regno crociato di Gerusalemme*, edited by Gabriella Airaldi and Benjamin Kedar, 401-28. Genoa: Istituto di Medievistica.
- . 2007. "The Pisan Commercial Manual of 1278 in the Mediterranean Context." In *Quel mar che la terra inghirlanda: In ricordo di Marco Tangheroni*, edited by Franco Cardini and Maria Luisa Ceccarel-li Lemut, 2: 449-64. 2 vols. Pisa: Pacini.
- Jacoff, Michael. 1993. *The Horses of San Marco and the Quadriga of the Lord*. Princeton, NJ: Princeton University Press.
- Jardine, Lisa, and Jeremy Brotton. 2000. *Global Interests: Renaissance Art between East and West*. Ithaca, NY: Cornell University Press.
- Kinney, Dale. 1995. "Rape or Restitution of the Past? Interpreting *Spolia*." In *The Art of Interpreting*, edited by Susan C. Scott, 52-67. University Park, PA: Department of Art, Pennsylvania State University.
- . 1997. "*Spolia: Damnatio and renovatio memoriae*." *Memoirs of the American Academy in Rome* 42: 117-48.
- Kopytoff, Igor. 1986. "The Cultural Biography of Things: Commoditization as Process." In *The Social Life of Things: Commodities in Cultural Perspective*, edited by Arjun Appadurai, 64-91. Cambridge: Cambridge University Press.
- Kovesi, Catherine. 2018. "Luxury and the Ethics of Greed in Early Modern Italy: An Introduction." In *Luxury and the Ethics of Greed in Early Modern Italy*, edited by Catherine Kovesi, xv-xxx. Turnhout: Brepols.
- Le Goff, Jacques. 2001. *Marchands et banquiers du Moyen-Âge*. Ninth edition. Paris: Presses Universitaires de France.
- Lopez, Robert. 1979. "The Culture of the Medieval Merchant." *Medieval and*

Renaissance Studies: Proceedings of the Southeastern Institute of Medieval and Renaissance Studies 8: 52-73.

Lopez, Robert, and Gabriella Airaldi. 1983. "Il più antico manuale italiano di pratica della mercatura." *Miscellanea di studi storici* 2: 99-133.

Mack, Rosamond. 2002. *Bazaar to Piazza: Islamic Trade and Italian Art, 1300-1600*. Berkeley: University of California Press.

Maguire, Henry, and Robert Nelson, eds. 2010. *San Marco, Byzantium and the Myths of Venice*. Washington, DC: Dum-barton Oaks Research Library and Collection.

Mathews, Karen Rose. 2012. "Plunder of War or Objects of Trade? The Reuse and Reception of Andalusí Objects in Medieval Pisa." *Journal of Medieval Iberian Studies* 4 (2): 233-58.

---. 2014. "Other Peoples' Dishes: Islamic *Bacini* on Eleventh-Century Churches in Pisa." *Gesta* 53 (1): 5-23.

---. 2015. "Decorating with Things: *Spolia* as Material Culture in the Italian Maritime Republics, 1100-1300." *BFO-Journal* 1: 4-13. <http://bauforschungonline.ch/bfo-journal-12015.html>

---. 2016. "Holy Plunder and Stolen Treasures: Portable Luxury Objects as War Trophies in the Italian Maritime Republics, 1100-1400." In *More than Mere Playthings: The Minor Arts of Italy*, edited by Julia Fischer, 59-83. Newcastle: Cambridge Scholars Publishing.

---. 2017. "Defining a Merchant Identity and Aesthetic in Pisa: Muslim Ceramics

as Commodities, Mementos, and Architectural Decoration on Eleventh-century Churches." In *Postcolonising the Medieval Image*, edited by Eva Frojmovic and Catherine Karkov, 196-217. London: Routledge.

---. 2018. *Conflict, Commerce and an Aesthetic of Appropriation in the Italian Maritime Cities, 1000-1150*. Leiden: Brill.

Morelli, Marcello, and Marco Tangheroni, eds. 1994. *Leonardo Fibonacci: Il tempo, le opere, l'eredità scientifica*. Pisa: Pacini.

Müller, Rebecca. 2002. *Sic hostes Ianua frangit: Spolien und Trophäen im mittelalterlichen Genua*. Weimar: VDG.

---. 2003. "Constructing Fame in a Medieval Town." *Medium aevum quotidianum* 47: 8-32.

