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For my Mother and Marc

and

To the memory of my Father
ISTANBUL VIEWED: THE REPRESENTATION OF THE CITY IN OTTOMAN MAPS OF THE SIXTEENTH AND SEVENTEENTH CENTURIES

by

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ABSTRACT

Starting from the premise that maps are essentially about visualizing space, this dissertation examines what the Ottoman maps of Istanbul reveal about the city's perception, as it evolved in connection to urban development after the conquest.

The maps that form the subject of this study appear as illustrations in three manuscript books. The Istanbul maps contained in Mecmu'-i Menâzil (1537-8) and Hünername (1584) respectively mark the beginning and the accomplishment of the city's architectural elaboration. The other twenty maps, featuring in manuscript copies of Kitâb-i Bahriye (1520s), roughly span the period between 1550 and 1700. The variants of a design fixed around 1570 offer an image that fulfills its topographic elaboration in the late-seventeenth century. While the making of this map's design relates to Istanbul's sixteenth century urban development, its topographical elaboration reflects a new perception of the city. These picture-maps, produced in the sixteenth and seventeenth centuries, form a unique group of documents as the only known Ottoman pictorial representations showing the city as a whole. As revealed by the context of the books containing them, their making relates both to Ottoman Empire's territorial expansion and to the appropriation of Constantinople as its new capital. Their cartographic language combines, in different manners, the familiar conventions of Islamic miniature painting with artistic forms encountered and assimilated during territorial expansion, particularly in contact with Venice. Especially the making of the Istanbul maps in Kitâb-i Bahriye copies illustrates the crucial role of the Mediterranean seafaring culture, its navigational manuals, nautical charts and island books.

These images of Istanbul can be related to the development of the urban landscape and its symbolic function. Their study as cartographic representations pays attention to both accuracy and emphasis in their topographic contents. Supported by contemporary European visual sources and travel accounts as well as Ottoman topographic and poetic descriptions of Istanbul, the viewing directions, the depictions of buildings, and the overall cartographic composition in these maps are interpreted as features shaping a symbolic landscape that developed from an ideal vision to an actual garden-like urban environment, structured by land, water, and architecture.

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<td>BAV</td>
<td>Biblioteca Apostolica Vaticana, Rome.</td>
</tr>
<tr>
<td>BL</td>
<td>British Library, London.</td>
</tr>
<tr>
<td>BLO</td>
<td>Bodleian Library, Oxford.</td>
</tr>
<tr>
<td>BN</td>
<td>Bibliothèque Nationale, Paris.</td>
</tr>
<tr>
<td>BNM</td>
<td>Biblioteca Nazionale Marciana, Venice.</td>
</tr>
<tr>
<td>BP</td>
<td>Biblioteca Palatina, Parma.</td>
</tr>
<tr>
<td>BUB</td>
<td>Biblioteca Universitaria di Bologna, Bologna.</td>
</tr>
<tr>
<td>DAI</td>
<td>Dar al-Athar al-Islamiyah, Kuwait.</td>
</tr>
<tr>
<td>DM</td>
<td>Deniz Müzesi, Istanbul.</td>
</tr>
<tr>
<td>IAM</td>
<td>İstanbul Arkeoloji Müzesi, Istanbul.</td>
</tr>
<tr>
<td>İÜK</td>
<td>İstanbul Üniversitesi Kütüphanesi, İstanbul.</td>
</tr>
<tr>
<td>KK</td>
<td>Köprülü Kütüphanesi, İstanbul.</td>
</tr>
<tr>
<td>MC</td>
<td>Museo Correr, Venice.</td>
</tr>
<tr>
<td>MGK</td>
<td>Millet Genel Kütüphanesi, İstanbul.</td>
</tr>
<tr>
<td>NKC</td>
<td>Nasser D. Khalili Collection of Islamic Arts, London.</td>
</tr>
<tr>
<td>NOK</td>
<td>Nuruosmaniye Kütüphanesi, İstanbul.</td>
</tr>
<tr>
<td>ÖNB</td>
<td>Österreichische Nationalbibliothek, Vienna.</td>
</tr>
<tr>
<td>SBPK</td>
<td>Staatliche Bibliothek Preussischer Kulturbesitz, Berlin.</td>
</tr>
<tr>
<td>SK</td>
<td>Süleymaniye Kütüphanesi, İstanbul.</td>
</tr>
<tr>
<td>SLB</td>
<td>Sächsische Landesbibliothek, Dresden.</td>
</tr>
<tr>
<td>TSMK</td>
<td>Topkapı Sarayı Müzesi Kütüphanesi, Istanbul.</td>
</tr>
<tr>
<td>TSMA</td>
<td>Topkapı Sarayı Müzesi Arşivi, İstanbul.</td>
</tr>
<tr>
<td>TİEM</td>
<td>Türk ve İslam Eserleri Müzesi, İstanbul.</td>
</tr>
<tr>
<td>WAG</td>
<td>Walters Art Gallery, Baltimore.</td>
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</tbody>
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Bahriye/Kahle    Piri Reis, Kitab-ı Bahriye, P. Kahle (ed.)
Bahriye/1935    Piri Reis, Kitab-ı Bahriye, H. Alpagut and F. Kurtoğlu (eds.)
Bildlexikon    Wolfgang Müller-Wiener, Bildlexikon zur Topographie Istanbul.
EI²             Encyclopedia of Islam, 2nd ed.
Hadika          Hafiz Hüseyin Ayyansarayi, Hadikatü'l-Cevâmi.
HC              History of Cartography, J.B. Harley and D. Woodward (eds.)
İA              İslam Ansiklopedisi.
İstA            Dünden Bugüne İstanbul Ansiklopedisi.
İstA/Koçu       İstanbul Ansiklopedisi, R.E. Koçu (ed.)
OTDTS           Mehmet Z. Pakalın, Osmanlı Tarih Deyimleri ve Terimleri Sözlüğü.
Portolanı e Carte Nautiche   İstanbul Topkapı Sarayı ve Venedik Museo Correr koleksiyonlarından XIV-XVIII Yüzyıl Portolan ve Deniz Haritaları.
Seyahatnâme     Evliya Çelebi, Evliya Çelebi Seyahatnamesi, 1.Kitap: İstanbul, O.Ş. Gökyay (ed.).
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Fig. 46: Site plan of the Fatih Complex with old street pattern (19th century) (author's drawing, based on a street plan of Istanbul published in Ayverdi, 19.Asırda İstanbul Haritası).

Fig. 47a: Fatih Complex (far left) in the Köprülü water supply map (ca. 17th century), section, KK, MS, "suyolu haritası 1".

Fig. 47b: Bayezid Complex (far left) in the Köprülü water supply map (ca. 17th century), section, KK, MS, "suyolu haritası 1".

Fig. 48a: Site plan of the Bayezid Complex showing the modern street pattern in the surrounding urban area (early-twentieth-
century streets, now modified, are indicated by a dotted line). From Bildlexikon, 258.

Fig. 48b: Partial site plan of the Bayezid Complex: Mosque (1); Soup kitchen (2); Caravanserai (3); Sultan Bayazid’s tomb (4); Koran school for children (5). From Bildlexikon, 386.

Fig. 49a: View of the Bayezid Mosque from the square between the mosque and the Old Palace precinct, looking east. From Bildlexikon, 387.

Fig. 49b: View of the Bayezid Mosque from the main street (Divanyolu) to south of the complex, looking northwest. From Bildlexikon, 387.

Fig. 50a: Site plan of the Bayezid Complex in Edirne: 1 Mosque (1); soupkitchen (2); caravanserai (3); hospital and mental asylum (4); madrasa (5); bath (6). From Kazancıgil, Edirne Sultan 2. Bayezid Külliyesi, unnumbered pl.

Fig. 50b: View of the demolished bath to southwest of the mosque as seen from the south. From Kazancıgil, Edirne Sultan 2. Bayezid Külliyesi, unnumbered pl.

Fig. 51: Hypothetical site plan of the Bayezid Complex in the seventeenth century (author's drawing based on fig. 48a).

Fig. 52: The Bayezid Mosque precinct (marked with "B", to the right), detail from the map of Bayezid water supply system (ca. 1810-14). From Ünver, Fatih’in oğlu Bayezid’in su yolu haritası, insert map.

Fig. 53: "Dresden-389"; Istanbul map in Kitâb-ı Bahriye (short version, copied 961/1554 by Mehmed Reis), SLB, MS, Dresd. Eb 389, fol. 170r.

Fig. 54: "Köprülü-172"; Istanbul map [ca. 1560-1570s], Kitâb-ı Bahriye (short version), KK, MS, 172, fol. 181r.

Fig. 54a: Topographical details in Köprülü-172 (author's drawing).

Fig. 55: "Bologna-3613"; Istanbul map in Kitâb-ı Bahriye (short version, copied 977/1570), BUB, MS, 3613, fol. 162r.

Fig. 56: "Topkapı-337"; Istanbul map, Kitâb-ı Bahriye (short version, copied 982/1574), TSMK, MS, B 337, fol. 167v.

Fig. 57: "Deniz-990"; Istanbul map [ca. 1580s?], Kitâb-ı Bahriye, DM, MS, 990 [formerly 3538], fol. 271v.

Fig. 58: "Millet-1"; Istanbul map [ca. 1590s?], Kit-ı Bahriye, MGK, MS, Coğrafya 1, fol. 208v.

Fig. 59: "Vienna-192"; Istanbul map [ca. 1580s?], Kitâb-ı Bahriye (short version), ÖNB, MS, Cod. H.O. 192, fol. 169v.
Fig. 60: "London-4131"; Istanbul map [ca. 1620s], Kitāb-1 Bahriye (short version), BL, MS, Or. 4131, fol. 195r.

Fig. 61: "University-123"; Istanbul map [ca. 1600], Kitāb-1 Bahriye (short version), İÜK, MS, T 123, fol. 470r [originally 170r].

Fig. 62: "Nuruosmaniye-2990"; Istanbul map, Kitāb-1 Bahriye (short version, copied 1055/1645 by Ahmed bin Mustafa), NOK, MS, 2990, fol. 160r.

Fig. 63: "Kuwait-75"; Istanbul map, Kitāb-1 Bahriye (short version, copied 1100/1688-9), DAI, LNS. 75, fol.[unknown]. From Brown, The Story of Maps, frontispiece.

Fig. 64: "Nuruosmaniye-2997"; Istanbul map, Kitāb-1 Bahriye (short version, copied 1038/1629 by Mustafa bin Mehmed el-Cündi), NOK, MS, 2997, fol. 203v.

Fig. 64a: Mihrimah Complex, Şemsi Ahmed Pasha's Mosque and Palace, Üsküdar and Fener Gardens, detail from Nuruosmaniye-2997.

Fig. 65: "Yenicami-790"; Istanbul map [ca. 1629], Kitāb-1 Bahriye (short version), SK, MS, Yenicami 790, fol. 201v.

Fig. 65a: Topkapı Palace and Shore Kiosk, detail from Yenicami-790.

Fig. 65b: Tersane Garden, detail from Yenicami-790.

Fig. 66: "Paris-956"; Istanbul map [ca. 1650], Kitāb-1 Bahriye (long version), BN, MS, supp. turc 956, fol. 434v.

Fig. 66c: Dolmabağçe, detail from Paris-956.

Fig. 66b: Üsküdar and Fener Gardens, detail from Paris-956.

Fig. 66a: Shipyards, Tersane Garden and Piyale Pasha Mosque, detail from Paris-956.

Fig. 66d: Palace of Kaya Sultan, Mihrimah Complex, Şemsi Ahmed Pasha's Mosque and Palace, detail from Paris-956.

Fig. 66e: Topkapı Palace, Shore and Basketmakers' Kiosks, Hagia Sophia, Sultanahmet and Bayezit Mosques, Old Palace and Suleymaniye Mosque, detail from Paris-956.

Fig. 67: "Bologna-3609"; Istanbul map (mid-17th century), Kitāb-1 Bahriye (maps), Bologna, BUB, MS, 3609, fol. 10v.

Fig. 68: "Köprülü-171"; Istanbul map [ca. 1660s], Kitāb-1 Bahriye (long version), KK, MS, 171, fol. 428r.

Fig. 69: "Topkapı-1633"; Istanbul map [ca. 1680s?], Kitāb-1 Bahriye (long version), TSMK, MS, R 1633, fol. 434r.

Fig. 70: "Baltimore-658"; Istanbul map [ca. 1730-40], Kitāb-1 Bahriye (long version), WAG, MS, W. 658, fol. 370v.
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Fig. 70b: Hagia Sophia, Sultan Ahmet, Hippodrome, Old Palace, and Süleymaniye, detail from Baltimore-658.
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Fig. 71a: Asian coast and Seraglio Point, left half of London-718.
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Fig. 75a: Map of the island of Khios (Sio) (Greece), in Isolario by B. dalli Sonetti (Venice, 1485), fols. 43v-44r.

Fig 75b: Map of the island of Khios (Sakiz)(Greece), in Kitâb-ı Bahriye (short version), Pîrî Reis, BUB, MS, 3613, fol. 19v. From Bahriye/Kahle, 1:33.

Fig. 75c: Map of the island of Khios (Sakiz)(Greece), in Kitâb-ı Bahriye (long version) by Pîrî Reis, SK, MS, Ayasofya 2612, fol. 86r. From Bahriye/1988, 1:370.

Fig. 76a: Vignette of Genoa in a nautical chart of the Mediterranean by [Batist]a Beccari, 1435, BP, MS, II, 21, 1613. From G. Patti Balbi, Genova Medievale-Vista dai contemporanei.

Fig. 76b: Vignette of Genoa, detail from the map of the Ligurian coast in Kitâb-ı Bahriye (long version), TSMK, MS, H.642, fol. 284r. From Renda, "Representation of Towns...", 283.

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Fig. 77a: Vignette of Venice, chart of the Central Mediterranean in an atlas by Giovanni Xenodocos da Corfu (1520, [Venice?]), MC, MS, port. 29. From Portolani e Carte Nautiche, no.11.

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Fig. 77d: Gulf of Venice and the lagoon, detail from a chart of the central Mediterranean in anonymous atlas (second half of the 16th century, [Istanbul ?]), IAM, MS 1621, 148/7. From Goodrich, "Atlas-i Hûmayun", 95.

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Fig. 78: Town vignettes from a nautical chart of the Mediterranean, by J. Martinez (1591). From Guillén y Tato, "An Unpublished Atlas of J. Martinez", 112.

Fig. 79: Map of the Aegean island of Patmos (Greece), Kitâb-ı Bahriye (long version), SK, MS, Ayasofya 2612, fol. 99r. From Bahriye/1988, 1:424.
Fig. 80: Map of the island of Corfu (Kerkyra) and the Epirian coast (Greece), fol. 169r, MS Ayasofya 2612. From Bahriye/1988, 2:721.

Fig. 81: Map of the Peloponnesian coast near the fortified ports of Modon (Methoni) (above) and Coron (Koroni) (below) (Greece), MS Ayasofya 2612, fol. 153r. From Bahriye/1988, 2:658.

Fig. 82: Map of the North African coast near Bougie (Bejaia) (Algeria), MS Ayasofya 2612, fol. 321v. From Bahriye/1935, 642.

Fig. 83: Map of the North African coast near Tripoli (Tarabulus al-Gharb) (Libya), MS Ayasofya 2612, fol. 338r. From Bahriye/1935, 675.

Fig. 84: Map of the South Anatolian coast with the port and citadel of Alanya (Turkey), fol. 382r, MS Ayasofya 2612. From postcard (Dost Yayinlar). 

Fig. 85a: Map of Cairo, in Kitab-ı Bahriye (long version) by Piri Reis, TSMK, MS, 642, fol. 355r. 

Fig. 85b: Map of Cairo, NKC, MS, 718, fols. 48v-49r. From SK, microfilm no. 3574. 

Fig. 85c: Map of Cairo, Kitab-ı Bahriye (maps), SBPK, MS, Diez A fol 57, fol. 25, quarters a, b. 

Fig. 86a: Map of Venice and its lagoon in Kitab-ı Bahriye (long version) by Piri Reis, TSMK, MS, 642, fol. 212v-213r. 

Fig. 86b: Map of the Gulf of Venice, Kitab-ı Bahriye (short version, copied 977/1570), BUB, MS, 3613, fol. 72r. From Soucek, "Islamic Charting", 277. 

Fig. 86c: Map of Venice and its lagoon [ca. 1600], Kitab-ı Bahriye (short version), IÜK, MS, T 123, fol. 287r. 

Fig. 86d: Map of Venice and its lagoon, Kitab-ı Bahriye (short version, copied 978/1570-1), SK, MS, Hüsrevpaşa 272, fols. 71v-72r [additional]. 

Fig. 86e: Map of Venice and its lagoon, Kitab-ı Bahriye (short version), MGK, MS, Coğrafya 1, fols. 80v-81r [additional]. 

Fig. 86f: Map of Venice and its lagoon, Kitab-ı Bahriye (maps), NKC, MS, 718, fols. 28v-29r. From SK, microfilm no. 3574. 

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Fig. 87: Vignette of Cairo, detail of from a chart of the central Mediterranean in anonymous atlas (ca. 1560s [Istanbul?]), WAG, MS 660, fols. 6v-7r.
Fig. 88: Map of the lagoon of Venice, with a plan of the city in a cartouche, published by Lodovico Furlanetto (Venice, 1780). From Cassini, Piante e vedute prospettive di Venezia, 162.

Fig. 89: Map of Venice and its lagoon (1528), in Libro ... de tutte l'isole... by B. Bordone (Venice, 1528), fols. 29v-30r.

Fig. 90: Perspective plan of Venice (end of 16th century), engraved by B. Salvioni. From Cassini, Piante e vedute..., 78.

Fig. 91: Map of the Iberian coast from Gibraltar (top) to Bera [Garrucha] (bottom) with vignettes of Malaga, Salobreña, Almeria and Bera, Kitāb-1 Bahriye (short version), İÜK, MS, T 123, fol. 304r [additional page at the beginning].

Fig. 92a: Map of the Marmara Sea (east-oriented, entitled "Eşgāl-i kızıl ada bu resimdir"), Kitāb-1 Bahriye (short version), BN, MS, supp. turc 220, fol. 157r.

Fig. 92b: Map of the Marmara Sea (east-oriented, entitled "Eşgāl-i kızıl adalar bu resimdir"), Kitāb-1 Bahriye (short version, copied 978/1570-1), SK, MS, Hüsrevpaşa 272, fol. 167r.

Fig. 92c: Map of the Marmara Sea (east-oriented, entitled "Eşgāl-i marmara engini bu resimdir"), Kitāb-1 Bahriye (short version, copied 978/1570-1), SK, MS, Hüsrevpaşa 272, fol. 4r [additional].

Fig. 92d: Map of the Sea of Marmara (west-oriented), Kitāb-1 Bahriye (short version), İÜK, MS, T 123, fol. [4] 312v.

Fig. 92e: Map of the Marmara Sea (west-oriented) with Istanbul as a topographical detail, Kitāb-1 Bahriye (short version, copied 996/1587), BLO, MS, d'Orville 543, fol. 142v.

Fig. 92f: Map of the Marmara Sea (west-oriented) with Istanbul as a topographical detail (entitled "Eşgāl-i İstanbul"), Kitāb-1 Bahriye (short version, copied [10]17/1608-9 by Hacı Mehmed Reis), SK, MS, Ayasofya 3161 , fol. 201r.

Fig. 93: Map of the Istanbul area (author's drawing).

Fig. 94: Anonymous nautical chart of the Mediterranean, (end of 16th century), MC, MS, port. 34. From Portolani e Carte Nautiche, no.35 (original size: 515 x 990 mm).

Fig. 94a: Vignette of Istanbul in the anon. chart, MC, MS, port. 34.

Fig. 95: Diagram explaining the cartographic distortions underlying the design of the Istanbul map in Kitāb-1 Bahriye (author's drawing).

Fig. 96: Possible stemma for the Istanbul maps in manuscript copies of the Kitāb-1 Bahriye (* dates correspond to the completion dates of copying given in the colophons of the respective manuscripts; drawing by Marc Grignon).
Fig. 97: Panoramic view of the Asian coast (ca. 1590), attributed to H. Hendrofski, ÖNB, MS, Cod. 8626. From F. Babinger, "Drei Stadtansichten...", unnumbered pl. (size of the original: 12 x 51.5 cm).

Fig. 97a: Üsküdar Garden at Point Kavak, with Kadıköy in the background, detail from ÖNB, MS, Cod. 8626. From And, 16.Yüzyılda İstanbul, 81.

Fig. 98: Map of the Bosphorus in an anonymous costume book (1588 [Istanbul?]), BLO, MS, Or. 430, fol. 2r. From Necipoğlu, Topkapı Palace, 29.

Fig. 98a: Üsküdar Garden, detail from, MS, Or. 430, fol. 2r.

Fig. 99: Shore Kiosk, reconstructed elevation, section and plan (1592). From Eldem and Akozan, Topkapı Sarayı, pl.10.

Fig. 100: Basketmakers' Kiosk, reconstructed elevation and floor plan (1645), and plan of the supporting pillars built on two sides of the fortification wall. From Eldem and Akozan, Topkapı Sarayı, pl.11.

Fig. 101: Şemsi Ahmed Paşa Complex (1580-1), (top) view from the south-east, (middle) site plan. From Bildlexikon, 484. (Bottom) view from the sea. From Kuran, Sinan, 199.

Fig. 102a (left): Miniature composition with cypress trees alternating with chimneys and with cupolas in Süleymannname by Arifi, 1558, TSMK, MS, H. 1517, fol. 412r. From Atıl, Turkish Art, 147.

Fig. 102b (right): Miniature composition with cypress trees alternating with cupolas, ibid, fol. 17v. From Atıl, Süleymannname, 93.

Fig. 103: Map of the Kâğıthane River and meadows with a reconstructed site plan of the Saadabad complex as in the 19th century (the Golden Horn is at the left edge, the straightened river bed is to the right of the royal residence marked "A"). From Eldem, Sa'dabad, 8-9.

Fig. 104: Coastline between Üsküdar and Kadıköy, detail from the map of Istanbul, "Plan de Constantinople..." (ca. 1860s) by C. Stolpe [the site of the Üsküdar Garden is occupied by the Selimiye Barracks built in 1795]. From Kayra, İstanbul: Zamanlar ve Mekânlar, insert map no.7.

Fig. 105: View of Point Kavak with the Selimiye Barracks from the west in an illustration of The Illustrated London News (January 6, 1855). From İstA, 1:346.

Fig. 106: View of Point Kavak from the north-west looking toward Kadıköy and the Marmara sea in the 1850s, in Scutari, the Bosphorus and the Crimea (1857) by Lady Blackwood. From İstA, 4:566.
Fig. 107: View of the waterfront pavilions of the Üsküdar Garden at Point Kavak (1797-8), pencil drawing by J.-B. Lepère. From Müller-Wiener, "Das Kavak Sarayi", pl. 52.

Fig. 108: View of the waterfront pavilions in the Üsküdar Garden at Point Kavak (ca. 1790), attributed to J.B. Hilair. From Kayra and Üyepazarcı, İkinci Mahmut’un İstanbul'u, 84.

Fig. 109: Panoramic view of the Asian coast and the Seraglio Point from Galata (ca. 1670) by J. Grelot. From idem, Relation nouvelle d’un voyage à Constantinople (Paris, 1681), insert.

Fig. 109a: View of the Üsküdar Garden ("Serrail de Scutari") from the sea, detail from Grelot's panorama.

Fig. 109b: Basketmakers' Kiosk and Shore Kiosk, detail from Grelot's panoramic view.

Fig. 109c: Human figure looking toward Üsküdar from the heights above Galata and holding an open book, detail from Grelot's panoramic view.

Fig. 110: Perspective plan of Istanbul looking west, with the Üsküdar Garden (right) and Fener Garden (left) in the foreground (ca. 1670) by J. Grelot. From idem, Relation nouvelle d’un voyage à Constantinople (Paris, 1681), insert.

Fig. 110a: Royal residence in the Üsküdar Garden seen from the back, detail from Grelot's perspective plan.

Fig. 111: Royal residence ("Kâvak Sarayi") in the Üsküdar Garden seen from the sea, detail from a map of the Üsküdar water supply system [first half of the 18th century?], TİEM, MS, 3336. From Konyalı, Üsküdar Tarihi, 2:217.

Fig. 112: Üsküdar Garden (marked with "M"), detail from a panoramic view of Istanbul looking from Galata by C. de Bruyn, ca. 1680. From idem, Voyage au Levant (1714).

Fig. 113: Asian coast from Kızkulesi (left) to Fener Garden (right), detail from a panoramic view of the Asian coast and the Seraglio Point "taken from Mr. Lisle’s House above Galata" by R. Dalton, ca. 1750. From idem, Antiquities and Views in Greece and Egypt (1791).

Fig. 114: View of Salacak from the south looking toward the Bosphorus, with the Ayazma Mosque on top of the slope (ca. 1835) by W.H. Bartlett, in The Beauties of the Bosphorus by J. Pardoe (1838). From postcard (Keskin Color AŞ).
NOTE ON TRANSLITERATION

Modern Turkish orthography has been used for all Turkish terms, personal names and the current place-names, except for direct citations from the principal sources of study.

For words that entered English dictionaries (such as pasha, madrasa, waqf), the English ortography has been followed.

Throughout the main text and in the footnotes, in direct quotations from the Ottoman texts rendered in the Arabic script, only the long vowels "a", "u" and "i" of Arabic and Persian words and endings, as in silâhî and Nasûh, and the character ('ayn), as in mecmû', have been distinguished. The same simplified transcription has also been followed in Appendices 1 and 2. However vowel harmony has not been applied and soft consonants have been respected.

In Appendices 3-22, dealing with the Istanbul maps in Kitâb-ı Bahriye manuscripts, the transliteration system adopted by the İslam Ansiklopedisi has been used to render the text and inscriptions found on the respective map pages.
INTRODUCTION

(... Nous promenâmes dans le jardins, et nous regardions avec une grande admiration et un grand plaisir tantôt le sérial du Grand Seigneur placé en face de notre maison [i.e. Embassy of France in Pera], tantôt le Bosphore, Scutari, Chalcédoine et le golfe de Nicomédie, et tantôt l'île des Princes et plus loin le mont Olympe. (...) à la vue de toutes ces choses, à la fois si émerveillés et si étonnés, qu'il nous semblait être arrivés en quelque nouveau paradis, tant nous plaisait la beauté des vertes et fécondes collines sur les flancs desquelles Constantinople doucement s'étend.[February, 1573]¹

Than this there is hardly in nature a more delicate Object, if beheld from the Sea or adjoyning Mountaines; the loftie and beautifull Cypresse Trees so intermixed with the buildings, that it seemeth to present a Citie in a Wood to the pleased beholders. Whose seven aspiring heads (for on so many hils and no more, they say it is seated) are most of them crowned with magnificent Mosques, all of white Marble, round in forme, and coupled above; being finished on the top with gilded Spires, that reflect the beames they receive with a marvellous splendor; some having two, some foure, some sixe adjoyning Turrets, exceeding high, and exceeding slender... [September 1610]²

Tout ceux qui ont vu Constantinople sont d'accord que cette ville est dans la plus belle situation qui soit au monde, en sorte qu'il semble que la nature l'ait faite pour dominer et commander à toute la terre. [December 1655]³

² George Sandys, "A Relation of a Journey begun, Anno Dom. 1610. Written by Master George Sandys, and here contracted," chap. 8 in Purchas His Pilgrimes, vol. 8 (Glasgow, 1905), 111.
These remarks, made by Europeans who visited the ancient city when it enjoyed another era of splendor as the Ottoman imperial capital, reveal how it was perceived as strikingly beautiful by its visitors. They account for the components that made the city so impressive. Its charming landscape consisted of an extraordinary geographical setting and an urban environment that blended buildings and trees in a particularly harmonious fashion.

The various Ottoman accounts from around the same time suggest that the city's inhabitants were also enchanted with its landscape. The first instances of the Ottoman appreciation, however, must date back from the time prior to the conquest, when, like any other foreigner, they viewed the city from afar.

The motive of this study is to understand how the Ottomans perceived this new city as an urban environment and how they conceived their architectural contributions in relation to its landscape. The monumental buildings they erected, be they palaces or royal foundations destined for public use, are perfectly integrated into the natural topography of the city and embellish it, even in the eyes of foreigners from different urban cultures. While we lack texts, drawings or official documents that could explain the design precepts that guided their architectural endeavor, other sorts of documents provide an insight into how the new inhabitants perceived and conceived the city. Topographical maps, texts in the form of descriptions and panegyrics, and the buildings themselves suggest that viewing and visibility, and their reciprocity, profoundly structured the selection of sites and the spatial organizations in and around monumental buildings. Departing from the Byzantine city, the Ottomans moved from the existing urban form and structure - its symbolical sites, buildings and ceremonials - to a synthesis that reflected a different historical context involving the old and the new, local and foreign cultures, circumstances and meanings.
Istanbul's impressive cityscape that particularly commands the Golden Horn is both accidental and deliberately shaped: Its beginnings may not be linked to a clear desire of shaping a representational front on the Golden Horn. However, the potential of this cityscape seems to have been quickly recognized, and, I think, owed some of its development as much to the culture of viewing the landscape from different vantage points as to symbolical concerns. The crucial shift in the perception of the city is marked by the construction of the Süleymaniye Complex, which succeeded in blending symbolic themes into an architectural design. Its arrival essentially shaped one of the most visible parts of the city and transformed it into a monumental belvedere.

This study is based on the examination of maps, which constitute the most direct representations of Istanbul produced during the Ottoman period. These maps have been examined in their own right, that is, as much for their symbolic content as for the topographic information they contain. Yet my focus has also been on what the maps reveal about the ways of viewing the city. This study of the Ottoman maps of Istanbul, from the beginning stages of research onward, has been significantly encouraged and inspired by the new, critical current in the field of historical cartography. My interpretation of the Ottoman maps of Istanbul substantially benefited from an enlarged definition of what a map is, as proposed by the

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4 I refer to the interpretive approach that has developed in the last twenty years with the contributions of several scholars from within and without the discipline and which was most determinedly pioneered by the late J.B. Harley. Reacting to the "positivist" historiography of maps that earlier dominated the field and which gave "the pride of place to the history of mathematically constructed, 'scientific' maps", the new approach proposes to treat maps as "historical" documents, and not as "scientific, value-free" documents. It thus enlarges the field of study and transforms it into a humanistic discipline. The new approach is represented by a multi-volume, ongoing publication that aims at rewriting the history of cartography of all cultures with a critical agenda. See The History of Cartography, edited by J. B. Harley and David Woodward (Chicago and London: The University of Chicago Press, 1987-).
proponents of this new approach. It emphasizes the study of a map as any other kind of representation, that is as a structure with meaning of its own.

The maps that form the principal subject of this study are dealt with in three chapters. The first two chapters are devoted each to a single map: the Istanbul map contained in Mecmu‘-ı Menâzil, and the Istanbul map in Hünernâme. The third chapter, which is considerably longer than the first two, examines a series of Istanbul maps that were included in manuscript copies of Kitâb-ı Bahriye, produced over a period of nearly two centuries. However, these maps of Istanbul form a large family of variants and demand to be studied as a group. The length of that chapter is justified not only by the nature of the material discussed, but also by the absence of earlier research.

5 To reflect the enlarged cultural scope of the projected history of cartography and of its subject matter, the editors of The History of Cartography have proposed the following, new definition of map: "Maps are graphic representations that facilitate a spatial understanding of things, concepts, conditions, processes, or events in the human worlds." See J.B. Harley and David Woodward, preface to The History of Cartography, vol. 1, xvi. For an overview of the ideas that have shaped the theoretical postulates of the new approach, see J.B. Harley, "Deconstructing the Map," Cartographica 26, no. 2 (1989): 1-19.
CHAPTER 1:

THE ISTANBUL MAP IN MECMU'-I MENÂZIL BY NASÜH EL-MATRÄKİ

1. Introduction: The Book, Its Author and Its Illustrations

The earliest known Ottoman map of Istanbul is a miniature contained in a manuscript book entitled Mecmu'-i Menâzil (The Collection of Stations), which exists in a unique copy presumably prepared for the sultan and richly illustrated with topographical miniatures (fig. 8). The book relates Süleyman I's military campaign to Iraq and western Iran undertaken between AH 940-942/AD 1533-36. Mecmu'-i Menâzil was completed in AH 944/AD 1537-8, and is the work of Nasûh üs-Silâhî el-Matrâkî, today more commonly known as Matrâkî Nasûh. According to Nasûh's statements in the text, he is not only the author of the text but also of the illustrations. Nasûh had

1 İstanbul Üniversitesi Kütüphanesi (İÜK), MS, T. 5964. This title is mentioned by the author on fol. 12v. For its quotation, see below n. 5. The other commonly known title "Beyân-ı Menâzil-i Sefer-i 'Irakeyn" (Descriptions of the Stations of the Irakeyn Campaign) is written on fol. 1r and is a later addition according to Hüseyin G. Yurdaydın, see Beyân-ı Menâzil-i Sefer-i 'Irakeyn-i Sultan Süleyman Han, facsimile edition of İÜK, MS, T. 5964, with an introductory study and its English translation, and an annotated transcription of the manuscript text by Hüseyin G. Yurdaydın (Ankara: TTK, 1976), 151. Hereafter I shall refer to Nasûh's work shortly as Menâzil and to Yurdaydın's facsimile edition and introductory study as Beyân-ı Menâzil, and give page references to its English translation in brackets.

2 When the French art historian Albert Gabriel studied the manuscript in the 1920s, he noted its colophon on fol. 109r as: "Sultan Süleyman-ı Kânûnî bendegânindan Nasûh üs-Silâhî el-Matrâkî, 944." See Albert Gabriel, "Les étapes d'une campagne dans les deux 'Irak d'après un manuscrit turc du XVIe siècle," Syria 9 (1928): 329 (hereafter cited as "étapes"). The colophon is also given in Franz Taeschner, "The Itinerary of the First Persian Campaign of Sultan Süleyman, 1534-36, according to Nasûh al-Maträki," Imago Mundi 18 (1956): 53. At the present, the page bearing the colophon does not seem to exist anymore. In Yurdaydın's facsimile edition, the page numbered "109r" bears a miniature. Yurdaydın mentions the colophon in his study but without giving any page reference or making any comment, Beyân-ı Menâzil, 10 [128]. Elsewhere, however, he notes that some pages seem to have been lost since the book was studied by Taeschner, ibid., 36 [156].

3 It is most clearly stated in the passage where Nasûh explains why he entitled his book the "Collection of Stations," see below n. 5. This
been educated in the palace school and was a versatile person renowned for his swordsmanship and calligraphic skills. Before Menâzil, he had already written two books on mathematics, another on the techniques of warfare, and had also begun his Turkish translation of al-Tabari's famous history from its Arabic original.4

The extant miniatures in Menâzil number 128. These miniatures are all topographical representations without human figures and depict the cities, towns or the countryside where the sultan and his army camped during marches, and also a number of shrines which the sultan had visited. Although not systematically, the tents of the royal camp are also shown in a good number of them (figs. 9-13). The miniatures are conceived as maps in which the landscape is depicted from above while its three-dimensional features and buildings are shown in elevation and occasionally from an oblique angle.

The illustrations have an imposing presence in Menâzil and form a veritable compendium of city views and landscapes. Considering that the book chronicles a military campaign, it is very remarkable that no images showing battle scenes or sieges are included among its illustrations. Yet seemingly this was a deliberate choice as the book's title and Nasûh's explanation of it reveal. Priding himself on his work, Nasûh says that "the master (üstâd) who put together this picture (resm) station by station named it the 'Collection of Stations' (...) and since it is the master who constructed it (bûnyâd itdi), it is fit to

statement and others have been pointed out by Yurdaydın in his introductory study, see Beyân-ı Menâzil, 13 [131-2] and 31-2 [152, 223].

4 For a detailed biography of Nasûh and his works, see Yurdaydın, op. cit., 1ff. [119ff.]. Also idem, "Matrakçı", in E1 2, 6: 843f. A briefer overview of Nasûh's work is given in idem, "An Ottoman Historian of the XVIth Century: Nasûh al-Matrâkî and His Beyân-ı Menâzîl-ı Sefer-i Irakayn and Its Importance for Some Iraqi Cities," Turcica 7 (1975): 179-87.
recall this picture." 5 In fact, the text, too, describes more the spatial progress of the Süleyman's army rather than the battles or sieges themselves, and as a whole the Menâzil represents an itinerary and demarcates a geographical space which its miniatures make "visible". Although this geographical space is "constructed" of sequential views, as Nasûh underlined, what Menâzil brings before the eyes is a global picture of the lands traversed and to which the sultan's authority was extended as a result of the military campaign.

Nasûh's predilection for city views somewhat recalls that of Braun and Hogenberg in their famous publication Civitates Orbis Terrarum (Cologne, 1572), yet it had a different context. Menâzil is the illustrated version of a part of Nasûh's multi-volume Ottoman history conceived as a suit to al-Tabarî's universal history. 6 Also part of this voluminous work are two other campaign chronicles that are similarly illustrated, even though not as richly, with topographical maps and views (figs. 14, 15, 17 and 18). 7 One of them, Târîh-i Feth-i Siklos ve Esterggon ve Istunibelgrad (The History of the Conquest of Siklos, Esztergom and Szekesfehérvar) relates in a first part Süleyman's Hungarian campaign of 1542-3 and in a second part the Ottoman naval campaign in the Mediterranean led by Hayreddin Barbarossa in alliance with the navy of Francis I in 1543. The other chronicle entitled Târîh-i Sultân Bayezid (The History of Sultan Bayezid) is an account of the naval conquests along the western coast of Greece made during the reign of Bayezid II (1481-1512).

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5 The passage is written above the view of Gebze, a small town near which the army had made its first halt: "Bu resmi cem' iden menzil be-menzil/ Dedi adina Mecmu‘-i Menâzîl" (...) Bu resmi günkü bünaydın itdi üstâd/ Menâzîl ismi itmek gerek yâd," see Beyân-i Menâzîl, 223 and fol. 12v.
6 See Yurdaydın, Beyân-i Menâzîl, 3-6 [121-5] and 10-25 [128-43].
7 These manuscripts do not have colophons but Yurdaydın has convincingly demonstrated that they were composed and illustrated by Nasûh. See H. G. Yurdaydın, "Matrâkı Nasûh'un minyatürlû iki yeni eseri," Belleten 28 (1964): 229-33. Also see idem, Beyân-i Menâzîl, 12-16 [131-4] and 19 [137-8].
These three books composed by Nasûh are the earliest examples of the Ottoman illustrated chronicles to be produced during the sixteenth century. Yet in being illustrated with exclusively topographical miniatures they are both unprecedented and without followers. Nasûh's chronicles that record and celebrate individual sultans' achievements share the ideological scope of earlier Ottoman chronicles and of later ones commissioned to appointed court historiographers (shahnamedjis). But Nasûh's historical work just predates the official chronicles and seems, in its conception and production, to have been his private enterprise, something that may explain the addition of illustrations to some of its volumes, and particularly the use of topographical miniatures. While Nasûh's versatility may have allowed him to realize this novel type of illustration, topography as illustration betrays a "mapping impulse," a desire to make new territories "visible." In other words, topographical representation must have related to a consciousness of the Ottoman Empire's rapid territorial expansion, a consciousness shared by the sultan and the ruling elite in his service of which. His three illustrated chronicles indeed cover the territorial advance in three major areas, on land and at sea, and precisely at a moment when this expansion, ongoing since the mid-fifteenth century, attained its climax.


9 The post of shahnamedji was created by Süleyman I in the 1550s to establish an official court historiography, see Christine Woodhead, "Shahnamedji," in EI², 9:217, and idem, "An Experiment in Official Historiography: The Post of sehnâmeçi in the Ottoman Empire," Wiener Zeitschrift für die Kunde des Morgenlandes 75 (1983): 157-82.

10 After Süleyman I's death in 1566, the Ottoman expansion did not progress much further and eventually stopped in the late sixteenth century. That Nasûh's topographically illustrated chronicles were not only unprecedented but also remained unimitated is a further indication how much his "mapping impulse," reflected a consciousness of territorial
Yet Nasûh's interest of describing places with pictures may be also linked to a wider concern of image-making under Süleyman I. As Christine Woodhead has remarked, during Süleyman's reign (1521-1568), besides the widely appreciated historiography, a variety of visual representations of power, including both artefacts and acts, were utilized to convey the desired image. Woodhead notes in this context especially Süleyman's unusually long military campaigns that were transformed into "an extremely visible and impressive imperial progress" with regular halts in major towns and cities, visits to tombs and shrines, and the reception of gifts and petitions. 11 The Menâzil which was Nasûh’s first chronicle is both a record and a eulogy of Süleyman's first long military campaign, and it clearly fits in with the representational function of the event noted by Woodhead. Given the court's keen interest in visual representation, its extensive illustration almost appears natural. Nevertheless, Menâzil is a very striking book, not only novel in being the first illustrated Ottoman history, but also in the wider context of Islamic books, and painting in general, in having exclusively topographical miniatures. Unprecedented as it is in depicting landscapes and cities, it also displays a remarkable richness and efficiency in blending topographical information and symbolic meaning.

2. The Sources and the Meaning of Menâzil's Depictions of Cities and Landscapes

Nasûh is known to have participated as an officer in the military campaign to Iran and Iraq, and at different points in the text, as I have already noted, he states that the

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illustrations of Menâzil are his own work. Yet Menâzil's miniatures display some differences, mostly in the quality of drawing, detailedness, and color scheme and to a lesser extent in the painting style. If there is no consensus on his unique authorship for the entire of miniatures in Menâzil, it is generally accepted that the illustrations must have been based on the sketches he had made during the campaign.

That there are no earlier known representations of the cities and fortresses depicted in Menâzil, and Nasûh's versatile talents and interests offer ground to accept that he had himself sketched the plans of the cities where the army halted. His knowledge of mathematics and interest in the art of war are attested by his works on these subjects. Furthermore, the fortress models he had constructed in large scale to stage a mock attack during a festivity and which he later depicted in one of his books also suggest that he had some architectural and surveying skills (fig. 19). Besides, the surviving Ottoman siege plans reveal that topographic recording was practiced in the Ottoman army, and it is not unthinkable that Nasûh himself had previously prepared some plans during earlier

12 For statements of Nasûh in Menâzil, and in other illustrated histories, indicating that the illustrations were made by him, see Yurdaydın, Beyân-ı Menâzil, 10, 13-4 [128,131-3] and also n. 1 above.

13 These differences have led to different opinions about the authorship of the miniatures in the book. According to one opinion, the varying quality of production was probably a result of time constraints, either at the stage of in-situ sketching or the final painting, see Gabriel, "Etapes," 346-7, and Zeren Akalay (Tanında), "Tarihi konuda ilk Osmanlı minyatürleri," Sanat Tarihi Yâllâhı 2 (1966-8): 103. According to another opinion the differences are sufficiently indicative of different hands, possibly a group of artists that teamed with Nasûh, see J.M. Rogers, "Itineraries and Town Views in Ottoman Histories," in Cartography in the Traditional Islamic and South Asian Societies, vol. 2, bk. 1, The History of Cartography, ed. by J. B. Harley and D. Woodward (Chicago and London: The University of Chicago Press, 1992), 236 and passim.

14 For Nasûh's two books on mathematical problems and another on the art of using weapons, see Yurdaydın, Beyân-ı Menâzil, 2-9 [120-8]. His depiction of the fortress models is in the latter book entitled Tuhfet el-guzât. The fortresses drawn in elevation are decorated with geometric patterns that are remarkably similar to those occurring in the depictions of buildings in the Menâzil.
campaigns. Extant siege plans from the early sixteenth century are very similar in concept, composition, and depiction modes to the city and fortress plans in Menâzil (figs. 20 and 21). The topographic importance given to rivers, and the depiction of fortresses in relation to them in Menâzil's maps perhaps suggests another source of inspiration, a northern Italian territorial map which also emphasizes the same topographical elements in a somewhat ideogrammatic fashion but as part of a larger geographical context (fig. 22). Presumably of Venetian origin and prepared for military purposes, this map was kept in the Topkapı Palace. This one and perhaps other similar ones may well have been known to Nasuḥ.

On the other hand, despite their general rarity in the Islamic painting, topographical representations occurred in a particular medium, the so-called pilgrimage scrolls, and their influence on some of Menâzil's illustrations seems obvious.

15 On Ottoman siege plans and further references, see Ahmet T. Karamustafa, "Military, Administrative, and Scholarly Maps and Plans," in Cartography in the Traditional Islamic and South Asian Societies, 210-5. Particularly similar in its depiction to some of Nasuḥ's cities is a representation of Van preserved in the Topkapı Palace Archives (MS, E. 9487). Its captions suggest that it was drawn as a topographic record of the city's fortifications, presumably in the first decade of the seventeenth century. For its study, see Jean-Louis Bacqué-Grammont, "Un plan ottoman inédit de Van au XVIIe siècle," Osmanlı Araştırmaları 2 (1981): 97-122. Also reproduced in Karamustafa, op.cit., 214.

Depictions of the Kaba precinct in Mecca and other major sites of Islam, conceived as plans with their buildings drawn in elevation, occur on these scrolls and provide a sequential illustration of the hadj itinerary not unlike in some pre-modern European itineraries. There are few illustrated examples of them predating the sixteenth century but their tradition seems to be old, and around 1540 the same kind of illustration began to be used also in books explaining the rituals of the hadj. The resemblance between Nasûh's

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miniatures, especially those showing some holy sites in Iraq, and the illustrations of a pilgrimage scroll from 1544-5 and to those in two contemporary books is remarkable (figs. 3 and 224), besides the fact that Menâzil also shares the same concept of illustrating places connected by an itinerary in a sequential fashion.

The Ottoman siege plans and the representations of Muslim holy sites that appear as the most likely sources or models of Menâzil's illustrations all share the characteristics of pre-modern topographical maps, often also described as picture-maps. They are topographic representations that typically combine the concept of map and topographical details drawn in elevation and thus preserve a link to the direct experience of the depicted subject. They do not use a uniform scale but nevertheless reflect some spatial relations correctly and as derived from actual observation, in order to characterize the topography. Menâzil's illustrations are conceived in the same way: they record observed features of cities or landscapes to a certain extent so that they appear as sufficiently distinct places. Walter Denny's observation, that the depictions of buildings in the Istanbul map in Menâzil are "both symbolic and to some extent recorded observations as well"20 also applies, even though in varying proportions, to the depictions of other places and buildings in this book. It is important to acknowledge both characteristics because, besides their novel, topographic focus, these illustrations also fulfill a symbolic function in keeping with the "eulogistic" purpose of Menâzil, and they accomplish this through a particular treatment of

19 These similarities have been noted by Tanindî, op. cit. She did not suggest, however, any direct link to Nasûh. The depictions of Menâzil showing shrines in Iraq, especially venerated by the Shiites, cannot have originated in such pilgrimage scrolls. Yet a similar tradition of scrolls may have also existed for the Shiite shrines, as has been suggested by J. M. Rogers, and hence provided models for Nasûh, see Rogers and Ward, Süleyman the Magnificent, 91.

landscape and architecture largely derived from the pictorial tradition of Persian miniatures.\textsuperscript{21}

In giving a place of importance to natural landscape scenes, \textit{Menâzil} may perhaps be compared to an anthology of Persian poems from 1398 (fig. 25).\textsuperscript{22} If known to Nasûh, the pure landscape images of this exceptional book may have been inspiring for its illustrations. But more than stemming from any precise model or reflecting the influence of a particular painting school, \textit{Menâzil}'s illustrations follow the prevalent approach in Persian miniature painting of transforming natural and architectural settings into enchantingly beautiful and compelling backgrounds through meticulous detailing and rich coloring.\textsuperscript{23} Treated in this way, architecture and landscape are not reduced to a decor but become idealized, "eulogistic" settings for a figural composition, most often relating an epic or romantic event. Yet such a treatment also reveals an

\textsuperscript{21} Artists representing the various schools of Persian miniature painting contributed in important ways to the formation of Ottoman miniature painting and to the training of its practitioners in the court workshops in Istanbul from the fifteenth century onward. Especially in the early sixteenth century, several artist were brought by Selim I from Tabriz, after he defeated the Safavid ruler Shah Tahmasp in 1514. On the Persian influence on Ottoman miniature painting, see Esin Atil, "The Art of the Book," in \textit{Turkish Art}, ed. by E. Atıl (Washington D.C.: Smithsonian Institution Press and New York: H. N. Abrams, 1980), 154-95; also Norah M. Titley, \textit{Persian Miniature Painting and Its Influence on the Art of Turkey and India} (Austin: University of Texas Press, 1983), 133-60.

\textsuperscript{22} This anthology is preserved in Türk ve İslam Eserleri Müzesi (TİEM), Istanbul. It contains 642 folios of which only twelve bear illustrations. They are all highly abstract landscapes and are stylistically somewhat isolated in Persian painting. The anthology was prepared in Iran, presumably near Shiraz. Whether it was in Istanbul in the early sixteenth century and known to Nasûh remains to be tackled. For a study on this book, see Mehmed Aga-oglu, "The Landscape Miniatures of and Anthology Manuscript of the Year 1398 A.D.," \textit{Ars Orientalis} 3 (1936): 76-98, for a color reproduction of one of its illustrations and brief comments on the book itself, see Thomas W. Lentz and Glenn D. Lowry, \textit{Timur and the Princely Vision: Persian Art and Culture in the Fifteenth Century} (Los Angeles and Washington, D.C., 1989), 57, 56 and 331.

\textsuperscript{23} The treatment of natural and architectural settings somewhat varies from one painting school to another. A concise overview is given in Aga-oglu, op. cit., 85-7; for more specific remarks, see Titley, \textit{Persian Miniature Painting and Its Influence on the Art of Turkey and India}, passim.
aesthetic approach that goes beyond painting and reflects a fascination with beautiful landscape, itself idealized in Persian gardens and integrated to the built environment, but also represented in architectural decoration in tile revetments.

Even though Nasûh's landscapes and cities are rendered in a bolder and less refined manner and relate to real places, they are idealized in the same way as in Persian miniatures. They fashion settings by largely making use of pictorial elements commonplace in miniatures such as the colorful tufts of flowers and herbs, blossoming spring trees, and the elaborate and sometimes fanciful rock shapes. The very colorful depiction of cities in them, especially with buildings the various surfaces of which are richly ornamented, also comes from Persian miniatures even though among its examples depictions of cities such as the partial view of Baghdad are very rare (fig. 26).

In making the landscape and architecture (in the form of cities) the principal subject matter of Menâzil's illustrations, Nasûhin a certain sense takes a step further the legacy of the Persian miniature painting, for in his topographical compositions devoid of figures the setting fully assumes the eulogistic purpose of illustration. Menâzil's illustrations are also notable in presenting both cities and countryside as part of a continuous landscape and it is within

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24 On rocks incorporating fantastic faces and figures in Persian miniature and the stylistic differences in their depictions with regard to various painting schools, see Bernard O'Kane, "Rock Faces and Rock Figures in Persian Painting," *Islamic Art* 4 (1991): 219-46. Menâzil's illustrations notably display a variety of these styles.

25 This miniature, representing a past inundation of Baghdad during the reign of Shakh Uvays (1356-74), is contained in an anthology of Persian poems dated 1468 and prepared in Shirwan. The manuscript is preserved in the British Library (BL), London, as Add. MS. 16561. It is signed by Dervish Nâsir Bukharai. Few extant miniatures depicting Baghdad, also including this one, are mentioned in J.M. Rogers, "Itineraries and Town Views in Ottoman Histories," 230-1. Rogers, however, does not comment on the similarities between this miniature made in Shirwan and Menâzil's cities and buildings, especially those in Iraq.
that scope both subjects gain a symbolic meaning. The cities' overall colorful and ornate rendering is a generalization of urban and architectural beauty which Nasûh describes in the text only in relation to the most important ones such as Tabriz, Baghdad, and Aleppo but in a style that is strikingly similar in its ornateness to that of his illustrations. It becomes clear that cities are not only depicted as topographic records of Süleyman's campaign itinerary but also as its embellishments.

That the "ornamental" treatment of cities and countryside is unseparable from the eulogistic purpose of Menâzil is also evidenced by frequent passages in the text where Nasûh describes the landscape beauty of a camp site. His writing style is unmistakably ornate yet his emphasis on the colors of landscape elements and of royal tents is literal. These passages have an overt "eulogistic" purpose, for Nasûh claims that the sultan's arrival "restored" or "enhanced" the beauty of these places, and the incorporation of the royal tents into such descriptions of landscape makes his intentions even clearer. Yet, the same passages also convey an aesthetic feeling, a way of viewing the landscape and conceiving man-made structures, here the tents, in continuity with it. Thus, in a sense, these descriptions also qualify the depiction of cities.

26 For descriptions of the "ornate" architecture of Tabriz, Baghdad and Aleppo respectively, see Beyân-ı Menâzil, 216, 241-2, 283.
27 Especially notable, e.g., is the personification of Baghdad, or rather of its buildings. See the four couplets relating how the city wellcomed and eulogized the sultan, ibid., 241.
28 See, e.g., the description of the halting place outside Kal‘a-i Gulgûn, a fortress in Western Iran, where Nasûh suggests that the site "florished" (sersebz olub) and "billowed" (mevc vurub) with the multi-colored royal tents, pavilions, and parasols, Beyân-ı Menâzil, 258-9 (fols. 249v-250r); or the description of another site near Kal‘a-i Sarîm, which Nasûh introduces as "an exhilarating plain with pleasant air" (havasî hoş-dem sahrây-i dil-gûşâ) and then praises the beauty of the royal camp to suggest that the landscape "became honored" (geref bulub) and its beauty enhanced by the sultan's troops and tents resembling waves (emvâc) and water bubbles (habâb), ibid., 263.
and fortresses in equal terms with their surrounding landscapes and in the same ornate style. 29

Menâzil's illustrations present a series of views that fuse record and ornament, or expressed somewhat differently, topography and eulogy. In that, they perfectly accompany Nasûh's chronicle text which itself combines facts (distances between stations, arrival and departure dates) with panegyric descriptions (the sultan, the army camps, and the cities and the countryside in between). Yet these illustrations also represent urban and natural settings in a continuum, not only in a geographical sense, because they alternate in a sequence of views, but also in an aesthetical sense because the same ornateness characterizes them and brings buildings and elements of landscape in a certain equation in creating beautiful settings.

The map of Istanbul placed at the beginning of this series of views appears to simply represent the Ottoman capital, the seat of Ottoman power and the starting point of the campaign. Nasûh refers to Istanbul only in a concise praise that combines its significance for Islam, its ancient foundation and fame and its embellishment by lofty architecture and surrounding bodies of water. 30 It is, however, in relation to the subsequent views of landscapes and cities, Istanbul gains its meaning in the book. The lands covered in Menâzil's illustrations constitute the extended landscape, the beautiful prospect of the Ottoman capital, and hence define it as the "imperial look-out". Much more worked and topographically precise than the depictions of other cities in the book, the map of Istanbul somewhat condenses their urban beauty, but also that of natural

29 Nasûh's praise of Baghdad's natural setting, e.g., is very meaningful in this regard. He presents the city as: "defined by the River of Tigris, embellished by the date palms, endowed with a charming space, and renowned for its pleasant air" (nehr-i Dicle ile mubeyyen ve nahl-i hurma ile müzeyyen, letâfet-i fezâyile mevsûf ve letâfet-i hevâyile ma'ruf), see Beyân-ı Menâzil, 235.
30 See ibid., 214.
settings, for it incorporates blossoming fruit trees like no other city in the book. As we shall see, this garden-like representation of the Ottoman capital was not simple rhetoric but reflected an urban aesthetics the importance of which is evidenced by historical accounts emphasizing the gardens built as part of the city's restoration after the conquest.

3. The Istanbul Map

The Istanbul map (fig. 8) which fully occupies two pages is a very detailed and colorful composition, and stands out as the most impressive topographic representation in the book. It has been particularly appreciated for its realism, conveyed by the meticulously drawn representations of buildings. For that reason, Nasuğ's map is generally considered to be a document that provides accurate topographic information on the buildings of early-sixteenth century Istanbul. Like any other map, however, it is intended to convey a certain level of accuracy. Although all buildings are drawn with equal care, the accuracy of their architectural configurations and of their locations varies. For example, not all the buildings can be recognized as easily as the royal monuments and the identity of a good number of buildings remains obscure or at best hypothetical.

31 The only other city where buildings and nature intermingle more conspicuously is Sultaniye, yet this is a very particular depiction: the city's fortifications are shown in ruins and it looks as if the lush vegetation of its surroundings had invaded what was once a walled, urban area. See Beyân-i Menâzîl, fol. 31v-32r; reproduced in color also in Atıl, Süleyman the Magnificent, 86; Rogers and Ward, Süleyman the Magnificent, 106; and in J.B. Harley and David Woodward, eds., Cartography in the Traditional Islamic and South Asian Societies (Chicago: University of Chicago Press, 1992), pl. 18.

Walter Denny observed that Nasûh used "certain conventional forms and stylizations to denote specific types of buildings"\(^{33}\) such as madrasas, baths, soup kitchens and commercial structures. Yet this observation about the use of conventional forms needs to be qualified. As Denny observed further in his article, Nasûh represented select buildings.\(^{34}\) It is, therefore, more likely that he used typified signs for specific buildings and not just specific types of buildings that existed in the city.

Denny also rightly noted that Nasûh's map reflects "a greater regard for accuracy in an enumerative sense than in an architectural sense."\(^{35}\) Indeed, Istanbul appears on this map as the sum of its carefully drawn buildings, most of which correspond to buildings erected after the Ottoman conquest of the city under royal or vizierial patronage. Hence, Nasûh's Istanbul map presents an image of the Ottoman capital that is beautified by numerous monumental public buildings. This image conveyed through Nasûh's map obviously reflected the ideals and the perception of the Ottoman sultan and the ruling elite, i.e. the askeri (military administrative) class in his service.\(^{36}\) It is only natural that Nasûh, himself an "askeri" moreover


\(^{34}\) Ibid., 54: "virtually every building of any size shown on the map might have had a particular and definite identification at the time of painting because the artist wished to please the powerful officials and their families, whose prestige was encouraged by their architectural patronage."

\(^{35}\) "Architectural Plan," 51. Denny also noted the interesting parallel between this enumerative aspect of Nasûh's map and some Ottoman literary compilations of architecture, such as Tezkire't-ül Bünvân (ca. 1580's) which lists all the works of Architect Sinan, or Hadîkat'ül-Cevâmi' (1779) which lists all the mosques of Istanbul, or the building lists in Evliya Çelebi's description of Istanbul (ca.1670), see Evliya Çelebi Seyahatnamesi, 1. Kitap: Istanbul [Transcription of Topkapı Sarayi Küütûphanesi, MS, Bağdat 304 by Orhan Şâik Gökşay] (Istanbul: YKY, 1995); (hereafter cited as Seyâhatnâme).

\(^{36}\) About Nasûh's distinguished career as an officer, see Yurdaydın, Beyân-ı Menâzil, 120 [147-9]. For the designations of the term 'askeri, see Bernard Lewis, "'askari', in EI², 1:712; also idem, Istanbul and the Civilization of the Ottoman Empire (Norman: Oklahoma University Press, 1982), 51-64.
educated at the palace school, embraced this particular perception of Istanbul. But his representation of Istanbul is without any Ottoman precedent and also differs in many ways from the two earlier European representations of Istanbul, the so-called Buondelmonti map (ca. 1420s) and the Vavassore map (ca. 1540) (figs. 5 and 7).

Nasûh was in all likelihood aware of the earlier of the two maps contained in Christoforo Buondelmonti's Liber Insularum Archipelagi, a book that was circulating rather widely in manuscript copies since the 1430s. The other map's

37 The original map drawn by the Florentine humanist and traveler Cristoforo Buondelmonti is believed not to have survived. It was contained in Buondelmonti's Liber Insularum Archipelagi, composed in 1420's following his voyage in the Aegean and sent to his patron Cardinal Orsini. This original presumably disappeared when Orsini's library was dispersed during the sack of Rome in 1527. Hilary L. Turner located a manuscript in a private collection in Baden, Switzerland, that she considers the earliest known copy of Buondelmonti's Liber Insularum. See H.L. Turner, "Christopher Buondelmonti and the Isolario," Terrae Incognitae 19 (1987): 11-28.

38 The map is a single-sheet, woodcut print, of which only two copies are known. See "Vavassore and Pagano", Imago Mundi 5 (1948): 73. One of the two cartouches appearing on the map identify it as the "Opera di (work of) Giovanni Andrea Vavassore detto Vadagnino". Vavassore was a woodcutter and bookprinter active in Venice from ca. 1510 onward, and in printing business after 1530 until his death in 1572. See Leo Bagrow, Giovanni Andreas di Vavassore (Jenkintown: Tall Tree Library, 1939), and Franz Babinger, "Drei Stadtansichten von Konstantinopel," Österreichische Akademie der Wissenschaften. phil.-hist. Klasse. Denkschriften 77, 3.Abteilung (1959): 5.

39 Buondelmonti's map of Constantinople survives in numerous variants that are contained in manuscript copies of the Liber, mainly prepared in the second half of the fifteenth century. The copyists who prepared them seem to have considerably modified and elaborated the topographic content of Buondelmonti's original. Eight variants are reproduced and discussed in Giuseppe Gerola, "Le vedute di Constantinopoli di Cristoforo Buondelmonti," Studi Bizantini e Neoellenici 3 (1931): 249-79. For more recent opinions see Turner, "Christopher Buondelmonti and the Isolario," 22f and idem, "Christoforo Buondelmonti: Adventurer, Explorer and Cartogapher" in Géographie du Monde au Moyen Âge et à la Renaissance, ed. M. Pelletier (Paris: Editions du C.T.H.S., 1989), 207-216, esp. 210f.; and especially Ian Manners, "Constructing the Image of a City: The Representation of Constantinople in Christopher Buondelmonti's Liber Insularum Archipelagi," Annals of the Association of American Geographers 87 (1997): 72-102 (hereafter cited as "Image of a City"). Manners, op. cit., 81, rightly argues that Buondelmonti's original design must have been simpler than most of its extant variants and closer to the two from
exact publication date by Vavassore is not certain but the estimated period is quite close to the completion date of Menâzîl.\textsuperscript{40} The illustrations of Nasûh's two other chronicles, Târîh-i Feth-i Siklos... and Târîh-i Sultan Bâyezîd, suggest that he was indeed aware of European topographic views (figs. 15, 17 and 18).\textsuperscript{41} The Mediterranean port cities in these two books are all depicted as bird's-eye views seen from the sea and are clearly inspired by and possibly based on European models even around 1430, i.e. the Baden and Venice (Marciana) manuscripts (figs. 5a and 5b).

\textsuperscript{40} The publishing date of Vavassore's print was first estimated to be ca. 1520, see Eugen Oberhummer, Konstantinopel unter Sultan Suleiman dem Grossen (Munich, 1902), 21. But a later date around 1540 has been considered more likely, see Babinger, op. cit., and Manners, "Image of a City," 91. Vavassore's printed map records the post-conquest changes in the city and its topographic content suggests a terminus ante quem not later than 1506 or 1517, see below chap. 3, n. 160. The general opinion is that Vavassore's map was not his original design but largely based on an earlier drawing possibly dating from the late fifteenth century. A map drawn by Gentile Bellini, who was at the Ottoman court in 1479, was considered the be the source of Vavassore's print, first by A. D. Mordtmann, quoted in Oberhummer, op. cit., 22 and more recently by Manners, op. cit., 93-4. An earlier printed view of the city was realized by Francesco Rosselli, although only known from the inventory of his stock made after the death of his son in 1525. Also Rosselli's view has been considered as a possible model for Vavassore's map, see Cecil Striker, "The 'Coliseo de Spiriti' in Constantinople" in Studien zur spätantiken und byzantinischen Kunst, ed. by O. Feld and U. Peschlow (Mainz: Römisch-Germanisches Zentralmuseum, 1986), 9.

\textsuperscript{41} In Târîh-i Feth-i Siklos..., the topographic miniatures form two groups according to their depiction modes: the illustrations of the Hungarian campaign showing inland fortresses conform in depiction style and mode with Menâzîl's illustrations while the views of Genoa, Antibes, Nice, Toulon, which illustrate Barbarossa's naval campaign form another group. The depictions of ports in Târîh-i Sultan Bâyezîd are also bird's eye views. Zerrin Akalay [Tanîndî] suggested that the author of Târîh-i Feth-i Siklos... may have illustrated the two campaigns differently because he could have participate in only one of them for they took place around the same time. See Akalay,"Tarihi konuda ilk Osmanlı minyatürleri," 106. Akalay thus seems to imply that only one set was based on in-situ sketches of the author. She also drew attention to the stylistic similarities between the views of ports in these two campaign chronicles and the topographic details in maps of Piri Reis's Kitâb-i Bahriye as well as in an early-sixteenth-century Portuguese atlas, ibid., 111-4.
though these models cannot be identified, except perhaps for the view of Genoa for which the view in Hartman Schedel's Liber Chronicarum appears to have served as the model (fig. 16). As for the Istanbul map, in spite of the resemblance of its layout to the Buondelmonti map, it is a substantially new image of the city as well as a beautiful example of miniature painting.

The particularity of Nasuš's Istanbul map does not only lie in the meticulous depiction of a large number of buildings but also in the organization of the map as a whole. This pictorial organization comprises the use of cartographic distortions and symmetries as well as of various viewpoints. Nasuš seems to have employed these distortions and symmetries to create pictorial emphases. These emphases also support and qualify the different viewpoints that are suggested through the unified orientation of building facades on different parts of the map. The unity or contrast of the different viewpoints thus expressed appears to be a significant aspect of this map's visual language. So far, only the cartographic distortions of the map have been mentioned but neither these nor other pictorial peculiarities have been discussed as components of the map's meaning. My particular interest in discussing Nasuš's map of Istanbul is to draw attention to the viewpoints in and around Istanbul that it implies. Since these viewpoints are tightly linked to the pictorial composition of the map, I shall start by discussing its general layout, i.e., the graphic

42 J.M. Rogers presumes that Nasuš's sources must have been either Venetian topographic prints, portolans (not clear if he means charts or navigation manuals) or some isolario, see Rogers and Ward, Süleyman the Magnificent, 105 and 107. The most substantial discussion of the miniatures of the two chronicles remains Hedda Reindl, "Zu einigen Miniaturen und Karten aus Handschriften Matraḳçu Nasuh's," Islammundliche Abhandlungen 17 (1974): 146-71.

43 Yet in that view there are also additional topographic details and differences suggesting that its maker may have incorporated other information originating either in direct observation or in other pictorial source(s) For this observation in a brief comment on this miniature, see Ennio Poleggi, Paesaggio e immagine di Genova (Genoa: Sagep Editrice, 1982), 53-54. On Schedel's Liber Chronicarum, see below chap. 3, n. 159.
arrangement of the different parts of the city and the symmetrical order underlying this layout.

3.1 The Map Layout

The map of Istanbul in Menâzil measures 31.6 x 46.6 cm but its original format was probably somewhat larger. As it is today, the map covers the entire surface of two book pages and presents a very compact composition. The peninsula with the walled city of Istanbul almost fully occupies the right half of the picture surface while the three townships (Bilâd-i Selâse), i.e. Galata, Eyüp and Üsküdar, are all shown on the remaining half to the left. The left-hand folio also accommodates the other important element of the mapped area, namely the body of water consisting of the Golden Horn, which separates Istanbul from Galata, and the Bosphorus, which separates Galata and Istanbul from Üsküdar. On the right-hand folio the Marmara Sea, which is reduced to a narrow strip in the present state of the map, surrounds the Istanbul peninsula on the south and southeast.

3.1.1. The Depiction of Istanbul

The walled city of Istanbul is shown as a uniformly built urban entity, with almost a rectangular shape, despite the curved line of the Marmara shore (fig. 8a). The form of the Istanbul Peninsula considerably deviates from its actual form (fig. 1), and also disregards the commonplace reference in

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44 The Menâzil has been rebound at least twice. See Gabriel, "Étapes," 328 and 344; also Atıl, Age of Süleyman, 309; Rogers and Ward, Süleyman the Magnificent, 90 and 106. During rebinding processes, the pages must have undergone considerable trimming. The order of pages got also confused. Yurdaydin's facsimile edition Bevân-i Menâzil, proposes a sequence for the extant folios on the basis of the campaign itinerary and chronology, also known from another contemporary source.

45 The illustrated pages of Menâzil are now being preserved as separate sheets. The Istanbul map is painted on a single sheet of paper that was folded in the center to be bound. It is not certain if this sheet had originally a frame and margin. But among other topographical miniatures of Menâzil there are some of which the framing line has partly survived, as, e.g., in the case of the map of Sultaniye.
historical texts to Istanbul's triangular shape. It also contrasts with the European maps of the city by Buondelmonti and by Vavassore, which showed the city with a triangular shape (figs. 5 and 7).

Albert Gabriel explained the shape of the Istanbul Peninsula as a result of Nasūh's shortening of the land walls for the purpose of the page layout. Gabriel considered this distortion a serious error because it rendered the reading of the map and the identification of buildings difficult. Walter Denny shares Gabriel's opinion in principle yet suggests a further explanation. According to Denny, the distortion stems not only from compacting the west part of the city (on the map's lower right-hand corner) but also from exaggerating the tip of the Istanbul peninsula because it was the site of the most important monuments then existing in the city (fig. 1). Denny's remark is important because it points to the conceptual

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46 Although closer to the actual shape of the peninsula, the comparison of Istanbul's site to a triangle also involves a simplification. This triangular shape was often mentioned as the characteristic of the Byzantine capital by Arab geographers, such as al-Idrisi (1100-1166): "Cette capitale est bâtie sur une langue de terre de forme triangulaire. Deux de ses côtés baignés par la mer; le troisième comprend le terrain...," Géographie d'Edrisi, trans. by A. Jaubert (Paris, 1836-40), 293 (?), quoted in Mehmed Izeddin, "Quelques voyageurs musulmans à Constantinople au Moyen Age," Orient 34 (1965): 84; Ibn al-Wardi (died 1457), Haridat al-'Adjaib, quoted in F. Taeschner, "Der Bericht des arabischen Geographen Ibn al-Wardi über Konstantinopel," in Beiträge zur historischen Geographie, Kulturgeographie, Ethnographie und Kartographie, vornehmlich des Orients (Festschrift für Eugen Oberhummer), ed. H. Mzik (Leipzig and Vienna, 1929), 88. Also referred to as "Üç bucaklu" (three-cornered) in a 1465-translation of al-Wardi's Haridat into Turkish by Ali bin Abdurrahman, see F. Taeschner, "Ein altosmanischer Bericht über das vorosmanische Konstantinopel," Atti dell'Istituto Universitario Orientale di Napoli, N.S., 1(1940): 184-5. During the Ottoman period, European travelers such as Pierre Gilles, The Antiquities of Constantinople (1560), trans. J. Ball (1729, reprint, New York: Italica Press, 1988), 14, as well as Ottoman writers emphasized this characteristic. Cf. Latifi, Evsâf-ı İstanbul (ca. 1522-3), ed. by Nermin Suner (İstanbul: İstanbul Fetih Cemiyeti, 1977), 12; Evliya Çelebi, Seyahatnâme, 67. 47 "Etapes," 333. Gabriel's opinion clearly reflects the approach of the older historiography which typically evaluated maps in terms of geographic accuracy. 48 "Architectural Plan," 50.
aspect of Nasûh's map, which I shall try to explain next, discussing the map's layout.

The conspicuous homogeneity in the distribution of buildings on the Istanbul peninsula is a clear indication of Nasûh's concern with representing the Ottoman capital as a uniformly urbanized city punctuated by religious and commercial centers. One of the ways in which Nasûh achieved this uniformity seems to be by leaving out those areas of the city that were not built as would have been desired.

The resettlement and urban development of Istanbul in the years following the conquest were not without difficulties. Under Mehmed II (the Conqueror), first incentives like tax exemption and donation of property and then forced settlement were used to repopulate the deserted city. In 1459, Mehmed II assigned to his viziers the construction of religious complexes with public facilities in different districts throughout Istanbul. With these efforts, the sultan aimed at achieving a rather uniform development of residential areas within the new capital. We know, however, that despite continuing efforts under Bayezid II and Süleyman I (the Magnificent) the western part of the city, bordering the land walls, remained sparsely built until the end of the sixteenth century.

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50 İnalcık, "Istanbul," 229-34. The table that shows the distribution of waqfs with respect to Istanbul's districts, included in İnalcık's study, is added to his map of districts reproduced in my fig. 27. A more detailed version of this table including the 1521 registry is to be found in İstanbul Vakıflar Tahrir Defteri, 953(1546) Tarihli, ed. by Ömer L. Barkan and Ekrem H. Ayverdi (İstanbul, 1970), viii.
This situation is clearly reflected in the waqf registries from AH 927/ AD 1521 and AH 953/ AD 1546 that were studied by Ömer Lütfi Barkan and Ekrem Hakkı Ayverdi and which served as the basis of Halil İnalcık's overview of Istanbul's urban development from the conquest into the early sixteenth century (fig. 27).\footnote{Inalcık, "Istanbul," 229-31. Fig. 27, which shows the areas of Istanbul's principal districts (nahiyes) referred to in the waqf registries, reproduces a map proposed by İnalcık, ibid. It also includes the table showing the distribution of waqfs in respect to these districts, given in İnalcık, ibid., 229. A more detailed version of this table including the 1521 registry is to be found in İstanbul Vakıfları Tahrir Defteri, 953(1546) Tarihli, ed. by Ömer L. Barkan and Ekrem H. Ayverdi (İstanbul, 1970), viii..} These records indicate that fifty percent of the waqfs founded by individuals between the years 1521 and 1546 were established in districts located east of a north-south axis to be imagined between the Unkapanı and Yenikapı districts as shown by way of a diagram in fig. 28. Thirty percent of the waqfs were concentrated in the Fatih Mehmed and Murad Paşa districts to the west of the same axis while the remaining districts toward the land walls accommodated only twenty percent and also comprised large meadows such as Yenibağçe and Ağa Çayırlı as well as market-gardens around the Yedikule Fortress and along the western portion of the city's Marmara shore.\footnote{For the sixteenth-century urban development in these less dense regions of Istanbul, see İnalcık, "Istanbul," 231-4.}

As can be deduced from these waqf registries, in the early sixteenth century the concentration of urban facilities and residential areas decreased considerably from the tip of the Istanbul peninsula towards the land walls. It is exactly this sparsely built area of the city that was compacted on Nasûh's map. But it was not compacted just to fit the page. In order to depict an idealized view of the city, Nasûh deliberately left off of his map all those vacant properties within the city walls that were unbuilt and therefore insignificant. More precisely, he achieved this by compacting, both in width and
length, that portion of the peninsula which lies beyond the Unkapanı-Yenikapı line (cf. figs. 28 and 29). The compacted area corresponds approximately to the areas where the thirty and twenty percents of the total number of registered waqfs were located and where empty land was used as meadows and market gardens (fig. 28).

However certain types of green areas are depicted on Nasûh's map. These are open spaces of relatively small size such as the gardens of the two royal palaces, the Hippodrome and the Langa Bostanı, which is shown as a square, walled garden on the Marmara shore. The presence of these well-defined areas on the map is related to their urban significance. The Hippodrome was the most prominent public square where royal festivities were organized. It was also regularly used for equestrian exercises and games. Langa Bostanı (the market garden of Langa), the former Byzantine harbor of Theodosius, which gradually became filled with alluvium, was also used for similar exercises and was a recreational site where the building of houses was forbidden. In contrast, former Byzantine open cisterns that were being used only as market gardens are not represented.

53 This harbor has been generally identified with the harbor of Eleutherius. For its reshaping under Theodosius I (379-95), see Albrecht Berger, "Der Langa Bostanı in Istanbul," Istanbuler Mitteilungen 43 (1993): 467-77, also idem, "Theodosius Limanı," İstA 7: 263 and Semavi Eyice, "Eleutherius Limanı," İstA, 3:153.
54 İnalçık, "Istanbul," 234.
55 Denny argued that these cisterns were not shown because "they were not connected with any important contemporary patron" and because "a convenient mode of representation for a large hole in the ground did not exist," see "Architectural Plan," 54. The open cisterns of Aetius, Aspar and Mocius (each ca. 200,000 sq.f.), which dated from the fifth century, served as reservoirs and were filled with water brought to the city by means of aqueducts. They had fallen out of use long before the Ottoman conquest of the city. Raymond Janin refers to Manuel Chrysoloras who confirmed that already toward the end of the fifteenth century they were planted with vines, see Constantinople Byzantine (Paris: Institut Français d'Études Byzantines, 1950), 196. In the Ottoman period they were continued to be used as vegetable gardens, see Bildlexikon, 278-9, and ibid., fig. 2.
The intentional omission of unbuilt areas from the map is also suggested by the care with which Nasûh distributed the buildings on the Istanbul peninsula. The mosques, madrasas, baths, commercial buildings and important residences are drawn without overlapping and with almost equal distances between them. In the spaces left between buildings, cypress and blossoming fruit trees are carefully distributed all over the urban area. In Nasûh's representation they represent cultivated gardens spread throughout the city. Although Nasûh eliminated the unbuilt areas from his representation of Istanbul, he seemed to consider cultivated green areas important components of the urban landscape. From his representation, Istanbul emerges as somewhat of a garden city, as it was seemingly conceived by the sultans, for whom beautiful gardens were signs of urban prosperity along with beautiful buildings. Kritovoulos, the Byzantine chronicler of Mehmed II who left an account of the early period of Istanbul's post-conquest rebuilding, particularly notes the cultivated gardens as part of the building programs and signs of prosperity.

3.1.2. The Depiction of Galata
On Nasûh's map the town of Galata is the second most important urban entity after Istanbul. It is shown as a remarkable settlement opposite Istanbul across the Golden Horn. It is depicted, in proportion to Istanbul, larger than it should be and occupies the center of the left half of the map. This walled town was founded by the Genoese after their earlier trade colony in the Byzantine capital was relocated.

56 In the depiction of Galata, however, some overlapping occurs although there are spaces left between buildings.
57 Kritovoulos wrote that Mahmud Pasha, the grand-vizier of Mehmed II, "built grand houses for himself, rich and beautiful, and he planted gardens with trees bearing all sorts of fruit for the delectation and happiness and use of many, and gave abundant water supply. He did many such things, precisely according to the wish of the Sultan, and thus beautified the city at his own expense and cost with buildings and monuments useful to public," in History, 141.
Like several other Italian trading communities, the Genoese had first settled on the peninsula, but around mid-thirteenth century they were assigned by the Byzantine emperor an extra-muros site at the foot of a promontory on the northern shore of the Golden Horn. Soon after its foundation, the Genoese fortified their new settlement and expanded it several times until the Ottoman conquest. The walled town consisted of five sections that corresponded to different stages of its expansion. In the fifteenth century it had acquired an irregular form and spread onto the southern slopes of the promontory dominating the entrance of the Golden Horn (figs. 1 and 4).

Nasûh's representation shows the town in a simplified, triangular form and with only three subdivisions that corresponded to the three major districts. The dividing walls descended from an imposing fortification tower, located at the highest point of the settlement. Nasûh did not fail to indicate the dominating situation of this tower, today known as the Galata Tower, as well as the summit of the hill rising behind Galata.

The Genoese called their autonomous colony communità de Peyre, pera meaning in Greek "yonder"; in the context of Konstantinoupolis, "across" or "on the other side" of the Golden Horn, referring to the settlement's location with respect to the Byzantine capital. Although the town passed

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58 On the Genoese colony in Galata, see Jean Sauvaget, "Notes sur la colonie génoise de Péra," *Syria* 15 (1934): 252-75.
59 Pitton de Tournefort, who visited the town in the eighteenth century, remarked that Galata was divided, from west to east, into three districts: Azapkapı, customs and Karaköy. He also noted that the dividing walls were not anymore noticeable because of the houses built against them, in *Rélation d'un voyage au Levant* (Paris, 1717), 1:502-8, quoted in Robert Mantran, "Images de Galata au XVIIe siècle," in Comité International d'études pré-ottomanes et ottomanes. Symposium (6th: 1984, Cambridge, England) Proceedings, eds. J.-L. Bacqué-Grammont and E. van Donzel (İstanbul, Paris and Leiden, 1987), 197.
60 The town continued to be referred to as Pera by the Non-Muslims while Galata became its official name under the Ottomans. As an administrative unit, Galata later on comprised the two suburbs of Kasımpaşa and Tophane,
under Ottoman jurisdiction after the conquest of the Byzantine capital, it preserved its integrity, and its primarily Genoese inhabitants continued their trades. Even after Muslim neighborhoods developed within its walls and as suburbs during the sixteenth century, Galata remained predominantly a Christian or "frankish" town and, because of its strongly contrasting urban environment and lifestyle, a counterpart to "islamicized" Istanbul.

Nasuh seems to have emphasized this distinct and opposite character of Galata with his pictorial arrangement. The triangular shape of Galata is based on the coastline of the Golden Horn and culminates with the Galata Tower, the largest of the fortification towers. Hence, Galata appears as fully oriented toward Istanbul. Its buildings are drawn to overlap slightly, indicating perhaps both its hillside location and its density. It is also remarkable that no vegetation is shown in the densely built, walled area of Galata, but the surrounding landscape abounds in trees and flowers. As such Galata not only stands in contrast to its immediate surroundings but also to Istanbul where gardens and green areas intermingle with buildings.

3.1.3. The Depiction of the Golden Horn

The Golden Horn emerges as the third important element in Nasuh's composition. This navigable estuary served as the principal harbor and symbolized the commercial prosperity of

which developed in the sixteenth century respectively to northwest and to east of the fortified town, as well as the European suburb, which stretched along the ridge of the hill toward north. This latter suburb was primarily a green area occupied by summer residences amidst gardens and was, therefore, referred to by Europeans as Vigne di Pera. During the sixteenth century, starting with the French embassy in 1535, this area became gradually settled by European embassies, see Necdet Sakaoğlu, "Elçilikler," İstA, 3:149-51.


62 Evliya Çelebi especially notes the lack of gardens in his description of Galata, Seyahatnâme, 184.
the Ottoman capital. It is shown here as a wide, blue strip at the center of the map with galleons and galleys sailing on it. The Bosphorus and the Marmara Sea have a relatively lesser visual presence, even if one takes into consideration that the map's edges on the Marmara Sea have been trimmed.

3.1.4. The Depictions of Eyüp and Üsküdar

With Eyüp and Üsküdar, Nasūh's map reaches its outmost limits. Both towns, Eyüp, right outside the walls of Istanbul, and Üsküdar, across the Bosphorus, are shown as small settlements without much pictorial emphasis. However, their truncated state, evidently the result of the lower and upper map edges having been trimmed, prevents us from assessing their precise layouts on Nasūh's map. Yet we may assume that originally, each settlement was approximately twice the size we see now.

Both Eyüp and Üsküdar lacked an enclosure wall, and in the early sixteenth century neither of them displayed a distinct urban form comparable to that of fortified Galata. Yet they were not unimportant. Eyüp had a predominantly Muslim population and had developed as a suburb around the shrine of Abu Ayyūb Ansārī, whose grave was discovered during the siege of the city and immediately became a holy site.63 As a settlement, it was particularly important as it surrounded the city's great Islamic sanctuary. Üsküdar, a small town with a more mixed population, was important as the gate of Istanbul on the Asian shore, and it was well-connected with the city by boat.

Although the towns of Eyüp and Üsküdar did not have the importance of Galata in Nasūh's map, they frame the left half

63 Abu Ayyub Ansārī, the standard-bearer of the Prophet, died in 668 during a siege of the Byzantine capital by the Arabs and was buried before the walls. According to Arab authors, the Byzantines respected the grave, see E. J. Brill's First Encyclopedia of Islam, 2:868. The sanctification of this site by the Ottomans was an important instance of the city's islamization, see H. İnalcık, "Istanbul: An Islamic City," Journal of Islamic Studies 1 (1990): 1-4.
of the image and, situated at both ends of the Golden Horn, appear in remarkable symmetry on either side of Galata. Depicted as they are, the three towns constitute a pictorial balance that conveys a hierarchical order. This is, however, not the only instance of translating a conceptual hierarchy into a pictorial one for the layout of the Istanbul map is underlined also by other symmetrical arrangements.

3.2. The Symmetrical Structures in the Istanbul Map

Overall symmetrical order is achieved by distributing the major urban entities in both halves of the map. By placing the three townships (Bilâd-ı Selâse) Galata, Eyüp and Üsküdar together in one half of the composition and the city of Istanbul in the other, Nasu'h points at a conceptual balance between them (fig. 30). In pictorial terms, the balance is expressed by a vertical axis of symmetry that coincides with the center of the book. Furthermore, by creating another symmetrical order within the left half of the composition, Nasu'h gives Galata a central, and hence, superior position in regard to Eyüp and Üsküdar.

The efficiency and subtlety of Nasu'h's construction of pictorial symmetries is most evident in Galata's placement on the map. As an isosceles triangle based on the Golden Horn, the walled town of Galata occupies a central position on the horizontal axis of the double-folio composition (fig. 30). This horizontal axis passes through the Galata Tower, through a principal wharf on the Golden Horn shore and, in the right half of the picture, through the Old Palace shown amidst a rectangular walled garden. Once we recognize this symmetrical order, we also notice that it is supported through the arrangement of several small details, which at first appear to be casually placed on the map. The hill beyond the walls of

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64 The map is drawn, as I have already noted, on a single sheet of paper. Bound as it is in the book, we treat it as if composed of two halves.
Galata is depicted with a bold line as if to underline the shape and position of the walled town. The cypress and fruit trees as well as the few buildings dispersed in the surrounding green areas, without being forced into a rigid order, also underline the symmetry. Moreover, the land mass on which Galata is situated is symmetrically bordered by the Bosphorus and the upper Golden Horn, beyond which are located Üsküdar and Eyüp respectively.

Finally, a further symmetrical arrangement can be discerned in the depiction of the walled city of Istanbul itself. A vertical axis cutting through the peninsula connects the great mosques of Hagia Sophia and Fatih. Hence, the two monumental mosques of the city acquire a special visual emphasis on this map, and their symmetry is an allusion to Mehmed II's desire to build his mosque equally as monumental as the Hagia Sophia. But besides this possible ideological symmetry, Nasuh's emphasis obviously reflects the visual symmetry of the two monuments that, before the construction of the Süleymaniye Mosque in 1550-7, dominated Istanbul's cityscape.

Half way between the Hagia Sophia and the Fatih Mosques, stands the Old Palace, precisely at the intersection of the vertical axis and the horizontal axis. Its position on the map reflects the common opinion that its site corresponded to the center of the city, but possibly also has to do with the fact that this first royal palace was a significant urban landmark.

The absence of streets from Nasuh's map appears as a peculiarity but, in fact, this is a characteristic it shares with other Ottoman city maps such as the Istanbul map in the Hünernâme and several variants of the Istanbul map in

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65 Two Byzantine historians note that the Mehmed II chose for his palace a site "in the center of the city". See Kritovoulos, History, 83, and Doukas, Decline and Fall of Byzantium to the Ottoman Turks by Doukas, ed. H. J. Magoulias (Detroit, 1975), 243-4, quoted in Gülru Necipoğlu, Architecture, Ceremonial and Power: The Topkapi Palace in Fifteenth and Sixteenth Centuries (Cambridge: AHF and The MIT Press, 1991), 3.
manuscript copies of the Kitâb-ı Bahriye. Yet among all these maps, Nasuh's map does the best job of efficiently representing the most important street of Istanbul, though in an indirect way.

The vertical symmetry axis that runs through the Istanbul Peninsula in Nasuh's map and which visually connects the Hagia Sophia and Fatih Mosques also suggests the path of "Divânyolu", the main street of the city (cf. figs. 1, 29 and 30). In the Ottoman period this street was used for ceremonial processions and connected the Edirne Gate with the city's most important buildings such as the New Palace (i.e. Topkapı Palace), the Old Palace, the covered bazaar, and other royal mosques. It also corresponded to the northern branch of the Byzantine thoroughfare Mese. Despite its symbolic function and importance, this principal street is not represented as a visible path on Nasuh's map but is implied through the sequence of monumental buildings located along it. In other words, the vertical axis of the Istanbul peninsula constitutes a peculiar abstraction of an actual urban experience: the path itself is obliterated and replaced by the simple pictorial device of linear arrangement of buildings that corresponds to the sequence in which they were seen on that urban path. The suggested path is further emphasized pictorially by the fact that its direction coincides with the orientation of the map.

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66 For a detailed topography of Mese in the fifth century, during the reign of Theodosius II (408-450) when the walled city reached its largest limits, see Janin, Constantinople Byzantine, 43-6. Also see Cyril Mango, Le Développement urbain de Constantinople, IVe-VIIe siècles (Paris: Diffusion de Boccard, 1985), 27-32, 42-4. Best historical overview, comprising the Ottoman and modern periods, is to be found in Bildlexikon, 269-70.

67 This pictorial device obviously originates in the sequential illustration of holy sites in pilgrimage scrolls, which reflects the order of their ritual visit. It also has a parallel in pre-modern European itineraries, see Harvey, Topographical Maps, 40.

68 On the perception of the top of a map by its viewer as what lies ahead of him or her, see Rudolf Arnheim, "The Perception of Maps," in New Essays on the Psychology of Art (Berkeley: University of California Press, 1986), 197. We can talk of a dominating orientation for this map,
With the book in hand, the viewer's eye is led eastward across the peninsula in a simulation of the act of entering Istanbul through the Edirne Gate and passing by the monumental buildings one after the other until reaching Hagia Sophia and the Topkapı Palace. For Nasuh's contemporaries, this representation of the main thoroughfare must have been sufficiently intelligible because streets were recognized not for their own sake, but rather through the monumental buildings that punctuated them.69

3.3. The Viewpoints
Svetlana Alpers has discussed in detail the implications of different modes of viewing in Western representations of cities with respect to the viewer. She notes that, unlike a profile view that shows a city in some distance across a body of water or flat lands, as it would be seen by somebody standing on the earth's surface, a bird's-eye view corresponds to an imagined sight and allows us to look at a city from a much greater distance and from above. Alpers underlines that a bird's-eye view is a purely pictorial construct that "does not suppose a located viewer," in the sense that it does not capture and record a real viewing experience but rather what is imagined to be visible from an aerial viewpoint, and transforms the limited human experience into an extensive picture.70 But even though the post-Renaissance bird's-eye view represents a view normally not possible, it still maintains a single viewpoint and, hence, relates what is seen to one observer at one moment. On the other hand, a vertical or ichnographic city plan specifically lacks a located viewer because it represents

which is east, because the viewer's way of looking at it was determined by the book containing it.

69 This kind of perception is evidenced by the depictions of the Fatih and Bayezid Complexes in the Hünernâme map of Istanbul and will be discussed in detail further below, in the chapter dealing with that map.

a city, as John A. Pinto has put it, "as if viewed from an infinite number of viewpoints, all perpendicular to each topographical feature". What an ichnographic plan makes visible as a picture is the accurate quantitative relationships of topographical features, not something that resembles human vision.

The ichnographic plan and the bird's-eye view obviously do not intend to show the same things. Nevertheless both offer, in their own way, a total and unified vision of a city. The ichnographic plan achieves this because it remains absolutely indifferent to any possible viewpoint, or rather does not emphasize any specific one. The unity of vision, in fact the homogeneity of vision, is a consequence of this pictorial indifference. The unified vision of the bird's-eye view corresponds to the unified sight of one viewer, imagined as located at one precise viewpoint and, hence, depends on the emphasis of this imaginary but unique viewpoint.

Nasuh's map differs from both of these modes of representation in offering a non-unified vision of the city of Istanbul and its surroundings. According to the different ways in which the depicted buildings face, it incorporates two viewpoints: one to look at Istanbul, Eyüp and Üsküdar, and another to look at Galata. Thinking in a modern way, the artist's incorporation of more than one viewpoint into his map might be interpreted as an attempt to draw attention to different possible or significant viewing positions by disturbing the given unity of human vision. But in the historical context of Nasuh's work, or more precisely in the context of a non-Western pictorial tradition, the use of different viewpoints to depict different portions of a picture

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71 The term of "ichnographia" was first used by Vitruvius to signify a ground plan and later on occasionally. John A. Pinto proposed a systematic use of it as a precise technical term in relation to historical plans of cities to distinguish the vertical plans from other types, see "Origins and Development of the Ichnographic City Plan," *Journal of the Society of Architectural Historians* 35 (1976): 35-50.
is not uncommon. It is an attitude that allows the artist to depict the different aspects of a spatial entity, or to juxtapose scenes that are separated either in space or time. Yet it should not be seen as a purely technical device. More likely, the coexistence of different viewpoints in one picture corresponded to a mental attitude that did not seek to represent space according to a unified vision. Yet, it would be unfair to deny any pictorial concern or system to the miniature artist. As Nasuh's Istanbul map demonstrates, the different viewpoints can be carefully integrated into a single composition and become meaningful. On this map the two different viewpoints are visually emphasized through their overlapping with the axes of symmetry. In that way, the hierarchical order suggested by the symmetrical arrangements becomes also a pictorial means for emphasizing the hierarchy of viewpoints or viewing situations.