Nelson, Jonathan K., and Richard Zeckhauser. 2008. *The Patron's Payoff: Conspicuous Commissions in Italian Renaissance Art*. Princeton, NJ: Princeton University Press.

Pegolotti, Francesco Balducci. 1936. *La pratica della mercatura*, edited by Allan Evans. Cambridge, MA: The Mediaeval Academy of America.

Pujades, Ramon. 2007. *Les cartes portolanes: La representació medieval d'una mar solcada*. Barcelona: Lunwerg.

---. 2013a. "Navigational Maps: The First Widely Distributed Maps." In *The Golden Age of Maritime Maps: When Europe Discovered the World*, edited by Catherine Hoffman, Hélène Richard, and Emmanuelle Vagnon, 60-65. Buffalo, NY: Firefly Books.

---. 2013b. "The Pisana Chart: Really a Primitive Portolan Chart Made in the 13th Century?" *Cartes et géomatique* 216: 17-32.

Radicati, Luigi. 2002. *Fibonacci tra arte e scienza*. Milan: Silvana.

Rodini, Elizabeth. 1995. "Translatio Sancti Marci: Displaying the Levant in Late Medieval and Early Modern Venice." PhD dissertation, University of Chicago. 2 vols.

Rosen, Mark. 2015. *The Mapping of Power in Renaissance Italy: Painted Cartographic Cycles in Social and Intellectual Context*. Cambridge: Cambridge University Press.

Rowlands, Michael. 2005. "Value and the Cultural Transmission of Things." In *Commodification: Things, Agency, and Identities: (The Social Life of Things Revisited)*, edited by Wim van Binsbergen and Peter Geschiere, 267-81. Münster: Lit.

Scalia, Giuseppe. 2007. "Pisa all'apice della gloria: l'epigrafe araba di San Sisto e l'epitafio della regina di Maiorca." *Studi medievali*, ser. 3 (48): 809-28.

Sheehan, Kevin. 2013. "Aesthetic Cartography: The Cultural Function of Portolan Charts from 1300 to 1700." *Imago Mundi* 65 (1): 133-35.

---. 2014. "The Functions of Portolan Maps: An Evaluation of the Utility of Manuscript Nautical Cartography from the Thirteenth through Sixteenth Centuries." PhD Dissertation, University of Durham.

Sigler, L.E., ed. and trans. 2002. *Fibonacci's Liber Abaci: A Translation into Modern English of Leonardo Pisano's Book of Calculation*. New York: Springer.

Silva, Augusta, ed. 1987. *Corpus Inscriptionum mediæ Ævi Liguria*. Genoa: Istituto di Medievistica.

Stahl, Alan. 2010. "Michael of Rhodes and the Birth of the Mariner's Manual." *Journal of Early Modern History* 14: 151-63.

Stasolla, Maria Giovanna. 1980. "L'iscrizione araba della chiesa di San Sisto." *Studi maghrebini* 12: 99-102.

Tolias, George. 2007. "Isolarii, Fifteenth to Seventeenth Century." In *The History of Cartography, volume 3: Cartography in the European Renaissance*, edited by David Woodward, 263-84. Chicago: University of Chicago Press.

Toncini Cabella, Alessandra. 2001. *Chiese e parrocchie gentilizie a Genova: Aristocrazia, arte, devozione*. Genoa: De Ferrari.

Ulii, Elisabetta. 2002. "Scuole e maestri d'abaco in Italia tra Medioevo e Rinascimento." In *Un ponte sul Mediterraneo: Leonardo Pisano, la scienza araba e la rinascita della matematica in Occidente*, edited by Enrico Giusti, 121-60. Florence: Edizioni Polistampa.

Vagnon, Emmanuelle. 2013. "La représentation cartographique de l'espace maritime." In *La terre: Connaissance, représentations, mesure au Moyen Âge*, edited by Patrick Gautier Dalché, 443-503. Turnhout: Brepols.

Vio, Ettore, ed. 2003. *St. Mark's: The Art and Architecture of Church and State in Venice*. New York: Riverside Book Company.

Yale, Elizabeth. 2014. "Making Lists: Social and Material Technologies in the Making of Seventeenth-century British Natural History." In *Ways of Making and Knowing: The Material Culture of Empirical Knowledge*, edited by Pamela Smith, Amy Meyers, and Harold Cook, 280-301. Ann Arbor: University of Michigan Press.