Before discussing the implications of these different viewpoints, it might be noted that Nasuh's map also exhibits a non-unified depiction technique on a much more elementary level. For example, the outlines of the landmasses are drawn as if seen from a point perpendicular to the earth's surface, like in an ichnographic plan. But the individual topographical elements such as buildings, city walls, as well as trees and ships, are usually depicted in elevation. In their depiction, sometimes an oblique angle (with regard to ground plane) is chosen so that certain buildings whose architecture incorporates an open space or, as Denny suggested, whose ground plan is the main determinant of the architectural form could be

72 This is an attitude diametrically opposed to that of the Renaissance mind that devised the single-vanishing point perspective in order to represent a unified vision of the human eye on a picture surface. While for the latter the strictly geometrical separation of ground plan and elevations was necessary for the construction of a perspective, the miniature artist could use these geometrical abstractions in a more flexible, somewhat "cubist" manner.
shown appropriately,\textsuperscript{73} as, e.g., in the details of the Topkapı Palace, a convent to its south east, the Hippodrome and the precincts of the covered bazaar, the Old Palace and the Fatih Mosque. But this is not a peculiarity of Nasuh’s depiction. The heterogeneity of viewpoints in the depictions of topographical elements in the same map indeed had to do with rendering them intelligible and is typical of all pre-modern “picture-maps”.\textsuperscript{74}

With very few exceptions, Nasûh has drawn the buildings on the Istanbul Peninsula, as well as those in the towns of Eyüp and Üsküdar, as facing west, that is the lower edge of the map. Having in mind Buondelmonti’s and Vavassore’s Istanbul maps that show the city and the neighboring urban settlements from the south and from the east respectively (figs. 5 and 7), Gabriel briefly remarked this unprecedented “point de vue” located in the west of the city.\textsuperscript{75}

The other viewpoint of the map concerns Galata where the buildings are depicted as facing the Istanbul peninsula. In other words Galata is represented as a town viewed from Istanbul. Istanbul, however, is not represented as viewed from Galata. The striking aspect of Nasuh’s map lies in this non-reciprocity of the viewing directions suggested for Istanbul and Galata.

The viewing direction for Galata is an expected viewing direction as far as two settlements situated on opposite shores are concerned. On the other hand the viewing direction for Istanbul is a convenient one that coincides with the general orientation of the map and which enables the user of the book to look at Istanbul first. Yet this rather practical concern

\textsuperscript{73} Denny considered these aerially seen “plans” somewhat inaccurate in comparison with the “elevations”. See “Architectural Plan,” 53. Nurhan Atasoy and Filiz Çağman seem to consider the different “point of views” underlying the drawings of buildings and squares a peculiarity of this map, in \textit{Turkish Miniature Painting} (Istanbul: Doğan Kardeş Matbaacılık Sanayi A.Ş., 1974), 27 and the caption to its pl. 6.

\textsuperscript{74} The conventions of illustrating picture-maps in the pre-modern period are discussed in Harvey, \textit{Topographical Maps}, 48-115.

\textsuperscript{75} Gabriel, “Etapes," 332.
was probably not the only one that led Nasûh to choose this particular viewpoint for Istanbul.

The viewpoint located west of the land walls, which has been chosen over other ones, suggests an approach to the city of Istanbul by land and was perhaps reminiscent of the city's long history of sieges that terminated with the Ottoman conquest. However, this particular viewpoint has two important implications. One of them relates to the perception of Istanbul as experienced along its principal thoroughfare; the other relates to its conception in Menâzîl as the "imperial lookout". As I have noted earlier, this viewing direction first coincides with the east-west orientation of the main street and the sequence of perceiving its monumental buildings and sites from the Edirne Gate to the Topkapı Palace. Secondly, it also coincides with the east-bound direction of the military campaign which Menâzîl subsequently describes, and hence links Istanbul to the illustrations to come and to the global view they represent.

I should like to suggest, however, one more implication of this particular viewing direction for Istanbul. By avoiding a common viewpoint for looking at both Istanbul and Galata, as is the case of the Buondelmonti map or of Vavassore's bird's-eye view (figs. 5 and 7), or a reciprocity of viewing directions between them, Nasuh's map emphasizes Istanbul as being self-contained. Istanbul is not seen from Galata, as Galata is seen from it, but from a completely different location on the vacant plains beyond its land walls. Fortified by walls and surrounded on its three sides by bodies of water, Istanbul stands apart as if meant to be looked at on its own and not from a definite location like another city. Remarkably, Eyüp and Üsküdar are also seen from the same direction and thus pictorially appear

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76 One might also speculate that Nasûh favored a separate, but in particular a west orientation, to contest the representation of the city as the pre-conquest Constantinople, i.e. without its Ottoman monuments, in numerous variants of Buondelmonti's map that were produced in the late fifteenth century, see Manners, "Image of a City," 86-7.
as Istanbul's continuations. Galata, which was a much bigger town with a predominantly non-Muslim identity, is clearly differentiated from Eyüp and Üsküdar by being shown from a different viewpoint and not only through its central place in the cartographic composition as examined earlier. It is the only urban settlement that is depicted as viewed from Istanbul. In order to look properly at Galata we need to adjust our viewing direction by turning the map (and the book) ninety degrees. Then we see Galata the way it was seen from Istanbul or more precisely from the city's northern slopes that descend toward the Golden Horn. With this consideration in mind, it is remarkable how much Nasuh has straightened the two banks of the Golden Horn. The curved profiles of both shores are eliminated as if to stress the opposite positions of the two urban entities. Yet the straightened shoreline of Galata also gives to its depiction the character of a profile view, a hillside settlement rising from a coastline, with slightly overlapping buildings as seen from the capital's coast on the Golden Horn.

In the same view as Galata, we see vessels, two galleys and four galleons depicted with full-blown sails, and some firing canons. The war vessels shown departing from the naval shipyards, six vaulted structures to the left of Galata, might have been conceived as an enhancement of this minor topographical detail in Nasuh's map, and in a way anticipate the pictorial emphasis the shipyards will be given in later Ottoman maps of Istanbul. In a more direct relation with the Golden Horn itself, however, the ships complement the view of this body of water that was a prime setting for regattas, especially when the Ottoman navy left for campaigns in the Mediterranean. Consequently, these ships, together with others sailing the Marmara shore or the Bosphorus, refer, in a more general way, to the Ottoman capital's central importance for imperial power on the seas.
Despite Istanbul's self-contained character with its viewpoint other than Galata, a few buildings of the peninsula do not conform with the unified viewing direction of the city that I have discussed. These are some single-storied buildings between Istanbul's walls on the Golden Horn and the coastline. They face Galata or perhaps rather the Golden Horn, and are mainly buildings related to port activity and storage. We also know that this area developed as one of the major Greek neighborhoods of the capital after the conquest, after Mehmed II settled the prisoners assigned to him as ruler along the Golden Horn.\(^7\) Whatever they represent, their orientation facing Galata and the Golden Horn seems to be an emphasis of their closer link with a separate urban area than the capital itself, something confirmed by their extra-muros location.

Another building on the Golden Horn shore of Istanbul that is oriented toward Galata is a small building with a triple arcade and a pyramidal roof painted blue, just outside the walls of the Topkapi Palace. The depicted building stands for the waterfront kiosk built by Sultan Bayezid II, which came to be known as the Shore Kiosk (Yalı Köşkü) (fig. 8b).\(^8\) The kiosk commanded two superb vistas, one up the Golden Horn toward the northwest and the other up the Bosphorus toward the northeast, in addition to a full view of Galata. It served the sultan both as a pleasant retreat and a place to watch the ceremonial parades of the Ottoman fleet, and whom the galleons depicted in Nasuh's map might be saluting. In the course of the sixteenth century, this kiosk found its official and private functions expanded and was rebuilt twice to meet new ceremonial

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\(^7\) See İnalçık, "Istanbul," 225; also İA, 5/II:1200.  
\(^8\) The construction history of this kiosk and the development of its official and private functions are traced on the basis of historical documents in Gülru Necipoğlu, Architecture, Ceremonial and Power: The Topkapı Palace in Fifteenth and Sixteenth Centuries (Cambridge: AHF and The MIT Press, 1991), 231-40; (hereafter cited as Topkapı Palace). The original kiosk, built by Bayezid, and the second, built to replace it in 1583 during the reign of Murad III, had both this jutting position while the third kiosk, built soon after in 1593, had a quay in front.
requirements. Yet it remained foremost a building from where an important section of Istanbul's surrounding landscape was viewed, be it for its own sake or as a setting for ceremonial events. Therefore, the depiction of Bayezid II's kiosk as facing the Golden Horn might be explained with the importance of its view-oriented function.

The two other buildings on the Istanbul peninsula that are differentiated from the rest of the buildings by their orientation are the first (Bâb-i Hümayûn) and the second (Bâb'ûs-Selâm) gates of the Topkapi Palace (fig. 8b), which face south. In this particular case, the change of orientation may be related to a change that occurs when the palace is approached. If the path of the main street, insinuated by the succession of monumental buildings, is followed toward the east, after passing by the Hagia Sophia, the first gate of the Topkapi Palace is reached after a turn to the left, that is toward the north. The shift in direction suggested by the orientation of the two gates in Nasuh's map exactly corresponds to the actual shift at the south corner of Hagia Sophia. Nasûh might have emphasized this shift in order to represent properly the urban path that leads to the outer gate of the palace, yet by doing so he also pointed, even though somewhat indirectly, at a particularity of the Topkapi Palace's site.

The tip of the Istanbul Peninsula occupied by the palace complex is a promontory that juts towards the north and thus enjoys a panoramic view encompassing not only the Golden Horn, Galata, the Bosphorus, the Asian shore and the Marmara Sea but also the Istanbul Peninsula itself (figs. 1, 2a and 2b). On Nasuh's map this northward projection of the palace site is obliterated, yet it can be sensed through the shift of the viewing direction suggested by the first and the second gates of the palace.

The depiction of the palace itself appears somewhat more enigmatic because another shift of direction is suggested by
the third gate and court. Drawn as they are, the three courtyards of the palace complex are situated not along a straight, south-north axis, but along an L-shaped one, bent upward, or east (cf. fig. 8b and 2b). This bent axis certainly allows a compact arrangement of the three courtyards on the squarish surface reserved for the palace, nevertheless it also increases the number of viewing directions available from these courtyards, especially from the third one. Therefore it is tempting to see here an arrangement that Nasûh deliberately devised to suggest that the palace complex afforded a multitude of viewing directions, thus compensated for the fact that he left the palace site cartographically undifferentiated. Also the hexagonal shapes of the second and the third court, which have in reality rectangular plans, might be an indication that these parts of the palace viewed several directions. In the case of the second court, this shape could perhaps be explained by the compositional restraints of a location squeezed between the first and third courts, at the corner of the bent axis. In the case of the third court, however, there were no such constraints, and the view-related explanation remains valid.

Noting that none of the major buildings of the third court are depicted in this map, Gülru Necipoğlu provides a convincing explanation when she suggests that what appears to be the third court in Nasuh's representation must be the hanging garden that lay beyond it, a private royal space for rest and contemplation. The depiction of Nasûh shows that area of the palace surrounded by five (or six?) towers connected by crenellated walls that are pierced by grilled windows opening

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79 Nurhan Atasoy considered that Nasûh's depiction of the Topkapı Palace was "arranged to fit the available space," see "Matrahâ's Representation of the Seven-Towered Topkapı Palace," in Fifth International Congress of Turkish Art, Budapest 1978, 93.

80 Necipoğlu suggested that the hexagonal depiction of the second court was a result of Nasûh's effort "to show different facets of each courtyard simultaneously." This explanation is plausible, yet Necipoğlu does not seem to extend it to the hexagonal depiction of the third courtyard, Topkapı Palace, 186.
Necipoğlu interprets the towers as belvederes and relates them to belvedere pavilions "from which the sultan could look over his capital and view the ships coming into the harbor from the four corners of the world" that were praised in the early sixteenth century by the court historian İdris Bidlisi. Although Bidlisi's remarks might also have referred to other spots and structures on the palace site, they confirm the significance of the view-commanding nature of the palace in general.

The configuration of the Topkapı Palace on Nasuh's map has not yet been fully explained and might not have expressed the view-orientedness of this building complex. Nevertheless, it remains a very suggestive detail in that regard, especially since later Ottoman maps of Istanbul such as the Hünernâme map and certain Istanbul maps contained in copies of the Kitâb-ı Bahriye, as we shall see later on, also emphasize the distinguished position of the Topkapı Palace by depicting its buildings with an orientation different from that of all the other buildings on the Istanbul Peninsula. If these later depictions are considered, Nasuh's implicit stress on the view-oriented aspects of the Topkapı Palace becomes intelligible and his contorted drawing of this building complex appears less enigmatic as a representation.

4. Concluding Remarks

Although Nasuh's map can be considered more symbolic than naturalistic it represents geographic as well as symbolic issues. His representation of Istanbul is first of all that of

81 In fact, a late-sixteenth century representation of the palace in the Sehingehnâme map (fig. 33a) shows in front of the third court an enclosure with four free-standing corners that is similar to what appears as the third court in Nasuh's map and which Necipoğlu interpreted as the hanging garden in front of the third court. She did not comment on the similarities of the two depictions.

82 İdris Bidlisi, Hasht Behisht, Süleymaniye Kütüphanesi, Istanbul, MS, Esad Efendi 2198, fol. 5, quoted in Necipoğlu, Topkapı Palace, 188.
an ideal city, evenly urbanized, flourishing (in both senses of the word!), that is rendered in a charmingly ornate manner. But beneath its ornate surface, Nasuh's map is a carefully constructed topographic representation. Its layout unmistakably captures the geographic situation of the city and its surrounding towns, yet at the same time transforms them into cartographic elements of varying emphases. These emphases particularly sustained by various symmetrical orders reflect the hierarchical order underlying the perception of Istanbul and its parts. The image Nasûh sought to convey must have been both acceptable and pleasing to the ruling elite but especially for the sultan to whom he presented the unique copy of his book. His representation of Istanbul as a city full of beautiful structures and gardens recalls a passage in Evsâf-ı İstanbul, a contemporary panegyric text by the poet Latifî, which claims that in the city of Istanbul "which ever direction one looks, it is impossible to notice an unbuilt space, even as small as the finger tip". Nasuh's map and Latifî's panegyric are not only strikingly similar in the ornateness of their styles but also in that of the urban image they convey. Also composed for presentation to the sultan, Latifî's text describes the walled city of Istanbul as a flourishing city composed of monumental and medium-sized mosques, public, commercial and select residential buildings and embellished by gardens. Especially Lâtifî's frequent references to Iram, or

83 Latifî, Evsâf-ı İstanbul, 13.
84 The notion of Iram originates in a unique reference in the Koran to "Iram dhât al-‘imâd" (translatable as Iram with pillars, or columns), Sura 89, verses 5-6: "(5) hast thou not seen how thy Lord dealt with Ād, (6) Iram dhât al-‘imâd, the like whereof hath not been created in the lands". The reference is inexplicit about the identity of Iram but sounds admonitory. Iram Dhât al-‘imâd was given, in learned circles, two different interpretations, either a tribe related to the people of Ad or a city, see W. Montgomery Watt, "Iram," in E2, 3:1303. The use of it as a poetic metaphor in the Persian and Ottoman classical literature, however, is derived from another interpretation, weaved in legends yet more explicative: Iram was a sumptuous town, somewhere in South Arabia, and was built by a king named Shaddâd as a challenge to and in imitation
rather to "Bağ-i Írem" (Garden of Iram) in describing Istanbul, strikingly parallels Nasuh's representing Istanbul as a garden city and gives an insight into the cultural background that ideally associates gardens with cities. More importantly, these two representations from the first half of the sixteenth century, one verbal the other pictorial, hint at a concept that seems to have significantly shaped the Ottomans' approach in rebuilding Istanbul.  

Istanbul is compared also by the fifteenth-century chronicler Tursun Beg to Bağ-i Írem in a passage that recounts Mehmed II's impressions of the newly conquered city and its beautiful landscape, Tarih-i Ebü'l-Feth, 66. Notably, Tursun's quotation from the Koran, ibid., only gives a section of the sura, i.e. "the like whereof hath not been created in the lands", which alone sounds as an ultimate praise. Istanbul's comparison to the legendary Iram Garden also occurs in later sixteenth-century panegyrics, such as the poetic descriptions of Istanbul serving as introductions to sehrengiz. It is, however, in Evliya Çelebi's Seyahatnâme that Iram acquires the widest and direct application. See below chap. 3, p. 293f.
Among the emphases of Nasuh's map, those related to viewpoints are the least tangible even though they are sustained by the pictorial construct of the symmetry axes. What Nasuh's map reveals about viewing in the context of Istanbul and its surroundings pertains less to real viewpoints than to conceptual priorities, such as the non-reciprocal situation of viewing between Istanbul and Galata, or the unification of Eyüp and Üsküdar in the same view with Istanbul. The dominant viewing direction reserved for Istanbul, the vertical axis implying the Divanyolu, i.e. the main thoroughfare, and the symmetry of the Fatih and Hagia Sophia Mosques can be related to real viewpoints, yet they correspond more to conceptualized situations. The most concrete emphases on real viewing are perhaps those concerning the Shore Kiosk and the Topkapı Palace as they can be easily associated with extraordinary, view-commanding sites.

These viewing directions suggested in the map do not necessarily correspond to actual viewing practices or empirical situations. However, they cannot be interpreted as the simple results of formal concerns either. Nasuh's use of different viewpoints reveals that, in a pictorial system which does not rely on a unified vision, the choice of a viewing direction is not something neutral, and the viewing directions selected by him support meaning by participating in his idealized representation of the city.

What Nasuh conveys through the tight and calculated composition of his map can perhaps be summed up in the following way: Istanbul is a place to be viewed on its own from outside of its walls but also from inside, as the viewer of the map (the sultan), already familiar with the city, is led to do by following the path suggested by its monuments. Galata, on the other hand, is entirely oriented toward Istanbul, from where it can be properly seen - almost as if it were under
surveillance— but the reverse is not true: Galata is not in a position to look at Istanbul.

Finally, by presenting this map as part of Menâzil, Nasûh provided Istanbul with a symbolic view, with an extraordinary prospect formed by the ensemble of Menâzil's illustrations, beginning just outside of Istanbul, beyond Üsküdar, and depicting the landscapes and cities as far as Western Iran and Iraq. Hence, we may say that Istanbul is represented in Menâzil not only for its own view but also for the view it afforded as the imperial look-out.
CHAPTER 2:

THE ISTANBUL MAP IN HÜNERNÄME

1. Introduction: The Book and the Istanbul Map

The late-sixteenth-century manuscript book Hünernâme, renowned for its miniature illustrations, contains another lavishly produced map of Istanbul (fig. 31). Hünernâme (The Book of Accomplishments). It was produced during the reign of Murad III and consists of two volumes, completed in AH 992/AD 1584 and AH 996/AD 1588 respectively. Its text, written by Seyyid Lokman, relates the lives of the Ottoman sultans, in chronological order, with a focus on their personal qualities and accomplishments. The first volume covers the period from the reign of Osman I, the first Ottoman sultan, to the reign of Selim I. The second volume focuses on the reign of Süleyman the Magnificent.

The miniatures of Hünernâme, like the text, have a narrative character and mainly depict important military and ceremonial events from the lives of the sultans. The Istanbul map, which is the only map and non-narrative painting included in this book, accompanies a chapter of the first volume that is about the conquest of the city by Mehmed II in 1453. Yet it neither relates to the event nor to the city at that time. The map rather shows Istanbul as a very densely built city with all the Ottoman monuments built there from the time of the conquest until the 1580s, including the naval shipyards on the north shore of the Golden Horn, established around 1512 and expanded during the second half of the sixteenth century. Furthermore,

1 Topkapı Sarayi Müzesi Kütüphanesi (TSMK), MSS, H.1523 (Vol. 1) and H.1524 (Vol. 2).
2 Lokman was then the royal historiographer (Şehnameci). On Lokman see Hanna Sohrweide, "Lukman b. Sayyid Husayn", EI², 5:813-4; also Christine Woodhead, "An Experiment in Official Historiography: The Post of Şehnameci in the Ottoman Empire. c.1555-1605," 157-82.
3 TSMK, MS, H. 1523, fols. 158v-159r. The dimensions of the map are 49.2 x 63.0 cm.
4 On the shipyards, and its buildings, see chap. 3, esp. n. 277.
it depicts the suburb of Eyüp as a considerably developed settlement. In other words, the map conveys a contemporaneous image of Istanbul, an image of the flourishing and populous capital of the Ottoman empire.

It is not difficult to imagine that the Istanbul map in Hünernâme, not unlike the map by Nasûh, was conceived as a eulogistic representation, a representation that celebrates the splendor of the Ottoman capital.

The large size of the map, its detailed content and its coloration, especially the remarkable silver surface of the bodies of water surrounding the peninsula, all contribute to a monumental visual effect, well-suited to this eulogistic purpose. The map of Istanbul stands as a self-contained image with an only indirect relation to the text of the book. In that regard, it is not very different than Nasûh's map of Istanbul in Menâzil. The monumental quality of these two representations of Istanbul and the minimal textual context provided by the books suggest that, rather than illustrations of any part of the text, they were independently conceived to reflect contemporaneous perceptions of the Ottoman capital.

2. The Question of the Istanbul Map's Authorship

The miniature paintings of the first volume of Hünernâme were prepared by a team from the palace's painting studio. A document, dated AH 990/ AD 1582, indicates the names of six painters and the number of meclis (compositions) painted by each as Osman (19), Ali (6), Mehmed Bey (10), Veli Can (2), Molla Tiflisi (5) and Mehmed Bursavi (3), but does not specify the subjects of the compositions. Hence, the forty-three extant miniature plates, the Istanbul map included, remain quasi-

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5 The document concerns the payments made to the various artists and the materials provided for the production of the first volume. It is preserved in the Topkapi Palace Museum Archives and is discussed in Nigar Anafarta, Hünernâme Minyatürleri ve Sanatçıları (İstanbul, 1969), IX-XIII. Also see N. Atasoy and F. Çağman, Turkish Miniature Painting, 44.
anonymous works. In her study on the Hünernâme, Nigar Anafarta attempted to resolve the authorship question for the Hünernâme miniatures by distributing them, on the basis of this document as well as a stylistic analysis, to the six painters. In the resulting distribution the Istanbul map is associated with Veli Can. According to a later opinion held by Filiz Çağman, the Istanbul map is to be attributed to Osman.

Osman was the master painter of the group and, according to the document, painted the largest number of plates in the first volume of Hünernâme. His painting style is most clearly recognized in narrative miniatures, particularly in the composition and depiction of human figures as well as in coloration. On the other hand, in miniatures without human figures, his personal style does not stand out, and it is thought that some other painters, working closely with him, approached his style and participated in certain paintings with him.

6 The number of compositions, indicated in the document of 1582, amounts to forty-five. Atasoy and Çağman consider that this number might have increased until the completion of the volume in 1584, op. cit, 44. As of today, the volume contains only forty-three compositions; one other miniature is preserved as a single sheet in Worcester Art Museum, Massachusetts, USA.

7 Anafarta's attribution, op. cit., is based only on a stylistic grouping of Hünernâme miniatures, which is also problematic in its approach. Assuming the completed volume contained forty-five compositions, Anafarta sought to group the miniature plates in six stylistically distinct groups, which furthermore contain a matching number of compositions as mentioned in the document, in order to distribute them to the six painters; but to maintain the total number of forty-five, indicated in the document, she counted two of the double-folio compositions as four and two other double-folio compositions as two compositions. Moreover, the six groups she came up with, are not all stylistically coherent.

8 See below, n. 12.

9 On painter Osman, see Esin Atıl, "The Art of the Book," 198. He was a much esteemed painter in his time. Atasoy and Çağman, e.g., point out that in contemporaneous archival documents and historical texts he was always referred to with praising words, Turkish Miniature Painting, 35. Therefore, art historians tend to attribute the most successful compositions in Hünernâme and other books from the same period to him.


11 Çağman observes that the painting styles of Osman and Ali, who was the other painter hired for the job, are difficult to distinguish in scenes
Although the characteristics of Osman's painting style, which are primarily derived from narrative miniature compositions, do not help to analyze the Istanbul map, another topographical composition depicting the Kırkçeşme water supply system (fig. 33), allows us to link the Istanbul map with this painter. This composition is contained in Tarih-i Sultan Süleyman Han (The History of Sultan Süleyman Khan) dated AH 987/AD 1579-80, for which the historiographer Seyyid Lokman and the painter Osman teamed up for the first time. It is conceived as a map, without any human figures and displays a striking stylistic similarity with the Istanbul map in Hünernâme. The map, which measures 37.8 x 52 cm, spreads across two pages and depicts a green landscape with the ensemble of aqueducts built north of Istanbul during the reign of Süleyman I. It also shows the north corner of the city, its suburb Eyüp and some smaller settlements on the opposite shore of the upper Golden Horn, between the Tersane Garden and the district of Sütluce. The technique of drawing and the coloration of buildings as well as of the landscape closely resemble that of the Hünernâme map. Particularly noticeable is the depiction of

without human figures of Sehnâme-i Selim Han. Çağman suggests that some miniatures might even have been produced by these two painters together, ibid., 418. Painter Ali, who was Osman's brother-in-law, apparently collaborated with him in various commissions.


hills as repetitive wavy motifs, like an all-over pattern, on both maps despite their difference of scale. The hills are painted in a darker shade of green on green ground in the water supply map and in dark grey on light grey-rose ground in the Hünernâme map. Also common to both maps is the coloration of the body of water with silver pigment.¹⁵

A third map that shares the pictorial characteristics of these two maps is contained in Şehingehnâme (The Book of the King of Kings) completed in 1581, and which was most probably illustrated by Osman and his group (fig. 34).¹⁶ The dimensions of the square into which this map can be inscribed are 21 x 21 cm. The upper part of the composition is reserved for the depiction of the comet that appeared above the city in 1577, and below the horizon line the considerably smaller map shows the city only in part.¹⁷ But the contour of the Istanbul Peninsula is very reminiscent of the Hünernâme map, and the buildings of the city are drawn exactly in the same graphic style and similarly form a continuous urban fabric. The pink tone of the urban areas as well as the silver color of the body of water further point to a common author. But more importantly, in all three maps the coastline that is composed of arc segments displays the characteristic style of nautical charts and links these maps unmistakably to one another (figs. 35 and 36), and at the same time provides a concrete piece of evidence in favor of the common authorship of these three maps.

¹⁵ The use of silver pigment to paint the water surface is associated with Osman's style. It occurs, however, first in topographic views of Nasuh's chronicles Tarih-i Sultan Bayezid, ca. 1540; and Tarih-i Feth-i Siklos, ca. 1545.

¹⁶ İstanbul Üniversitesi Kütüphanesi (İÜK), MS, F. 1404, fol. 58r. The volume, also referred to as Germâlpâme, was written by Lokman. Atasoy and Çağman attribute its miniature illustrations to Osman and a group of painters working with him but do not comment specifically on this map, Turkish Miniature Painting, 36–38. For a brief remark about its stylistic similarity with the Hünernâme map, see GünSEL Renda, "Minyatürde İstanbul," in İstA 5:472. The map is reproduced in color in Ahmed S. Ünver, İstanbul Rasathanesi, 2nd ed. (Ankara: TTK, 1985), 72f.

¹⁷ For the section of Şehingehnâme concerning the appearance of the comet in September 11, 1577, see Ünver, op. cit., 78–9.
evidence that someone trained in the craft of chartmaking somehow participated in their preparation.

These three compositions, hence, form a small but stylistically consistent group of topographical representations to be associated with Osman or at least with a group of painters led by him, and another composition in the first volume of Hünernâme links them, but in particular the Hünernâme map, with the narrative miniatures of that volume. This composition, which shows the third court and the outer gardens of Topkapı Palace, is a mainly topographical representation but also includes few human figures to depict some typical court activities (fig. 37). The depiction of the fortified enclosure wall, as well as the coloration of the sea and the gardens, clearly suggest that this representation was prepared by the same artist that prepared the Istanbul map in the same volume. But more importantly, the depictions of the palace site and of buildings are clearly based on the Istanbul map. In other words, this composition is an enlargement of the corresponding spot of the Istanbul map. The enclosure wall of the palace in the Seraglio Point area has the same curvature as on the Istanbul map, and the third court, as well as several smaller buildings, are similarly situated in regard to the coastline. It is worth noting that a further enlargement of the same area can be found in Sehinsehnâme, in a topographical composition that shows the new pavilion of Murad III commanding the harem wing (fig. 38). The configuration of the harem facade here is clearly based on the respective details of

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18 TSMK, MS, H. 1523, fols. 231v-232r. This representation of the third court is part of a series that also comprises the representations of the first court (fol. 15v) and the second court (fols. 18v-19r) of the palace. The second and third courts are clearly by the same artist while the first court is by another.
19 In two small walled areas adjacent to the seawalls, in the right half of the composition, the ground is painted like the extra-muros landscape on the Istanbul map and the Kirkçeşme water supply map, seemingly to distinguish their uneven surface from the smooth, grass-covered areas of the gardens.
the Istanbul map in the same manuscript (fig. 34) and the composition showing the third court of the palace in Hünernâmê (fig. 37).

Apart from the Istanbul map and the three topographical compositions conceived as maps (figs. 33, 34 and 37), there are also some narrative compositions attributed to Osman, in which the setting of the event is depicted like a map, and in one particular case, there is a striking similarity between his composition and that of a European engraving from around the same time (cf. figs. 39a and 39b). 20

The predominantly topographic aspect of Osman's miniatures certainly affirms his interest in the cartographic genre, but more importantly suggests that he possibly relied on some cartographic material prepared outside of the royal painting studio. It is even conceivable that a cartographer assisted him in the production of such miniatures but especially of the maps. 21 In fact, the coastlines of the Istanbul Peninsula bears considerable similarity to the respective detail of a nautical

20 Such miniatures occur especially in Şehnâme-i Selim Han, completed in 1580-1, TSMK, MS. A. 3595, fols. 41v-42r and fols. 147v-148r which are reproduced as fig. 8 and 6 respectively in Çağman, "Şehname-i Selim Han": 438-9, 434-5. The comparison with the European engraving, which I have come across by chance, is not mentioned by Çağman. Another instance of similarity between a topographic miniature depicting the tripartite fortress of Sigetvar and an engraving by Domenico Zenoi (or Zenoni) has been pointed out by J. M. Rogers, see Rogers and Ward, Süleyman the Magnificent, 110.

21 The relation of topographic compositions in sixteenth-century Ottoman miniature painting has been described in a general way, and its possible link to nautical charts ("portolans") has been suggested in a general way by art historians, see, e.g., Zeren Akalay [Tanindi], "Tarihi konuda ilk Osmanlı minyatürleri," 111 ff, and Çağman, "Şehname-i Selim Han," 420. For a more detailed discussion of possible links between palace painting workshops and cartmakers, see Günel Renda, "Representations of Towns in Ottoman Sea Charts of the Sixteenth Century and Their Relation to Mediterranean Cartography," in Soliman le Magnifique et son temps: Actes du Colloque de Paris, Galéries Nationales du Grand Palais, 7-10 mars 1990, ed. by G. Veinstein (Paris: La Documentation française, 1992), 279-97; (hereafter cited as "Representations of Towns"). These maps, however, have not been studied on their own nor has the concrete link to nautical cartography provided by their coastline been addressed. For the characteristics of nautical charts, generally referred to as "portolan charts", see below chap. 3, p. 136 ff.
chart of the Black Sea that is contained in an atlas prepared by Ali Macar Reis (fig. 40). Dated 1567, the atlas was kept in the treasury of the Topkapı Palace. Even if Ali Macar Reis might not have been the collaborator of Osman, it is not impossible that the atlas was used as a cartographic source.

At present, even though Osman is the most probable name to be associated with it, the Hünernâmê map preserves its quasi-anonymous character since, upon closer examination, as we shall see further on, the participation of two rather than one hand is suggested, at least in the drawing of its topographical details.

3. The Cartographic Composition

The Hünernâmê map does not have a tight compositional order comparable to that of Nasûh's map and appears relatively more naturalistic. There are, for example, no symmetrical or other compositional concerns that seem to have determined the map's layout. The Istanbul Peninsula is depicted closer to its actual triangular shape, and the coastlines reflect geographic features such as bays and capes. This said, the Hünernâmê map is not free of distortions and emphases, and in some ways

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22 TSMK, MS, H. 644. The atlas consists of seven charts drawn on vellum. Each chart measures 29.5 x 43.0 cm. Fol. 4v bears along its right edge a colophon indicating that it was "written by the poor Ali Macar Reis in the month of Safer of the year 975" (ketebetü'l- fâkîr... Ali Macar Reis fi şehri's-Safer sene 975/AD 1567). The chart of the Black Sea is reproduced in color in Portolani e carte nautiche, 94-5.

reflects spatial hierarchies through its layout and scale differences in the depiction of different settlements. It also incorporates several viewpoints that are different from those of Nasuh's map but also more complex. In fact, the Hünernâme map suggests a modification in the hierarchy of prevalent viewing directions in and around the city. But these viewing directions are not always explicit and need be inferred from intricately depicted topographical details. Therefore I shall discuss them after having examined the layout and the topographical content of the map.

3.1. The Map Layout

The Hünernâme map is painted on two separate sheets of paper that were then bound side by side. It fills these two folios without margins and measures 49.2 x 63.0 cm. The Istanbul Peninsula, which projects towards the east, is drawn horizontally across the center of the book. The upper edge of the map is occupied by the north shore of the Golden Horn. Here the semicircular bay, where the naval shipyards were located, is in central position. Moreover its size is exaggerated with regard to the walled town of Galata, which is to its right, on the southward projection of the north shore. Other settlements that developed during the sixteenth century along the north shore of the Golden Horn are depicted without precise demarcation; particularly noticeable is the development north of Galata. On the left folio to the west of Istanbul the town of Eyüp is depicted as a dense settlement that almost borders the walls of the city. Its depiction remarkably surpasses that of Galata in size. On the other hand, Üsküdar, where two monumental mosques, several public facilities and palaces were built after the mid-sixteenth century, is virtually absent.
Only a very small part of the town is visible as a tiny triangular land projection at the right-hand edge of the map. The city of Istanbul, represented in its integral shape, occupies the center of the map. All other urban settlements, including Galata, appear somewhat marginal. The particular geographic situation of Istanbul surrounded by water on three sides finds more visual emphasis on this map than on Nasuğ's map as a result of the stronger visual presence of the Marmara Sea that forms a large triangular surface at the lower right-hand corner of the map and then upwards merges with the Bosphorus. Painted in silver, the body of water acquires an overall emphasis and appears as the second most important element of the map after the city of Istanbul. It is further accentuated with various kinds of ships depicted with a remarkable graphic precision, not given to other details of the map.

A particularity of the Hünernâme map, which concerns its layout, and in some ways its topographical content, needs to be mentioned before the topographical details are examined.

The center of the book visually divides not only the map but consequently also the Istanbul Peninsula into halves. This division of the peninsula, however, also corresponds to a division in the depiction of the city with regard to the

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24 As far as we know, the Hünernâme volumes have not been rebound and, therefore, its pages, including those bearing this map, have not been trimmed. Yet I do not exclude the possibility that the map was initially drawn on larger sheets and eventually cut down to fit the pages, something which would explain not only the unusual lack of margins but also the quasi absence of Üsküdar.

25 Also in that area of the map are depicted two islands one in elevation the other in plan. They represent Sivri and Yassi respectively, two of the Princes' Islands that are closest to the city.

26 Depictions of ships in Ottoman miniatures of the sixteenth century not only display a striking precision of drawing but a striking realism as well, easily comparable to that of ship depictions found on engraved or painted Western maps and views. Whether they were the work of painters specialized in ship figures, or whether miniature painters were depicting ships in a particular manner because it was a new and special subject for requiring precise and realistic representation, remain questions to be answered.
drawing scale and manner of the buildings. In the right-hand half of the peninsula the buildings are drawn in a more orderly fashion and are slightly larger than in the left half. This observation leads one to suspect that after the contours of the landmasses were traced on the two sheets, each half of the map was worked on by a different painter. Following a common style of depiction, the painter of the left half drew the buildings on a slightly smaller scale, perhaps to fit the amount of detail foreseen. Another possibility, which does not necessarily rule out the hypothesis of two painters, is that the map's layout initially consisted of only what is shown on the right-hand folio and that this single-folio map was then extended over a second folio either to show Istanbul in full, or perhaps to obtain a larger and more impressive representation. This hypothesis seems feasible given the fact that the map is drawn on two separate sheets and not on a single sheet of double-folio size. But it is also suggested by a particular detail that is occurs twice on the map. On both halves of the map, on the Marmara coast of Istanbul, there is a similar detail showing a vacant and walled site adjacent to the sea walls. Despite their slightly different depictions, both details cannot represent anything other than the Langa Garden, which was the only walled area on that shore and characteristically divided into two sections.27 It looks as if the detail on the left half relocates Langa to a more appropriate spot of the map in its extended format. The correct location of Langa, however, rather coincides with the book's center on the Hünernâme map. Hence, neither of the two Langa details is more correct with respect to the actual site.

27 On the Langa Garden, see chap. 1, n. 54. This former Byzantine harbor got gradually silted up. The land thus gained was walled around at two instances between the middle and the end of the fifteenth century, see Albrecht Berger, "Der Langa Bostani in Istanbul," 474. The double detail of Langa on the Hünernâme map has been also noticed by Berger, ibid., but due to some confusion he refers to the map as the Piri Reis map.
If the Hünernâme map was initially what we see on the right-hand folio, then it was first conceived in a vertical format. The resemblance between the vertical format of Hünernâme map's right half (fig. 35) and two other Istanbul maps, the Buondelmonti map (fig. 5) and the Sehinşehnâme map (fig. 34), is worth noting. The Buondelmonti map (or any of its numerous variants) (fig. 5) primarily shows Istanbul and Galata in the vertical format and rather little of the Asian side, even if we consider that it might be partly due to trimming. Also on the Sehinşehnâme map, the layout within the rectangle of the compositional frame includes only a small part of the Asian coast while a greater part is painted beyond the frame line on the margin space (fig. 36).28 The remaining similarities of the Hünernâme map with these two earlier maps part company here. The Buondelmonti map has its north orientation in common but differs in its representation of the city of Istanbul and its topographical details. In these latter aspects, however, the Hünernâme map resembles very much the Sehinşehnâme map. Their main difference lies in their contradictory orientations. If the Buondelmonti and the Sehinşehnâme maps served as models for the "first-stage" of the Hünernâme map, especially for its layout, then the limited presence of Üsküdar can be explained. In its expanded version, the map surface offers ample space towards the west for representing the city of Istanbul fully including its landwalls and some suburban settlements. This enlargement seems to have provided sufficient space to also depict Eyüp, however not

28 This extension of the Asian coast might have been required by the subject for which this map served as an illustration. The comet with its tail pointing towards the east, was interpreted as an auspicious sign for the Ottomans, i.e. they would be victorious over the Safavids of Iran. According to the text on fols. 58b-59a of Sehinşehnâme, the comet is described and interpreted as follows: "It sent sparks from west to east. Because it appeared in the sign of Sagittarius its arrow fell on the enemies of the religion [i.e. the Shiite Safavids]. It disappeared in the sign of Aquarius. Like a scorpion, it sent its ill-omen on the enemy for its brightness and tail was pointing east." See Ünver, İstanbul Rasathanesi, 78-9.
Üsküdar, whose size seems to have been largely determined by the initial, single-folio layout. It is conceivable though, that this imbalance between the representations of Eyüp, Galata and Üsküdar was not considered an unacceptable defect of the map and to some extent reflected the hierarchy of importance among the three townships, for otherwise a completely new map would have been prepared.

3.2. The Topographic Content

On the Istanbul Peninsula, which is presented as the central element of the map, the fortification walls enhance the geographic contour of the city, yet with their white color, also constitute the most prominent topographic detail. The Yedikule Fortress, which is located at the southern end of the landwalls, is especially depicted in a much larger scale and also much more precisely than any other building in the entire map (fig. 31a). It is to some extent balanced with the Topkapı Palace precinct located at the tip of the peninsula and separated from the city by a fortified wall of its own. The pale green color that distinguishes the detail of the Topkapı Palace is also applied to another palatial complex, the Old Palace, which is depicted as an area walled on four sides to the west of Topkapı, as well as to a small, trapezoidal area next to the sea walls on the Marmara shore. The latter detail shows a walled place, most probably the Cüni Meydanı (Spahi Field), reserved for equestrian competitions. Another

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29 It is, however, noticeable that the Tersane Garden, depicted here on the northern shore of the Golden Horn, west of the naval shipyards, is not accentuated with the same green ground color, although it was an important royal garden comprising waterfront kiosks.

30 This place, also referred to as Cindi Meydanı, was located between the Küçükâyasofya Mosque and the Port of Kadirga. It was described in the 1580s by Reinhold Lubenau as: "ein Ohrt (...), welchen man den Spahiplatz nennet, und ist gahr ein grosser, wider Platz mit einer Mauren umgeben, welcher gahr schon eben," in Beschreibung der Reisen des Reinhold Lubenau, ed. W. Sahm (Königsberg: F. Beyers, 1912) 1: 181 (hereafter cited as Reisen). Around the 1630s Jean-Baptiste Tavernier emphasized that the access to the place was restricted and that it was kept "propre
remarkable detail of the map is the longish, vacant area that ends at the landwalls. It represents the unbuilt part of Bayrampağa (Lykus) Valley. Except for this area and the walled Langa Garden, which occurs twice as it has been pointed out, the intra-muros area is fully built.

Within the continuous urban fabric, because of their walled precincts, the Fatih and Bayezit Complexes can be more easily recognized than other royal mosques such as Süleymaniye, Şehzade and Sultan Selim that are embedded in the dense urban fabric as numerous small mosques. They only stand out, apart from their white coloration, with their relatively larger size and multiple minarets.

The royal mosques are also either depicted in a bird's-eye view or in elevation (fig. 31b). Among them, the Hagia Sophia acquires a special emphasis with its slightly larger scale and its isometric depiction. The Fatih and Sultan Selim Mosques are also isometric views while Süleymaniye, Bayezid and Şehzade are shown in elevation. On the other hand, the details of the bird's-eye view of the Topkapı Palace, the Old Palace and the Hippodrome, as well as of the Bayezid and Fatih Complexes, comprise ground plans, elevations and isometric elements.

The use of different modes of depiction such as the bird's-eye view and the elevation, however, is not systematically linked with different building types as in Nasuh's map. As I shall discuss further on in relation to the viewpoints incorporated into the Hünernâme map, these different modes of depiction rather seem to indicate particular vantage points, within or without the city, and the perceptions of buildings or sites linked with these points.

The buildings that form the fabric of the city consist of houses, commercial buildings and small mosques. While the

& unie" according to the sultan's orders, who went there often to assist at competitions in which selected persons from the court and the common folk participated, in *Relation Nouvelle de l'Intérieur du Serrail du Grand Seigneur* (Paris, 1675), 69.
mosques are discrete figures accentuated with white paint, the facades of smaller, ordinary buildings are drawn without any space between them and form rows that slightly overlap. With this tight arrangement, the urban settlement of Istanbul is represented as a dense and continuous fabric, while its hillside location is expressed by the overlapping of facades. Within this fabric, the white pigment is applied to some buildings here and there but it has a varying and often poor opaqueness so that the grey-rose ground color shines through and visually enhances the continuity of the urban fabric. Furthermore, the red pigment used to paint the tiled roofs of these smaller buildings has a varying intensity. It is remarkably brighter on the left half of the Istanbul Peninsula and might be associated with the artist who worked on that part of the city.

The rows formed by smaller buildings, in general run parallel to one another as well as to the northern and southern coastlines of the peninsula, but there are noticeable differences in their depiction in the left and right halves of the map. In the right half, they neatly form rows parallel to an east-west axis, with the exception of the Topkapi Palace area. However, in the left half they are clearly more intricate. This difference of depiction seems to stem primarily from two different hands and corroborates further that two different artists worked on the two halves of the map. Yet the contorted rows of building in the left half are not simply a graphic peculiarity, for some relation can be established between them and the more complex topographic structure of the western part of the peninsula, where two groups of hills are separated by a valley (fig. 41).

A comparison with a contour map of Istanbul (fig. 3) suggests that there is some link between the steep slopes of certain hills and the groups of curved or twisted rows on the Hünernâme map. One can discern three such groups particularly
in the western half of the peninsula: two to the northeast and one to the southwest of the Bayrampaşa (Lycus) Valley (fig. 31e). It is possible to relate these curved rows, even though approximately, to the northern slopes of the so-called fifth and sixth hills and to the southern slope of the seventh hill.\textsuperscript{31}

The topography of the eastern part of the city is depicted in a more simplified scheme: the "third" hill, with Süleymaniye Complex at its northern promontory, and the "second" hill, to the east of the Bayezid Complex, are merged to form a saddlelike hill with two slopes descending toward the north and south. Yet the axis formed by the Hippodrome and Topkapi Palace Complex reflects the oblique position of the "first" hill in relation to other hills. On the steep northwest slope of this hill, the cypress trees are depicted in parallel rows, and confirm that this kind of arrangement of topographical details is used as a devise to represent a site's descent.\textsuperscript{32}

Painted in a very dark shade of green, trees are present all over Istanbul except in the Yenibahçe area and the area between the Old Palace and the Topkapi Palace. These trees that intermingle with buildings and almost uniformly punctuate the urban fabric represent the widespread vegetation within the city walls.\textsuperscript{33} In the area outside the walls, the trees do not seem to be depicted to characterize the natural landscape but

\textsuperscript{31} There is also a link between the curves framing the Langa detail of the left half of the map and the actual slopes of Bayrampaşa Valley just north of Langa where the valley opens to the sea. But because of the mislocation of the Langa detail to the west of the Column of Arcadius on the Hünernâme map, the link is not apparent. Another misplaced detail is the Sultan Selim Mosque, which is depicted not on the "fifth" hill but more easterly, nevertheless the steep slope to its north seems indicated by curved rows of buildings.

\textsuperscript{32} The use of different modes of depiction in this map has been briefly noted by J. M. Rogers. However, Rogers devotes to this map a very short section that hardly offers any substantial discussion of its cartographic particularities, let alone the depiction of its topographical details. Rogers calls the map, very generally, a bird's-eye view. See J. M. Rogers, "Itineraries and Town Views in Ottoman Histories," 249-50.

\textsuperscript{33} This contrast between the urban landscapes of Istanbul and Galata is also observable on Nasûh's map as I have noted above in chap. 1.
rather to emphasize their coexistence with buildings. However, it is difficult to know whether the treeless areas of the landscape were like that in reality or whether they are simply incomplete. At least in one detail of the map, though, they seem to have been neglected: the Tersane Garden (fig. 31f), which is a walled area with few waterfront buildings, right at the western end of the shipyards, is depicted without the dense cypress grove that characterized it and which was always depicted in other representations of this royal garden (fig. 32).34

Only a few trees are depicted in the walled town of Galata, which was much more densely built than Istanbul and did not contain any gardens within its walls. In this regard, Galata presented a striking contrast to Istanbul. On this map it is further distinguished by a grey ground color, which is also applied to the islands Sivri and Yassi. If there is a symbolic use of colors on this map, this particular color must indicate a lack of vegetation, as on the urban site of Galata, where trees were rare, but also on the two islands that were naturally barren.

The numerous sailing ships, which animate the bodies of water, are mostly cargo vessels rather than military ones and refer to the sea-based trade connections of the Ottoman. The military vessels are limited to some galleys depicted at the naval shipyard and to two galleons on the Marmara Sea. Also depicted are numerous rowboats (pereme) moored along the shores of the Golden Horn. The principal means of transportation between the parts of the city separated by water, these boats transformed the water surface, especially that of the Golden Horn, into an inner urban site, a locale not only of passage but also of promenade.35

34 Also see the variant Istanbul maps in Kitâb-ı Bahriye manuscripts, e.g. figs. 64-8, and 70.
35 On pereme transportation and the principal lines on the Golden Horn, and across and along the Bosphorus, see Cengiz Orhonlu, "İstanbul'da
3.3. The Viewpoints

As it is placed in the book, the Hünernâme map has a northern orientation, i.e. the direction of north points away from the upper edge of the book. As already mentioned, the general orientation of the Hünernâme map matches that of Buondelmonti's Istanbul map (fig. 5). Both maps are laid out with respect to a viewer presumably located somewhere on the Marmara Sea and, hence, looking at the city from a southern viewpoint. But this southern viewpoint, even though the most apparent, is yet only one of several other viewpoints from which the different parts of Istanbul and its neighboring towns are seen in the Hünernâme map (fig. 42).

The multitude of viewpoints underlying Istanbul's depiction is an aspect that also distinguishes the Hünernâme map from Nasûh's map and the Sehinsehnâme map. More than half of the buildings on the Istanbul Peninsula are drawn with respect to a second viewpoint in the north. A third viewpoint in the west is suggested through the orientation of the landwalls. In other words, the Hünernâme map proposes to look at the city of Istanbul from the Marmara Sea, from the Golden Horn (or its north shore) and from outside the landwalls. Thus the map presents all three aspects of Istanbul, which was frequently characterized as being surrounded on two sides by water and one side by land.

Eyüp, Galata and Üsküdar, the three townships of Istanbul, are each seen from a different direction but remarkably always from the sea. As is the case with all urban sites divided by a body of water, in Istanbul a view from the sea is at the same time a view from an urban site on the opposite shore. This reciprocity of views or viewing situations is clearly reflected in kayakçılık ve kayak işletmeciliği, "Tarih Dergisi" no. 21 (1966): 109-34; (hereafter cited as "İstanbul'da kayakçılık"). Orhonlu mentions, for the end of sixteenth century, five principal lines and twenty-one landings, ibid.
in the Hünernâme map. But more than that, such reciprocity seems to have been deliberately expressed by its mapmaker(s) for it also underlies the depictions of very small settlements. There are those outside the landwalls, not necessarily separated by a body of water, but that are nevertheless drawn as facing the landwalls.

3.3.1. The Viewpoints for Istanbul

The views of the walled city of Istanbul depicted in the Hünernâme map closely reflect real views, in other words the extent and depth of depicted views very much resemble what can actually be seen from viewpoints geographically corresponding to the chosen, pictorial viewpoints. Istanbul can be best viewed from the Marmara Sea and from the Golden Horn, or rather its north shore because of its peninsular site. Each of these panoramic views reveals the characteristic topography and the buildings of the city that ascend from the shore and form an extensive cityscape. The Hünernâme map shows Istanbul primarily from these two viewpoints in the south and in the north. In contrast to these viewpoints, the extra-muros viewpoint in the west offers a more limited view of the city. While the double row of fortification walls can be conveniently viewed from such a stance, the city practically disappears behind them as it descends eastward. Whenever visible from a sufficiently high spot it appears in a strongly foreshortened perspective. What is depicted on the Hünernâme map from this western, extra-muros viewpoint reflects well both its advantage and limitation: the

36 In 1614, Pietro della Valle praised the view of the double-tiered fortification walls seen when approaching the city by land: "però il muro di dentro è più alto di quello di fuori, onde viene a far bellissima prospettiva, scoprendosi, da chi viene alla città, di lontano, l'una e l'altra muraglia, a guisa di una scena," in Viaggi di Pietro della Valle (Brighton: G. Gancia, 1843) 1:22; (hereafter cited as Viaggi). Although some textual descriptions of this view exist, it hardly became a subject of pictorial representation similar to profile city views featured in Braun and Hogenberg's Civitates Orbis Terrarum. The European artists rather preferred for that purpose the view of the city from across the Golden Horn that was much more attractive.
main elements of the depicted view are the walls and the Yedikule Fortress. From the intra-muros buildings, only very few are depicted as facing this western viewpoint. These are buildings located near the Topkapı Gate, included in this western view since visible through their elevated site on the "seventh" hill.

The frontal effect of this depicted view from outside the landwalls is particularly enhanced by the detail of the Yedikule Fortress. This fortress, characterized by its seven-cornered plan, is not depicted through a bird's-eye view or vertical plan, which might have better revealed its characteristic configuration, but as a very precise elevation. Other than its elaborateness, this elevation is very symmetrical and also has a larger scale than any building depicted on the map. Hence it renders Yedikule the most prominent detail of the entire map. While this scale difference can be seen as an emphasis pointing to the symbolic significance of the fortress, it can also be explained in pictorial terms.

Given the limited depth of the western view, it is fair to consider the depiction of Yedikule in its own terms, or rather as a self-contained view. Then the scale of the fortress elevation appears much less exaggerated. The difference between its scale and that of the fortification towers of the landwalls is also much smaller. These towers, however, gradually diminish in size away from the Yedikule. This gradual change of scale, admittedly, permits a transition from the elevation of the fortress to the walls to its left, yet it also corresponds to what a viewer, standing in front of the fortress and looking at the walls, actually sees. The Yedikule Fortress is located almost at the southern extremity of the landwalls, and from an actual viewpoint that would permit a perfectly frontal sight of its facade, as the one represented here. From that position, the rest of the landwalls would be seen in an oblique angle.
and, hence, gradually diminishing in size. Considered together with the elaborate and symmetrical elevation of the Yedikule, this diminishing scale suggests that the western view on the Hünername might have been based on a sketch made in-situ but from a single vantage point located in front of the fortress.

As to the views of Istanbul from the Marmara Sea and from the Golden Horn, they too match actual views. In the map, the zones of these two views can be separated by a line, as indicated in fig. 42, which runs between the roof tops of the buildings facing opposite directions. The line has an irregular path but approximately follows the sequence of hilltops that delineate the city's skyline for each of the two viewing directions. In the left half of the map, the line splits into two. The area that remains in between corresponds to the lower part of the Bayramapaşa (Lykus) Valley, where the buildings on two slopes face into the valley (fig. 31e).

Remarkably, the city's main monuments which occupy the hilltops remain within the zone of the northern view as they are in fact actually seen from the north. From east to west the Topkapı Palace, the Hagia Sophia, Bayezid Mosque and the Old Palace, Süleymaniye, Şehzade, Sultan Selim, Fatih and Mihrimah Mosques, all line up along and north of the delineation line of the two zones. Among these buildings seen from the north, the Kara Ahmed Pasha Mosque is included (fig. 31e). It is a medium-sized mosque situated atop the southern slope of the Bayramapaşa Valley, near the Topkapı Gate and, therefore, visible from across the Golden Horn (fig. 43e). The inclusion of this mosque in the representation of the northern view particularly supports my argument that the depiction of topographical details in the Hünername map is largely based on the actual cityscape visible from the north.

Even though the southern view of Istanbul at first appears as the more important one—for looking at the north-oriented map we also find ourselves looking at the southern face of
Istanbul— the Hünernâme map clearly emphasizes the northern face of the city on the Golden Horn by representing the most important buildings of Istanbul within the northern view. In order to properly see these monuments one must, however, look at the map the other way around, that is to leave our initial southern vantage point and, adopt another one that conforms with the north of the map. So we look at the city as if we were across the Golden Horn. I consider this shift of vantage point a deliberate cartographic emphasis on the northern view, which at the same time makes explicit the link between the depicted and the real viewpoints.

3.3.2. The Representation of the Northern Cityscape of Istanbul

The northern cityscape comprises numerous mosques that are depicted in elevation, including the medium-sized Atik Ali Pasha Mosque to the southeast of the Bayezid Square and next to the Column of Constantine (Çemberlitaş) and the Mihrimah and the Kara Ahmed Pasha Mosques respectively to the north and to the south of the vacant Bayrampaşa Valley near the landwalls (figs. 31b, 31e and 42). But from the monumental mosques only the Süleymaniye and Şehzade Mosques are depicted in elevation. We see their side facades frontally as one sees them looking from Galata. On the other hand, three other mosques, Hagia Sophia, Sultan Selim and Fatih are all shown in frontal isometric views, the latter amidst its open space and flanked by madrasas. The details showing the Topkapı Palace, the Old Palace and the Bayezid Mosque are hybrid depictions for they combine elevations with plans or isometric views of their precincts.

This disparity of depiction modes somehow disturbs the pictorial unity of the northern view, and whether these differences in depiction had a meaning of their own or resulted from the participation of more than one person in the production of the map is not easy to assess. Yet there seems to
be a relation between the isometric views of the Hagia Sophia, Fatih and Sultan Selim Mosques and that of the Old Palace in the Hünernâme map, on the one hand, and the oblique views of the same buildings from the Galata Tower, on the other. (figs. 43a, 43d and 43e). The Galata Tower has often served as a convenient vantage point for drawn or photographed panoramic views of the cityscape on the Golden Horn, including its first panorama by Melchior Lorichs (fig. 44a and 44b). The depiction of the Süleymaniye and Şehzade Mosques in elevation also conforms with the frontal views of their side facades seen from the same vantage spot (fig. 43c). This connection made, one is tempted to imagine a semi-circular line interconnecting the Topkapi Palace, Hagia Sophia, the Bayezid Mosque, Şehzade and Sultan Selim on the map and which would define the span of this panoramic view. In any case, if such a correlation between the modes of depiction and the actual views of the monumental buildings from the Galata Tower exists, it would further confirm that the depicted northern view is partly based on an actual view of the peninsula from the north. At the same time, most of the buildings on the north side of the peninsula are not depicted in respect to the particular viewpoint of the Galata Tower, but in respect to a general viewpoint to the north of the city. This implies that the northern view in the

37 For a facsimile of Lorichs's panorama, see Eugen Oberhummer, ed. Konstantinopel unter Sultan Suleiman dem Grossen aufgenommen im Jahre 1559 durch Melchior Lorichs aus Flensburg... (Munich: R. Oldenbourg, 1902); a small-scale, complete reproduction can be found in Soliman Le Magnifique, 296-7. An important section of Melchior Lorichs's comprehensive panorama (1557-9) was apparently drawn from this tower while the rest was drawn from several other viewpoints further west and with shifts of viewing directions in order to maintain a uniform distance to the depicted object (fig. 44a), see Karl Wulzinger, "Melchior Lorichs Ansicht von Konstantinopel als topographische Quelle," in Festschrift Georg Jacob, ed. by T. Menzel (Leipzig: Otto Harrassowitz, 1932), 355-67. During the nineteenth century, the tower served as a vantage point for the panorama of Robert Barker (1813) and for photographic ones such as the panorama by James Robertson and Felice Beato (1853) and others. For partial reproductions of these panoramas, see Sedad H. Eldem, İstanbul Anıları - Reminiscences of Istanbul (Istanbul: Aletas, 1979).
Hünername map is not a unified view but rather incorporates several vantage points, or rather ongoing frames, as one might have seen when sailing up the Golden Horn.

However, the partial frames that seem to constitute the northern view of Istanbul do not all relate to distant and external vantage points as those available from the Galata Tower or from along the Golden Horn. Inserted into the zone of this external northern view, we also find some that derive instead from vantage points within the city. They concern an individual monument or site that is seen from a relatively close distance. As they appear part of the northern view, these particular vantage points cannot be deduced from the orientation of the buildings concerned. They are rather revealed by some features of the topographic detail that appear, with respect to the northern viewpoint, architecturally or cartographically incongruent. We notice, for example, that the minarets of the Fatih Mosque are on the wrong side of the prayerhall (fig. 31c), or that the Bayezid Mosque is seen frontally while its vaulting is seen from the side and its unique madrasa is on the wrong side (fig. 31b). But these problems do not reveal the particular vantage points underlying the depictions of the Fatih and Bayezid Complexes. We first become aware of the significance of certain self-contained vantage points in details that are more clearly represented. In such details, partial or self-contained viewpoints are suggested alongside the general viewpoint in the north and without conflicting with it.38 This is most often the case in hybrid topographical details that combine a ground plan or an isometric view with elevations.

The simultaneous use of different depiction modes involves different vantage points from which to look at different

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38 As long as the shift between the individual viewing directions concerning parts of these hybrid details and the general viewing direction is not too great, and at least one of the particular viewing directions coincides with the general viewing direction, we tend to find these details more or less in conformity with the northern viewpoint.
aspects of a building or site. However, a juxtaposition of various vantage points in a topographical detail of the Hünernâme map is not the result of a pictorial technique. Rather, a concern to represent various views appears to be what necessitates such a mix. At least in this map, the combination of different modes of depiction, especially in certain details of the northern view, might be explained with viewing experiences that are very characteristic for the building or site concerned. The detail of Topkapı Palace is a good example that is both elaborate and yet simple to construe.

3.3.3. The Depiction of the Topkapı Palace

The Hünernâme detail shows the palace complex and the surrounding gardens basically in a ground plan (fig. 31d). The plan reflects the sequence of the three principal courtyards (fig. 2b), which can only be perceived one at a time by someone on the site. This sequential experience, made when walking from one court to the next, is suggested here through the orientation of the gates that connect the courts. These gates are drawn in elevation and face the direction of approach and entrance to the palace from outside as well as to the walking direction from one court to another. As such, the depiction not only represents the palace but also a visual experience of its interior.

The palace buildings that flank the second and third courts are also represented in elevation but oriented toward the outside: the harem wing faces the Golden Horn while the wing at a right angle to it faces the Bosphorus. The outward orientation of these facades relates to their visibility from outside the palace. But other than being visible from

39 Topkapı Palace was depicted in the same hybrid way, but in a larger scale, also in another miniature of the Hünernâme (fols. 231v-232r) that shows the third court of the Topkapı Palace and its outer gardens (fig. 37). But especially striking is the depiction of the harem wing which is the only elaborately drawn external facade of the palace and clearly has the same orientation as on the map, i.e. looks up the Golden Horn.
outside, these wings comprised several architectural elements designed to exploit the view such as belvederes, galleries, bay windows and, hence, formed a real "look-out" zone for the palace. Such reciprocity of viewing and being viewed does not characterize, for example, the wing formed by the kitchens opposite the harem. Remarkably, the former is depicted as simply facing the palace courtyard and not the Marmara Sea although it presents an architecturally impressive facade on that side. The depiction of an inward-looking kitchen wing particularly contrasts with that of the nearby Hippodrome, which is shown in a bird's-eye view and as seen from the Marmara Sea, something that relates both to this site's visibility from the sea and to the view of this sea available from its site.40

The double viewing experience that characterize the Topkapı Palace, one from within and one from without, is expressed with two different modes of depiction. For the exterior view of the palace, the vantage point is the same as for the rest of the city, that is the outer space to the north or from the sea. For the interior view, it is the depiction of the courtyards in plan that properly locates the vantage point; the gates shown in elevation indicate the direction of this experience. But the clarity of this hybrid depiction owes much to the architectural configuration of the Topkapı Palace, which allows such discrete representation with regard to different vantage points.41

40 The Hippodrome (At Meydanı) was not only an important public place, but also a favorite promenade especially praised for its view of the Marmara Sea, which was noted by Piri Reis in the context of a comparison with the site of the sacred precinct of Athena at Cap Sounion. Piri Reis describes this site as a "temaşâlik" (viewing place) comparable to the Hippodrome: "temaşâlik didiğümüz de deniz üzerine havâle, İstanbul'un At Meydanı misâlinde, bir yüce yir..." See Piri Reis Kitâb-ı Bahriye, with an introduction by Haydar Alpagut and Fevzi Kurtoğlu (İstanbul: Devlet Basımevi, 1935), 279.
41 The importance of the harem as the visible facade of the palace is also reflected in a slightly earlier miniature to be found in the Şehingehnâme, fol. 118r (fig. 38). This miniature highlights the new pavillion overlooking the Golden Horn built by Murad III, under whose
Despite its hybrid character and the various viewpoints it comprises, the depiction of the Topkapı Palace fits into the northern cityscape seen from the Galata Tower because the depicted harem facade is oriented as in its real situation, in other words, what belongs to the view of the palace from the north is depicted accordingly. The other viewpoints, which are pictorially distinct from the northern viewpoint coexist with it without creating any conflict. The details of the Bayezid and Fatih Mosques differ from that of Topkapı precisely because, in their depictions, a distinction between on-site viewing and external, distant viewing is blurred.

3.3.4. The Depiction of the Fatih Complex

The detail of the Fatih Complex shows a large, rectangular precinct enclosed by a wall (fig. 31c). The southwest and northeast sides of the precinct are occupied by two long blocks formed by the madrasa buildings. The mosque is shown in an isometric view. It is part of a central, longitudinal block, which also comprises, in an axial order, to the southeast of the mosque the tomb garden and to the northwest the entrance courtyard. The soupkitchen and the hospital, although somewhat compacted, are shown at the southeastern limit of the mosque precinct. The locations of all these auxiliary buildings in the map correspond to their actual locations. The problem of the detail is, as pointed out earlier, the location of the mosque's minarets which appear on the left side of the domed prayerhall instead of on its right side as one would expect to see them from a viewpoint north of the city.

However, if isolated from its context in the northern view, the depiction of the Fatih Mosque reflects an architecturally correct configuration, that is, the unique patronage the manuscript books Şehinglehname and Hünernâme were produced. Notably, also in this miniature the harem wing has the same orientation as in the Topkapı detail of the Hünernâme map as suggest the outer walls as well as the Golden Horn shore that run in an oblique angle to the depicted facade.
semidome and the minarets appear on opposite sides of the prayerhall.\textsuperscript{42} A view of the Fatih Mosque that corresponds to the depicted isometric view is offered by a viewpoint at the south corner of the open space surrounding the mosque, where two entrances lead to the complex precinct from the Divanyolu (figs. 45 and 46)

Even though the depiction of the Fatih Mosque seems to relate to this particular viewpoint in the precinct because of its isometric perspective, it nevertheless reflects a general overview of the mosque, or an overall configuration in which the pair of minarets appear on the left and the semidome on the right hand sides of the main dome when it is seen from any southern spot. This configuration must have corresponded to a typical sight or vantage point since arriving at the precinct of the Fatih Mosque from the west or east, more frequently the southern area of the open space was crossed because of its proximity and the several exits to the Divanyolu.\textsuperscript{43} The Fatih Mosque is depicted in this particular configuration also in a seventeenth-century water supply map that largely followed the path of the Divanyolu (fig. 47).\textsuperscript{44} The monumental buildings

\textsuperscript{42} The present Fatih Mosque dates from 1771. It replaced the original mosque of Mehmed II built in 1470 which had been repeatedly damaged by earthquakes and fires, see Bildlexikon, 406-7. After the severe damages of the 1754 and 1766 earthquakes, the main structure of the mosque was entirely rebuilt on the foundations of the first mosque but in a different design. The northwest wall of the original prayer hall and the courtyard that had remained intact were integrated into the new structure. The plan of Fatih Mosque in fig. 45 reflects the hypothetical plan of the original building as has been agreed upon.

\textsuperscript{43} The Fatih Complex formed a sort of nodal point on the main street. In the Ottoman period the main street arrived from the west at the two, centrally located western gates of the precinct. It then in a right angle circumvented the south side to continue its course eastward. It is possible that pedestrians often took shortcuts by crossing the southern half of the precinct and regained the main street passing between the southern madrasas or through the east gate at the south corner of the graveyard and then through the Saraghane (Saddlers' Market) before reaching the main street at a point further east.

\textsuperscript{44} Köprülü Kütüphanesi (KK), Istanbul, MS, "Su Yolu Haritası 1" (inventory no. 2441). The map shows the urban stretch between the Edirne Gate and the Column of Constantine (on the map identified as "dikilitaş"). The course of the waterway largely coincides with the
depicted, including in addition to the Fatih Mosque also the Bayezid Mosques and some vizirial complexes further east, are remarkably represented as seen from the Divanyolu.45

The Divanyolu, the northern branch of Mese, must have played an important role in the daily lives of Istanbul's inhabitants as an axis of visual orientation. Even though it had largely lost its original regularity by the sixteenth century, it was the unique thoroughfare of the city and linked all its important sites with one another in a relatively straight path (figs. 1 and 46).46 The two monumental mosques Fatih and Bayezid, which occupied hilltop sites at nodal points on this street, must also have served as orientation guides. We may assume that the sights from the Divanyolu or near it shaped the memorized images of those monuments. Especially in the case of the Fatih Mosque, it is possible that this image was shaped in relation to the frequently traversed southern zone of the precinct, and that the locations of the minarets and the unique semidome with respect to that zone became visual reference

course of the main street. After entering the city near the Edirne Gate, the water conduit follows the path of the main street until reaching the Fatih Complex, crosses the southern part of the precinct, passes over the Aqueduct of Valens; then via a distribution point at the southern corner of the old palace wall it traverses Bayezid Square and then reaches back to the main street, which it follows until it branches after the Column of Constantine.
45 The buildings are drawn on either side of the water way, or the main street, depending on which side they are situated. The only exception is the Kara Mustafa Pasha Complex, which is shown on the north instead of the south side of the water way.
46 This street must have been perceived as straight especially in contrast to the maze formed by smaller streets as suggests the description of the Italian traveller Pietro della Valle from 1614 that qualifies it as "una strada lunguissima, fin a palazzo del Gran Turco, che larga e piana per l'alto de'colli, e quasi sempre dritta, è la più bella che vi sia," in Viaggi 1, 22.
points, in other words, landmarks. These two architectural elements of the mosque must have been singled out, not only because their opposite locations indicated the east-west direction of the Divanyolu but also because their visibility was not restricted to the complex precinct, unlike that of the entrance court of the mosque or the tomb garden. The latter were probably not comprised in the enduring image of the mosque, and, therefore, are found in the Hünername map detail depicted rather as part of the precinct and not as elements attached and seen along with the mosque. On the other hand, the particular geometry of the mosque's depiction, which suggests a viewpoint in the north, might have been a pictorial solution to integrate the inner city image into the external general view of the city. Nevertheless the precinct's enclosure wall, along with its two gates, are drawn as if seen from the southeast (or from the southwest if the view is reversed as the mosque itself) and clearly points to the direction of approach from within the city. A vantage point from within the city, yet somewhat different than that of the Fatih Complex, seems to underlie the depiction of the Bayezid Complex.

**3.3.5. The Depiction of the Bayezid Complex**

The detail of the Bayezid Complex, apparently part of the northern cityscape seen from across the Golden Horn, shows the mosque in elevation surrounded by an open space (fig. 31b). This open space, drawn in plan, is enclosed partly by walls and partly by buildings. Two other buildings situated on the left side of the mosque also seem to belong to the complex, although they are separated from the mosque by a linear block, most probably representing a row of shops: the rectangular building with a central courtyard, shown from a bird's-eye view, might be identified with the madrasa and the domed building, shown in

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elevation, with the bath of the complex. Yet the actual locations of these two buildings are not to the east as we see them here but to the west of the mosque.

The depiction of the Bayezid Mosque itself appears, at first, to be a simple elevation oriented north even though a certain discrepancy between this fully frontal view and the oblique view of this mosque from across the Golden Horn might be noticed (fig. 43b). A closer look, however, reveals that the depicted elevation involves more than one view: the pair of minarets which symmetrically flank the elevation suggest a frontal view, possibly of the entrance facade, while the vaulting, a central dome abutted by two semidomes, corresponds to a lateral view.48 In other words, despite its frontal appearance, the depicted elevation suggests two viewing directions perpendicular to one another. Such a depiction might be interpreted in two ways: first, as a juxtaposition of the two elevations of the Bayezid Mosque both seen obliquely from the distant northern viewpoint (fig. 43b); secondly, as a simplified depiction of two elevations that are seen consecutively by someone walking in the open area that surrounds the mosque (figs. 48b, 49a and 49b).

These two possible interpretations are not mutually exclusive, yet the second, which gives priority to a viewing situation within the city, more precisely on the complex site, is supported by the depiction of the precinct as a conspicuous open space. The visual experience of the Bayezid Mosque from within the city is characterized by oblique views rather than frontal views, since no axial approach to the building is encouraged either by its site or by its architectural configuration.49

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48 On Nasuñ's map, the Bayezid Mosque is also represented with a frontal view of its entrance facade, but there the vaulting is seen in a configuration that corresponds to the viewing direction.
49 The perception of the royal mosques of Istanbul from their urban surroundings has been rarely addressed by architectural historians. Ulku Bates has discussed the question of the visibility of entrance facades to
The precinct of the Bayezid Complex seems to have been organized in a much less formal way than that of the Fatih Complex, and also had a different spatial relation with the Divanyolu. But the surrounding urban area soon developed into one of the most important urban nodes of Istanbul where various craftshops formed specialty markets, while the square in front became the junction of the two branches of the Byzantine Mese. But the spatial character of the complex site and its connections with streets has considerably changed since the sixteenth century, especially since there is no trace left of the enclosure wall that once defined the mosque precinct as well as its spatial relations with certain other units belonging to the complex, neighboring buildings and roads. Therefore, it is hardly possible to discuss the viewing situations that underlie the Bayezid Complex detail of the Hünernâme map without suggesting a reconstruction of this enclosure wall and the sequence of open spaces around the mosque. The site of complex units and some historical

some extent, particularly in relation to how the main entrances of mosques were approached from the street and then from the surrounding open space. Bates emphasizes the indirect approach on a bent path around the mosque, as a general characteristic of Ottoman urban arrangements, in "Facades in Ottoman Cairo" in The Ottoman City and Its Parts, ed. by I. Bierman et al. (New Rochelle, NY: A. D. Caratzas, 1991), 133-4.

50 For a description of the popular character of the Bayezid Square, and the variety of shops and activities around 1588, see Lubenau, Reisen 1:183-6.

51 We can only conjecture the precise path of the two branches of the Mese to the west of the complex in the sixteenth century. Coming from the west, the northern branch passed by the Fatih and Şehzade Complexes, flanked the Madrasa of Kuyucu Murad Pasha, which dates from 1606 and whose plan must have been determined by this street, and then reached the Bayezid square from the northwest between the madrasa and the wall of the Old Palace. The southern branch passed between the bath and the Simkeşhane and reached the square south of the madrasa. It seems that in Ottoman Istanbul the Bayezid Square became the principal junction of the two branches of the main street while in the Byzantine period the two branches separated in a location further west, at Philadelphia where today stands Laleli Mosque. On Philadelphia and its location, see Cyril Mango, Le développement urbain de Constantinople, 28-30.
descriptions and maps provide sufficient information to propose a reconstruction of this important urban area.52

3.3.5.1. The Urban Space Surrounding the Bayezid Complex in the Late Sixteenth Century

The site of the Bayezid Complex approximately corresponds to the southern part of the ancient Forum Tauri (fig. 48a). Before the construction of the mosque complex, this site was already enclosed within the walls of the Old Palace, which then bordered the Divanyolu.53 Although very probably the proximity to the Divanyolu played an important role in Bayezid II’s choice of this particular location to build his royal mosque complex, the buildings were not situated to establish axial relations with this street, nor with any other building, street or gate. Rather, they were sited with respect to the mosque, which itself is aligned with the direction of Mecca (SE in

52 The removal of the enclosure wall of the Bayezid Complex is believed to have taken place during the repair works at the Bayezid mosque in 1797. See İstanbul Ansiklopedisi, ed. R. E. Koç, 4 [ca. 1958]:2234. In the literature on the Bayezid Complex there is hardly any reference to a walled precinct around the mosque, let alone any attempt to reconstruct its plan. The only direct, but brief, reference known to me is in Bates, "Facades in Ottoman Cairo," 133. Doğan Kuban, who has discussed the topography of Bayezid Square in different epochs in a lengthy encyclopedia article (illustrated with historical site plans), does not mention a word about the walled precinct. See "Beyazit", in İstA, 2:180-8. Semavi Eyice notes that once an "outer court" surrounded the mosque but doubts that this court was enclosed by a wall and had gates, see "Bayezid Külliyesi," in İstA, 2:87-96. The enclosure wall is also clearly depicted in the Istanbul map in Şehingehnâme, see fig. 34a.

53 After the conquest of the city, Forum Tauri (or Forum of Theodosius) was included into the grounds of the Old Palace built as the first royal residence by Mehmed II in the new capital between 1454 and 1458. The enclosure wall of the palace probably ran parallel to Mese, the main street, which is believed to have crossed the southernmost area of the Forum Tauri. See C. Mango, Le développement urbain de Constantinople, 44 and Bildlexikon, figs. 290 and 294. The Ottoman chronicler Rûhi, writing in the early sixteenth century, stated that Bayezid II had the mosque built "within his own palace, known as the Old Palace" (Eski Sarayı demekle meghur kendü sarayının içinde), quoted in V. L. Ménage, "Edirne’i Rûhi’ye atfedilen Osmanlı tarihi," in Ord. Prof. İsmail Hakkı Uzunçarşılı’ya Armağan, ed. by O.Aslanapa et al. (Ankara: TTK, 1988), 331. That the mosque complex was built on palace grounds is also suggested in an archival document. See Rıfkı M. Merič, "Beyazid Câmii mimarı," Yıllık Araştırmalar Dergisi 2 (1957): 8, 49.
Istanbul). But the accidental spatial relations resulting from the superimposition of the invisible axis of Mecca onto an existing urban structure were to some degree defined by the architectural arrangement of the complex site and the following reorientation of circulation patterns.

The complex units that are sited according to an orthogonal order define the surrounding spaces less strictly than in the case of the Fatih Complex. In this arrangement, the smaller units are sited on both sides of the mosque but without creating a symmetrical order with their masses and distances (fig. 48a and 48b). The spatial arrangement of the Bayezid Complex, in fact, resembles very much that of an earlier complex that Bayezid II had built in Edirne (fig. 50a). What makes the arrangement in Istanbul unusual, however, is the distance between the madrasa and the mosque, which inevitably loosens the spatial integrity of these buildings. It seems that the distance between the mosque and the madrasa was kept longer than usual in order to maintain the access from the Divanyolu to the southern gate of the palace, which must have been displaced further north when part of the palace terrain was used to construct this mosque complex.

An archival document suggests that the complex precinct was defined by an enclosure wall of its own in AH 910/AD 1505–6 as soon as the mosque building was completed. We have no precise information either about the shape or about the extent of this walled area, but it seems that it involved the

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54 In both complexes the soupkitchen-caravanserai block and the madrasa are located in an orthogonal order on the northeast and on the southwest sides of the mosque respectively.
55 In Istanbul, the distance, measured from the longitudinal axis of the mosque to the entrance facade of the madrasa, is ca. one hundred and thirty meters. In Edirne, the same distance measures ca. eighty meters.
56 See above n. 53.
57 See Meriç, "Beyazid Câmii mimarı," 9. The layout of the Old Palace enclosure was modified several times between the early-sixteenth and mid-nineteenth century. The present-day wall was built in the 1860s when the last palace buildings were torn down to build the new Ministry of War, which today houses the offices of the rector of Istanbul University.
immediate vicinity of the mosque and the nearby block of units comprising the caravanserai and the soupkitchen, as in the Bayezid Complex in Edirne. The bath, which is located on the Divanyolu and quite far from the mosque to the west, must have remained outside the walled area. Most likely, the madrasa, too, whose construction began after the completion of the mosque and its enclosure wall, stood outside the walled precinct and the passage from the Divanyolu to the palace gate was kept free (fig. 51). Two historical descriptions, from the sixteenth and seventeenth centuries, clearly mention the existence of a walled precinct around the mosque and also corroborate that the madrasa stood apart.

In the mid-sixteenth century, Pierre Gilles observed north of Bayezid Bath a "broad way" that widened eastward where a group of buildings were visible. Remarkably, he counts in that group of buildings only the tomb, the mosque and the caravanserai of Bayezid II but not the madrasa. On another

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58 It is generally accepted that the bath was built after Bayezid's death, in 1517. See Bildlexikon, 388. There is no mention of the bath as a unit of the Bayezid Complex in the documents examined and published by Meriç, "Beyazid Câmii mimarî". Semavi Eyice, on the other hand, suggests an earlier date than 1517 on the basis of a mention of this bath as a revenue source for the waqf of Gülbahar Hatun, the wife of Bayezid II, in one of the waqfiyyas of Bayezid II dated 1507-8, see "Bayezid Külliyesi," 94; also idem, "İstanbul-Tarihi Eserler," in İA 5/2:102. In Edirne, the bath of the Bayezid Complex, which does not exist anymore, was situated similarly: It stood outside of the walled precinct, to the west of the mosque and at the head of the nearby bridge, which connected the site to the city. This bath is visible in an old view (fig. 50b).

59 The madrasa was built between AH 912 and 913/AD 1506 and 1507, that is after the completion of the mosque and an enclosure wall around it in 911/1505-6. See Meriç, "Beyazid Câmii mimarî," 14.

60 "Beyond the bath northward there is a broad way where there are three booksellers shops and an ancient cistern. More towards the south is the Seraglio. This broad way widens eastward into a large area, at the further end of which is the Sepulcher of Emperor Bejazit, with a mosque and a caravansaray." In Pierre Gilles, The Antiquities of Constantinople (1561), trans. by John Ball. 2nd ed. (New York: Italica Press, 1988), 150; (hereafter cited as Constantinople). The "broad way" may be located to north of the bath and the madrasa and to south of the Old Palace wall (hence, his locating the "Seraglio" to south of this road must be a simple error). Indeed, a cistern, or rather two, existed on that road, see Bildlexikon, 258 and fig. 290 (reproduced in my fig. 48a).
occasion Gilles describes the complex in more detail and states that:

the mosque and vestibule [sic] is surrounded on three sides by a large area that is enclosed partly with walls and partly with a caravansaray. On the fourth side it is encompassed by an adjoining garden, in the middle of which is the tomb of Beyazit in a small edifice built in a cylindrical form.61

This passage makes it clear that an outer court surrounded the mosque and its entrance courtyard, on the northeast, northwest and southwest sides; the southeast side was occupied by the tomb garden, which bordered the Divanyolu. The walls must have delineated this outer court only on the northwest and southwest sides since on the northeast stood the caravanserai block. The absence of the madrasa building from this description clearly suggests that it was not included in the immediate precinct around the mosque defined by an enclosure wall.

Further clarification about the spatial arrangement of the open spaces around the mosque is provided by Evliya Çelebi who described the site as it was in the second half of the seventeenth century.62 Evliya clearly distinguishes outside the entrance courtyard of the mosque, to which he refers as iç

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61 Gilles, Constantinople, 155.
62 Seyahatname, 60: "...câmi’în iç haremî hârcinde olan sahâ-misâl harem-i ’azîmî cânîb-i selâsînda dekâkinler îngâ idîp, esnâîf-î sînây’âtîlar, ehl-i hıref ile ârâste, ve bir matbah ve me’kel dâr’î-üz-ziyâfe ile pîrâste ve bir dâr-î misâfirîn ile pîrâste bir haremîr; ve bir mekteb-î sîbîyân, tiîlân-î fukarâ-îyyî ‘ayar zâdelîr içün bir tâ’îlîm-î karânî ve bir dâr’il-kûrâsî varîdî; ve haremîn cânîb-i erba’sîndâ altî kapusî varîdî. (*)Bu haremden hâric serâpâ gûnâgûn dîrâht-î mûntehâlîr ile müzeyyen olmuşturdî, ama ekserî şecere-î dût-i gûnâgûndur. Bu eşcârâtînîn zîlî-î hâmîyesînîdî nîcê bîn âdem sâbdâr olup, kîfâf-î nefs içün nîcê bîn gûne eylârlî firûht iderîr; ve bu haremîn taqra bîr ’azîm vâdî varîdî Sultan Bâyezîd meydândî derîr; cânîb-i erba’assî dekâkin-i gûnâgûnlîr ile müzeyyendîr; bîr tarafîndan Bâyezîd Hânîn yetmiş kubbe ’azîm bir medresesî varîdî." The phrasing from (*) onward, gives the impression that Evliya talks about two different open spaces outside and distinct from the walled precinct: one characterized by the many trees and the other by the shops and the madrasa. It is, however, more likely that each time he referred to the same open space that had both numerous trees as well as shops.
harem (the inner court), two open spaces. The first of these open spaces—he calls it a sahrâ-misâl harem-i 'azîm (vast court resembling a field)—was located immediately outside the inner court. It had on its three sides shops, built for artisans, and was also "adorned" by a kitchen, a foodstore, a dining hall and a caravanserai. Evliya also notes that this court had six gates on four sides, however does not specify their locations. But the locations of these gates were probably not very different from those marked on an early nineteenth-century map showing the conduits of water brought to the complex under the patronage of Bayezid II (fig. 52). By the seventeenth century, rows of shops must have either replaced the enclosure wall or been built adjacent to it so that it was not visible anymore as it was a century earlier when Gilles described the precinct.

The second open space that Evliya talks about is the open space that was called the "Sultan Bayezid Square". It is the open space that remained outside the previously described sahrâ-misâl harem-i 'azîm, or the walled precinct. According to Evliya's account, this open space was characterized by an abundance of trees. It had on four sides various shops and on one side the Bayezid Madrasa. What is interesting, however, is that Evliya refers to this open space as a 'azîm vâdi (vast

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63 As also suggested in Gilles's description, the precinct thus described was an enclosed area around the mosque and gave access to complex units that formed the caravanserai block to northeast of the mosque. Another building that Evliya mentions in connection with this outer court is the Koran school for poor children. This building, located at the street corner of the tomb garden, is on an off side of the described court yet might have been connected to it by one of the six gates mentioned.

64 Many shops were grouped as specialized markets in the immediate vicinity and near the Bayezid Mosque already by the mid-sixteenth century. A waqf register from 1546 lists one hundred forty one shops in relation to waqfs of five individuals only, see İstanbul vakıfları tahiri defteri (1546), waqfiyya nos. 422, 537, 764, 936, 1320. According to a royal decree dated 1580, also the trustees of the Bayezid Complex had asked for permission to build shops on an empty lot in front of the founder's tomb and facing the bazaar, see document no. 36 published in Ahmed Refik [Altınağ], Türk Mimarları (Hazine-i evrak vesikalarına göre), ed. by Z. Sönmez (İstanbul: Sander Yayınları, 1977), 126.
valley). The term "valley" brings to mind a passage area, a sort of fluid space, and hence, is well-suited to describe the area that was loosely defined by the walled precinct to the east, by the madrasa to the west and by the wall of the Old Palace to the north, and which indeterminately merged into neighboring roads. The shops, which Evliya says to have existed on the four sides of the "Sultan Bayezid Square", must have lined up along the exterior of the precinct wall and perhaps even along the "broad way" and along the Divanyolu. 65

3.3.5.2. The Viewing Situations in the Urban Space Surrounding the Bayezid Complex

The information gained from the descriptions of Pierre Gilles and Evliya Çelebi about the spatial arrangement of the walled precinct of the Bayezid Complex and its surroundings can be visualized as on the hypothetical site plan in fig. 51. 66 The roads that led to the so-called Bayezid Square from the west and from the east along the Old Palace wall did not provide an axial approach toward the mosque. The access from the Divanyolu was even more indirect and led to the west side of the precinct first. 67 The open space between the walled

65 Gilles noted some bookseller shops on the "broad way", see note 60 above. In the corresponding area of the early-nineteenth-century water supply map (fig. 51) are shown shops of paper, ink, and pen-case sellers; at the western end of this street was a gate called "Gate of the Inkmakers" (Mürekkepçiler Kapısı). On the same map, a row of shops can be seen closing the "Bayezid Square" toward the main street. The square was then entered through two gates. But already in the 1580s, the "Bayezid Square" must have been pretty much surrounded by shops as we can conclude from Lubenau's statement "umb den Platz herumb seindt kleine Heuslein", Reisen, 1:183.

66 The site plan is based on fig. 290 of Bildlexikon, 258. Historical information is taken from the early-nineteenth-century map of the Bayezid water supply system, published in Fatih'in oğlu Bayezid'in su yoluna haritasıyla 140 sene öncesi İstanbul, ed. Ahmed S Ünver (İstanbul: İstanbul Belediyesi, 1945); and from an Istanbul map, prepared according to a geometric survey, from around 1880, published in 19. Asırda İstanbul Haritası, ed. Ekrem H. Ayverdi (İstanbul: İstanbul Fetih Cemiyeti, 1978).

67 This must have been also the direction of access for the sultans when they came to attend a Friday prayer in Bayezid Mosque since the entrance
precinct and the madrasa, designated "Sultan Bayezid Square", was practically a continuation of the Divanyolu space with a certain directionality that seems to have been determined by the palace gate but not by any gate of the mosque precinct itself. Consequently, none of these approaches favored a frontal view of the Bayezid Mosque.

Besides the non-directional arrangement of surrounding open spaces and the particular situation of the complex, also the architectural configuration of the Bayezid Mosque itself encourages oblique views rather frontal views of its facades. First of all, the multiple gates of the precinct wall as well as those of the entrance courtyard permit various directions of approach and entrance to the mosque without favoring any particular one. As all other monumental Ottoman mosques, the Bayezid Mosque has no principal entrance facade. The main gate to the prayerhall that is on axis with the mihrab is preceded by the entrance courtyard and is invisible from outside. The three sides of this courtyard block, each with a gate, form in a sense an extended entrance facade "folded" around the entrance to the mosque.

In the case of the Bayezid Mosque this "folded" entrance facade also includes the entrance facades of the tabhâne (hospice) units that flank the mosque (figs. 48b and 49a). The reserved for the sultan and the royal loggia inside the prayerhall are on the west side of the mosque instead of the conventual east side.

In the sixteenth century, or at least in its first half, the south gate of the Old Palace was probably located slightly more west than the extant nineteenth-century gate, i.e. more or less where the present Takvimhane Street begins today. Notably, this street continues the path of access from the main street to the Bayezid Square, and from there north toward the Süleymaniye Complex. The opening of this street must correspond to one of the shrinking stages of the Old Palace grounds (In all likelihood the western wall of the palace was originally further west, possibly where we find a long and straight street in a south-north axis, which bears the names Bozdoğan Kemerî Caddesi/ Kirazlı Mescid Sokaği/ Yoğurtçuoğlu Sokâğı). Its path suggests that it was opened to connect the main street via Bayezid Square to Süleymaniye Complex but it needs to be established if part of palace grounds were given up on the west side as on the north where Süleymaniye Complex was built.

The side facades of the domed prayer hall can also be considered entrance facades as they have one or two entrances each.
three facades of the entrance court and the facades of the tabhânes form a unified surface for all have the same height, same type of windows and are linked by a continuous cornice that runs along their upper edges (fig. 49a). The effect of this extended entrance facade is further enhanced by the pair of minarets, which, instead of flanking the prayerhall, are located at the outer corners of the tabhânes, that is at the limits of the "folded" entrance facade. Someone who crosses the square or walks around the mosque from one tabhâne to the other perceives the facades of the entrance courtyard and those of the tabhânes as a long, horizontal elevation that gradually unfolds, and is aware at any moment of its two ends marked by the minarets. As a result of the distance between them, the minarets also frame the domical roof of the prayer hall in most of the vistas available from the surrounding open spaces.

The visual experience induced by Bayezid Mosque's particular architecture and urban situation finds a simplified but meaningful expression in the Hünernâme detail, where the "folded" entrance facade appears stretched flat between the two minarets. The various viewing situations, in which the mosque's roof is most often seen obliquely but with its central dome supported by two semidomes, are recalled by the side view of this composite domical roof.

On a more general level, the particular configurations of the minarets and the domical roof together also characterize the image of the Bayezid Mosque, and hence form a landmark that makes the urban surroundings of the complex recognizable from a distance.

Despite occupying an important junction on the Divanyolu, the Bayezid Complex formed a different type of urban node than

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70 The two minarets are set unusually apart and have distance of eighty seven meters between them. This exceptional configuration of the minarets is a visual characteristic of Bayezid Mosque. Its unusualness is also implied by Evliya Çelebi who stressed that the minarets are not adjacent to the mosque (Ammâ bu câmi’in iki minâre-i mevzûni birer tabaka olûp, câmi’e muttasîl değildir), Seyahatnâme, 60.
the Fatih Complex. Its units were situated neither within a clearly shaped enclosure nor a larger urban space. In other words, unlike the node formed by the Fatih Complex, the spatial arrangement of this node did not prescribe any precise path nor any precise sight of the mosque and its auxiliaries. However, the mosque, the madrasa and the bath offered at least one spatial configuration easy to retain in relation to the Divanyolu by punctuating it in a linear sequence from east to west, even though at some distance from one another. It looks like their view from the Divanyolu was memorized according to this sequence. At least, this is what seems to have been depicted as the view of the Bayezid Complex in the Hünernâme map: the madrasa, a rectangular building with a central courtyard, and the bath, a large domed building next to it, on the left side of the Bayezid Mosque which is surrounded by an enclosure wall (fig. 31b) The situation of the madrasa and bath buildings in respect to the mosque reflects the mosque-madrasa-bath sequence clearly visible from the Divanyolu. The detail moreover shows a row of shops, drawn vertically between the madrasa and the mosque and indicates that it was separated from the walled area.

The Bayezid Complex detail differs from the Fatih Complex detail in depicting not only the mosque but the whole complex as seen from the Divanyolu. However, both topographical details are basically similar in being characterized by a view from within the city, and more importantly, in being inserted into an exterior view, the cityscape on the Golden Horn. These two mosques, as several others, are components of that cityscape, although their precincts are not. The fact that the maker(s) of the Hünernâme map insisted on depicting these open spaces

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71 For the notion of "node" and its different types, see Lynch, The Image of the City, 72-103.
72 Lynch, e.g., notes that local points are often remembered as clusters, and that a "sequential series of landmarks, in which one detail calls up anticipation of the next," helps to orient the traveller through the city, op.cit., 83.
clearly relates to the urban significance of these spaces themselves which needs to be understood both in experiential and symbolical terms.

4. Concluding Remarks

By depicting visual experiences related to individual sites within the city and others related to spaces outside without really making it explicit, the Hünername map compromises its cartographic coherence. However, I believe that this particular compromise reveals much about its raison d'être or meaning, for it suggests a certain ambiguity between viewing priorities that seems to be characteristic of Istanbul's perception in the second half of the sixteenth century. Hybrid, and somewhat immature, as it is, the Hünername map represents Istanbul as a city primarily viewed from outside and all around, from the sea and opposite shores or towns. In other words, it suggests that Istanbul is viewed rather globally and as part of a larger landscape. Notwithstanding the importance and existence of individual views in this map, the urban image conveyed is one that blends into a continuous view. In that regard, the Hünername map contrasts with the image of Istanbul presented in the Menâzil map, so clearly composed by discrete and sequential views essentially seen from within the city.

The emphasis that the Hünername map puts on the northern cityscape has to be considered within this overall approach and does not necessarily indicate that a particular view dominated the city's perception. However, this emphasis perfectly reflects the increased importance of the Golden Horn as an urban space. This development was fostered by the presence of the port and commercial activities situated there, which constantly increased in parallel to the growth of the city as well as to the imperial expansion. The expansion of the naval shipyards, related industries, and new residential districts that could freely develop on land available along the northern
bank of the Golden Horn also played their part in the appropriation of this space.

On a more symbolic level, the Hünernâme map's emphasis on Istanbul's cityscape overlooking the Golden Horn is an acknowledgement of a visual elaboration through many new monuments built there in the second half of the sixteenth century. The symbolic appropriation of the space of the Golden Horn seems to have been initiated by the Süleymaniye Complex which not only shaped this front of the city in a substantial way but seemingly also triggered a shift in urban priorities in relation to ceremonial activities, that is, a shift from the Divanyolu toward the Golden Horn. The Hünernâme map seems to reflect in its own way a conceptual tension caused by the established priority of the Divanyolu (and the city's perception in relation to it) and an emerging one associated with a new urban space centered on the Golden Horn.

On a pictorial level, the Hünernâme map also marks a transition, or rather a mixing of pictorial traditions. Its hybrid character as a topographic composition reflects the encounter of traditional miniature painting with another

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73 Gülru Necipoğlu drew attention, e.g., to the modification in the itinerary of a ceremonial visit of ancestral tombs, which the newly enthroned sultans did beginning with the tomb of Ayyub al-Ansârî in Eyüb. When Murad III made this ceremonial visit in 1574, instead of taking the main street both ways as it was customary, he departed from the Topkapî Palace toward Eyüb by boat and returned to the palace by land visiting his ancestors' tombs in their respective mosque complexes along or accessible from the main street. The same itinerary was also followed by his successors Mehmed III and Ahmed I, in 1595 and 1603 respectively. See G. Necipoğlu, "Dynastic Imprints on the Cityscape: The Collective Message of Imperial Funerary Mosque Complexes in Istanbul." In Cimetières et traditions funéraire dans le monde islamique (İslam dünyasında mezarlıklar ve defən gelenekleri), ed. by J-L. Bacqué-Grammont and A. Tibet (Ankara: TTK, 1996), 2: 23-36; and for Ahmed I's itinerary, mentioned in relation to girding ceremonies at Ayyub's tomb, see Cemal Kafadar, "Eyüp'te kılıç kuşanma törenleri," in Eyüp: Dün/Buğun — Sempozyum 11-12 Aralık 1993, ed. by T. Artan (İstanbul: Tarih Vakfı Yurt Yayınları, 1994), 54-5. Necipoğlu, who focuses on the sixteenth-century royal funerary rituals in Istanbul with regard to their dynastic symbolism and function, attributes a crucial role to the cityscape as a ceremonial backdrop.
tradition, that of nautical cartography. This tradition was in the process of being established in the Ottoman capital since the early years of the sixteenth century, most likely through chartmaker workshops and in relation to the increasing Ottoman naval activity in the Mediterranean. The presence of this cartographic tradition is suggested by the surviving Ottoman atlases and charts yet it is best represented, even though somewhat indirectly, by the manuscript copies of Kitâb-ı Bahriye. The Istanbul maps that emerged as an illustration in those copies provide the evidence that this new tradition may have introduced new modes of depiction. The Hünernâme map's debt to this tradition, and somehow to the Istanbul map it produced, in constructing a topographic view may be better understood retrospectively, that is after its proper Istanbul maps are examined.
CHAPTER 3:

ISTANBUL MAPS IN MANUSCRIPT COPIES OF THE KITĀB-I BAHRIYE

1. Introduction

Besides the two sumptuous representations of Istanbul featured in the Mecmu’-i Menâzil and the Hünernâme, a series of more modestly produced representations of the city dating from the second half of the sixteenth century and from the seventeenth century stand out as a group (figs. 53-72). These maps of Istanbul are contained in manuscript copies of a book entitled Kitāb-ı Bahriye (The book of Matters Pertaining to the Sea). Kitāb-ı Bahriye is a navigation manual that concerns the Mediterranean Sea and is illustrated with coastal detail maps. It was composed in the early sixteenth century by Piri Reis, an experienced captain of the Ottoman navy.¹ There are about forty surviving manuscripts of Kitāb-ı Bahriye, which descend from two versions of different length.² Piri’s autographs of neither

¹ "Reis" means "ship captain".
² An incomplete facsimile edition of the short version after MS, BUB, ms 3613 (copied 1570), with few missing pages and maps replaced by corresponding ones from MS, SLB, Mscr. Dresd. EB 389 (copied 1554), was published by the German orientalist Paul Kahle (facsimile published until the end of chap. 60 on Venice and a German translation until the end of chap. 28 on Rhodes); see Piri Reis, Bahrije: Das türkische Segelhandbuch für das Mittelländische Meer vom Jahre 1521 ed. and trans. by Paul Kahle, vol.1, bk 1 and 2, vol.2, bk 1 (Berlin and Leipzig: Walter de Gruyter and Co., 1926); (hereafter cited as Bahriye/Kahle). A complete facsimile of the long-version Kitāb-ı Bahriye (MS, SK, Ayasofya 2612) was published by the Turkish Historical Society, see Piri Reis, Kitāb-ı Bahriye, ed. by Haydar Alpagut and Pevzi Kurtoğlu (Istanbul: Devlet Basımevi, 1935); (hereafter cited as Bahriye/1935). There exists also a more recent facsimile, in color, of the same manuscript, which includes a transcription of the text, a paraphrase in modern Turkish, and an English translation (by R. Bragner), see Piri Reis, Kitāb-ı Bahriye, ed. by E. Z. Ökte et al., vols. 1-4 (Istanbul: The Historical Research Foundation Istanbul Research Center, 1988-91); (hereafter cited as Bahriye/1988). The transcription and the translation accompanying this facsimile edition are, however, not free of inaccuracies some of which are discussed in Orhan Şaik Gökay, "Kim etti sana bu kârî teklif?," Tarih ve Toplum no. 70 (September 1989): 58-60. The English translation is variably based on the transcription and its modernized version. When referring to the long
version, however, appear to be among the extant manuscripts. The short-version Bahriye, of which there are at least twenty-five known manuscripts, seems to have circulated more widely than the long version. The twenty maps of Istanbul that form the subject of this chapter occur in copies of both versions which are listed below:

1.1. The List of Bahriye Manuscripts Containing a Map of Istanbul

Manuscript Copies of the Short Version:

1- Bologna, Biblioteca Universitaria di Bologna, ms 3613, copied AH 977/AD 1570 (Bologna-3613)
2- Dresden, Sächsische Landesbibliothek, Mscr. Dresd. Eb 389, copied AH 961/AD 1554. (Dresden-389)
3- Istanbul, Deniz Müzesi, Dm. No. 990 [formerly No. 3538] (Deniz-990)
4- Istanbul, Köprülü Kütüphanesi, 172 (Köprülü-172)
5- Istanbul, Millet Genel Kütüphanesi, Coğrafya 1 (Millet-1)
6- Istanbul, Nuruosmaniye Kütüphanesi, 2990; copied AH 1055/AD 1645 (Nuruosmaniye-2990)
7- Istanbul, Nuruosmaniye Kütüphanesi, 2997, copied AH 1038/AD 1629 (Nuruosmaniye-2997)
8- Istanbul, Süleymaniye Kütüphanesi, Yenicami 790 (Yenicami-790)

version, I shall mainly use Bahriye/1935. Unless otherwise noted, all transliterations and translations will be my own.

3 The most complete and annotated list of the extant Kitâb-i Bahriye manuscripts (it contains, however, some inaccurate data, especially copy dates) is the one compiled by Svat Soucek and Thomas Goodrich and published as Appendix 14.2, in Cartography in the Traditional Islamic and South Asian Societies, 290-2; (hereafter cited as "List of MSS").

4 Hereafter, when referring to Piri Reis's work, I shall use the shorter title Bahriye.

5 Only one third of the Bahriye copies containing a map of Istanbul bear a copy date. The copy dates indicated in this list are those given in the colophons of the respective manuscripts. The descriptors set in bold will be used hereafter when referring to individual Istanbul maps, and "MS" plus descriptor when referring to the manuscript containing them.
9- Istanbul, Topkapı Sarayı Müzesi Kütüphanesi, B. 337, copied AH 982/AD 1574 (Topkapı-337)
10- Istanbul, İstanbul Üniversitesi Kütüphanesi, T. 123 (University-123)
11- Kuwait, Dar al-Athar al-Islamiyah, LNS. 75 MS, copied AD 1688-9 (Kuwait-75)
12- London, British Library, BM Or. 4131 (London-4131)
13- Vienna, Österreichische Nationalbibliothek Cod. H.O. 192 (Vienna-192)

Manuscript copies of the long version:
14- Baltimore, Walters Art Gallery, W. 658 (Baltimore-658)
15- Istanbul, Köprülû Kütüphanesi, 171 (Köprülû-171)
16- Istanbul, Topkapı Sarayı Müzesi Kütüphanesi, R. 1633 (Topkapı-1633)
17- Paris, Bibliothèque Nationale, Suppl. turc 956 (Paris-956)

Manuscripts Consisting of Maps Only:
18- Berlin, Staatliche Bibliothek Preussischer Kulturbesitz, Diez A fol 57 (Berlin-57)
19- Bologna, Biblioteca Universitaria di Bologna, ms 3609 (Bologna-3609)

The Istanbul map appears to have been an early addition to Bahriye. In the introductions to both versions, Piri Reis clearly specifies that his sailing instructions will cover the entire Mediterranean in a tour that begins and ends at the Dardanelles. Hence, the Marmara Sea and Istanbul, lying beyond the northern limit of this geographical coverage, remain outside Bahriye's original scope. Moreover, the earliest

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6 See the short-version introduction, Bahriye/Kahle, 1:3 and the long-version introduction, Bahriye/1935, 6.
examples of the Istanbul map display significant differences and therefore suggest that Piri Reis may not have added the Istanbul map himself or did not provide a definitive prototype for it. Istanbul having been added and the difficulty of associating this addition or any Istanbul map with Piri Reis seem to have turned scholars' attention away from this large group of maps. Perceived as a heterogeneous group of inauthentic material, the Istanbul maps contained in the Bahriye manuscripts have remained practically undiscussed. However, despite their apparent differences, these maps deserve to be studied as a group because they genuinely originate in Bahriye and are also linked with one another in a cartographic

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7 These observations were already made in the earliest studies on Bahriye, see P. Kahle, "Einleitung," in Piri Reis, Bahriye: Das türkische Segelhandbuch für das Mitteländische Meer vom Jahre 1521, vol.2, Book 1, XII; and A. Adnan Adivar, Osmanlı Türklerinde İlim (1943; 3rd ed. Istanbul: Remzi Kitabevi, 1970), 73-4. The observations of Kahle and Adivar were based on a smaller number of manuscripts than what is known presently. Kahle studied the following seven manuscripts: MS, SLB, Mscr. Dresd. Eb 389 (dated 1554); MS, BUB, ms 3613 (dated 1570); MS, ÖNB, Cod. H.O.192; MS, BN, supp. turc 956; MS, SBPK, Diez A fol 57; MS BodL, D’Orville Ms. X. 2 infra 2, 42 (now same library, MS.d’Orville 543) (dated 1587); and MS, private collection of J. H. Mordtmann, cod. turc. 12 (now MS, Tübinger Depot der Staatsbibliothek, Ms. or. fol. 4133). Adivar considered MS, KK, 171; MS, BN, supp. turc 956, and MS, SBPK, Diez A fol 57.

8 İlhan Tekeli, e.g., in his encyclopedia article about Istanbul's representation in maps, leaves them aside because "the so-called Piri Reis maps differ from one another and are later additions by unknown authors", in "Haritalar" in İStA, 3:557. Svat Soucek, who is well familiar with all the extant Bahriye manuscripts, does not seem to recognize the significance of the Istanbul maps as a group either. He points out that Piri Reis had not specified having included the Ottoman capital in his work and that the Istanbul maps greatly vary from example to example. While discussing the Venice and Cairo maps with regard to their cartographic development in the Bahriye manuscripts, he treats the Istanbul map, its most elaborate example datable to late-seventeenth (or early-eighteenth) century, as an isolated subject. See Soucek, Piri Reis and Turkish Mapmaking After Columbus: The Khalili Portolan Atlas (New York: Oxford University Press, 1996), 132-61 (hereafter cited as Turkish Mapmaking). The only scholar who has noted these maps in a somewhat wider context is Thomas Goodrich, see "Supplemental Maps in the Kitabi-i Bahriye of Piri Reis," Archivum Ottomanicum 13 (1993-4): 117-41. Ibid., 121, n. 15, he also notes that he gave a paper on thirteen Istanbul maps in 1993.
development. More importantly, as a group they record an evolution of the perception of Istanbul.

The addition of an Istanbul map in Bahriye appears to have taken place at an early stage in a process of constant, if not systematic, revision of Pirî Reis's original work. During about two centuries of copying, especially of its short version, some of the original maps were modified or replaced with new ones derived from the same kind of cartographic sources as those used by Pirî Reis himself. On the other hand, the revisions done on the Bahriye maps concerned not only the coastal outlines but also the depictions of topographical elements occurring in them. A prominent example of the latter is the map of Venice. Part of the original contents of Pirî's work, it appears in the Bahriye manuscripts in at least two new designs, each with variants of its own. The multiple modifications brought to Bahriye's maps in the process of copying indicates that the continuing effort to improve this book's illustrative quality, especially with regard to topographical depictions, went beyond practical or functional concerns. These efforts at improvement seemingly also led, no later than the 1550s, to the inclusion of Istanbul as an illustration, which was subsequently also modified several times. The Istanbul map does not illustrate navigation instructions but first and foremost represents the Ottoman capital. Therefore, its inclusion into Bahriye must have had a symbolic motive rather than a practical one. Nevertheless, it was not an image imported from elsewhere but rather its cartographic beginnings and development were intimately linked with the sources and making of other maps in Pirî's work.

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9 So far no systematic study has been done to examine the character and extent of the revisions made on Bahriye's text and illustrations. While the modifications or replacements of maps may be more easily noticed, text revisions await careful examination, especially to see if marginal notes observable in several Bahriye manuscripts were integrated into the text in subsequent copies.
When the Istanbul maps are examined together, it becomes clear that through the second half of the sixteenth century they converged toward a particular design. The cartographic designs of Istanbul maps were significantly different only at the very beginning, that is between the 1550s and 1570s, when an intensive search for a definitive illustration seems to have taken place. Yet the basic concept that will underlie all the maps from the late-sixteenth century onward began to take shape already in this early period. Definitely established in the seventeenth century, this basic cartographic concept relates the Istanbul maps in the Bahriye manuscripts to one another so that they may be considered variants of a single map design. This map design is characterized by a straightforward emphasis on the northern view of Istanbul on the Golden Horn, and that emphasis is realized through the map layout and orientation.

The Istanbul map appears and develops first in copies of the short version but eventually cuts across the two strains of manuscript copies. The two versions do not differ in scope but in detail and, more importantly, in their circulation and use. To present the context in which the Istanbul maps came into being, I shall examine in the first part of this long chapter the making of the two versions of Bahriye, and then this work's contents and sources with emphasis on its maps and topographical details. I shall also consider the differences between the two versions with regard to the production of their copies, their copyists and their owners. This introductory study will allow me to show how the earliest examples of the Istanbul map not only stemmed from Bahriye but also evolved in a copying process particular to this book. The second part of the chapter will focus on the series of Istanbul maps. I shall examine the earliest examples with regard to their sources and discuss the considerations and cartographic compromises that led to a basic cartographic concept, a concept that underlies the designs of all later Istanbul maps occurring in manuscript
copies of Bahriye. These later maps, which I consider variants of a single map design, constitute a large family. Yet among them, subgroups with tighter genealogical links are easy to discern. Examining these later examples as subgroups of variants will allow me to discuss how the depiction of Istanbul evolved, from a gradual elaboration of the northern cityscape on the Golden Horn toward its integration into a topographic view that is extended to Istanbul's surrounding landscape.

1.2. Bahriye, Its Author and the Making Of Its Two Versions

What we know about Bahriye's author Piri Reis mostly comes from the book itself. Piri, son of Hadji Mehmed, had started sailing at a young age with his uncle Kemal Reis, a renowned corsair whose raids reached as far as Spain. Piri followed Kemal Reis when the latter was summoned by Bayezid II in 1495 to join the Ottoman navy, which was then being built up for new offensives against Venetian possessions. Piri actively served on board until his uncle's death in 1511, but thereafter seems to have held a job at the navy base in Gallipoli. Benefiting from a sedentary life, but possibly also seeking to distinguish himself from his peers, he began his cartographic activity. Piri's first work is a world map in the form of a nautical chart that he had compiled from various cartographic sources in 1513 and then presented to Sultan Selim I in 1517, in Cairo after having assisted in the conquest of the city. Encouraged by the good reception of his map, Piri seems to have immediately started to work on Bahriye, a navigation manual

10 For the most recent biography of Piri Reis, see S. Soucek, "Piri Re'is," EI2, VIII, 317-19.
11 According to his notes on the map itself, Piri used Arab and European nautical charts, including a chart used by Christopher Columbus, and probably Ptolomeic world maps. On this map and the note concerning its compilation, see Soucek, "Islamic Charting," 269-72.
that covers the entire Mediterranean. The ambitious scope of Piri's manual might have been in keeping with Selim's determination to push forward the Ottoman maritime frontiers. But Selim I died in 1520, apparently before Piri could finish his book. Bahriye was eventually presented to the new sultan, Süleyman I (the Magnificent) in 1525-6, yet in an edition based on a substantial reworking of some initial version, as I shall explain below.

The surviving copies of Bahriye, as already mentioned, form two groups that clearly descend from different editions of the book: the short-version Bahriye comprises an introduction followed by 130 chapters and 130 maps; the long-version Bahriye comprises 210 chapters, 223 maps, and, in addition to the introduction, an extensive prologue and an epilogue, both in verse. Although both versions cover the entire Mediterranean, the long version details some coastal areas more than the short version. But it differs from the short version mainly in having the two versified sections. The long version corresponds to the edition that was dedicated and presented to Sultan Süleyman I. The prologue addressed to the sultan serves to present Piri's knowledge not only about Mediterranean navigation but also about world geography and the European voyages of discovery. The purpose of the epilogue is to recount the making of the long version, basically to underline the role of the grand vizier Ibrahim Pasha therein.

The earliest known manuscript of the long version is the MS H. 642 of the Topkapı Palace Library which is in all likelihood the manuscript that was presented to Sultan Süleyman

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12 In the last years of his reign, Selim had begun to enlarge the naval shipyards in Istanbul and to build up the navy considerably and is believed to have been preparing for renewed maritime campaigns.
14 The epilogue is seven pages long.
in 1526. Until the creation of the modern library, it was preserved in the imperial treasury. A second manuscript, namely MS Ayasofya 2612, is very similar to MS H. 642 and seems to have been prepared about the same time. The texts of both volumes were possibly copied by a professional scribe, yet it may be assumed, the detail maps requiring a particular skill were by the hand of Piri or were close copies of his originals prepared especially for this edition.

For the short version, it is more difficult to know how Piri's original maps looked. The earliest manuscript of the short version appears to be MS Eb 389 of the Sächsische Landesbibliothek, Dresden, which was copied by different

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15 MS, TSMK, H. 642 does not bear a copy date, and its paper of Eastern origin is not watermarked. The chronogram on fol. 420r [modern pagination 423r] giving the date 932/1525-6, which appears in other manuscripts of the long version as well, indicates the completion date of the long-version Bahriye text and not necessarily the production date of the volume even though in the case of MS H. 642 the two dates might have coincided. It has been generally considered to be the Bahriye volume presented to Süleyman I, see the exhibition catalogues Atil, Age of Süleyman, 81, 308, and Rogers and Ward, Süleyman the Magnificent, 103 and more recently Portolani e Carte Nautiche, 64-5, as well as Renda, "Representations of Towns," 282. The partly preserved original binding, the beautifully executed headpiece and chapter headings of MS H. 642 are characteristic of the earlier part of the sixteenth century. I examined this manuscript in March 1995 and found that the seal stamp on fol. 2r belongs to Ahmed III and not to Süleyman I as claimed by Esin Atil in op. cit., 308 (I thank Prof. Zeren Tanindir for verifying Ahmed III's seal stamp). MS H.642 is a very handsome but not a lavishly illuminated manuscript. The chapter headings and margin lines are in gold. It has very carefully drawn maps that were copied by blindtooling and then inked. The coastlines on maps are gilded and topographical details are carefully colored.

16 MS Ayasofya 2612, which has been twice reproduced in facsimile, was donated by Mahmud I to the library he created as an annex to Hagia Sophia in 1740. It is possible that until then it was preserved in the palace and perhaps it was the copy prepared for Ibrahim Pasha at the same time as MS H. 642. This undated manuscript's maps are so similar to those in MS H. 642 in drawing style and detailing that they have been attributed to the same hand, see G. Renda, "Representations of Towns", 282 and Soucek and Goodrich, "List of MSS," 292 and n. 23 and n. 24. The authors note, ibid., 291, that the manuscript was "copied 982/1574", but it must be an error originating in C. Türkan, İstanbul kütüphanelerinde yazma ve basma coğrafya eserleri bibliyoğrafyası (Istanbul, 1958).
persons. It is provided with a colophon that gives the precise date of the completion of copying as March 1554.\textsuperscript{17}

In the literature on Bahriye, the short version has been referred to as the "first edition" of Bahriye and the long version as the "second edition", on the basis of the dates mentioned by Piri in the respective introductions. But Piri's statements are not fully conclusive, and the two versions seem to relate to one another in a more intricate way than this simple chronological sequence implies. The short version was possibly not made accessible as a book before the long version was created, and when it eventually came out, it might have been already slightly expanded. On the other hand, if we judge by its surviving manuscripts, it seems that the short version started to be copied and used before the middle of the sixteenth century while the more detailed long version awaited the seventeenth century. The Istanbul maps that cut across these two different lines of Bahriye manuscripts relate to the small expansion at the end of the short version seemingly made before it started to be reproduced.

Piri recounts how the long version came into being in its introduction and epilogue, yet he is not explicit in the same way about the short version. To reconstruct the sequence of the two versions and their relation to one another, the information provided by Piri needs to be carefully sorted and qualified with our observations on the two versions themselves. Yet some questions, especially when and how the short version we know of became accessible, inevitably remain open.

In the introduction to the long version, Piri explains that he "wrote in detail and fully the [navigational] matters until the year of AH 932/AD 1525-6. Having brought together the figures and the explanations of the places [mentioned in this...
book] in Gelibolu proper, this book came into being.”  


19 Ibid. About his reasons we can only speculate. His earlier present to Selim, the world map, was well received but with Süleyman he lacked such precedent. He might have also hesitated about his capacity of producing a presentable book that would conform with the well-established standards pertaining to the calligraphy, illumination, and binding of the books produced as royal gifts.


21 Piri’s encounter with the grand vizier took place during a voyage to Egypt in the fall of AH 930/ AD 1524-5. Piri was serving as a pilot on the grand vizir’s ship. It was after having survived a terrible storm that Ibrahim Pasha encouraged Piri to bring together what was “loose (or dispersed) leaves” (evrâk-ı periğan) until then, see n. 19 below. Kahle discussed and translated this part of the epilogue into German and English in “Piri Re’is und seine Bahrîje,” in Beiträge zur historischen Geographie, Kulturgeographie.– Festschrift für E. Oberhummer, H. Mzik ed. by (Leipzig and Vienna, 1929), 60-4 and idem, “Piri Re’is, the Turkish Sailor and Cartographer,” Journal of Pakistan Historical Society 4/II (1956): 102-3. For Soucek’s paraphrase of nearly the entire epilogue in English, see “Turkish Mapmaking”, 88-90.

22 Bahriye/1935, 849 (lines 9-11): “Cün cán olmıldığı bu ‘ilmе müstâk/ Bu fennde karalardum nice evрâk/ Yazardum Akdenizün gerh hålin/ Temâmet vasf
consulting this "book" [of notes?] to steer the right course during a storm when İbrahim Pasha noticed it. Recognizing its value, the grand vizier ordered him "to put it together nicely", and insisted that "he should not come up with any excuse but correct it, so that it could be presented to the sultan". At this point, Piri remarks that although he "had made before an account" he "had not perfected it", and "immediately [he put himself to work and] using all diligence, completed it fully and prepared a fair copy". A two-line chronogram at the end of the epilogue gives the completion date of the version at hand once again as AH 932/ AD 1525-6.

The introduction to the short version somehow completes the story of Bahriye's making, however it does not make clear exactly when the short version was completed. In its opening

kılub kil u kâlin/ Komayub bunda bir gizlû dakîkâ/ Beyân itdüm kamusun filhakikâ".

23 It is quite possible that Piri had begun to compile a navigation manual for his own use even earlier than 1520. It was a common practice among Mediterranean captains' to compile navigation manuals primarily for their own use from existing manuals and from their own records. In fact, Piri's words in the epilogue to the long version seem to confirm that he was using a manual: "Denizde düşmiş iken ıztırraba/ Nazar kilur idim daim kitâba" (When I was in trouble on the sea/ I always looked into the book), Bahriye/1935, 852. This passage was noted by Kahle as implying a certain distance between Piri and the book he was using. Kahle, justifiably interpreted that distance as an evidence that Piri's book incorporated long tested information from a navigation manual. See "Piri Re'is und seine Bahrije," 64-5.

24 Ibid., 852 (lines 44-5):"Velî dinlen, bu evrâk-ı perîşân/ Sebeb ne oldû cem' olmaça içûn/ Denizde düşmişiken ıztırraba/ Nazâr kilur idim daim kitâba/ Kitâbûmda ne yazardum nicedûr yol/ Bu fennim güherinden gösteren yol(...)(lines 62-4): Düzisen bu kitâbî hûb câmi'/ Bulacak fayide kim olsa sâmi'/ Ve hem içbu kitâb gâyet gerekdür/ Hezâ'inde bulmak yeğrekdür/ Tashih idûb getûr külma bahâne/ Ki teslim idevizî gûherîn-1 cihânê"

25 P. 853 (66-7):"Çi ger evvel yapdum bu makâle/ Velî, ırgûrmemîdüm kemâle/ Hemândem cidd û cehd itdûm begâyêt/ Beyâza çikarub kîldum temâmât

26 On Bahriye/1935, p. 855: "Tamâm etdük sözü bulub Murâdî/ Dedûk târîhi ânâ feyz-i hâdî," has been generally computed as amounting to 932, the date mentioned in the introduction. The proper chronogram formula is the compound formed by the words "feyz" and "hâdî". However, to obtain the value of 932 the word "ânâ" has to be considered as well. Alone the compound amounts to 910 (AD 1504), a too early date. On this problem and its possible implications, also involving the participation of Murâdî in the preparation of the long version, see Hûseyin G. Yurdaydın, "Kitâb-1 Bahriyye'nin telifi meselesi," Ankara Üniversitesi Dil ve Tarih-Coğrafya Dergisi 10 (1962): 143-6.
section, Piri formulates the customary homage to Selim I as the reigning sultan and explains that "when the sultan [...] ascended to the throne, masters of different professions offered him gifts to pay homage and to obtain recognition. In that hope, [he] too, intended, as a gift to the sultan, to compose a souvenir book from the knowledge of the sea and the seamen's craft". 27 Selim I ascended to the throne in 1512 and died toward the end of 1520, apparently before Piri's book was ready, for later on in the introduction he refers to Selim I as the deceased sultan and terminates by saying: "when it was the year of AH 927/ AD 1521, when I was putting together [the contents of this book] according to a plan in Gallipoli proper, first the explanations were written and then the places and their figures were depicted". 28

Whether Piri finished composing his book in 1521 remains uncertain even though his statement suggests that its preparation was nearing the end. 29 It is also curious that he did not mention the newly enthroned sultan Süleyman I who succeeded Selim I and for whom his book could have become a gift, especially since what follows this introduction is a well-organized and finished book. On the other hand we know from Piri's explanations in the long version that what he eventually presented to Süleyman was a reworked and completed version of an earlier draft of his book that he had left aside.

It seems that the short version, as we know it from its manuscript copies, largely corresponded to that earlier draft because some historical details in its text relate it to the

27 Bahriye/Kahle, I/1 (facs.), 1-2 and II, 1-2 (trans.).
28 Ibid., (facs.), 2-3 and (trans.) 4.
29 Piri's use of a verb in continuous past is curious and gives the impression that his work was in process, moreover he talks about "putting together" and not "completing". I emphasize the verbs in the continuous past in the concerned passage: "Tarih tokuz yüz yirmi yedi yılinda iken, nefs-i Geliboluda tertib üzerine bir yere cem' ıderken evvel şehirleri yazılub b'adehû ol mahalleri ve şekilleri resm olundu."
time before 1523. However, it cannot be ascertained if that early draft and the short version we know were one and the same or if a short version was completed before the long version. In fact, the short version that was reproduced in manuscript copies seems to have been slightly expanded and released once the long version was finished, because it does not terminate at the Dardanelles, as its introduction announces, but extends over the Marmara Sea up to Istanbul with four chapters and maps. Remarkably, the first three of these maps are appended to the long-version manuscripts MS Topkapı H. 642 and MS Ayasofya 2612 as "postscripts", i.e., they come after the chronogram and have no chapters to accompany them. It is evident that these maps were added to the long version after it was completed yet before its presentation copy was prepared. In the short version, however, they appear together with their chapters plus an additional chapter and, hence, constitute a proper sequence to the rest of the book, something that suggests Piri eventually wrote their chapters, plus a fourth one, before integrating them into the short version. In any case, since this small but significant terminal expansion is present in all surviving manuscripts, we may presume that the short-version Bahriye began circulating after that expansion was made. Yet it is curious that the short version was not otherwise modified, especially not updated. We can only speculate whether it was Piri who added the chapters concerning the Marmara Sea and then released the short version sometime

30 As pointed out by Soucek, Turkish Mapmaking, 91, the chapter on Rhodes contains detailed instructions on how to make a successful landing and siege. The island was sieged by the Ottoman army in the summer of 1522 and the Knights of St. John surrendered at the end of that year.

31 The presence of these four chapters in the short version has so far not been tackled. In his most recent study on Bahriye, Soucek mentions them without, however, making any comment. See Turkish Mapmaking, 85; also Kahle, "Bahrije," 63.
after 1525-6 despite the long version,\textsuperscript{32} or whether his fellow seamen started copying it only after his death in AH 961/ AD 1553-4. Yet mentioning here some possible answers allows us to reflect on the purposes of the short version and on the circumstances of its release.

The long version, even though presented to the sultan, was essentially a navigation manual intended for use by Ottoman seamen, and Pîrî must have expected that it would soon be reproduced to become instrumental.\textsuperscript{33} It is evident that Pîrî did not simply polish the early version he had but added considerable new material on important areas of the Mediterranean.\textsuperscript{34} As I shall point out when discussing the detail maps of Bahriye, he had also improved in the long version the cartographic material of sections which he did not necessarily expand.\textsuperscript{35}

Yet instead of reaching its potential users, it appears that the long-version Bahriye stayed in the palace since other than the presentation copy and its twin, there are no known copies of it made in the first half of the sixteenth century. Several factors might have complicated the copying of the long

\textsuperscript{32} Kahle, without elaborating, also suggested that "the first edition [i.e. the short version] must have been written in book form, in spite of the second edition [i.e. long version]." in "Turkish Sailor," 105.

\textsuperscript{33} His request, expressed at the very end of the long version, that his book be constantly improved and its deficiencies corrected is clearly addressed to seamen who, he hoped, would use it for navigation. See Bahriye/1935, 854 (lines 76-8): "îre sâhib-i kemâle çünkî kitâbîm/ Hatasına ki anun nazîr olanlar/ Tashih itmeginle kâdir olanlar/ Ol üstâde Hûdâ kilsun terehhüm/ Ki eksüklügüm ide tefehhûm."

\textsuperscript{34} These expanded sections in the first place concerned the Adriatic coasts, the prime area of dispute between the Ottomans and the Venetians but also the North African and Eastern Mediterranean coasts which the Ottomans had started to control or claim.

\textsuperscript{35} The significant improvements observable in the long version might explain why he referred to the version he reworked as a "draft", or "loose leaves", or as something that "he had not perfected". See notes 16, 19 and 20 above. Soucek, however, holds that Pîrî deliberately emphasized the imperfection of the short version and that in order "to enhance the merit of Ibrahim Pasha's intervention and the value of the resulting second version", in Turkish Mapmaking, 90. While there might be some exaggeration in his expression, it is justified to take his words as they are.
version for dissemination. First, its considerable volume must have rendered the copying a demanding job given that its manual section alone comprised about 380 folios including a large number of maps. Secondly, it is possible that the political scene in the 1520s and 1530s directed the new sultan's attention away from the maritime frontiers and thus diminished the urgency of the *Bahriye*’s dissemination. 36 What is known about Piri's subsequent career offers little clue about the fate of his navigation manual. He seems to have put time and energy into preparing another world map that he presented to Süleyman in 1528-9. Was it another effort to obtain the promotion to the post of a navy captain that he perhaps could not get by presenting *Bahriye*? We may never know, but the assassination of his mentor İbrahim Pasha in a political plot in 1534 must have considerably harmed his career. An indirect source indicates that around 1540 he was rather holding an administrative post, most likely, at the shipyards. 37 It is known, however, that finally in 1547, at an old age, he was appointed captain of the Red Sea fleet based in Suez. Although not related to the Mediterranean, the area of his competence, this was possibly the most prestigious but also the riskiest post Piri ever held and led to his death in AH 961/AD 1554. 38

36 Instead of undertaking major naval campaigns, for which the Ottoman navy seem to have been prepared under Selim, Süleyman pursued between 1526 and 1532 a series of land campaigns against Hungary and subsequently in the east toward Iraq and Iran.

37 This may be deduced from the title of "kethüdâ", with which a fellow seaman and poet who used the penname Muradî refers to Piri in his two works written around 1540. Piri could have been employed either at the shipyards at Kasımpaşa, Istanbul or in Gelibolu. For two positions at the shipyards, connected with this title, i.e."tersane kethüdâsi" and "tersane defter kethüdâsi", see İsmail H. Uzungargılı, *Osmanlı devletinin merkez ve Bahriye teşkilatı*, 2nd ed.(Ankara: Türk Tarih Kurumu Basımevi, 1984), 427, 429; also Colin Imber, "The Navy of Süleyman the Magnificent," *Archivum Ottomanicenum* 6 (1980): 240-1, 280.

38 His post involved important risks for he was sent to break the Portuguese blockade of the Persian Gulf by capturing the fortress of Hormuz and to patrol the coastal area between Suez and the other navy base, the newly conquered Basra. The coastal area he was in charge of was too long and his fleet not sufficiently strong to combat the Portuguese.
If Piri sought to pass his navigation manual to fellow seamen, or was urged by them to do so, it is imaginable that he wrapped up his initial version as a short-version of Bahriye for two reasons: first, it would have been inappropriate that he himself release for copying the long version that had become a royal gift, and furthermore, with Ibrahim Pasha's death and his opponents being in power, it must have been preferable not to deal with the version so closely associated with the former grand vizier. Yet another factor may also have incited Piri to make public his earlier version of Bahriye. Around 1540, a fellow seaman, who used the pen name Muradi and who seems to have helped him in the preparation of the long version, contested that Piri was the sole author of Bahriye. If Piri released the short version in reaction to Muradi's claims, that may explain why he left it as it was. In its not updated state, the short version would have proved its precedence over the long version and at the same time its independence from it. On the other hand, adding the Marmara chapters and maps to the end of the short version cannot be seen as a contradiction. The addition to the short version of the chapters lacking in the long version links the two versions and, hence, would have demonstrated Piri's authorship for both.

Although we may thus conjecture that the short version was released by Piri, it also remains a possibility that it started

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Piri's failure to fulfill his assignment completely, combined with allegations of fraud against him led to his execution. See Cengiz Orhonlu, "Hint kaptanlığı ve Piri Reis": 235-54.

39 Muradi's signature, for his contribution to the writing of the long version, is hidden in the chronogram that must have been composed by him. See n. above. His claim that "it was him who put Bahriye together as a book but it became known under Piri's name" is stated in a passage repeated in two of his own works. It was noticed and discussed by H. G Yurdadayın in "Kitâb-ı Bahriye'nin telifi meselesi":143-5. For the passage in question, see ibid, 146. Yurdadayın concluded that Muradi was a co-author who transformed the notes of Piri into a book. Yet, as has been suggested by Soucek, Muradi's ambiguous and somewhat cautiously expressed claim may also be interpreted differently, that is, as concerning Bahriye's versified sections rather than the entire manual, in Turkish Mapmaking, 95.
to circulate only after his death. The date of the earliest known manuscript of the short version completed in March 1554, a date too close to Piri's death, does not allow any further conclusion. About a century later, the Ottoman scholar Kâtip Çelebi, alias Hadji Khalfa, noted the existence of two versions of Bahriye and named Piri as the author.

1.3. The Contents and Sources of Bahriye

In its introduction, Piri presented his work as "the knowledge of the Mediterranean" and entitled it Bahriye meaning "matters pertaining to the [Mediterranean] sea". In Turkish and other library catalogues, Bahriye has been variably designated a sea atlas, a geographical, hydrographical, or topographical work on the Mediterranean Sea, a description of the islands and coasts of the Mediterranean, and a portolan of the Mediterranean. Among all these relevant designations, "portolan" identifies the genre from which Piri's work actually stemmed and to which it owes its essence.

1.3.1. The Navigation Manuals (Portolans)

The navigation manuals called portolans, from Italian portolano (harbor-book), whose origins can be traced back to the eleventh century were being widely used by the

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40 The precise date of Piri's execution, in Cairo, has not been documented. According to Orhonlu the earliest possible date would be mid-1554, see "Hint kaptanlığı ve Piri Reis":246-7. Orhonlu, ibid., notes that Piri's belongings were thereafter sent to Istanbul.

41 Kâtip Çelebi mentioned Bahriye in three of his works including his monumental bibliographical survey Kegel-Zunun where, under "Bahriyye" (no.1689), he noted that "there are two recensions, one more detailed than the other and with a beginning in verse which the other lacks," see Hadji Khalfa, Lexicon Bibliographicum et Encyclopaedicum, vol. 2, ed. and trans. by Gustav Flügel (Leipzig, 1837), 22-3. For his two other references to Bahriye, see Kahle, "Einleitung", XIV-XV.

42 At the end of the prologue to the long version, see Bahriye/1988, fol. 42v: "Zira bu yir halkına iy pür-kemal / Bahr-ı Rum 'ılmı gerek kim bile hal / Anınığın işbunu yąd eyledüm / Bahriyye diyঃ ad eyledüm." (Oh, the perfect one, the knowledge of the Mediterranean is necessary to our people so that they can know its state. Therefore, I called to mind this [knowledge] and named it Bahriyye).
Mediterranean sailors at the turn of the sixteenth century. These manuals concerned primarily coastal navigation and responded to the particular needs of Mediterranean seafaring. The portolans typically listed harbors in a sequence around the Mediterranean coastline and indicated the distances between them as well as the appropriate bearings to sail from one harbor to the next. The information contained in them reflected the cumulative experience and records of several generations of seamen. 43

We do not know whether portolans, or similar navigation guides, were used by Ottoman seamen before the composition of Bahriye, which seems to be the first of its genre in the Turkish language. 44 But since various Mediterranean nationalities intermingled on board Ottoman ships, it is not impossible that some Ottoman seamen were familiar with foreign portolans before Bahriye was composed, or used them as Piri himself appears to have done. 45

43 On portolans the best historical overview remains Konrad Kretschmer, Die italienischen Portolane: Ein Beitrag zur Geschichte der Kartographie und Nautik (1909; reprint, Hildesheim: Georg Olms Verlagsbuchhandlung, 1962). This work also contains transcriptions of a number of portolan-texts together with commentaries. For the various types of information contained in portolans, see ibid., 190-2. (hereafter cited as Italienische Portolane).
44 According to Katip Çelebi, Bahriye became the only reference of seamen since the Ottomans had no other navigation manual, in Tuhfetü'l-Kibâr, (Istanbul, [AH]1141/ [1728-9]), fol. 28r, quoted in Kahle, "Einleitung," XV. For two portolans, seemingly partial and from later periods, see H. Ethé, Catalogue of the Persian, Turkish...Manuscripts in the Bodleian Library (1930), no.2084 and E. Blochet, Catalogue des manuscrits turcs de la Bibliothèque Nationale, vol. 2, no.219.
45 Seamen of Italian, Greek or other Mediterranean origin were involved in the Ottoman navy or acted as corsairs on their behalf, especially during the formation period of the Ottoman fleet in the fifteenth century. See H. İnalçık, "Gelibolu," Eİ 2, 985 and idem, "The Rise of the Turcoman Maritime Principalities in Anatolia, Byzantium, and Crusades," Byzantinische Forschungen 9 (1985): 211. Notwithstanding the possibility of their mediation, the factual information contained in the portolans, written in rather standard formulations and using a limited vocabulary, might have been intelligible to Turkish-speaking seamen who made use of a nautical "lingua franca", see H. and R. Kahane and A. Tietze, The Lingua Franca in the Levant: Turkish Nautical Terms of Italian and Greek Origin
Although Piri does not make any explicit reference to portolans as such, the sailing instructions found in each chapter of Bahriye leave no doubt that he was well-familiar with current, possibly Italian portolans.\textsuperscript{46} The text of Bahriye, divided in chapters, discusses in segments the entire Mediterranean following its coastline and also provides, besides distances and bearings between harbors, detailed information about harbor facilities and coastal hazards in the typical portolan style.\textsuperscript{47} However, Bahriye also differs from traditional portolans in certain ways. First, the written information it gives is supplemented with detail maps, secondly it is prefaced or mingled with some non-nautical information. Yet, these particularities relate Bahriye to two other products of the Mediterranean maritime culture: the nautical chart and the island-book.

1.3.2. The Nautical Charts

The nautical charts in question, which are more commonly referred to as "portolan charts" in English,\textsuperscript{48} appear to have

\textsuperscript{46} Even though Piri's sources have not been identified, the Italian forms of place-names in Greece and the Aegean are considered as evidence that he was using Italian portolans, see W. C. Brice, C. H. Imber and R. Lorch, The Aegean Sea-Chart of Mehmed Reis, (Manchester, 1977), \[5\]. The authors draw attention to the presence of italianized place-names also in the sixteenth-century nautical charts by the Sharfi family of Sfax, Tunisia and in the Greek portolans. For the Greek portolans, a similar observation is made by Armand Delatte, in Les portulans grecs (Liège and Paris, 1947), XIX. These observations suggest that current portolans, at least in the sixteenth century, must have been mostly Italian.

\textsuperscript{47} While the distances and bearings between harbors were the standard information of all portolans, the content and arrangement of further information on safe entrances to harbors, anchorages and depths, nearby fresh water sources, lighthouses, and landmarks, as well as precise information about coastal hazards (submerged rocks, sandy shallows, reefs, etc.) did not follow a rigid structure. See Kretschmer, Italienische Portolane, 173-4.

\textsuperscript{48} I shall refer to them as "nautical charts" to keep them distinct from "portolans" that were written navigation manuals. In fact, the designation "portolan chart" (in French: carte portulane) is considered inappropriate yet too well established to be altered. At the time, these charts were never called that way but rather carta, carta nautica or
originated in the late-thirteenth century and were particular to Mediterranean seafaring as were the portolans. A typical nautical chart was drawn on a single piece of vellum and showed the entire Mediterranean Sea, often together with the Black Sea and part of the Atlantic coast. Certain areas of the Mediterranean Sea were also drawn in a larger scale on separate vellum sheets and sometimes bound together to form an atlas. While the charts themselves were produced by individual chartmakers or workshops, the information contained in them is believed to have been compiled and corrected over long periods of time by various individuals including the seamen.

The nautical charts basically showed the continental outlines with an unbroken sequence of place-names noted all along. With respect to form and content, the charts followed stricter conventions than the navigation manuals. The coastline was typically composed of arcs and thus emphasized headlands or capes, and the bays in-between. The names of harbors, always written on the land side and perpendicularly to the coastline, followed the course of the coastline. The coastal hazards such as submerged rocks, riffs, and sandy shallows, which were pointed out in portolan texts, were marked along the coastline


On the nautical charts, esp. for a critical survey of the state of research, see Campbell, op. cit., 371-463; and Kretschmer, op. cit., 34-104, and for indications of a "causal relation" between portolans and nautical charts 166-7, 177. The genesis of the nautical chart is believed to be linked with the introduction of the mariner's compass into the Mediterranean sailing practice, something which may be corroborated by the date of the earliest documented reference to a nautical chart in the late thirteenth century. See Campbell, ibid. 382 and 389.

How these charts were precisely constructed still remains unresolved. For a critical review of the various theories, see Campbell, ibid., 380-92. Possible methods used for constructing a chart of the entire Mediterranean, in support of the theory of piecemeal creation, is discussed (by David Woodward), ibid. 387-8.
using a conventional set of signs. The most conspicuous trait of the nautical charts is the network of "rhumb lines". These lines that criss-crossed the entire map surface radiated from several windroses and indicated the directions of the eight principal winds, half-winds and quarter-winds in different colors. The rhumb lines allowed the seaman to pick his wind or sailing direction easily anywhere on the chart.

The use of nautical charts by Ottoman seamen might date back as far as the turn of the thirteenth century, even though how widespread that use was cannot be estimated. By the late-fifteenth or early-sixteenth century, however, the nautical charts seem to have become standard also in Ottoman navigation. An evidence in support of this is provided by a particular genre of poetry that became fashionable around the middle of the sixteenth century and which relied on an extensive use of nautical terms as a stylistic device. In these poems we find "chart" (hartı or karta) and "mariner's compass" (pusola) featuring as poetic metaphors or similes, which also

51 The wind roses are distributed in a circular pattern over the mapped area and each one indicates thirty-two wind directions. For a description of how the rhumb line network was constructed and used, see E. G. R. Taylor, The Haven-Finding Art (London: Hollis and Carter, 1958), 111-2.

52 The rhumb lines are believed to have been used mainly to choose the sailing direction from one a port to another or to visualize the position of the ship when estimating that position in terms of the direction and distance travelled. It is also presumed, by Taylor and others, that rhumb lines were of help when taking bearings or plotting the course while sailing. Such a use of nautical charts, however, cannot be corroborated, see Campbell, "Portolan Charts," 441-4. For a recent critical study based on historical accounts and arguing that the nautical charts had a limited use during navigation, see P. Gautier Dalché, "L'usage des cartes marines aux XIVe et XVe siècle" in Spazi, tempi, misure e percorsi nell'Europea del Basso-Medioevo (Spoleto: Centro Italiano di Studi sull'alto medioevo, 1996), 98-128

53 William Brice and Colin Imber presumed that the use of portolan charts as navigation aid must have spread among Ottoman seamen in relation to their increasing activity in the Mediterranean, primarily as corsairs from the late thirteenth century onward and as navy captains after 1460. They argued that "it is unthinkable, with this constant and increasing maritime activity, the Turks should not have produced their own maps." See W. Brice and C. Imber, "Turkish Charts in the Portolan Style", The Geographical Journal 144 (1978): 529.
sometimes invoke these two instruments' complementary use. Such an application of the terms clearly suggests that nautical charts and compasses were then used by Ottoman sailors since a while, so that laymen who also wrote such poems had become sufficiently familiar with them around mid-sixteenth century. The production of nautical charts in Ottoman centers probably also started in the sixteenth century, although its extent remains unknown because of the small number of charts that have survived.

Piri himself must have become familiar with nautical charts when he began sailing with his uncle in the Mediterranean. In the prologue to the long-version Bahriye, he presents the nautical chart (kharti), as part of the indispensable knowledge of seamen besides the knowledge of winds, calendars and the mariner’s compass. He also explains in detail its use and conventions. In the maps that illustrate the chapters of Bahriye, the coastlines are drawn in the

54 This genre was particularly fashionable from the 1540s to 1570s, and the poets who produced such poems included laymen as well as mariners. Andreas Tietze discussed their works in a series of three articles; for their references, see the bibliography under Andreas Tietze. For samples of such poetry and metaphorical use of “chart”, see Henry and Renée Kahane and Andreas Tietze, The Lingua Franca in the Levant: Turkish Nautical Terms of Italian and Greek Origin (1958; reprint ABC Kitabevi A.§.: Istanbul, 1988), 158 and 596. For a mention of a similar poetic instance as evidence of familiarity with the navigation instruments, see Taylor, The Haven-Finding Art, 116.

55 The surviving charts are contained in three atlases, see Soucek, "Islamic Charting," 279-84. For references to studies on individual atlases see chap. 2, n. 23 and below n. 106. Apart from them, the only other known chart, drawn on an uncut vellum, is the one prepared by Menemenli Mehemd Reis, mentioned above in n. 46 (fig. 74). A seventeenth-century Ottoman nautical chart, also of the Aegean Sea dated AH 1071/AD 1660-1 and signed by a certain ‘Abd’al-Rahman Rish [sic]—came up as an item for sale at Sotheby’s (Dec. 7, 1993 as Lot 285), see Imago Mundi 46 (1994): 199.

56 He remarks in the introduction to the long version, Bahriye/1988, fol. 6r, that he took down notes himself during all those voyages he did with his uncle.

57 Ibid., fols. 10v-14v. He explains in detail how the network of rhumb lines are generated and drawn, and what their color conventions are, as well as the conventions concerning the place-names and the signs for coastal hazards, fols. 12r-14v.
typical style of nautical charts, and the submerged rocks, reefs, etc. are marked with the same conventional signs. But more importantly, the purpose of Bahriye's maps directly derives from nautical charts. Piri particularly emphasizes that the nautical charts can contain only summary information about coastal features and hazards because of the smallness of their scale. He remarks that charts are useful for navigating "on broad stretches of coast and around large islands", but "when navigating close to the shore or between small islands", seamen depend on a pilot, or on written information. In Bahriye, the information pertaining to coastal navigation is both explained in the text and depicted in detail maps. These maps that occupy a single book page, or at most two, show only a very small coastal area, or an island, and have a scale much larger than the scale of any nautical chart. Hence, they show a much more detailed and precise coastline than that which can be found on nautical charts.

Piri's purpose in combining the sailing instructions with detail maps had obviously to do with increasing the efficiency of his navigation manual which was prepared, as he claims in the introduction, to enable [Ottoman] captains to navigate without a pilot yet safely in unfamiliar areas. This

58 That these detail maps lacked rhumb lines had to do with their limited geographic coverage: a single but large wind rose centered on the map was sufficient for orientation.
59 Ibid., fols. 12v and 13v.
60 In the respective introductions to the long version, see Bahriye/1988, fol. 2v-3r, and to the short version, see Bahriye/Kahle, 1-2.
61 He makes this indirect reference to portolans where he notes that what cannot be recorded with precision on nautical charts had been written down: "Anınınuzn yazdilar..." ibid., fol. 13v, the last line. However, since he uses the verb "yazmak" both for "to draw" and for "to write" the object of his reference does not emerge clearly and can only be extrapolated from the preceding lines.
62 In the introduction to the long version, Bahriye/1988, fol. 2v-3r. Piri's ultimate goal was to provide the Ottoman seamen with all the nautical knowledge necessary for mastering the navigation in the Mediterranean and thus successfully advancing the Ottoman expansion. Elsewhere, addressing the potential user of Bahriye, he makes it very explicit: "Garet eyle daim Efrenç illerin/ Zira kim gösterdüm ânun yolları yan/ Hem sana vü hem bana iy âgâ/ Bir sevab ola, olursa
combination of detail maps with typical portolan information forms the striking and, according to some, the original aspect of Piri's work. Given the importance of portolans and nautical charts in Mediterranean seafaring, it is not astonishing that Piri sought to combine them in one volume. But whether Bahriye was in that regard really unprecedented cannot be fully ascertained. It is known that sailing manuals called "rutters", which were particular to the Atlantic navigation, began to be illustrated with coastal profiles from the end of the fifteenth century onward. But the portolans seem to have contained only written instructions until the end of the sixteenth century, and if some portolans containing detail maps as illustrations existed before Bahriye, then they must have been not very usual. However, another genre of book that used

feth bāb" (Keep raiding the Frankish lands/ I have shown you the ways/ Both you and I, oh elder or youth/ Will merit God's reward/ If gates open as a result), ibid. fol. 14v.

63 See Soucek, "Instructions nautiques": 248, and idem, "Piri Re'is" in EI², 8: 309; also see M. Mollat du Jourdain and M. de La Roncière, Les portulans: Cartes marines du XIIe au XVIIe siècle (Fribourg: Office du Livre, 1984), 218 and 223.

64 The earliest known is that of Pierre Garcie dit Ferrande presumably composed around 1483-84. This illustrated rutter circulated in manuscript form until it was published as Le Grand Routtier et Pillotage... in 1520 in Poitiers. Some of its chapters had appeared earlier on in Le routier de la mer, an anonymous, printed rutter datable to between 1502 and 1509, see Des livres rares depuis l'invention de l'imprimerie, ed. by A. Coron (Paris: Bibliothèque nationale de France, 1998), 78. Cornelis Anthonisz's sailing instructions accompanied by coastal profiles as well as charts was printed in 1543 in Amsterdam, see L. Bagrow and R. A. Skelton, History of Cartography, (enlarged 2nd ed., Chicago: Precedent Publishing, Inc., 1985), 119-20. The profile views as a representational mode and in relation to other modes used for depicting cities is discussed in L. Nuti, "The Perspective Plan in the Sixteenth Century: The Invention of a Representational Language," The Art Bulletin 76 (1994): 105-28, esp. 109-10 (hereafter cited as "Perspective Plan").

65 Kahle had assumed that even though none has survived Italian portolans illustrated with detail maps existed and that Bahriye was modeled after such a portolan. See Kahle, "Einleitung," X. The view of Lucia Nuti, however, is that Italian portolans continued well into the sixteenth century without any illustration, see "The Perspective Plan": 110. One of the earliest known Italian portolans illustrated with detail maps dates from the end of the sixteenth century: Isolario e Portolano del Mediterraneo by Antonio Millo (MS Correr 904), Museo Correr, Venice, covers only the coastline from Otranto to Alexandria. It is featured as
illustrations derived from nautical charts was emerging in the late-fifteenth century and had possibly played a role in the conception of Bahriye.

1.3.3. The Island Books

The isolario or the "island book" appeared in Italy in the fourteenth century as a new genre that essentially treated the islands of the Aegean Sea. From the period preceding the initial composition of Bahriye around 1520 only two island books are known. The first is Cristoforo Buondelmonti's famous Liber Insularum Archipelagi composed around 1420, and thereafter frequently reproduced in manuscript; the second is the Isolario of Bartolommeo dalli Sonetti published in print no. 51 in the exhibition catalogue Portolani e Carte Nautiche, 144-5. The same catalogue features another illustrated portolan by Gaspare Tentivo from after 1683. For a list of later portolans, printed or manuscript, including those by Millo and Tentivo, see Kretschmer, Italienische Portolane, 228-32.

66 The larger number of the island books were written in the sixteenth and seventeenth centuries. They vary in style, content, accuracy, and only form a loose genre. See Elizabeth Clutton, "The Isolarii: Buondelmonti's Liber Insularum Arcipelagi," in Cartography in Prehistoric, Ancient, and Medieval Europe and the Mediterranean, 482-4. For an essay interpreting the different meanings of isolario as a genre, see C. Brétecher and F. Lestringant, "Insulaires" in Cartes et figures de la terre (Paris: Centre Georges-Pompidou, 1980), 470-3.

67 Buondelmonti was a Florentine priest who had received humanist education. He travelled the Aegean between 1415-31. The autograph manuscript of this work, sent to Cardinal Orsini, is believed to have perished in 1527 during the sack of Rome. Buondelmonti's work survives in numerous manuscript copies, most of them made between 1460s and 1480s, which Hilary L. Turner groups in three clearly separable traditions. For her comparison of separate manuscript groups, as well as an evaluation of Buondelmonti's text and maps, see "Christopher Buondelmonti and the Isolario," Terrae Incognitae 19 (1987): 11-28.
around 1485-6,\(^68\) and third island book printed in Venice in 1528 by Benedetto Bordone slightly postdates Piri's work.\(^69\)

The island books are characterized by their exclusively maritime scope and their cartographic illustrations. The early examples preceding Bahriye deal only with the Aegean islands, devoting to each one a chapter—perhaps an inspiration drawn from the portolans—and an illustration, that is a map drawn in the fashion of nautical charts. However, the information contained in the island books is of little, if any, navigational use. Buondelmonti describes about seventy-two Aegean islands giving some topographical and historical information on each, primarily of antiquarian interest. His text is based not only on his own observations but also on written and hearsay sources. Bartolommeo, a seaman by profession, describes forty-nine Aegean islands. His descriptions are composed as short, rhymed verses (sonnets) and recount some topographical and historical particularities for each island. They are very similar to and sometimes based on Buondelmonti's descriptions.\(^70\) But in addition, Bartolommeo's sonnets occasionally mention some nautical details such as the sailing direction to a nearby island and its distance in miles. In both books, the chapters are illustrated with detail maps.

\(^68\) Little is known about the author who presents himself as the Venetian shipmaster Bartolommeo dalli sonetti, probably for his predilection for that verse form in which he composed his entire island book. The original woodblock print is published in facsimile, with an introduction by F. R. Goff, as Bartolommeo dalli Sonetti, *Isolario (Venice 1485)* (Amsterdam: Theatrum Orbis Terrarum Ltd., 1972). Also see, Tony Campbell, *The Earliest Printed Maps 1472-1500* (London: The British Library, 1987), 89-92.

\(^69\) Benedetto Bordone was a Paduan illuminator and wood-engraver established in Venice. The majority of maps in his island book are drawn after those in Bartolommeo's island book. It also included a selection of islands beyond the Mediterranean. For a facsimile edition with an introduction by R. A. Skelton, see Benedetto Bordone, *Libro... de tutte l'isole del mondo (Venice 1528)* (Amsterdam: Theatrum Orbis Terrarum Ltd., 1966).

\(^70\) The general opinion is that Bartolommeo largely based his text on Buondelmonti's *Liber Insularum*, see Hilary L. Turner, "Christopher Buondelmonti and the Isolario," 25; R. A. Skelton, introduction to *Libro...* by B. Bordone, V.
that show individual islands in typical nautical chart outlines which enclose a few topographical details such as buildings, ruins, hills, trees, etc. that are most often drawn as elevations and sometimes as small bird's-eye views (fig. 73a, 73b and 75a). Bartolommeo's detail maps also contain a standard, large compass rose that encircles the island depicted and occasionally a bar-scale. They bear the conventional signs used on nautical charts to mark rocks, reefs and shallows, yet these nautical details are neither explained nor mentioned in Bartolommeo's text (figs. 73b and 75a).

It is evident that both island books drew inspiration and also assembled some material from portolans and nautical charts, however, without using it for a nautical end. Liber Insularum is essentially a travelogue that Buondelmonti wrote with his patron in mind. Bartolommeo's Isolario, even though containing some nautical details, is not a navigation manual but at best a fanciful variation of that genre, perhaps composed to divert fellow seamen, or potential voyagers.

Nevertheless, the concept of combining descriptive text with illustrations derived from nautical charts that both island books share is very suggestive, and what Piri did was to exploit that concept for a directly nautical purpose. Whether it was the island books that first inspired him to use nautical chart details to illustrate a portolan text, or whether he had already thought of making such enlargements to supplement nautical charts and found in island books a suitable format, is difficult to determine. But it is clear that Bahriye is based


72 The island books were formerly considered a form of navigation manual because of their detail maps' cartographic relation to nautical charts. See Bagrow and Skelton, History of Cartography, 63 and 119; Frabetti, quoted in Campbell, "Portolan Charts," 379-80; Frederick R. Goff, introduction to Isolario by B. dalli Sonetti, VI; Harvey, Topographical Maps, 64-5. As in Kretschmer, Italienische Portolane, 226-7, the current opinion clearly distinguishes the island books both from portolans and nautical charts, see Campbell, ibid., and Clutton, "The Isolarii: Buondelmonti's Liber Insularum Arcipelagi," 482.
on Isolario. Its detail maps closely follow the model of Isolario's maps and have a similar map-scale, compass rose and layout. Furthermore, for the maps of the Aegean islands, Piri's principal source was largely Bartolommeo’s island outlines, at least for those contained in the short-version Bahriye.

Nevertheless Piri's work is not limited to the Aegean islands and covers the entire Mediterranean. Given his cartographic experience, it is not impossible that he prepared a good number of detail maps himself by enlarging directly from nautical charts. That he may have proceeded that way is also suggested by his insistent emphasis on the issue of scale with respect to nautical charts and the need of supplementing them. Opinions vary, however, about how he obtained these detail maps.

1.4. The Detail Maps of Bahriye

In the earliest studies, it was suggested that Bahriye maps directly reproduced some cartographic models such as already existing detail maps,73 or the maps of Bartolomeo's Isolario.74 It was also considered that an Italian portolan, which possibly served as model to Piri, also provided the models for the detail maps.75 According to a more recent view, which does not reject that some Bahriye maps might have been derived or copied from Isolario maps, Piri primarily constructed them by enlarging relevant parts of nautical charts and then improved these enlargements on the basis of his own

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73 Robert Herzog, "Ein türkisches Werk über das ägäische Meer aus dem Jahre 1520," Athenische Mitteilungen 27 (1902): 420. Herzog held that they were directly traced, as were, according to him, the maps in Bordone's isolario, from some nautical charts of a larger scale, each showing a segment of the Mediterranean coastline. Herzog suggested that these might have been the Venetian "Spezialkarten" from which presumably the nautical charts were compiled.
74 L. Gallois, Cartographie de l'île de Délos (1910), 16, quoted in Kahle, "Einleitung," VII.
75 Kahle, "Einleitung," X. After examining the long-version Bahriye, however, Kahle thought that Piri’s role in composing that version and making additions was more important than what he first believed, see idem, "Turkish Sailor": 104-5.
experience and direct observations.\textsuperscript{76} How Piri exactly prepared his detail maps cannot be fully resolved, but the question as to whether he could have based them on the enlargement of nautical chart details is worth examining.

In the case of Bartolommeo's \textit{Isolario} and Buondelmonti's \textit{Liber Insularum}, the possibility of obtaining such detail maps by making enlargements from a nautical chart has been dismissed with the argument that the Aegean islands, because of their small size, do not appear in nautical charts in characteristic outlines.\textsuperscript{77} While this may be true for charts showing the entire Mediterranean, those showing only the Aegean basin have a scale large enough so that all the islands, except the tiny ones, can be depicted in characteristic outlines. Yet what is considered a "characteristic outline" when speaking of nautical charts is an approximate shape and does not correspond closely to the actual outline of the island or coast represented. Moreover, the outline of a particular island differs somewhat from one nautical chart to another. How much a depicted outline approached the actual one seemingly depended on the importance of the subject, and probably also depended on how often observations and corrections on existing outlines could be made. This is especially noticeable in the large group formed by the Aegean Islands: the large and medium-sized islands, although more difficult to map, have in general more accurate outlines than small ones.\textsuperscript{78} For their detail maps of individual islands, or coastal sections, Buondelmonti, Bartolommeo and

\textsuperscript{76} Soucek, "Instructions nautiques": 248. Elsewhere, Soucek noted that, as also for the text, the exactness of maps vary and those treating the North African coast of which Piri had a firsthand knowledge, are the most original, see idem, "Islamic Charting," 378-9.

\textsuperscript{77} This has been argued independently, for \textit{Isolario} in Campbell, \textit{Earliest Printed Maps}, 90, and for \textit{Liber Insularum Archipelagi} in Turner, "Christopher Buondelmonti and the \textit{Isolario}," 23.

\textsuperscript{78} Local eye sketches are considered to be at the origin of the compilations of nautical charts and their eventual corrections, see Campbell, "Portolan Charts", 383, 388. Making a sketch-plan of the coast with the help of the compass from the nearest hill had become a routine by the sixteenth century, see Taylor, \textit{The Haven-Finding Art}, 192.
Pirî must have relied to a great extent on enlargements from large-scale nautical charts, since their maps display not only outlines similar to those found on nautical charts but also the same pattern of accuracy with respect to large and small islands. Yet this is not to say that they did not incorporate their own observations and corrections into their detail maps. Both Bartolommeo and Pirî mention how they climbed, compass in hand, atop of an island to verify its position on the chart. Their similar statements suggest that they were verifying, in that way, the outline features of an island, such as capes and bays, with respect to compass bearings and to neighboring coasts or islands within view. The outline they verified might not always have been an enlargement but also a copy or their own sketch of a small island for which the nautical charts did not provide any particular shape. However, verification from an elevated spot was apparently not made consistently, and in some detail maps the imprecise compass bearings can be traced back to nautical chart details and thus provide a further clue that the latter must have been their source. On the other hand, verification or sketching from shipboard, most often when lying at anchor, seems to have been done more often. The practice of sketching and correcting coastal outlines from shipboard was seemingly

79 The Aegean chart of Mehmed Reis (1590-1) that occupies an entire vellum (ca. 59 x 82 cm), mentioned in n. 46 above, is a good example for a sufficiently large-scale (1:1,200,000) portolan chart (fig. 53).
80 Turner who rejects the possibility that nautical charts provided a cartographic source for Buondelmonti's detail maps of small islands observes with surprise that outlines of large islands are more accurate than those of small islands, see "Christopher Buondelmonti and the Isolario," 24.
81 For Bartolommeo's statement, see Isolario (facs. edition, op. cit.), XII; and for Pirî's statement, see Appendix 1. They possibly did such verification more for the smallest islands for which even the large-scale nautical charts did not provide a characteristic outline and the coastal outline of which could be observed from an elevated spot.
82 This is the case of Rhodes both in Bahriye and Isolario, but a clearer case is the island of Carpathos.
83 The outlines of islands, especially those of small ones, are somewhat distorted because the inlet serving as its harbor is exaggerated in size.
also at the origin of nautical charts, and when the material at hand had some geographic substance, further observation could increase its accuracy. In any case, the seamen seem to have departed, whenever they could, from available maps and sought to improve them; that is to say their original contributions mainly consisted in the elaboration of existing material.

Piri's detail maps of the Aegean Islands illustrate well the different degrees of borrowing from and correcting his sources. For the outlines of the Aegean islands, it is apparent that at first he largely relied on detail maps of Bartolommeo's Isolario. Some of his island outlines closely repeat those in Isolario. Other maps have some differently articulated details in both versions of Bahriye, something which indicates that Piri also made partial corrections while using Isolario maps. Yet other Bahriye maps are altogether different, and might have been based on enlargements from nautical charts, on his own sketches or both. These latter maps suggest that Piri replaced Isolario maps whenever he thought improvement was

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84 See, e.g., the map of Euboea from B. dalli Sonetti's Isolario and from short-version Bahriye (MS Bologna-3613), reproduced in Kahle, "Einleitung," as plate 1 [Tafel 1]. The Euboea map in the long version is even closer to the Isolario Euboea, see Bahriye/1988, fols. 64v-65v; for its brief discussion see W. C. Brice, "Early Muslim Sea Charts," Journal of the Royal Asiatic Society of Great Britain and Ireland no.1 (1977): 56. But later manuscripts of both the short and the long versions exhibit different outlines suggesting that the Isolario was not anymore an exclusive source and the copyists use other material. For examples, see Soucek, "Islamic Charting" 276, fig. 14 11 and plate 22.

85 These modifications seem to have been done at varying degrees. The map of Khios (Sakiz) is an example where Piri probably made an eye-copy of the island outline as he found it in the Isolario (Sio), fol. 44v but reworked the Anatolian coastline and the tiny islands in-between, Cf. the short-version map in MS Bologna 3613, Bahriye/Kahle (short version), 1:33, and Bahriye/1988 (long version), fol. 86r. See fig. 54.

86 This is the case, e.g., with the map of Mytilene (Lesbos), cf. Isolario (Metelin), fol. 45v and Bahriye/Kahle (short version), 1:26; and Bahriye/1988 (long version), fols. 73v-74r. An interesting case is that of Leros, a small island halfway between Samos and Cos. Its map in Isolario, fol. 37, clearly shows another island. Its map in the short version repeats the erroneous map of Isolario, see Bahriye/Kahle, 1: 51, while the long-version map does not only correct the mistake but is also strikingly accurate, see Bahriye/1988, fol. 101r.
necessary and possible, as users and copyists of Bahriye later did with his detail maps.

For detail maps dealing with the Mediterranean coastline beyond the Aegean, Pirī must have proceeded mostly by making enlargements directly from nautical charts and complementing them, whenever he could, with his own observations.\(^87\) It is not impossible either that he had access to an illustrated source, perhaps a partial portolan that contained detail maps. In the long-version Bahriye where the Adriatic coastline from Dubrovnik to Ancona is covered, especially the western coast of the Istrian Peninsula, Bahriye maps contain topographic details showing fortified port towns that stand out not only as full bird's-eye views but also with their considerably uniform depiction style, which might be an indication that he incorporated an "illustrated" portolan that he had come across.\(^88\)

This quick comparison of the detail maps of Bahriye and Bartolommeo's Isolario indicates that the coastal outlines shown in them could very well have been enlarged from nautical charts.\(^89\) Yet more importantly, it becomes clear that such detail maps were not obtained through a uniform procedure, but

\(^87\) Soucek concludes that Piri must have relied on his own observations particularly when describing and depicting the North African coast, in "Islamic Charting," 279.

\(^88\) See the detail maps showing the port towns of Porec (Parenzo), Novigrad (Cittanova), Umag, Piran, Izola, Koper (Capodistria), Moggia, Trieste in Bahriye/1988, fols. 201v-209r. This section of the long version appears as an important expansion in respect to the short version and, as Soucek points out, the most important difference between the two versions concerns the Gulf of Venice. He notes that only for the section between Dubrovnik and Venice, the long version has twenty-six more maps than the short version, "Islamic Charting," 275 and n. 34. Soucek does not speculate on the source of additional maps.

\(^89\) Although Buondelmonti's maps were not part of this comparison there is no reason to doubt that they were obtained similarly. My research on Bahriye manuscripts has revealed that at least in one case the detail maps might have been directly enlarged from a cartographic source of smaller scale: The map pages of MS Hüsev Paga-272 of the Süleymaniye Library, Istanbul, bear the pale grey (graphite?) traces of a square grid (each square measuring ca. 1.5 x 1.5 cm). On the use of this method to change cartographic scale, see Campbell, "Portolan Charts", 392.
instead were varyingly based on enlargements and personal observation. In general, what was available was taken as a starting point and when observation revealed its shortcomings it was improved or replaced. This way of proceeding that relied on accumulated knowledge and at the same time on constant, careful observation characterized the compilation of both portolans and nautical charts.

The observation of coastal landscape recorded in different forms in portolans and nautical charts was a standard practice in navigation. We find it incorporated not only into topographic details and coastal outlines of detail maps but also into the topographic descriptions of Liber Insularum, Isolario, and Bahriye. In Bahriye, which was essentially a navigation manual, such observation is unmistakably the source of the descriptive directness that characterizes its text and illustrations.

Although in varying length and detail, each Bahriye chapter describes the topography of a coastal region as seen from a ship, especially noting the precise elements of the landscape such as a hill or a mountain range, a solitary building, a big tree or a grove, even ancient ruins, that would eventually enable the seamen to recognize the area discussed. The most important landmarks of any coastal landscape were of course port towns, and Bahriye chapters often describe their views from sea with a few but characterizing remarks.

90 Less surprising is the case of Bartolommeo, who was a seaman of profession, but Buondelmonti, too, seems initiated to such observation from many years of voyaging, as reveals his description of the shape of an island as "spreading like the hem of a garment", and another as "a sinking ship", quoted in Turner, "Christopher Buondelmonti and the Isolario," 19. Turner qualifies these descriptions as "picturesque, ungeographical language". Yet they were clearly borrowed from sailors' language that Buondelmonti must have heard on board. Such comparisons were typically used to describe landmarks and facilitated their memorization and they frequently occurred in portolans, see Kretschmer, Italienische Portolane, 192, and in Bahriye.
1.4.1. The Topographical Details in Bahriye Maps

What is pointed out as a topographical element in the text of Bahriye is most often shown as a detail in the accompanying map. But topographical details do not all display the same elaborateness and representational nature, a fact that is particularly noticeable in the depiction of towns. In general, topographical details involving buildings make use of a standard vocabulary of architectural forms comparable to those found in Isolario’s detail maps but also in the so-called town vignettes of nautical charts: saddle-roofed houses and churches, the latter sometimes with a bell tower, castles and fortified towers with crenellated walls, to which are added domed mosques with their minarets. The simpler topographical details show either a single building or a group of a few buildings that are drawn as elevations, rising from a baseline indicating either a flat or a hilly site. As can be deduced from Bahriye’s text, the simple topographical details consisting in a single, typified tower, house or monastery are often records of solitary buildings that served as landmarks, although occasionally they also function as map symbols and may respectively stand for a castle, a village, or a monastery complex. The castles, or fortified towns, however, are more typically represented as an assemblage of crenellated towers and walls. Occurring in some variations, these generic representations of Mediterranean settlements akin to medieval town symbols are the most frequently encountered topographical details in Bahriye maps.

For the topographic details, as with coastal outlines, Piri seems to have relied on his models when he did not have other information. The comparison of the short- and long-version maps having the same subject, however, reveals that he subsequently modified also topographical details when he could rely on his own observations. A striking aspect of the topographical details of Bahriye and which contrasts with
Isolario's details, is that they are nearly all depicted as seen from the sea, that is oriented to the seaman on board his ship. The map illustrating the island of Kos (fig. 73c) shows that even when Piri transferred topographic details from an Isolario map (fig. 73b), where they are all drawn to face the viewer who holds the book, he has reoriented them toward the sea to face different directions of approach by ship. In the long-version map of the island of Kos (fig. 73d) we see that Piri also improved the topographic details when he had further information. 91 He corrected the castles' locations to reflect the more precise information he gave in the text, but especially elaborated the depiction of the principal harbor, the castle of Narince, on the northeast coast of Kos. Despite its simplicity, this topographical detail closely matches the brief description in the text, which reads "a castle built on a low-lying, flat place of which they have excavated one side to make a harbor, which small boats can enter, but not galleys, because it is very shallow". 92

In the long-version Bahriye, besides the very frequent, generic representations of towns resembling to those showing the castles of Kos, there are also representations of towns that are quite characteristic, and they can be encountered all

91 The island of Kos, called "Istanköy" in Bahriye and "Lango" in Isolario, was taken by the Ottomans in 1522, at the same time as Rhodes. The short-version chapter and map clearly predate the Ottoman conquest. Yet in the short-version map, the Anatolian coastline, then under Ottoman control, is remarkably improved compared to the corresponding coastline in the Isolario map. Moreover, Piri's textual description of these coasts clearly gives more precise information than what Piri gave about the island itself, see Bahriye/Kahle, (facs. 55-6), (trans., 77-80). The long-version map must have been modified after the island came under the Ottoman control and reflects a better knowledge of the place, esp. of its castles and harbors which are also described more clearly and fully in the respective text, see Bahriye/1988, fols. 110v-111v. Similar observations can be made on maps and chapters concerning Rhodes in the two versions.

92 Ibid., fol. 110v: "Bu zikr olan kal'a bir alçak, düz yirde vaki' olmuşdur. Bir tarafin kazub liman yelemişlerdür. Küçük gemiğüler girür, kadırgalar girmez sığdır." The map shows this second inlet next to the castle filled with red dots, which, according to nautical chart conventions, indicate that it is shallow.
along the Mediterranean coastline. These characteristic representations of towns are constructed using the same simple architectural forms, nevertheless they correspond to observed views. Their immediate precedents, as well as those of the generic representations, were the representations of towns that appeared in the form of vignettes in the empty, inland zones of nautical charts.

The town vignettes found on nautical charts typically served as embellishments, and although they marked the presence of important ports and urban centers around the Mediterranean they did not really portray them. Despite their imaginary character, however, the town vignettes seem to have been conceived as profile views seen either from the sea or the ground level which is indicated by a wavy base line, often painted dark blue or green, from which the assemblage of tower-like buildings rise, and as such they might be related to a "sea-based culture." In the fifteenth century, especially on charts of Italian production, the vignettes began to display some characteristic features. Notwithstanding the fact that these vignettes represented the most important ports, the characteristic views they displayed related to a real view that was distinctive and well visible from the sea. It must have been no coincidence that the earliest-known vignette with characteristic features was the vignette of Genoa.

In one of its earliest examples, found on a chart dated 1435 (fig. 76a), Genoa is depicted with its crescent-shaped harbor, its mole and its two lighthouses, in a configuration

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93 It was a characteristic of nautical charts to surmount each vignette with a banner to explain the political affiliations of harbors, and on some charts banners substituted for the vignettes.
95 Campbell, "Portolan Charts", 397 and Harvey, Topographical Maps, 74-5.
96 In a long tradition originating in medieval world maps, a city that was a given map's place of patronage or production was emphasized by being depicted more elaborately than others, see Pascal Arnaud, "Les villes des cartographes," Mélanges de l'Ecole Française de Rome, Moyen Age-Temps Modernes 96 (1984): 581-2.
similar to what is represented in several later vignettes but also in views produced as book illustrations, such as the view in Liber Chronicarum (fig. 16), or paintings. This realistic and complete view of Genoa from the sea seems to be a result of the good visibility of a clearly shaped harbor, and behind it, of a walled city rising on a slope, both conveniently facing the sea.

In contrast, Venice, the other important port and center of chart production, was never represented in its vignettes as successfully as Genoa. Its vignettes were characterized, even though at an early stage, by the Campanile, the only landmark visible from some distance. The city of Venice itself, a flat settlement amidst the lagoon and blocked by the lidi, simply could not be viewed from the sea, unless from very close. The most characteristic vignettes of Venice indeed represent a close-up view, inevitably partial, which shows the Piazzetta with Venice's most prominent buildings framing it, a view that was available from the closest anchorage to the city (fig. 77a; also 77b and 77c).

These contrasting depictions of Genoa and Venice exemplify how the topography of a city and its visibility from the sea affected the design of a characteristic vignette. Consequently, they reveal how the distinctive sight of a port town captured in a vignette significantly depended on possibilities of observation from the sea. In that sense, the distinctive sight of a town was not so different than that of a landmark, a topographical element easily observable and recognizable from the sea, and, hence, essential to the seaman's knowledge of any coast. But obviously, not every town had a suitably distinctive view from the sea, and this might have been one of the reasons why many town vignettes remained largely symbolic views. The town vignettes from a late-sixteenth-century chart (fig. 78)

97 See, for example, figs. 39-42, 46, 47 and 78, in Ennio Poleggi, Paesaggio e immagine di Genova (Genoa: Sagep Editrice, 1982).
exemplify both kinds, the symbolic and the characteristic vignettes, the latter obtained by incorporating into an otherwise conventional town depiction a characteristic sight, that of the port as in the case of Genoa and Marseille, or a particular topographical element as in the case of Venice (the Campanile) and Barcelona (Montjuich and its semaphor).

The elaborate town representations occurring in the long-version Bahriye are akin to these characteristic town vignettes both in their concept based on observation and in their double function, first as visual aids to seaman as landmarks and secondly as representations of towns contributing to a cumulative and symbolic visualization of the towns around the Mediterranean. 98

Unquestionably modeled after a nautical chart vignette, the topographic detail showing Genoa in the long-version Bahriye (fig. 76b) illustrates a precise and detailed description of the harbor given in the text, but it is also a visual record of the city's appearance. 99 The representational quality of this topographical detail is not an exception but can also be observed in other topographical details of the long-version such as those showing Patmos, Corfu, Methone, Bougie, Tripoli, and Alanya (figs. 79-84). 100 These details depict ports of varying size and importance, and models similar

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98 For the symbolic function of nautical charts in general, see Gautier Dalché, "L'usage des cartes marines aux XIVe et XVe siècles," 97-128. The author argues that "the nautical chart has to be considered from a cultural point of view, as a concentration of the experience of an entire milieu, formed by seamen and merchants, which makes visible the skills of those who belonged to that milieu. As such, its principal function seems to be representing, in its full scope, the image of a world proper to these men," ibid., 127-8 (my translation). We may consider the town vignettes within this global picture as points of concretization by referring to visual memories of places.

99 See Appendix 2. For a similar depiction of Genoa in a short-version manuscript, see fig. 76c.

100 The elaborate topographical details in Bahriye have been briefly dealt with in Renda, "Representations of Towns," 281-4. Renda has distinguished two groups: town views based on European models and town views that might have been based on Piri's own observations. In the latter group, she points out the North African ports and Alanya.
to that of Genoa most likely did not exist for them. Their
depictions, however, suggest their having been sketched from
the sea, that is from aboard ship. The explanations of these
ports in the respective chapters reveal that the depicted views
indeed correspond to what would have been seen from the
anchorage.¹⁰¹ For in all these views, the viewpoint of
depiction coincides with the place of anchorage indicated in
the text. Moreover, what is described in each passage as the
sight of the port town also corresponds to what would have been
seen from the mentioned anchorage position. Hence we may
presume that descriptive notes and sketches were made during
the same observation, and it is feasible that they were done by
Piri himself.

1.4.2. The Maps of Cairo and Venice

The most elaborate topographical representations in the
long version are the maps of Cairo and Venice (figs. 85a and
86a). Unlike the profile views of port towns seen from a
precise viewpoint on the sea, the representations of Cairo and
Venice have an elevated viewpoint and thus present a global
picture of the cities in question. Furthermore, Cairo and
Venice constitute the principal subject of illustration, and as
the respective chapters reveal, these cities are depicted not
in relation to nautical instructions but for their own sake. On
the other hand, their maps accomplish alone a topographical
description because the text hardly provides such
information.¹⁰²

¹⁰¹ In each chapter, Bahriye text explains the position of safe anchorage,
and on the maps these anchorages are pointed out by a ship in that
position moored as described and drawn very precisely to indicate for
what kind of ship the anchorage is suitable. For our examples mentioned
above, the text provides a good description of how each port settlement
looked clearly corresponding to an observation made from the anchorage.
For the respective quotations from Bahriye's text (long version), see
Appendix 2.
¹⁰² The respective chapter which contains no remark on Cairo only relates
to the Nile, in Bahriye/1935, 710. The map of Venice comes after a small-
scale map that shows the northern part of the Adriatic. The only
The emphasis that Pirî thus conferred upon Cairo and Venice can be explained with their general importance for the entire Mediterranean region. Yet Pirî's making these two cities so visible in the long-version Bahriye may also be considered in a more particular context, that is in relation to İbrahim Pasha's patronage of the long version. Cairo was not only worthy to be highlighted as the most important of Ottoman possessions, but the consolidation of Ottoman rule there had been achieved by İbrahim Pasha. Venice's importance was of a different kind and multifaceted. The principal adversary to Ottoman expansion in the Mediterranean, Venice was admired in naval matters and industry, and at the same time for its urban splendor and luxury goods. Seen within the imperial scope of Bahriye and especially in relation to all the expansion that Pirî brought to the Adriatic section in the long version, Venice inevitably appears as a military target. However, the 1520's was not a period of hostilities between the Republic and the Ottoman State, on the contrary a period of peace and political alliance, during which Venice increasingly enjoyed the friendly support of the grand vizier İbrahim Pasha. 103 Hence Venice's prominent map in the long version patronized by

topographical information in the text concerns Venice's situation amidst a lagoon (deniz kulağı), and that its buildings were constructed on piles driven in the shallow areas of the sea (...hinâşî uruluğu yir, berrden ve bahirden cem' olmay bir deniz kulağıdır. Ol denizin b'azı yirleri şiğ ve b'azı yirleri derindir. Ol şiğ olan yirlerin üzerine kazıklar kakub, ol kazıkların üzerine mezkûr şehri binâ eylemişlerdir), Bahriye/1988, 211v.

The rest of the chapter relates the foundation of the city, the transfer of St. Mark's relics from Alexandria, the system of government, and ends with detailed nautical instructions about how to enter the lagoon, ibid., 211r-214r.

the grand vizier could also be interpreted as materializing this "friendly" look.

Whether Piri had some models for the Cairo and Venice maps or not cannot be fully answered for there are no known representations of Cairo and Venice that resemble his maps in the long version, either among the nautical chart vignettes representing these cities nor among European city views.\textsuperscript{104} Notwithstanding the possibility that they were based on or inspired by existing representations, the maps of Cairo and Venice display the same approach of depiction as in other Bahriye maps where characteristic but approximate views of towns were constructed with simple architectural forms.

In the Cairo map, a mass of houses constitute the city, and it is a few topographical elements such as mosques, the citadel and the aqueduct leading to it from a water tower at the Nile with the towns of Bulaq to its south and Fustat to its north that render this depiction characteristic. We may presume that, as his chart of the Nile,\textsuperscript{105} the Cairo map, too, was a result of his own observations and familiarity with the city, which his topographical remarks noted on the map itself seem to support.\textsuperscript{106}

\textsuperscript{104} Renda thinks that the Venice map in MS H. 642 is possibly a simplified adaptation of a European prototype, see "Representations of Towns": 282. Soucek, without suggesting any precise model for the Venice map in question (he discusses its twin in MS Ayasofya 2612), considers that some of the derivatives of de' Barbari's bird's-eye view of Venice "may have influenced the image of Venice in the Kitab-i Bahriye", in Turkish Mapmaking, 145.

\textsuperscript{105} Cairo appears on the fifth and last map of a series dealing with the Nile. In the related chapter, Piri presents the Nile maps as a record of his observations of Nile until Cairo (Nil Irmağında, tâ Mısır'a varınca temâşa iylediğimiz yerler). He explains that during his voyages to Cairo he used to record [in drawings] the river of Nile place by place using a mariner's compass the result of which is these maps (mezkûr Nil Irmağîn, Mısır'a giderken, pusula ile makâm-be-makâm yazardum, ısgû eçgal hasil oldu.), Bahriye/1935, 710.

\textsuperscript{106} Piri's remarks concern individual topographical elements or buildings. For a detailed discussion, see Soucek, Turkish Mapmaking, 154-6. I notice a considerable similarity between Piri's Cairo map and the depiction of Cairo in a vignette from the later half of the sixteenth century (fig. 87), featured in an anonymous atlas of charts possibly produced in
The Venice map, on the other hand, bears hardly any written information, something that might indicate that Piri did not know the city as well as Cairo even though he might have sailed there.\textsuperscript{107} The depiction of Venice, in fact, could be reflecting the limits of his topographical knowledge. The only accents, besides the shipyards, are a basilical church and an adjacent tower that apparently stand for St. Mark and the Campanile, the latter mentioned in the text as the sole landmark of Venice. Also part of the composition is Murano, famed for its glass ware, which is shown to northeast of Venice. Both settlements are characterized simply by clusters of houses separated by channels and are framed by a bold curve that outlines the lagoon and the lidi drawn as if fortified.

Yet, despite some exaggeration and simplification of geographic shapes, the Venice map is not inaccurate and gives a clear idea of the layout and situation of the lagoon and that of Venice in relation to it, and as such it is not very different from other maps in Bahriye that originated in coastline details of nautical charts. In fact, the Venice map, too, might have originated in nautical charts: its correct orientation (cf. fig. 88), and the coastline of the lagoon composed of arc segments both suggest this possibility. The boldly curved overall shape of the lagoon, especially, might

\textsuperscript{107} Besides a caption identifying "the city of Venice" (\textit{şehr-i Venedik}) the only note concerns Murano and explains that it is a different town than Venice and its population manufactures glass (fig. 86a). The detailed nautical instructions which concern the conditions of the sea and the access to the lagoon, as well as the procedure of taking pilots do not betray a borrowing from another source but are given as clear, first-hand information. Nevertheless that information must have been widely known and pretty standart.
derive from a nautical chart for it repeats here, in a much larger scale, the tiny detail with which the lagoon is often represented on these charts (figs. 77a-f). In the nautical charts, however, Venice itself is not included in the lagoon, at best, it is indicated by a group of dots. The city itself appeared near this detail, as a vignette but depicted altogether differently than what we find in the Bahriye map which should, therefore, be considered an original complement, be it Pirî's own design or not.

The maps of Cairo and Venice that stand out as topographic representations also qualify the function and meaning of other, less elaborate views and maps in the long version by making manifest their role as city views. From these richer and more elaborate map illustrations in the long version emerges a coastal panorama in segments that extends the function of Pirî's navigation manual beyond the practical. While the map illustrations and their topographical details allow a visual perception of the Mediterranean coasts, the passages about local histories, legends, customs, folklore and ways of life with which Pirî interspersed the manual in both versions transform these coasts into a setting of life. This setting reveals itself step by step to the reader of Bahriye who follows the trajectory constituted by the sequence of its chapters and maps. More importantly, the reader is gradually initiated to viewing: the text makes him aware that described coasts are carefully observed, and the maps, through their variously oriented topographical representations, make him shift viewpoint several times. Thus, they make him notice he is moving in space, and that, in order to view.108

108 On town views depicted on nautical charts as suggesting movement through their different orientations, see Christian Jacob, L'Empire des cartes (Paris: Albin Michel, 1992), 203.
1.5. The Symbolic Function of Bahriye and the Istanbul Map

By transmitting a detailed but at the same time global picture of the Mediterranean Sea, Piri's navigation manual fulfills a symbolic function. The cumulative experience of viewing from which this global picture emerges is gained on a virtual voyage that begins and ends near Gelibolu, at the Dardanelles. Gelibolu was the town where Piri grew up and composed his work yet it also was the launching point of Ottoman naval campaigns, and in that regard, constitutes the conceptual lookout of the picture offered in Bahriye. On a more symbolic level, however, the lookout that afforded the global view of the Mediterranean was Istanbul, the seat of Ottoman power. The eventual addition of a representation of Istanbul to Bahriye might, therefore, be considered as a visualization of this real lookout in the book, which must have been motivated by a need of self-representation, a need to see the Ottoman capital within the global picture of the Mediterranean. Yet the meaning of the representation of Istanbul cannot be defined only in relation to the symbolic function that Bahriye fulfilled at the moment of its conception, for it possibly followed the changes which that function underwent in relation to Ottomans' control over this maritime region.

The Mediterranean was emerging as an important frontier area precisely when Piri joined the Ottoman navy in 1495, and his Bahriye project must have been significantly stimulated by the imperial aspirations of the Ottoman state when the Mediterranean was perceived as an important and promising frontier area. Conceived as an unusually comprehensive navigation manual based on two typically Mediterranean navigation aids, namely the portolans and the nautical charts, Bahriye represented at the moment of its composition the desire and readiness of the Ottomans to master the navigation of that
sea and, hence, primarily consisted in a look forward.\textsuperscript{109} It seems, however, that \textit{Bahriye}, in its short version, started to circulate and to be used as a navigation manual in the second half of the sixteenth century when naval campaigns served to consolidate the Ottoman presence in the Mediterranean but no further expansion took place.\textsuperscript{110} The earliest examples of the Istanbul map appear and evolve in this period when the frontiers of the Ottoman Empire in the Mediterranean took their ultimate shape.

Judging by the extant manuscripts, a second period, during which \textit{Bahriye} was frequently copied, starts toward the middle of the seventeenth century and seems to coincide with the Ottoman siege of Crete between 1640-70. This new conflict that lasted thirty years must have turned the Ottomans' attention toward the Mediterranean anew. From this period we have copies of both versions of \textit{Bahriye}, and the map of Istanbul, by then evolved into an elaborate topographical map, also appears in the long-version manuscripts.

By the end of the seventeenth century, with the Ottoman power in decline, the elaborate picture of the Mediterranean that \textit{Bahriye} offered in text and maps must have acquired a compensatory function, just as the island books did in the Venetian context.\textsuperscript{111} The Istanbul map, appearing as an

\textsuperscript{109} A similar symbolic meaning, but in a retrospective direction, has been suggested for the Venetian \textit{isolarii} and atlases printed in the sixteenth and seventeenth centuries. See F. Lestringant and C. Brétecher, "Les îles," in \textit{Cartes et figures de la terre} (Paris: Centre Georges Pompidou, 1980), 471-2. The authors suggest that the Venetian \textit{isolarii} and atlases presented a nostalgic inventory of possessions lost to Turks and thus assumed an emminently compensatory value.

\textsuperscript{110} In that period the Ottoman navy undertook some major campaigns such as the siege of Malta (1565), yet unsuccessful, and the conquest of Cyprus (1570). Djerba (1560), Chios (1566), recaptured Tunis (1574) and regularly carried out raids. Remarks concerning incidents during these campaigns can be found in the form of margin notes in the short-version manuscripts. For a concise overview of Ottoman naval involvement in the Mediterranean from the 1450s to the end of the sixteenth century, see Ann Williams, "Mediterranean Conflict" in Süleyman the Magnificent and His Age: The Ottoman Empire in the Early Modern World, 39-54.

\textsuperscript{111} See above, n. 106.
impressive topographical view of the Ottoman capital in these late manuscripts, must have significantly reinforced that function of Bahriye.

1.6. Copyists and Clients of Bahriye Manuscripts

There exists no in-depth study that deals with the copying history of Bahriye or the links between its manuscript copies. The tendency has been to consider the manuscripts descending from the short version and from the long version as two distinct groups with regard to production quality and function. Svat Soucek has characterized the short version manuscripts as modest copies prepared for seamen which fulfilled a practical function, and the long version manuscripts as art books prepared as presentation copies reproduced principally for their illustrative content. Soucek argued that the exquisite maps contained in these long-version manuscripts must have been the work of "imperial or private artisans of the Ottoman book arts." 112 Yet more importantly, Soucek considers the modification and elaboration of Bahriye maps as an esthetically motivated phenomenon that took place in the copying process of the long version. He supposes that it was the miniature painters who prepared the map replacements or additional ones. 113 The study of the Istanbul maps, based on in-depth examination of several manuscripts and their map illustrations, reveals a different picture.

First, the copies of the short version, much more numerous than those of the long version, cannot be characterized in a general way. Notwithstanding the existence of several short-version manuscripts casually copied and clearly taken to sea, there are also several others that are neatly copied and

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112 Soucek, "Instructions nautiques": 243-4, 250-3 and more recently idem, "Piri Re'is", EI2, 319-20 and "Islamic Charting", 275-6
113 Idem, "Instructions nautiques": 252-3. Although Soucek admits the cartographic similarity of this new material with contemporary European nautical charts, he maintains that it was the miniature painters who made the enlargements from these sources, ibid, 254.
illustrated, and even some that are very handsome. Among the long-version manuscripts, there is at least one that belonged to a seaman and another one that clearly defies the statement that all manuscripts in this group are lavish books. Secondly, the chronological sequence involving both groups of manuscripts (based on the dated copies and the genealogical links between them and the undated copies) indicates that the copying of the short version began earlier and stretched over a longer period than that of the long version. Considered from this new angle, the two groups can be evaluated differently with regard to their functions, clients and copyists.

The existence of several dated copies of the short version allows us to trace the beginnings of its copying back to the 1550s and follow its continuation into the eighteenth century. Since none of the nine known copies of the long version is dated, its case remains less clear. Yet the cartographic development of the Istanbul maps and the genealogical links suggested by them permit us to situate seven of these long-version manuscripts in the seventeenth century and the early-eighteenth century. Hence, there appears a long time gap between these copies and the two long-version manuscripts from the sixteenth century, MS Topkapı H. 642, presumed to have been presented to Süleyman I, and its twin MS Ayasofya 2612.

The earliest known copy of the short version, apparently transcribed by more than one hand, was completed in March 1554 by Mehmed Reis, a captain who was then serving as the helmsman on the vessel of the kapudanpaşa (admiral of the fleet). Other short-version manuscripts from the second half of the sixteenth century, which only bear a completion date, and

114 He signed "Mehmed Re'is dümenci-i kapudanpaşa". For the colophon of this manuscript (MS Dresden-389, fol. 169v), see Appendix 1. The colophon is mentioned and translated in Soucek, Turkish Mapmaking, 92. For Kahle's observations on this manuscript, see "Einleitung," XXII-IV.

115 MS Bologna 3612 (1570), MS Hüsev Paşa 272 (1570), MS Topkapı 337 (1574), MS Oxford 543 (1587).
some others without a colophon but datable to this period, were possibly transcribed by seamen, too, or by amateur copyists and then used on board. Their texts are transcribed with care but do not betray a professional hand, and the same can be said about their maps. Their tracing is careful yet the quality of drawing is mediocre and the coloring sparse. Occasionally there are blank or missing pages. Corrections or place-names noted on the maps or marginal notes on text pages, as well as water stains and patches all indicate that these manuscripts were used as navigation manuals. Short-version copies with similar characteristics also occur in the seventeenth century. A late-seventeenth century manuscript, incomplete and in which all the maps appear together before the text, might have been copied by an administrator at the shipyards.

Yet judging by the neat and uniform handwriting as well as the skillfully traced, colored, and occasionally gilded maps of some other manuscripts, the short version seems to have been copied in the seventeenth century also in a more formal way. From the early seventeenth century we have a manuscript with fine, gilded maps that was prepared by a captain. Two

116 MS Köprülü-172, MS Deniz-990, MS Millet-1, MS University-123, MS Vienna-192.
117 E.g., MS Or. Foliant 4133, Staatsbibliothek, Tübingen, composed of two fragments by different hands might have been also copied and used by seamen, see B. Flemming, Türkische Handschriften, 13/1, (Wiesbaden, 1968), no. 300. Flemming mentions a marginal note on fol. 132v which indicates August 1624 as the date of the construction of a seaside fortress in the presence of the volume's owner. An ownership note on fol. 1v identifies the owner of the volume in the year AH[10]54/ AD 1644-5 as Tüfenkçi Yusuf Ağażade Mehmed. For Kahle's observations on this manuscript, see "Einleitung," XXIX-XXX.
118 MS Hamidiye 945. The following identification and date appear not in a colophon but on fol. 2v, inside the title frame of the table of contents: "Mustafa, kethüda-i tersâne, eşğeşir Mahmud Efendizâde el-Galatevi, sene 1070 [AD 1659-60]". It is also possible that Mustafa was only the owner.
119 MS Ayasofya 3161. The colophon appears unusually in a medallion placed above a world map, on the last page of the volume, fol. 202v: "'amel'ül-fakir Haci Mehmed Re'is, fī 17 [1017 AH/ AD 1608-9], kayd 'Ali". I understand the latter part as a reference to the person who made the manuscript's binding.
manuscripts, whose copyists only signed their names, as well as three others which are all handsome volumes might have been the work of professional copyists.

The ownership notes or seal stamps that can be occasionally encountered in short-version manuscripts suggest that some volumes, unsurprisingly quite worn-out manuscripts, changed hands several times and may have belonged to owners other than seamen. In one case, the owner of a handsome manuscript identified himself as a [royal?] tutor, and we can identify two other owners as a madrasa teacher and as a high-level administrator. Although not common, such evidence

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120 MS Nuruosmaniye 2997 (1629), fol. 203v: "el-fakir Mustafa bin Mehemmed el-Cündi", MS Nuruosmaniye 2990 (1645), fol. 159v: "el-fakir Ahmed bin Mustafa, sakin-i Beşiktaş". Both volumes are transcribed in elegant handwriting and have carefully copied and colored maps. MS London 4131, an undated manuscript, might have been copied by the copyist of MS Nuruosmaniye 2997 since the handwriting, as well as the coloring and decoration of maps in these two manuscripts are very similar.

121 MS Ağır Efendi 227 (1644-5), Süleymaniye Library, Istanbul, MS Kuwait (1688-9) and a manuscript (1718) which was previously in the library of Sir Thomas Phillips and is now in a private collection (For this manuscript I have not seen, I rely on the catalogue description and Soucek and Goodrich, "List of MSS"). MS Ağır Efendi 227 is particular in having only a few full-page maps while all the rest are drawn on the large margins of text pages. For MS Kuwait, see E. Atil, Islamic Art and Patronage: Treasures from Kuwait (New York: Rizzoli, 1990), no. 78. For the other, see Bibliotheca Phillippica: Manuscripts (catalogue 153). (New York: H. P. Kraus, 1979), no. 106. On observations concerning the exquisite production quality of the latter manuscript, see Soucek and Goodrich, "List of MSS," 291, n. 18.

122 These notes usually appear on the first blank page of the volume. I deduce that they were not seamen from the absence of a professional epithet such as "kapudan" or "reis", which seamen customarily used beside their names. For example subsequent owners of MS University 123, at unknown dates, were Hüseyn ibn Mahmud, a certain Esad and Mehemmed. MS London 4131 was owned by a certain ibn Yusuf in AH 1098/ AD 1686-7 and by İbrahim Nâgid in AH 1206/ AD 1791-2, see Soucek and Goodrich, "List of MSS," 290. For MS Tübingen's owner, see above n. 115.

123 MS Nuruosmaniye 2990 (1645), bears an ownership note that is neatly added next to the colophon, something which might indicate that the owner had the volume copied for himself: "Sâhibi Mehemmedpaşâlî oda lalaası Ahmed Ağa".

124 The owner of MS Vienna in the eighteenth century was Zeynelabidin Evliyâzâde (died 1780) who had served as müderris and then as molla. See Kahle, "Einleitung," XXVIII. MS Köprüülü 172 was owned, also in the eighteenth century, by Elhaj Hâfiz Ahmed Pasha (died 1769), son of Köprüülü Fâzîl Mustafa Pasha, who served, among others. as governor of Negroponte (island of Eğriboz/Euboea) and of Candia (Crete).
suggests that starting in the seventeenth century the short-version Bahriye reached an audience outside the circle of seamen, and in the eighteenth century, copies were also owned by the members of the ruling elite. In that century, it was acquired also by some Europeans interested in Oriental literature and books, something which attests to the high standing that the short-version Bahriye then enjoyed.

The long-version Bahriye must have been copied much less often than the short version, judging by the smaller number of extant manuscripts. Except for the two sixteenth-century manuscripts preserved in the palace, all other known manuscripts of the long version, none dated or signed, were apparently copied from the mid-seventeenth century onward. The earliest manuscript in this later group bears a note indicating that it was owned in 1651 by Captain Hadji Abdi and might have been prepared for him. Whether the two sixteenth-century manuscripts in the palace were the only earlier copies of the long version, and whether they remained inaccessible for copying cannot be resolved. But if this seventeenth century copy owned by a captain was indeed prepared for him, it might have been copied from a long-version manuscript that had been preserved in the circle of seamen.

125 The ownership note of Zeynelabidin Evliyazade in MS Vienna-192 emphasizes that "the volume is the most beautiful of his books", quoted and translated in Kahle, "Einleitung," XXVIII.

126 Count Ferdinando Marsigli (1658-1730) bought MS Bologna 3613 and two other Bahriye manuscripts possibly during his stay in Istanbul. MS Paris 220 belonged to Eusebe Renaudot (1646-1720), MS Vienna to Josef Hammer von Purgstall (1774-1856).

127 MS Paris 956. An approximate date for the making of the volume is suggested by a paper watermark from around 1648, see below n. 254. The ownership note has not been noticed until now for it appears on the last page (on the back of Istanbul map), which is bound upside down. It reads: "Sâhibi ve mâlikî Haci 'Abdî Kapudan, fi 22 Şehr-i Safer'ül-muzaffer sene iḥâd ve sittîn ve el[f] [AH 1061/AD 14 February 1651]."

128 The volume in question, MS Paris 956, bears a title written on fol. 1r, "Portulan-ı kebîr-i 'Ali Kapudân" that designates it as the great portolan of Ali Kapudan; a similar designation on fol. 1r of MS Baltimore-656, which belongs to the same group of long-version manuscripts, identifies Ali as "Seyyid Ali Kapudan", a navy captain who served at the shipyards in Istanbul and who replaced Pîrî as the captain.
manuscripts seem to have been subsequently copied from Captain Hadji Abdi's manuscript in the second half of the seventeenth century. One is a very close copy with maps very similarly colored and must have followed soon after. No record of the immediate owner can be found in the volume but in the eighteenth century it was owned by a high-level administrator. The other one has maps drawn and colored in a crude style although its text is copied neatly. It was part of a library in the palace and might previously belonged to a courtier. The five other manuscripts were copied either in the late-seventeenth or eighteenth century. This group comprises the most lavish copies of Bahriye, two of which might have been royal commissions from around the 1740s.
The overlap between the two groups of Bahriye manuscripts in terms of copyists, clients and second hand owners need to be researched more in detail. Yet this preliminary overview suggests that the copying and owning of short-version Bahriye manuscripts, although having started in the circle of seamen, soon involved a larger group of individuals, and that the manuscripts themselves reached a rather varied audience. More importantly, the manuscripts of the short version that have been so far considered the seaman's version seem to have paved the way for an appreciation of Piri's work beyond its practical purpose.

That the short version sufficiently accommodated a global representation of the Mediterranean in text and image, in spite of being less elaborate than the long version, is suggested by the appearance and subsequent cartographic development of the Istanbul map in its manuscript copies. The elaboration of the Istanbul map — but also the modifications linked with other map images of the short-version Bahriye, especially the illustration of Venice — all confirm that copying the short version involved improving its illustrative content. The elaboration of the Venice map, even though of a different nature, deserves note. In some copies of the short version from the late sixteenth century, the original illustration of Venice (fig. 86b) is replaced by a new Venice map that is unmistakably adapted from the Venice map in Benedetto Bordone's island book (Venice, 1528) (fig. 89).\textsuperscript{133} Another one, seemingly composed

\begin{footnotesize}

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\item \textsuperscript{133} MS University-123, fol. 287r. In its Bahriye adaptation, Bordone's Venice map is made to fit the vertical format, which enhanced the roundish shape of the lagoon even more, and Venice itself is slightly rotated. Despite the simplification of topographical details, the highlights in Bordone's composition such as the layout of the canals, the
\end{itemize}

\end{footnotesize}
with elements from charts and printed views, appears around the mid-seventeenth century as a supplementary illustration (figs. 86d and 86e). Interestingly, none of these illustrations seem to be based on the Venice map in the long version (fig. 86a) and may, therefore, indicate that the latter was indeed not being circulated.

The modifications brought to the map content of short-version Bahriye were part of the copying process, and the varying quality and style of the map drawings indicate that individuals with different backgrounds prepared the maps. To distinguish between amateurs who produced the coarsely drawn and colored maps and professionals who did the fine work oversimplifies the picture. Neither amateurs nor the skilled copyists can be narrowed down to a single professional background.

The first corrections of coastal outlines visible on maps, especially in early Bahriye copies, were made by seamen probably while they used their own copies as navigation manuals and noticed some shortcomings in the maps. But besides these casual corrections, some seamen might have also contributed to more substantial modifications such as replacing some maps or adding new ones. Mehmed Reis, who prepared the fine Bahriye copy mentioned earlier, was at least a skilled copyist. His

shipyards, and two peculiarly emphasized jetties remained recognizable. This Venice map also occurs in MS Millet 1 (late-16th), MS Nuruosmaniye 2990 (1640) and MS Kuwait-75 (1688-9).

134 It features in a double-folio format in MS Millet 1 and MS Hüsev Paşa 272 (1570) (figs.66 c,d). In both manuscripts the folded sheet was glued in between two pages. The paper of the latter is watermarked and datable to mid-seventeenth century. Later variants of this Venice map occur in MS London-718 and MS Berlin-57, both datable to late seventeenth or early eighteenth century. The composition is characterized by the shape of the lagoon looping around Venice, which might have been derived from the similar shape of the lagoon in nautical charts (figs. 56b-f) or from a printed map of Venice. The other characteristic feature, i.e. the prominent perspective view of the Piazzetta, possibly comes from printed maps of Venice (or an inset featuring in them), such as Salvioni's (fig. 68), that were published in slightly different versions in Venice in the late sixteenth century. For Salvioni and other examples, see J. Schulz, The Printed Plans and Panoramic Views of Venice (Venice, 1970).

135 See above, n. 119.
case must not have been an exception since we also know of other seamen who were skilled in drawing nautical charts.\textsuperscript{136}

If we examine the carefully produced maps in short-version copies, we notice maps whose copyists must have been trained in tracing and coloring nautical charts,\textsuperscript{137} other maps that were copied carefully following the drawing style of nautical charts,\textsuperscript{138} and yet others incorporating minute and elaborate decoration as found in miniature painting.\textsuperscript{139}

Nevertheless, the formative influence of nautical charts makes itself felt, even in the lavishly colored and gilded maps of the long-version manuscripts produced in the late-seventeenth or eighteenth century. The topographic representations, too, in general display the depiction style and the architectural forms typical of nautical chart vignettes or details of island book maps.

All this, besides the cartographic character of the modifications and the sources used, indicates that the copying of Bahriye manuscripts was taking place in a milieu including the seamen but not restricted to them and where new cartographic and topographical sources were easily available and used.\textsuperscript{140} It is tempting to think that this milieu was centered on the chartmaker's workshops in Istanbul of which Evliya Çelebi has left a vivid account from about the middle of

\textsuperscript{136} See below n. 55 for nautical charts drawn by Mehmed Reis ibn Menemenli (1590-1) and Abdulrahman Reis (1660-1) and chap. 2, n. 23 for the atlas by Ali Macar Reis (1567).
\textsuperscript{137} MS Bologna-3609, MS Nuruosmaniye-2997 and TSMK, MS, B. 338,.
\textsuperscript{138} The fragment of six unnumbered maps bound at the beginning of MS University 123 might have served as a model to maps of the following Bahriye manuscript since the latter closely imitate the drawing style and coloring of these unnumbered maps three of which bear European place-names together with Turkish translations or explanations. For one of these maps, see fig. 91.
\textsuperscript{139} MS Nuruosmaniye-2990 and MS London-4131.
\textsuperscript{140} E. g., the person who prepared the maps of MS Ayasofya 3161 (1608-9), possibly Mehmed Reis who signed it, see above n. 119, knew Bartolommeo dalli Sonetti's Isolario, and adopted the peculiar tree motive found in its maps. It cannot be a coincidence that the manuscript has a title noted inside its front cover designating it "Kitāb-i tafsīl-i ahvāl-i cezā'īr", i.e. an "island book".

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the seventeenth century.\textsuperscript{141} His remark that these chartmakers possessed several languages and particularly Latin and Greek, reveals that they were mainly European artisans settled in the Ottoman capital to practise their art and may also have included converts. But it seems that around that time, there were also chartmakers who worked independently. A cartographer working at his home, a certain Mehmed Çelebi, was, for example, visited in 1673 several times by Antoine Galland, the secretary of the French ambassador in Istanbul.\textsuperscript{142} As Renda suggested, chartmakers' workshops most probably existed in Istanbul already in the sixteenth century and were also connected with the circle of miniature painters, initiating the new depiction modes used in topographic compositions.\textsuperscript{143} Evliya's account suggests that the chartmaker's workshops might have been dealing in topographic plans or views as well. He noted that the chartmakers "decorated their shops [staged on carts for the occasion of a parade] with sheets of charts [along] with world maps and numerous fortress and city images (nice kilâ' ve şehirler süreteriyle)".\textsuperscript{144} The availability of such prints in

\textsuperscript{141} Seyahatnâme, 236. Describing all the guilds in Istanbul on the occasion of a major procession in front of the sultan in 1639, Evliya gives a detailed account of the "esnâf-i hartaciyan" (the chartmakers' guild) whose members prepared nautical charts for seamen who depended on them for safe navigation." According to Evliya, the number of the workshops was eight, and altogether fifteen chartmakers worked in them. He also informs us about two other workshops, those of the makers of mariner's compasses and the makers of hour-glasses, two other basic tools used by seamen. During the parade, these three guilds passed amidst the larger group comprising all the guilds related to the repairing and maintenance of ships.

\textsuperscript{142} see A. Galland, Journal d'Antoine Galland pendant son séjour à Constantinople, 1672-1673, ed. by C. Schefer (Paris: 1881), 1:168, 253, 2:58. The Italian Count F. Marsigli, who was in Istanbul around the same time as Galland, had a map of the Ottoman empire prepared by an "Ottoman cartographer," which he then included into his Stato militare dell'imperio ottomano. Etat militaire de l'empire ottoman (Amsterdam/ The Hague, 1732), mentioned in Heidrun Wurm, Der osmanische Historiker Huseyn bin Cafer, genannt Hezârfenn (Freiburg im Breisgau: Klaus Schwarz Verlag, 1971), 147.

\textsuperscript{143} "Representations of Towns," 292.

\textsuperscript{144} Seyahatnâme, 236. These were possibly European broad sheet prints. This important detail given at the very end of Evliya's account of the
chartmakers' workshops would not only explain the source of visual material used for modifying topographic details in Bahriye maps but also that of topographic compositions prepared in the sixteenth century by miniature artists closely related to the palace or working in the painting workshops.\(^{145}\)

However, despite a relatively long period of contact—rather than interaction, I think—between miniature artists and chartmakers, the maps that we encounter in seventeenth-century Bahriye manuscripts, especially those of topographic character, do not evidence a real synthesis but a coexistence of different drawing styles and skills. These maps often display a mixture of traditional and European pictorial and cartographic conventions, something that also makes it difficult to narrow down their production solely to chartmaker's workshops or to traditional painting workshops. I think, that although the formative influence came from the cartographic and nautical practices and was channelled through the chartmakers' workshops, the production of Bahriye copies took place in heterogeneous settings where local and foreign, professional and amateur skills easily mixed.\(^{146}\) An unconventional book in the Ottoman context, and becoming increasingly popular from the sixteenth to the seventeenth century, Bahriye seems to have encouraged such a wide

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\(^{145}\) In two works from the 1540s, Tarih-i Feth-i Sikloğ... and Tarih-i Sultan Bayezid attributed to Nasuh, which I have briefly discussed in chap. 1, printed views of Mediterranean ports seem to have been rather straightforwardly adapted as miniature illustrations, see figs. 15-18. In later miniatures produced by Osman and his team, the adaptation of such material is more complex yet at least in one example, in Şehname-i Selim Han (1580-1), a European print seems to have largely determined the miniature's composition (cf. 39a and 39b).

\(^{146}\) Soucek, too, seems to have first considered a particular milieu related to cartographic practices for the production of Bahriye maps but then abandoned it to argue that professionally copied maps were of purely aesthetic value and the work of traditional miniature artists who had the necessary skills. For his earlier view, see "The 'Ali Macar Reis Atlas' and the Deniz Kitabı," 26-7.
participation. It is this collective background that characterizes the making and evolution of the Istanbul maps in Bahriye copies.

2. The Istanbul Map

2.1. The Emergence of the Istanbul Map in Manuscript Copies of Bahriye

The Istanbul map in Bahriye manuscripts appears as an illustration to the final chapter of the short version that deals with the "Red Islands" (Kızıl Adalar) situated south east of the city.\[147\] As I have noted at the very beginning, the extant manuscripts of the short version do not end with a chapter on the Dardanelles despite its being announced in the introduction. Rather, four chapters extend the sailing manual's coverage into the Marmara Sea.\[148\] These four chapters discuss the Bay of Bandırma, the Marmara Island, the İmralı Island, and the Red Islands.

The map illustrations of the first three chapters pertaining to the Marmara Sea do not vary from one manuscript to another. The illustration of the Red Islands, however, does. In the short-version manuscripts produced roughly until the end of the sixteenth century the final chapter bearing the title "Eşgāl-i Kızıl Adalar" (The Shapes of the Red Islands) is accompanied either by a map showing the entire Marmara Sea, or the Red Islands and Istanbul together, and even by a map showing Istanbul alone.

Istanbul is hardly mentioned in this final chapter of the short version for the sailing instructions only concern the Red Islands and explain how to approach them, and where and how to

\[147\] This little archipelago, referred to as the Princes' Islands in foreign sources but simply as "Adalar" (the Islands) in Istanbul, consists of nine islands five of which are tiny. Their name in Bahriye derives from the characteristic color of their soil rich in iron oxide. Their distances to Istanbul vary between 23 km and 35 km.

\[148\] See above p. 130.
anchor. It ends by indicating, with respect to the Burgazlı [sic] Island, the compass bearings of a number of locations, among which is also the entrance to the Bosphorus.\textsuperscript{149} The chapter might well have been written by Pîrî himself for its style and the personal tone of the sailing instructions match the rest of Bahriye's text. Yet the varying illustrations indicate that Pîrî most probably did not prepare the map to accompany that chapter.

A map illustrating the chapter on the Red Islands would ideally have shown, in a large scale, the islands themselves with a wind rose centered on or near the Burgazlı Island. But we do not encounter such an illustration.\textsuperscript{150} It is possible that at the beginning the drawing of such an illustration was delayed, since the Red Islands that appear very tiny even on relatively large-scale charts could not have been enlarged from existing sources but needed to be mapped. Meanwhile to illustrate the chapter with a general map of the Marmara Sea must have been considered an acceptable solution (fig. 92a-c).

The charting of the Red Islands seems to have taken some time, and possibly different individuals tried their hands and skills, since in the other type of illustration that accompanies this chapter and where the Red islands and Istanbul appear together, the Islands' outlines and group configurations vary (figs. 55, 56 and 57). But the presence of Istanbul in this type of illustration indicates that the focus had already shifted away from the Red Islands for the illustration clearly favours Istanbul with its format and composition at the expense of a proper representation of the islands and the chapter's contents. In other words, as I shall explain later, the illustration showing the islands and Istanbul together is

\textsuperscript{149} For the facsimile of this chapter from MS Dresden-389, and my transliteration and English translation of it, see Appendix 1.
\textsuperscript{150} I have come across only one map showing these islands alone, not serving as an illustration to this chapter but appended, together with ten other maps, at the end of a manuscript dated AH 978/ AD1570-1), Süleymaniye Küütüphanesi, Istanbul, MS, Hürev Paşa 272, fol. 3v.
already a compromise that seeks to reconcile what the chapter demands as illustration with a desire to represent Istanbul. In fact, to include Istanbul in Bahriye must have been the real preoccupation, and the Red Islands chapter seems to have offered a pretext for doing so because around the same time we also find the chapter paradoxically accompanied by a map that does not show the islands but Istanbul only, as is the case in MS Dresden-389 and MS Köprülü-172 (figs. 53 and 54).

It is difficult to distinguish a chronological sequence among these different types of illustration in the short-version manuscripts produced between the 1550s and 1570s. None of them quite serves the purpose of the chapter explaining the Red Islands, but they were nevertheless used to illustrate it. Remarkably however, they all derived in one way or another from nautical charts and attest to a genuine search process within that cartographic tradition. More importantly, their examination reveals how one of them, the illustration showing the islands and Istanbul together, eventually retained as the illustration of the Red Islands chapter, might have been conceived.

2.1.1. The Map of the Marmara Sea

The maps showing the entire Marmara Sea must have been traced directly from some nautical charts of larger scale such as the Aegean Sea chart drawn by Menemenli Mehmed Reis (fig. 74) for their design and scale matches the respective area in these charts. The way it is drawn on the Bahriye-page, the map of the Marmara Sea is sometimes oriented east and sometimes west (figs. 92a-f). In the first case, the map orientation suggests that, upon being entered from the Dardanelles, the Marmara Sea lies ahead and the sailing direction is toward the Red Islands and Istanbul. In the latter case, the Dardanelles appear at the top of the page and, hence, ahead of the viewer. Thus the map orientation implies a general sailing direction toward the Aegean and the Mediterranean Sea.
that lie beyond the Dardanelles, and, within the Marmara Sea itself, a sailing direction from the Red Islands in the lower right area of the map toward Istanbul situated further up. In both cases, the Marmara map somehow relates to the Red Islands chapter. While the east-oriented map remains more general, the west-oriented map implicitly emphasizes only one of the sailing directions mentioned in that chapter, that is the sailing direction toward Istanbul, by aligning it with the viewer's direction of looking at the map.

2.1.2. Dresden-389 and Köprülü-172: Two Early maps Representing Istanbul without the Red Islands

The Red Islands do not appear at all in Dresden-389 (fig. 53) and in Köprülü-172 (fig. 54). These two maps have very different cartographic designs although both suggest more or less the same direction of approach toward Istanbul from the southeast, that is from the Red Islands and, hence, in a way imply the islands that are left out. The suggested direction of approach to Istanbul also relates Dresden-389 and Köprülü-172 to the west-oriented Marmara Sea map of which they appear to be enlargements of the area corresponding to the confluence of the Bosphorus and the Golden Horn.

Köprülü-172 (fig. 54) presents quite a straight-forward and rather accurate cartographic representation of the chosen area. The directions of approach to the city and of viewing it can be easily deduced from its map orientation and topographical details. Compared to Köprülü-172, Dresden-389 appears to be a simplistic map, however its examination reveals a somewhat intricate representation of Istanbul with regard to approaching and viewing.

Dresden-389 (fig. 53) is contained in a manuscript completed in AH 961/AD 1554, the oldest dated copy of the short version that we know.151 The drawing of the Istanbul map may

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151 I have not examined this manuscript myself. A detailed description of MS Dresden-389 is given in Kahle, "Einleitung," XXIII-IV, however without
have postdated the completion of copying the text, but its
topographic content suggests a date not later than the
1560s.\textsuperscript{152} The examination of that content also allows us to
discern the viewing directions that are involved in its design.

When discussing the viewing directions implied by this map
two things need to be distinguished: the general orientation of
the map, i.e. the direction coinciding with the top of the
page, and the viewing direction for Istanbul depicted as a
topographic view in it.

The general orientation of the Dresden-389 map is
northeast as indicated by the direction of the northeast wind
Poρyaz (Boreas) noted on the compass rose and which coincides
with the top of the page.\textsuperscript{153} Looking at Dresden-389 as it is
placed in the manuscript we look up the Bosphorus. However,
Istanbul's buildings face the right edge of the map, i.e.
southeast, and demand a change of our viewing direction. The
city appears to be looked at and depicted from the Asian side,
across the Bosphorus. But a closer examination of the depicted
buildings reveals that the city is in fact viewed from a more
southern direction, i.e. from the Marmara Sea. The logic that
underlies the design of Dresden-389 is not unrelated to the

any commentary on maps. On the manuscript itself, also see H. Fleischer,
\textit{Catalogus Codicum Manuscriptorum Orientalium Bibliothecae Regiae
Dresdensis} (Leipzig, 1831), 64, no. 389. According to Soucek, "Islamic
Charting," 291, n.3, as well as to Mr. Perk Loesch, librarian at the
Sächsische Landesbibliothek Dresden, who kindly examined the manuscript
at my request and communicated his observations in a letter dated August
9, 1994, the text must have been copied by more than one individual
judging by the changing handwriting. But Loesch is hesitant to make a
similar observation on the map drawings although they, too, seem to
display some differences.

\textsuperscript{152} The Istanbul map is drawn on fol.170r of MS Dresden-389, i.e.,
it immediately follows the end of the chapter concerning the Red Islands and
the colophon which fully occupy fol.169v, see Appendix 1. Loesch reports
that "a fragmentary(?) map drawing is to be found" on fol.170v, i.e. on
the back of the Istanbul map. It is not impossible that the Istanbul map
was drawn at a date somewhat later than 1554, especially if it is clearly
distinct in its drawing style from the rest of the maps. For a detail
suggesting a date around 1560, see n. 163.

\textsuperscript{153} For the other winds indicated by name in Dresden-389, see Appendix 3.
sailing instructions given in the chapter on the Red Islands. 154

The layout of Dresden-389 is quite simple and is based on a schematized depiction of the junction of the Bosphorus, the Golden Horn, and the Marmara Sea. The Bosphorus that runs vertically appears, however, to be the element that determined this map's layout. The characteristic triangular form of the Istanbul Peninsula has become unrecognizable, and the city itself appears in an indistinct form while Galata, though incomplete, has a more characteristic urban form. Both settlements face a simple, undulating coastline that represents the Asian shore.

Since the depicted view of Istanbul fully faces the Asian shore the viewer of the map imagines, as noted, to be looking at the city from there. In that position, the viewer would see the Topkapı Palace at the tip of the peninsula and look up the Golden Horn, as the map also seems to suggest. Yet the depiction of Istanbul in Dresden-389 clearly comprises a much wider area than would be visible from the Asian coast facing the palace and the Golden Horn. Beyond a front formed by the fortification walls on the coast, Istanbul's depiction shows the entire Marmara coast of the city stretching from the Yedikule Fortress on the left to the Topkapı Palace precinct on the right. As also suggest the mosques depicted in side elevations, this is rather a view of Istanbul seen from the southeast, when sailing toward the city from the Red Islands.

The view of Galata depicted in Dresden-389, however, corresponds to a different viewpoint. This is suggested not

154 The chapter defines the entrance to the Bosphorus as Salacak, the promontory on the Asian side and across from the Seraglio Point. The bearing of this promontory from Burgazlı Island, in reference to which all the bearings are given in the chapter, is precisely NNW: "Yıldız[N]-Karayıl[NW] Üzerinedür" (toward NNW). Once, however, Salacak, or the entrance of the Bosphorus is reached, the sailing direction is determined by the NE course of the strait. It is, in fact, this latter direction, which is suggested by the general orientation of the map under discussion.
only by its overall appearance but also by the relative position of the Kurşunlu Mahzen (Kastellion of Galata) to the left of the Galata Tower, a configuration in which both landmarks appear when looked at from the east, i.e. only after the boat passes the Seraglio Point and arrives at the confluence of the Bosphorus and the Golden Horn. The fact that these views of Istanbul and Galata are presented as if seen from the same viewpoint gives to Dresden-389 an ambiguous character which may yet be explained in the following way: the eastern viewpoint of Galata's depiction corresponds to an angular position that is shifted about forty five degrees from the southern viewpoint from where the Marmara side of Istanbul can be perceived as depicted here. This shift of viewing direction from south to east, as a real experience, happens gradually when someone on a boat sailing from the islands toward Istanbul and then toward the Bosphorus views the city. The viewer of Dresden-389 holding the book, first looks at the map, given its orientation, also from a southern viewpoint, but turning the map on its side to look at the depiction of Istanbul and Galata, adopts an eastern viewpoint, hence, shifts position in the same way. The view of Istanbul seen in Dresden-389 side by side with that of Galata is then, in a sense, a

155 Kurşunlu Mahzen, a massive, rectangular fortress believed to date from the time of Tiberius II, is situated where the Galata coast projects south and, hence, was an important landmark that we find depicted in other Bahriye maps but also on variants of Buondelmonti's map, see e.g. fig. 5c. What appears like a minaret must be an adjacent tower of Galata's fortification wall transformed into a lookout, since the sources give the date of the building's conversion to a mosque as 1756. Kurşunlu Mahzen is depicted with that minaret-like tower also in other Bahriye maps predating 1756, but also in the Sehinsehnâme map of Istanbul (1582) (fig. 34) and in several European topographical views of Galata. Kurşunlu Mahzen had become a royal storage house (Mahzen-i Sultânî) after the Ottoman conquest and the waqf documents of Mehmed II that mention the building note together with it and as part of the waqf a "burgos" which might be this tower, see Fatih Vakfiyeleri II (Ankara, 1938), fol. 205. On Kurşunlu Mahzen, see S. Eyice, "Yeraltî Camii," İstâ, 7:502; Bildlexikon, 320-1; R. Janin, Constantinople Byzantine, 460-1. The question of the minaret-like tower, however, is not addressed in these studies.
south-southeastern view pulled along and represents what would be seen from constantly shifting viewpoints aboard ship. Hence, somewhat like a "kinematic" map, Dresden-389 captures the typical experience of a seaman.

That the depiction of Istanbul was primarily conceived as a sea-level view is also suggested by certain features. Even though the depicted buildings appear to be seen from above, they are all drawn as elevations and the map does not define the geographic shape of the city. It shows the buildings behind a very conspicuous front formed by the seawalls on the Marmara Sea and omits the rest of the fortification walls. The curved, irregular line that otherwise delimits the urban area is certainly not the outline of Istanbul in plan but possibly the skyline of the sea-level view.

The depiction of Istanbul as an assemblage of buildings seen behind city walls is very similar in its concept to the town vignettes in nautical charts, and also bears some resemblance to a particular one representing Istanbul on an anonymous sixteenth-century nautical chart (figs. 94 and 94a) where buildings facing east are assembled behind a front formed by the fortification walls. 156

It is not unthinkable that the maker of Dresden-389 drew his initial inspiration from a town vignette given the fact that nautical charts were at the origin of many illustrations in Bahriye and also remained the most accessible and familiar visual sources in the milieu where this book was copied and used. The reduction of Istanbul's geographic setting to a layout dominated by the Bosphorus, moreover Istanbul's depiction as a coastal view in relation to this important strait, especially from an eastern viewpoint, might also have been derived from sea charts. 157

156 This chart, preserved in Museo Correr, Venice, (Port. 34) is held to be a Majorcan production; see Portolani e Carte Nautiche, 113.
157 The vignette of Istanbul (fig. 94a), e.g., even though placed inland, is conceived as a sea-level view of the city. Facing east, it relates to
But some existing representations of European origin such as Buondelmonti's map in *Liber Insularum* (fig. 5), 158 a view printed in Hartman Schedel's *Liber Chronicarum* (Nuremberg, 1493) (fig. 6), 159 or the bird's-eye-view map of Vavassore (fig. 7) 160 might have also variably influenced the conception

the west bank of the Bosphorus that runs more or less south-north in the map.

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158 On Buondelmonti's map of Constantinople and its variants, see above chap. 1, n. 38 and 40.
159 Also known as Weltchronik, after its German edition published in 1493. The woodcut illustrations of the book were realized by Michael Wolgemut und Wilhelm Pleydenwurff. The view meant to represent the Byzantine capital is considered a characteristic city view in relation to many imaginary views also featuring in Schedel's work, see V. von Loga, "Die Stadtansichten in Hartman Schedels Weltchronik," Jahrbuch der Königlich-Preußischen Kunstsammlungen 9 (1888) [part 2]: 184, 194, and presumed to be based on in-situ observation even though it provides only limited topographical information, see Bildlexikon, 31 (caption to fig. 5). More recently, Semavi Eyice has rightly suggested that this view must have been derived from an other image of the city predating the Ottoman conquest, see "Hartman Schedel" in *ista*, 6:476. As the most likely model, I consider Buondelmonti's map, of which a few variants must have been known to the illustrators of the *Liber Chronicarum*, for Schedel is known to have gathered considerable written and pictorial source material for his book.

160 On the bird's-eye-view map published by Vavassore, see above chap. 1, n. 39 and 41. Possibly based on an earlier map, it shows the city as it was in the late-fifteenth century with the major constructions of Mehmed II, the Old Palace, the Fatih Mosque and the Topkapı Palace. But the terminus ante quem for its depicted content cannot be later than the early-sixteenth century, in any case not later than 1506, the completion date of the Bayezid Mosque, which is wanting. Cecil Striker, basing himself on the depiction of the Column of Theodosius, proposed 1517 as a terminus ante quem, the assumed date of the definitive destruction of this column, see his "The 'Coliseo de Spiriti' in Constantinople," 8-9. The Vavassore map was included into the enlarged and revised edition of Sebastian Münster's *Cosmographei* published in 1550. *Cosmographei* was subsequently printed many times and was widely available in Latin, French, Italian, Czech and English translations throughout the sixteenth century until the early-seventeenth century when its popularity declined, see R. Oehme, "Introduction", in Sebastian Münster, *Cosmographei* (Basel 1550; reprint Amsterdam: Theatrum Orbis Terrarum Ltd., 1968), V, XIV-XVII and XXVI. Some late-sixteenth century single-sheet maps, printed in Venice, also seem to have been based on Vavassore's woodcut, see Caedicius [A. D. Mordtmann], *Ancien Plan de Constantinople imprimé entre 1566 et 1574 avec notes explicatives*, 2f. It is one of these views that served as illustration, without being topographically updated, in Georg Braun and Franz Hogenberg's *Civitates Orbis Terrarum* (Cologne, 1572). For these and other derivatives, see Manners, "Image of a City": 92-3.
of Dresden-389. The common aspect of these three very different European representations of Istanbul is that they align the Bosphorus with an edge of their compositions and show the Üsküdar area on its eastern bank either minimally or not at all, something which also characterizes Dresden-389 but will gradually be modified in later Bahriye maps of Istanbul. With its vertical format and north-oriented layout that emphasizes the Bosphorus as a broad waterway running up the page, Dresden-389 mostly resembles the Buondelmonti map. In presenting Istanbul as seen from an eastern viewpoint, however, it has more affinity with Vavassore's map and the view in Liber Chronicarum. It also resembles the latter in depicting Istanbul in an overall shape approaching an oval and in assigning a conspicuous frontality to the seawalls.

161 In addition to topographic sheet prints, available in chartmakers' workshops according to Evliya, European books seem to have also circulated in Istanbul. Lubenau noted in 1587-8 that in Galata, all kinds of European books were available for sale in "junkshops" (Kramladen) run by the Greeks, in Reisen, 204; and the Maroccan envoy Abou'l-Hasan at-Tamgrouti noted in 1589-90 that "books from all countries of the world arrived in Istanbul," in En-Nafahat el-Miskiya, ed. and trans. (into French) by H. de Castries (Paris: P. Geuthner, 1929), 68. A Liber Chronicarum, 1493 edition, seemingly kept in the royal treasury before and today preserved in the Topkapi Saray Library, is reported in Renda, "Representations of Towns": 298, n. 29. For copies made from maps of Buondelmonti's book in MS H.1608 of Topkapı Palace Library, see H. Reindl, "Zu einigen Miniaturen und Karten aus Handschriften Matraççı Nazım's," 151f. A manuscript of Liber Insularum that has additional Ottoman place-names noted on its Istanbul map (fig. 5d), purchased by the French orientalist Charles Schefer around the turn of the twentieth century and preserved today in Bibliothèque National, Paris, as MS n.a. lat. 2383, suggest that it was at some point owned by an Ottoman. Besides, it is possible that the two books and Vavassore's single-sheet print were also used as reference works in chartmakers' workshops in Istanbul.

162 Few topographical elements might have been also borrowed from the view in Liber Chronicarum. Although the sea walls on the Marmara had eight gates in both views only three gates are shown, and the commemorative columns (three in Liber Chronicarum view and two in Dresden-389) are situated similarly in relation to them. However, the column bearing an equestrian statue which appears in Liber Chronicarum view on the right is absent from Dresden-389. The column with an equestrian statue of Justinian was located at the Augusteion near Hagia Sophia and seems to have survived only into the first decades of the sixteenth century. For the most recent assessment of textual and visual documents, see Julian
Yet in its depiction of buildings, Dresden-389 is independent from all three views. Not only does it show the city with its Ottoman monuments but also represents them with architecturally correct features. Especially noticeable is the depiction of Hagia Sophia with its characteristic half-domes that we find in none of the mentioned European views. Drawn in a relatively large scale and as side-elevations, the major mosques appear in recognizable shapes. They also line up quite well. Hence, we can easily distinguish, slightly above center, the Süleymaniye Mosque with its double- and triple-balconied minarets and, diagonally below to its left, the Fatih Mosque fronted by its southern madrasas. The other mosques may also be identified in spatial relation to these two mosques: the Sultan Selim to upper left of Fatih, and the Şehzade and Bayezid Mosques below the Süleymaniye. These mosques, even though not all distinctly visible from the Marmara Sea, are shown in relation to a southern viewpoint. However, the depiction of the Hagia Sophia, also a side elevation with its minaret(s) to the left, cannot but relate to an eastern viewpoint and, hence, goes with the view of the Topkapi Palace and Galata seen from the entrance of the Bosphorus.163


163 In that position, the depicted minaret would correspond to either the brick minaret at the south corner, built in the late fifteenth century or the stone minaret at the east corner added in the sixteenth century. On the first minaret, see William Emerson and Robert L. Van Nice, "Hagia Sophia and the First Minaret Erected After the Conquest of Constantinople," American Journal of Archeology 54 (1950): 28-40; on the second minaret, see Semavi Eyice, "İstanbul Minareleri," Türk San'atı Tarihi Araştırmalar ve İncelemeleri 1 (1963) :37-8. Given the accuracy with which the particular configurations of mosques are rendered, it is difficult to think that the drawing of Hagia Sophia, too, is a southeast elevation but the minaret is placed in a wrong place, or that it represents one of the two constructed at the beginning of Murad III's reign around 1574, because then the depiction would be incomplete as the same view would require the south minaret to be shown as well. Accepting that Hagia Sophia is depicted in Dresden-389 with one of its minarets on the southeast side but its north west minaret lacking, would suggest 1574 as a terminus ante quem, while the completion of the Süleymaniye Complex toward 1560 provides a terminus post quem.
The depiction of Istanbul’s major mosques is the most attractive aspect of Dresden-389 while its geographic and navigational function as a map is not so obvious at first sight but has to be construed with the help of implied viewing directions. As such, though, Dresden-389 well reflects the efforts of its maker who, relying on nautical charts, personal observations, and perhaps also on some existing representations, had to face the challenge of representing Istanbul in a map to be included in a navigation manual. Notwithstanding the oversimplified representation of the coastlines so essential to navigation, the maker of this map succeeded in communicating correctly and clearly one thing crucial to navigation near the city: the course of the Bosphorus running northeast. Dresden-389 indicates this precise direction with its compass rose in which the northeast wind Foryaz points the same way as the depicted course of the Bosphorus. As we shall see, this particular information concerning the Bosphorus will be retained in the Istanbul map and its variants that will feature in later manuscripts and will constitute their sole navigationally useful aspect.

Compared with Dresden-389 but also with all the other Istanbul maps, Köprülü-172 (fig. 54) is perhaps the only map in the entire Bahriye-group that displays a particular attention to the coastline quite similar to a modern map (fig. 93) and whose origin in a nautical chart is evident. Composed of arc segments and exaggerating bays and capes, its coastlines unmistakably reflect the conventions of nautical cartography. Quite possibly, Köprülü-172 was enlarged from a nautical chart. In fact, having almost the same west orientation as some Marmara Sea maps (figs. 92d-f), it looks like a close-up on the Istanbul area. But more than that, this map bears a striking resemblance to the respective detail of the Aegean Sea chart of Menemenli Mehmed Reis (fig. 74a).
Its straightforward representation of a geographic area centered on the confluence of the Marmara Sea, the Bosphorus, and the Golden Horn, as well as its compass rose providing correct orientation suggest that Köprülü-172 was conceived with navigation in mind. The depictions of buildings drawn mostly on the Istanbul Peninsula are clearly of secondary importance yet give to this map some topographical character and also permit an estimate of when it was made. But especially the direction from which they are seen presents a significant difference from Dresden-389 and anticipates a viewing direction.

Mostly showing mosques, the topographical details in Köprülü-172 not only vary in style and skill but were also made with different pens and inks. They seem to have been drawn at different times and at least by three different hands. The captions they bear also betray different hands, and in some cases, appear to have been added later on. With all its additions, Köprülü-172 is a good example of successive modifications made to an Istanbul map at the level of topographic and toponymic content. Yet when looked at closely, the majority of the depicted buildings are drawn with the same fine pen and ink as that used for the compass rose and the coastline, as well as the fortification walls that closely follow it, including the Fortress of Yedikule, and the entire walled town of Galata. Therefore, they must be contemporary with the map. This original set of topographical drawings and the later additions may be distinguished and grouped as in the

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164 This map is drawn on fol. 171r of MS 172 of the Köprülü Library, Istanbul. The manuscript belongs to the group of books donated to this library by Elhajj Hafiz Ahmed Pasha, son of Köprülüzade Numan Pasha. His seal stamp indicates the date of donation as AH 1170/AD 1756-7. The paper used for this manuscript is not watermarked. In a relatively recent catalogue of the library, this manuscript has been estimated to date from the seventeenth century but without any explanation, see R. Şeşen, C. İzgi and C. Akpinar, Catalogue of Manuscripts in the Köprülü Library (Istanbul: IRCICA, 1986), vol. 2, 494-5.

165 For a transliteration of the captions, see Appendix 4.
legend of fig. 54a, which also indicates the completion dates of depicted buildings for a chronological reference.

On the Istanbul Peninsula, the original set comprises, the Hagia Sophia, five large mosques plus a smaller one, and two Byzantine commemorative columns which are situated quite correctly and furthermore in respect to the principal streets of the city. To the same group of topographical details belong also some important sites such as the walled precinct of the Topkapi Palace, the Hippodrome, and the meadows known as Yenibahçe. On the Galata side, besides the walled town itself, the shipyards, the site and small pavilions of the Tersane Garden, several small mosques, and in the Üsküdar area two mosques, the Mihrimah and Rum Mehmed Pasha Mosques, and Kızkulesi are the details that belong to this original set. The hand that drew these topographical details seems to have also applied the pale green wash as a baseline for the buildings, in the fashion of town vignettes, but also used it to trace the streets and to enhance the rivers and open sites. Several of these original details bear captions that correctly identify them except one: the unmistakable detail of the Hippodrome properly situated between the Column of Constantine and the Hagia Sophia is taken for "Sarây-ı 'Atîk" (the Old Palace). This mistake and the fact that not all the details of the original set are identified indicates that the captions were probably added by a different person than the one who drew the details. It should also be noted that the handwriting of these captions is not the same as that of the captions of the Column of Constantine and the Column of Arcadius.166

166 The columns captions might have been written by the person who drew them or by an owner of the volume who wanted to underline the presence of these important landmarks in the map. The Column of Constantine drawn between the Hippodrome and the Bayezid Mosque is concealed by the minarets of a mosque added later. Its caption reads "Ali Paşa çarşısıunda olan dikilitaş" (the erect stone [monument] at the Ali Pasha Market). The Column of Arcadius bears the caption "'Avrat Pazarında olan dikilitaş" (the erect stone [monument] at the Women's Market).
The topographical details added later may be attributed to at least two different hands. Clearly by the same hand are the depiction of the Sultan Ahmet Mosque,\textsuperscript{167} carefully drawn with its six minarets and identified with a caption, and an unidentified hilltop mosque on the Asian side.\textsuperscript{168} Other additions are two relatively primitive depictions of mosques, both on the Istanbul Peninsula. These two details, perhaps by two different hands, seem to correct the locations of two existing details with respect to their views from the sea. The mosque facing the Golden Horn, drawn somewhat more surely, is identified as "Sultan Mehmed [Mosque]"; the other one facing the Marmara Sea possibly stands for the Haseki Mosque built near the women's market. Its incongruous caption "'Avrat Pazarıında olan dikilitasg" refers to the Column of Arcadius column at the nearby Avrat Pazari (Women's Market) and exactly repeats what is written below the original depiction of the Column of Arcadius drawn not very correctly further east.\textsuperscript{169}

The group of topographical details that I consider to be contemporary with the map itself present a good selection of recognizably depicted buildings and sites and, hence, may be relied on as dating evidence. The Hippodrome\textsuperscript{170} shown as a

\textsuperscript{167} The depiction of Sultan Ahmet is not drawn where it should have been. In between the Hippodrome and the Süleymaniye, it obscures the drawing of the Column of Constantine but this might have been a deliberate choice since, drawn at its correct place, this detail would have at least partly obscured the details of Hippodrome and the Hagia Sophia.

\textsuperscript{168} This unidentified mosque probably stands for the Ayazma Mosque built in 1760 by sultan Mustafa III, if one may judge by its single minaret, and not the Atik Valide mosque built in 1583. It is possible that the additions of this mosque and Sultanahmet were made by a library user after the manuscript was donated to the Köprülü Library in 1756-7.

\textsuperscript{169} This caption might be by a different hand than the hand which wrote the caption "Sultan Mehmed" under the other mosque drawing. Although incongruous with the mosque drawing itself, the caption indirectly relates to it and would not make sense without that detail. Hence, it was possibly written by the person who drew the mosque but, for some reason, not the column mentioned in the caption.

\textsuperscript{170} The location of this rectangular open site near Hagia Sophia and to the east of a column, which is now concealed under the added drawing of Sultan Ahmed but whose presence is signalled by a note saying that it is i.e. Column of Constantine), as well as the Bayezid mosque leave no doubt
rectangular place flanked on both longer sides by vizirial residences suggests that Köprülü-172 was prepared before the construction of the Sultan Ahmet Mosque, that is 1609-17. Given the fact that the original group of topographical details comprise not only royal mosques, the absence of some late-sixteenth-century mosques of medium size located on prominent sites near or at the shore, such as the two mosques of the grand vizier Sokollu Mehmed Pasha at Kadırga, Istanbul (1571) and Azapkapı, Galata (1577), the mosque of Şemsî Ahmed Pasha at Üsküdar (1580) and that of the admiral Kılıç Ali Pasha at Tophane, Galata (1587), may be interpreted in favor of a date for this map prior to their constructions. If the wanting Mihrimah Mosque at the Edirne Gate is also taken into account, its completion year 1565 may be considered a terminus ante quem for the making of Köprülü-172. On the other hand, a terminus post quem quite close to 1565 seems to be provided by a detail, a small mosque depicted below Süleymaniye on a promontory facing the Golden Horn. Although not identified by a caption, it most probably stands for the Rüstem Pasha Mosque completed in 1561. Hence, Köprülü-172 appears to be more or less contemporary with Dresden-389. But it displays very significant differences in respect to viewing directions.

In conformity with its closer links to nautical cartography, Köprülü-172 puts more emphasis on the correct representation of coastlines, and does not seek to present a unified, topographical view of Istanbul and its surroundings. The buildings depicted in this map are all oriented toward the sea but face different directions from which they are really visible. As such, they appear to have been recorded as that it represents the Hippodrome despite the note designating it as the "The Old Palace" (Seray-1 'atik).  

171 The detail of Kadırga Limanı, the former port of Kontoskalion, depicted as not yet filled, also offers a terminus ante quem from the later part of the sixteenth century. Its filling by the grand vizier Sokollu Mehmed Pasha, who served 1565-1579, is reported by the German traveller Reinhold Lubenau, in Reisen, 1:140.

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individual landmarks, that is in the manner seamen were accustomed to do. Even though not all buildings seem to have been drawn after direct observation, their depictions largely correspond to what would be visible from the suggested viewing directions. Consequently, all the major mosques on the Istanbul Peninsula are depicted as seen from the Golden Horn side and not from the Marmara Sea. Yet when a building could be seen from different viewing directions, as in the case of the Hagia Sophia and Kızkulesi, it seems that the viewing direction compatible with the direction of approach from the Marmara Sea has been chosen.

Despite their different cartographic designs, Köprülü and Dresden have something in common, especially when compared to other Istanbul maps in Bahriye manuscripts: the viewing directions for Istanbul varies from the viewing direction for the map themselves. Consequently, the viewer holding the respective Bahriye manuscript has to turn it in order to look at the depiction of Istanbul. The alignment of map orientation and the viewing direction for Istanbul appears to have been crucial in the search for an appropriate cartographic design since it unchangingly characterizes all later Istanbul maps. The earliest known map whose layout enables such an alignment is Bologna.

Note, e.g., the depictions of the Bayezid and Sultan Selim Mosques shown facing the Golden Horn with their entrance facades instead of their side facades, and the entrance court of Süleymaniye shown on the east side instead of west.

Remarkably realistic are the drawings of the Hagia Sophia, the Mihrimah Mosque at Üsküdar, and the walled town of Galata, all depicted as they would be seen from the particular viewpoints suggested in this map. The Hagia Sophia, not only shown with its southeast facade flanked by two minarets conforming to a southeast viewpoint it faces in this map but also situated very correctly in respect to the wall of the Topkapı Palace, cf. the palace's layout in figs. 2a and 2b.
2.1.3. Bologna-3613: An Early Map Representing the Red Islands and Istanbul Together

Drawn on the last page of a short-version copy finished in 1570, Bologna-3613 only traces the outlines of landmasses and has no topographical details, no placenames or legends (fig. 55). Of its compass rose only the circle is drawn but the windrays are missing. Yet Bologna-3613 is clearly a south-oriented map that allows to look at the Golden Horn front of the Istanbul Peninsula without any shift of viewing direction. As it is laid out, Galata appears in the lower right and the Asian side, separated from it by a vertically running Bosphorus, in the lower left section of the page. The Istanbul Peninsula is shown in the upper right section, simplified into a compact, triangular form, and its Golden Horn coast is aligned horizontally. Five of the Red Islands encircled by the compass rose occupy the upper center of the map.

Because Bologna-3613 has no topographical details, what its particular orientation accentuates remains implicit. It becomes evident, though, in later maps that adopted its cartographic layout and map orientation and which gradually became filled starting with buildings shaping Istanbul's northern aspect on the Golden Horn. That the cartographic design of Dresden-389 was not accidental but was conceived to permit the map's viewer to look directly at that particular view of the Ottoman capital is best evidenced, though somewhat retrospectively, by two maps of the Marmara Sea, Oxford-543 and Ayasofya-3161, in which Istanbul appears as a topographic detail.

174 The map is on fol.162r. At the top of the same page are the last three lines of the Bahriye text and the colophon. The statement concerning completion of copying reads: "Sene tokuz yüz yetmiş yedi evå‘il-i Şevval-i muharrem fi yevm’ül-agîr fi el-vakt’üz-zuhur" and corresponds to a Friday noon, March 10th or 17th, 1570. For full text of colophon, see Appendix 5.
2.1.4. Oxford-543 and Ayasofya-3161: Two Marmara Maps with Istanbul as a Topographical Detail

Oxford-543 and Ayasofya-3161, which respectively date from 1587 and ca. 1600, show the entire Marmara Sea in a scale and layout very similar to other Marmara Sea maps occurring in Bahriye manuscripts and both have a west orientation (figs. 92e and 92f). Yet they also depict Istanbul and its immediate surroundings as a small but conspicuous topographical detail by slightly exaggerating the corresponding area. In Oxford-543 (fig. 92e), this view is constructed with standard architectural forms typical of town vignettes and island book details: Towers with pointed roofs and interconnected by fortified walls fill out the Istanbul Peninsula. To represent Galata the standard elements of towers form a row, and a few of them grouped together stand for Üsküdar.

In Ayasofya-3161 (fig. 92f), which might have been based on Oxford-543, the topographical detail showing Istanbul is very similar but slightly more characteristic as it includes also mosques some of which are recognizable despite their tiny size. The remarkable aspect of both details, however, is that the Istanbul Peninsula is bent in such a way so that its Golden Horn side faces the viewer and thus is seen from the

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175 The map is on fol. 142v. The copy date is given as "fi évahir-i şehir-i Muharrem - AH 996 = AD 1587, end of December" in H. Ethé, Catalogue of the Persian, Turkish, Hindūstānī and Pashtū Manuscripts in the Bodleian Library (Oxford: Clarendon Press, 1930), cat. no.(41) 2079, col.1179.
176 It is remarkable that, although showing the entire Marmara Sea, this map is entitled: "Eğgâl-i İstanbul" (The shape of Istanbul). MS Ayasofya-3161 may be dated to around 1600. A possible terminus post quem is 1583, the date of completion of the Atik Valide mosque at Üsküdar. Although appearing here in a miniscule size, this mosque can be identified on the basis of its two minarets and its location clearly higher than the sea level. The manuscript has on the flyleaf at its beginning a date (fi |V = 17) noted under a given title "Kitâb-i Tafsil-i Cezâyir" (Book Explaining the Islands, i.e. "island book"!). This date may be interpreted as AH 1017/ AD 1608-9.
177 Three cupolas flanked by minarets and facing the Golden Horn can be distinguished within Istanbul and must be "summarizing" the major mosques in the city. But the mosque at the end of the Golden Horn clearly depicts Eyüp Mosque, and the two mosques in Üsküdar stand for Mihrimah Mosque on the shore and Atik Valide Mosque behind it on a hill.
same direction as the rest of the map. In Ayasofya-3161, this deliberate effort is sustained by a compass rose which does not harmonize with the west-orientation of the Marmara Sea nor with the axis of the Bosphorus but with the detail of Istanbul. It clearly serves to indicate that the city is looked at from the north.

Oxford-543 and Ayasofya-3161 considerably postdate Bologna-3613. Yet it is not impossible that these two maps were based on an earlier map more or less contemporary with Bologna-3613 and which constituted in a sense a cartographic link between it and the general map of the Marmara Sea. However, Oxford-543 and Ayasofya-3161 may not have had an antecedent at all. Then the emphasis on the Golden Horn view should be considered an influence of the south-oriented map composition as we find it realized around 1570 in Bologna-3613 and which was subsequently retained in several other Istanbul maps included in Bahriye manuscripts throughout the later part of the sixteenth century. But in any case, the deliberate distortion of geographic outlines in Oxford-543 and Ayasofya-3161, for the sake of aligning Istanbul's Golden Horn view with the map orientation, demonstrates that it was crucial to represent Istanbul giving priority to its view on the Golden Horn, and thus explains south-oriented design the Bologna-3613.

2.1.5. Bologna-3613: The Conception of a Basic Cartographic Design for the Istanbul Map

Besides its particular map orientation, Bologna-3613 (fig. 55) is significant because, unlike Dresden-389 and Köprülü-172, it includes the Red Islands in its composition, something rendering it a more suitable illustration to accompany the chapter dealing with the Red Islands. Nevertheless its vertical format reveals that Bologna-3613 was conceived from the beginning primarily as a representation of Istanbul.

Bologna-3613's layout that fits Istanbul and the Red Islands into a vertical, single-page format involves a
cartographic distortion that compromises a correct depiction of the islands. As can be seen in fig. 95, the Red Islands are located to the south-east of Istanbul at a distance that would rather require a horizontal map format. In Bologna-3613, to fit the islands in the chosen vertical format, their distance to the city was reduced and the SE-NW axis along which the four biggest islands line up was shifted to run SSW-NNE. To maintain its geographical relation with the islands, the opposite Asian coastline was also shortened and shifted.

As a consequence of these distortions, the map cannot illustrate the sailing direction from the islands toward the entrance to the Bosphorus, that is NNW, as noted in the text. This problem would have been easily solved if the map were laid out on two pages instead of one. But apparently, neither this solution nor another cartographic composition was considered after 1570, a situation suggesting that by then Istanbul alone had become the main subject of illustration. More importantly, Bologna-3613's design giving priority to the city's Golden Horn front with its geographic layout and map orientation seems to have fulfilled what was expected from an illustration of Istanbul since all subsequent maps we know of share this basic cartographic design even though they outline landmasses somewhat differently.

2.1.6. Later Istanbul Maps as Variants of Bologna-3613

The Istanbul maps occurring in Bahriye manuscripts from the late-sixteenth century until the end of the seventeenth century cover the same geographic area as Bologna-3613, that is the Istanbul Peninsula, its immediate surroundings and the Red Islands, in the same vertical format and south-orientation. The coastlines in these maps are traced differently but they

178 Apparently, the wind roses of these maps, although often encircling the islands do not relate to them but to the Bosphorus. Depending on the way the Bosphorus is depicted in each map, the north direction of the wind roses slightly varies so that Bosphorus's axis runs SW-NE.
relate to Bologna-3613's coastlines in particular features, and hence suggest that all these maps from the 1570s to 1600 were closely related in a cartographic effort seeking to improve the design of the Istanbul map realized in Bologna-3613. In that sense, they may be considered all variants of Bologna-3613, or rather variants of the "Istanbul map" to feature in Bahriye manuscripts. Together with the seventeenth-century maps that can be traced back to these late-sixteenth-century maps, the variants constitute a large family.

Within this large group of variants, some maps clearly have tighter genealogical links and form subgroups that are distinguished by very similar coastlines and topographical details, and sometimes also by their legends. A careful examination of these distinctive features often allows one to trace the genealogical sequence of variants in a subgroup. Some genealogical links may be discerned also between subgroups of variants, suggesting that when maps were redrawn more than one map might have served as models. However, as we probably do not have all the maps once made, neither the maps having served as prototypes nor the precise genealogy of variants can be fully determined. Without claiming to be definitive, the stemma in fig. 74 demonstrates the genealogical links that exist between the extant variants and between the subgroups they form. This stemma also reflects the structure that will be followed in the discussion of the variants.

Divided into subgroups, these variant maps produced over a long period can be more easily compared in terms of the elaboration of Istanbul's representation as a topographical view and the emphases on particular buildings, sites and viewing directions.

While in the earliest variants all the effort seems to have been put into elaborating coastlines, topographical

179 Examining these maps as genealogically related variant groups also allows an adjustment of the estimated dates of certain undated manuscripts that resulted from their isolated examination.
details showing buildings increase toward the early seventeenth
century. While one family of variants allows us to follow a
gradual elaboration of such topographical content, a much
smaller family presents two fully developed topographical maps.
Rich topographical content complemented by detailed toponymy
characterizes another family of variants that emerges around
the mid-seventeenth century, and for the first time, in copies
of the long version. Finally, two late variants that relate to
this latter subgroup offer the most elaborate topographical
view of Istanbul. They abandon the single-page format of all
previous variants to extend the depiction of the same
geographical area but especially that of the Istanbul
Peninsula, on two pages.

2.2. Determining the Sequence of Individual
Variants and their Dates: The Use of Topographical
and Toponymical Details as Internal Evidence and
the Use of Watermarks

This evolution of Istanbul's cartographic representation
roughly spreads over a period of 150 years, and substantial
change corresponds in average to time slices of twenty to
thirty years. Therefore, in chronologically situating the
variants from manuscripts without colophons a very precise
dating seemed unnecessary. While the overall genealogical
sequence in which the maps from dated manuscripts serve as
chronological markers already suggests an approximate
chronology for undated variants, internal evidence such as
topographical and toponymical details and watermarks have also
been considered to verify and if possible to narrow the periods
suggested for individual maps. The examination and evaluation
of such evidence is integrated into the discussion of each
variant map that follows. However, I should like to point out
here some of the major problems as well as possibilities that
have been encountered in using such dating evidence in the
context of Bahriye maps.
In general, the diversity of attitudes in copying and drawing Bahriye maps does not allow a uniform interpretation of topographic and toponymic details as dating evidence. Furthermore, the additions of such details made by subsequent users of manuscripts also complicate our task, especially when they cannot be definitively distinguished from what was put in a map originally.

With regard to topographical details, the different skills and backgrounds of the individuals involved in the drawing of these maps translates into different degrees of precision in depicting buildings which might provide a chronological reference. First of all, important buildings, mostly mosques, are represented selectively and what is there is not always depicted in an architecturally characteristic form and, hence, may not always be clearly identified. Secondly, it is also possible that in a map an important building is missing from a map simply because it was a close copy of an earlier variant unknown to us, and the copyist did not update the topographical content of the model. For these reasons, an important building missing in a certain map might not always provide a terminus ante quem. However, there are also maps which have meticulously depicted, identifiable buildings and for which missing buildings may offer termini, especially if in consistency with other reliable clue.

On the other hand, a terminus post quem for a map is more easily deduced from the presence of any clearly identifiable building. In general the minarets, being the most visible features of mosques, are carefully depicted in the majority of variants and their different numbers permit the distinction of the sultans' mosques from the rest, while the most visible of all, the Süleymaniye Mosque is quite consistently drawn with

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its characteristic four minarets. In the particular case of the
Hagia Sophia to which minarets were added at different
times,181 the different numbers of depicted minarets may offer
a chronological reference if the map in question displays a
general precision in the depiction of architectural features.

Such precision should also be considered with caution
since a certain map may just be repeating the topographical
details of an earlier one.182 Nevertheless there are also
instances that the topographical content of one map or more
belonging to the same group of variants were updated by their
copyists by adding new buildings. Hence, the reliability of
topographical details varies from map to map and requires
careful evaluation.

In some cases, in resolving problems presented by
topographical details the legends or place-names accompanying
them provide help, yet such evidence, too, has to be carefully
sorted. One of the problems connected with inscriptions on
these variants such as place-names, legends, and occasionally
some explanatory notes concerns determining their
contemporaneity with the map drawing itself. Ideally one would
look for legends that were written by the person who also
originally made the drawings to which they belong. But this is
quite rare in these variants. In general, the earlier variants
have very little writing on them, and some do not bear any
written information at all. The persons who did the map
drawings apparently did not annotate them or at best inscribed
only the wind names and the names of the islands. Other kinds
of notes identifying the major land masses, urban settlements
and some capes seem to have been added by a second hand,

181 The precise chronology of these minarets cannot be fully settled but
it is only after 1574 that Hagia Sophia had four minarets. See Gülru
Necipoğlu, "The Life of an Imperial Monument: Hagia Sophia After
Byzantium," in Hagia Sophia From the Age of Justinian to the Present, ed.
by R. Mark and A. Çakmak (Cambridge: Cambridge University Press, 1992),
208-9.
182 As in the case of Nuruosmaniye-2997 dated 1629 and undated Yenicami-
790.

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perhaps a user of the volume. But in any case, these place-
names do not really offer a chronological reference, nor do 
some landmark buildings such as Kızkulesi and Yedikule Fortress 
that date from a much earlier period. But occasional mistakes 
in the transcription of these place-names might suggest a 
copying sequence for close variants, or the repetition of the 
same erroneous place-name might relate variants to one another. 
In later variants, a rich toponymy offers dating evidence since 
among featured place-names there are many that clearly relate 
to depictions of sites, neighborhoods, city gates and buildings 
relevant for the period considered.

A careful sorting of all significant details of 
topographical and/or toponymical nature allows, however, in 
most cases to narrow the approximate time of an undated variant 
and its respective manuscript.

A more concrete way of dating these maps, and the 
manuscripts containing them, would be by using paper 
watermarks. But the precision of such dating depends on very 
accurate reproduction of watermarks and at the same time on the 
availability of comprehensive catalogues in which an identical 
watermark from the paper of a dated document might be found. 
The particular difficulty connected with Bahriye manuscripts is 
that often their texts and maps were copied piecemeal or 
seemingly on paper leftover from different batches as indicated 
by the large number of different watermarks occurring in a 
single volume.183 Because of the difficulty of fulfilling the 
precision requirements,184 watermark evidence has been used in 

183 This is particularly the case of earlier manuscripts copied in the 
sixteenth century yet also applies to some seventeenth-century 
manuscripts.
184 Photographic reproduction facilities for watermarks were not available 
for most of the manuscripts examined here. The other problem is the 
insufficiency of published watermark catalogues for European paper used 
in the Ottoman empire. From the two specific catalogues, V. Nikolaev, 
Watermarks of the Ottoman Empire, vol. I (Sophia, 1954) and Asparukh 
Velkov and Stephane Andreev, Filigranes dans les documents ottomans I: 
Trois croissants (Sophia, 1983) (hereafter cited as Trois croissants), 
only the second reproduces the catalogued watermarks photographically the

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this study only in a limited way, not for a precise dating but to control time periods of about twenty to fifty years, mainly suggested by the genealogical links between variant maps as well as by internal evidence.\textsuperscript{185}

2.3. The Evolution of the Istanbul Map

2.3.1. Topkap\i-337 (1574) and Deniz-990: Two Early Derivatives of Bologna-3613

In the absence of sufficient topographic detail, the comparison of coastlines is the only means for tracing the genealogical links between individual maps making sense of what they represent.

Although Topkap\i-337 and Deniz-990 (figs. 56 and 57) do not display the same coastlines, each map incorporates some of the characteristic elements of Bologna-3613 and might have been derived from it without any intermediary. Topkap\i-337 (fig. 56) is contained in a short-version manuscript copied in 1574, only a few years after the manuscript containing Bologna-3613.\textsuperscript{186} Deniz-990 (fig. 57), from an undated copy of the same version, must also be rather close in date since its cartography is clearly an interpretation of Bologna-3613.\textsuperscript{187} Remarkably, both variants rely very much on Bologna's depiction of the Istanbul other giving them as eye-copies of the author, which was in fact the case of watermark catalogues in general until about the 1970s.\textsuperscript{185} The watermarks of Bahriye manuscripts examined were reproduced as eye-copies and compared to catalogued ones of similar design and dimensions whenever possible. Certain designs that were used over a long period with minor modifications obviously provided less dating aid than some others that were used for a limited period or those whose appearance or disappearance date is pretty much known.\textsuperscript{186} Topkap\i-337 appears on fol. 167v of MS B.337 of the Topkap\i Saray\ı Kütüphanesi (Topkap\i Palace Library), Istanbul, a copy of the short-version Bahriye completed in AH 982/AD 1574. For full text of colophon, see Appendix 6.\textsuperscript{187} Deniz-990 is on fol. 271v [originally 269] of MS 990 [formerly no.3538] of Deniz Müzesi (Naval Museum), Istanbul, which is an undated copy of the short version. It has not been possible to examine this manuscript thoroughly for it is on permanent exhibit. This map bears as writing only a title: "This is the figure showing the Red Island[s]" (Kızıl ata ışbu şekildir). See also Appendix 7.
Peninsula but modify the coastlines of Galata and the Asian side. What each variant proposes, seems nevertheless to be somehow based on Bologna's depiction of the Asian and Galata coasts.

When we compare the depictions of the Istanbul Peninsula in these variants to what is depicted in Bologna-3613 (fig. 55) we notice that the makers of Deniz-990 and Topkapı-337 traced it with a quite similar coastline and in a triangular shape but interpreted a salient feature of their model differently. Although now barely visible, Bologna-3613 shows a piece of land with a peculiarly bulging shape that projects into the Marmara sea at the right edge of the map. Deniz-990 and Topkapı-337 reproduce a similar land projection at the same spot, however interpret it differently.

In Topkapı-337, which also reproduces the crenulate line seemingly representing the landwalls of Istanbul in Bologna, this land projection is understood as a cape much further west of the city's limit. The legend noted next to it identifies it as "Aya Stefanos Burnı", the area corresponding to present day Yeşilköy.

Deniz-990 assigns a larger surface to the city, and the same land projection is included within the walls of Istanbul that encircle it to depict the Yedikule Fortress. This fortress visible from the Marmara Sea, is in reality near but not at the coast which projects in reality more smoothly than shown. The particular depiction showing the Yedikule Fortress right on the Marmara shore and in an exaggerated, crown-like shape seems consistent with depicting landmarks in the nautical tradition. The same detail is depicted in a very similar shape also in Topkapı, and appears without significant change in all the variants descending from these two maps.

In depicting the coastline of Galata, the two maps seem to rely less on Bologna, and each of them proposes different modifications. Deniz-990 somewhat compacts the landmass that
this coastline encloses. In this way it renders better the projection of the Seraglio Point toward the Bosphorus and at the same time the northward bend in the upper part of the Golden Horn. The large, semi-circular inlet on the northern bank of the Golden Horn in Bologna-3613, which corresponds to the mouth of the Kasım Paşa River, is also present in Deniz-990 together with the watercourse. As to the Bosphorus, similarly to Bologna-3613, it is depicted as a relatively narrow strait and in a vertical position, however its abrupt change of course is a new detail.

The coastline of Galata in Topkapı-337 does not modify the Golden Horn much in form though it appears somewhat smaller and the inlet at Kasım Paşa cannot be distinguished. Yet across from the Seraglio Point, the coastline strongly curves northward and opens the Golden Horn toward the Bosphorus and thus reflects better the actual situation than in Bologna.

The departure of both variants from Bologna-3613 is mostly manifest in their depictions of the Asian coast. It looks as if the makers of the two maps wanted to show more detail in that coastline which is extremely compacted and approximate in Bologna-3613. Although the Asian coastline varies significantly in Deniz-990 and Topkapı-337, both maps seem to reproduce one coastal feature of Bologna-3613, a promontory that points straight up toward the biggest island. To figure out which actual land projection this detail in Bologna depicts is not obvious because the representation of the Asian coastline is very summary. On the other hand, its identification with Cape Kalamış, as in Topkapı-337, does not make sense geographically. A comparison with a modern map (fig. 93), however, brings some clarification if the following possibilities are taken into consideration: first that the maker of Bologna might have preserved a certain correspondence between the islands and the coast across them when he compacted the geographical area to fit the islands in the vertical map format, and secondly that
he exaggerated coastal features that were important landmarks. With these premises in mind, the south-oriented coastal projection in Bologna-3613 may be identified as Point Dragos, a much less pronounced promontory but similarly pointing toward Büyükdada, the easternmost of the four biggest islands. A look at the respective area of Menemenli Mehmed Reis's chart (fig. 74a), or of the Marmara Sea maps from Bahriye manuscripts (figs. 92c and 92d) in which we can see at the same spot a similarly exaggerated promontory reveals that this detail of Bologna originated in nautical cartography, and that it really depicts Point Dragos can be confirmed with the help of portolan texts.\textsuperscript{188} The other land projection that points west must be Cape Kalamış, the site of a lighthouse,\textsuperscript{189} north of which the actual coastline forms a deep, circular bay (Bay of Kalamış) and then another cape (Cape Moda) (fig. 93). Both capes and the bay between are clearly represented in Menemenli's chart (fig. 74a) similar to the actual coastline, but Bologna-3613 (fig. 55) seems to show only Cape Kalamış as a west-pointing projection with a bay to its north but without Cape Moda, and furthermore too close to the Bosphorus, something which renders the detail ambiguous.

Deniz-990 and Topkapı-337 propose two entirely different corrections. In Deniz-990 (fig. 57), the Asian coastline is strikingly similar to the coastline as traced in Menemenli's chart or in the Marmara Sea map (figs. 74a and 92d) and must have been enlarged from a similar source.\textsuperscript{190} In Topkapı-337, Point Dragos also appears as a prominent, south-pointing

\textsuperscript{188} This cartographic emphasis of Point Dragos must have had to do with the good visibility of Point Dragos which is in fact a rather high and rocky promontory, and remarkably, it is the only coastal location recorded between Üsküdar (Scutari) and the Gulf of İzmit (Golfo de Comidie) in portolans, in the section covering the Asian coast of the Marmara Sea. See under Rachia (= Kap Drako) in Kretschmer, \textit{Italienische Portolane}, 650.

\textsuperscript{189} See below n. 196.

\textsuperscript{190} It also shows the lighthouse as a topographical detail on the land projection corresponding to Cape Kalamış.
promontory but in a more easterly position in relation to the islands while Cape Kalamış seems to be the two-pointed land projection further north. Yet the coastline between Point Dragos and Cape Kalamış appears even more contracted in Topkapı-337 than in Bologna-3613. Toward the Bosphorus, however, the section of the Asian coast is drawn in a scale that matches better the rest of the map. In that section Topkapı-337 shows coastal features that were not articulated in Bologna-3613 such as the promontory projecting toward Kızkulesi with the bay at Üsküdar to its north, and the bay at Kadıköy to its south, the latter separated from the Bay of Kalamış by the projection of Cape Moda.

In both maps, the Red Islands are emphasized with color as customary in nautical cartography: in Deniz-990 they are picked out in red and in Topkapı-337 in three different colors. Their representation seems to have been largely based on Bologna-3613 for their group configuration and the place they occupy in the composition of Deniz-990 or Topkapı-337 does not differ significantly. Yet unlike in Bologna-3613, in both variants the two medium islands, "Heybeli" and "Burgazlı" are drawn slightly bigger than Büyükada, the biggest island of the group in reality, possibly as an emphasis because the chapter describes the area between the two islands as the main anchorage of this small archipelago. But the modifications made to the outlines of some islands do not really present an improvement, and the compass rose reveals that the islands are not the focus in either map.

191 In Topkapı-337, the easternmost island of the group in Bologna seems to have been left out.
192 It is referred to as "Kızıl Ada" (the Red Island) in Bahriye maps, as in Topkapı-337.
193 The bay of the small, crescent-shaped island in Bologna-3613, which corresponds to modern Kaşıklık Ada, correctly faces west. In Topkapı-337 the bay faces the opposite direction, and the island itself is moreover drawn bigger while the northernmost island, i.e. Kınalı Ada identified in this map as "Kuş Adası", has become smaller. The reversal of the two islands' names is perhaps a consequence of their mistaken sizes. This particular representation of the Red Islands, as well as the
The compass rose that is incomplete but clearly centered on the islands in Bologna-3613 is shifted somewhat more toward Istanbul in these two variants, and being sufficiently elaborate, its relation to the map content may be discussed. A compass rose in Bahriye's other maps, besides providing a general orientation, indicates the sailing directions in relation to the area focused on. Consequently, one would expect that the compass rose of these maps relates to the Red Islands, more specifically that it indicates the sailing direction from them toward Istanbul. But the compass rose of neither variant can fulfill that function because, as a result of the cartographic distortions the maps' design involves, the islands are not in their proper geographic position. The indication of north which is slightly different in Deniz-990 and Topkapı-337 reveals that the compass rose only relates to the immediate area of Istanbul south of the Bosphorus and serves to indicate the NE-direction in which this important strait runs. This is perhaps a compromise and gives some navigational substance to the map nevertheless also confirms that the islands are not the principal subject of illustration.

In both variants, the drawing of the coastlines, and the coloration of the islands reflect a familiarity with nautical chart conventions. The few topographical details that occur in them also conform to the same cartographic tradition. Similar in their elementary character, these details consist in standardized building depictions that are oriented to the sea. Notably, in both variants Istanbul and Galata are defined by their fortification walls.

misidentification of the two, is repeated on all the maps descending from Topkapı-337 and constitutes a sort of genealogical trademark of this subgroup of variants, i.e. Vienna-192, London-4131, University-123, Nuruosmaniye-2990 and Kuwait-75 (figs. 59-63).

194 In both maps the wind roses have eight rays and an arrow point indicates north. In Topkapı-337, the names of winds are also noted.

195 In Topkapı-337, also note the the dot signs indicating shallow water along the coast of "Aya Stefanos burni" (Cape Aya Stefanos).
In Deniz-990, the topographic drawings are made carefully with a fine pen. They show on the islands individual fortified towers, off the tip of Cape Kalamış the lighthouse and on the cape itself some structures belonging to the royal garden, Fener Bahçesi (the Lighthouse Garden). North of the next cape a few similarly depicted buildings might be interpreted differently, on the basis of their architectural forms as the buildings of another royal garden referred to as the Üsküdar Garden, or on the basis of their location as symbolizing the town of Kadıköy. Further north, offshore, is shown the Kızkulesi and the town of Üsküdar. The relatively elaborate depiction that looks like a large building on the opposite shore, is more difficult to interpret and might be representing the cannon foundry at Tophane. On the northern bank of the Golden Horn, to the west of Galata, the vaults of the naval shipyards occupy a good length of coast and are followed by a small group of buildings, possibly the coastal pavilions of

196 A firman of Süleyman I, dated 1562, orders the construction of a lighthouse on the Asian side at a location known as the "Kelemić Burnı", see Münir Aktepe, "İstanbul Fenerbahçesi hakkında bazı bilgiler," Tarih Dergisi no.32 (March 1979): 355-6. Aktepe concludes that the place-name "Fenerbahçesi" or "Fenerbahçe" began to be used some time after the construction of this lighthouse in 1562. The history of the royal pavilions on that site is not very clear although there are indications that the site gained in importance during the second half of the sixteenth century, since among works of Sinan, a renovation of Fenerbahçe palace is mentioned, see R. M. Meriç, Mimar Sinan, Hayatı ve Eserleri (Ankara: TTK, 1965), 40, 118. M. Erdoğan noted a first reference to "Bağçe-i Fener" in a document dated 1583, see "Osmanlı devrinde İstanbul bahçeleri," Vakıflar Dergisi 4 (1958): 174; (hereafter cited as "Bahçeler").

197 It is the central element in this depiction which has a pointed roof that recalls a similar structure depicted in two late-sixteenth century representations in the details showing the Üsküdar Garden (figs. 97a and 98a). For a brief discussion of these views, see below n. 376.

198 It compares to the depictions of the cannon foundry in the Hünernâme and Şehingnéname maps of Istanbul, especially to the latter where also differently shaped roofs are indicated (figs. 31g and 34c). The original foundry seems to have comprised several buildings which all three depictions show as if one. The wall that enclosed the buildings is distinguishable in the Hünernâme and Şehingnéname maps but seemingly, it is depicted in elevation in Deniz-990 and, thus, appears to be the facade of a single building. On the cannon foundry, see below n.394.
another royal garden, the Tersane Bahçesi (Shipyards Garden) or the settlement of Hasköy next to it. Obliquely across from that detail is a single building possibly relating to the town Eyüp, for which there was no space left. The walled areas of Istanbul and Galata were perhaps meant to receive some drawings of buildings but seemingly remained empty. The totally uncharacteristic buildings that fill Istanbul are drawn in an unfit scale and must have been added at a later date, perhaps by the same person who drew two ships in the upper right area of the map.

The topographic details of Topkapı-337 are less skillfully drawn than those in Deniz-990. Yet the person who drew them made an effort to depict Istanbul with more detail than only with fortification walls. The mosque drawings, even though highly standardized, certainly do not constitute a topographical view. Drawn as elevations seen from north, they clearly relate to the view on the Golden Horn. All of the six major mosques of the city, consistent with the date of MS Topkapı-337, i.e. 1574, are there, and moreover the four most visible mosques occupy the foreground. Notably, the third drawing from the left that corresponds to Süleymaniye by its situation, was initially drawn with only two minarets but then corrected to have four.

2.3.1.1. Millet-1 and Vienna-192: Close Copies of Deniz-990 and Topkapı-337:

Deniz-990 and Topkapı-337 each have at least one very close descendant among the extant variants. Millet-1 (fig. 58) presents the same coastlines as Deniz-990 but shifts the map

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199 Although their drawing quality does not suggest it, the topographical drawings may have been the work of someone else than the person who drew the map, since the line indicating Istanbul's landwalls, taken from Bologna-3613, was ignored when the buildings on the Istanbul Peninsula were drawn: the fortification walls on the Golden Horn side continue further west than that line and one of the mosques is drawn right on it. 200 Hagia Sophia, Bayezid, Süleymaniye, Sultan Selim in the front row, Şehzade and Fatih Mosques in the back, with the Column of Arcadius in between but closer to the Marmara Sea coast.
frame slightly west leaving out Point Dragos and showing a somewhat larger area to the west of Istanbul including the confluence of the two rivers that flow into the Golden Horn. Although carefully drawn and partly gilded, Millet-1 remained seemingly incomplete, and consequently, has even fewer topographic details than Deniz-990. 201 Nevertheless it is important not only as evidence of variants that stemmed from Deniz-990, but more precisely, in providing a link between that map and a family of variants from around the mid-seventeenth century. 202

The Istanbul maps directly related to Topkapi-337 are more numerous, and among them Vienna-192 (fig. 59) most closely repeats the same coastlines and topographical details. It offers nothing new, 203 but four other maps, London-4131, University-123, Nuruosmaniye-2990, and Kuwait-75 form a family of variants that appear interrelated, and in which a certain evolution of topographical content can be followed.

2.3.1.2. London-4131, University-123, Nuruosmaniye-2990, Kuwait-75: Variants of Topkapi-337

This group is formed by four variants, two of which are dated. The variants with unknown dates are London-4131 and

201 Gilding is used to fill out the islands, the cones of the fortification towers of Istanbul's walls and the longish island separating the two rivers flowing into the Golden Horn. It was also used to enhance the coastlines. The map is entitled: "The Red Islands situated near Istanbul" (istanbul kurbinde vakı'kızıl adalar). See Appendix 8.

202 Since Vienna-192 relates only to Topkapi-337 it is difficult to situate it chronologically. Its date might be very close to that of Topkapi-337 but also considerably later. I have not examined myself the manuscript containing this map on its fol. 169v, Österreichische Nationalbibliothek (ÖNB), Vienna, MS, H.O. 192. A date estimate for this manuscript is not available in the catalogue entry in Gustav Flügel, Die arabischen, persischen und türkischen Handschriften der Kaiserlich-Königlichen Hofbibliothek zu Wien (1865; Darmstadt: W. Weihert KG, 1977), vol. 2, 428 (cat.no.1275). Kahle, who did not know about MS Topkapi-337, considered MS Vienna-192 later than both MS Bologna-3613 (1569) and MS Dresden-389 (1554), see Kahle, "Einleitung," XXVIII. For the ownership notes in this manuscript, mentioned by Kahle, see above n. 125. For the legends of Vienna-192, see Appendix 9.
University-123 (figs. 60 and 61). They appear, however, to be earlier than Nuruosmaniye-2990 and Kuwait-75, which date from 1645 and 1688-9 respectively (figs. 62 and 63). All four maps display the same coastlines, very closely repeating the coastlines of Topkapı-337, however without exaggerating the details of Point Dragos and Point Aya Stefanos as much. They also show Istanbul's fortification in the same layout as in Topkapı-337, in addition to depicting the city's landwalls, only indicated by a simple line in their model.

In other topographic details, however, these four variants are clearly independent from Topkapı-337. They depict Istanbul's buildings differently and also present new topographical details on the Asian side as well as in and around Galata.

London-4131 (fig. 60), contained in an undated copy of the short version, is a neatly drawn and colored map without being stylized. Its topographic details also reflect the same qualities. They are rather sparse on the Asian side. In that area, the depiction of the lighthouse and some adjacent buildings are correctly situated on the land projection representing Cape Kalamış although the legend "Kalamış Burnı" refers to the same mistaken land projection as in Topkapı-337. Some houses, depicted further north, opposite to Kızkulesi, must represent the town of Üsküdar.

Compared to Topkapı-337, London-4131 shows considerably more buildings on the Istanbul Peninsula without however uniformly filling the entire city. The buildings form a notably tighter cluster along the Golden Horn. At the tip of the peninsula, the Topkapı Palace complex, separated from the

204 This map is on fol. 195r of MS Or.4131 of the British Library (BL), London, which is held to be dating from the seventeenth century. A terminus ante quem is provided by an ownership note dated AH 1098/AD 1686-7; see Soucek, "Islamic Charting,".290; also Norah M. Titley, Miniatures from Turkish Manuscripts: A Catalogue and Subject Index of Paintings in the British Library and British Museum (London: British Library, 1981), 64-6. I have not examined the manuscript myself. For the legends of London-4131, see Appendix 10.
rest of the city by its own wall, is depicted as a group of small buildings whose cupolas are enhanced with blue color. The palace is followed by three, blue-domed mosques and residential buildings, distinguished by their red, saddle roofs. Further back, however, no houses are shown but only five more mosques that are all depicted similarly, with a single dome and minaret, and which are also evenly distributed in the available area. In contrast to them, the three mosques in the foreground shown intermingled with houses form a sort of front on the Golden Horn whether intended or not. They also appear more characteristic in their depictions. The first one on the left, with four minarets, is especially a quite realistic side elevation of the Süleymaniye seen from the northeast. The other two (or three?) mosques with double minarets must stand for other royal mosques visible in the same range as Süleymaniye, possibly Fatih and Sultan Selim Mosques, but their depictions do not allow any precise identification.

The topographic details of the Istanbul Peninsula in London-4131 constitute a representation of the city that relates to two different perceptions: one pertaining to the visible front of the city on the Golden Horn and the other pertaining to the rest of its urban area imagined as extending behind this front and punctuated by mosques. This two-fold perception underlies Istanbul's depiction also in later and topographically much more elaborate variants but it is most apparent in London-4131.

The importance of the Golden Horn as an urban space that connects İstanbul with Galata is another subject that is emphasized in London-4131, and which is suggested by the tiny drawings of row boats (peremes) along that body of water. On

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205 Also on several other Bahriye maps, blue is used to indicate the lead roof covering and, hence, distinguishes monumental buildings from ordinary ones whose roofs were covered with tiles and correspondingly painted red.

206 Peremes were the principal means of transportation in Istanbul in the sixteenth and seventeenth centuries. Pereme transport was regulated, and
the coast opposite Istanbul, Galata and its suburbs are depicted as densely built settlements. Galata's suburbs and the two extra-muros mosques are new details. The mosque drawings are differentiated by their roof forms yet cannot be identified with certainty because in the early seventeenth century several medium-sized mosques occupied coastal sites outside Galata, especially on the Bosphorus side. Hence the mosque in the east, close to the place-name "Beşiktaş", might be identified as the mosque of Sinan Pasha completed in 1555, qualifying the group of red-roofed buildings between it and Galata as a representation of Beşiktaş, Fındıklı and Tophane districts together. Yet it might also stand for one of the later mosques closer to Galata, either the Molla Çelebi Mosque at Fındıklı (ca. 1565) or the Kılıç Ali Pasha Mosque at Tophane (1581).  

The extra-muros mosque to the west of Galata, shown as having a hipped roof, brings to mind the mosque built in the early 1530s by the grand vizier Kasım Pasha, who significantly developed this district later named after him. His mosque was the most important suburban mosque on that side of Galata until the mosque of Sokollu Mehmed Pasha was built in 1580s at Azapkapi, right outside the walls. If the depiction of the mosque with a hipped roof is not arbitrary, the completion of the Sokollu Mosque in 1580 might be considered a *terminus ante quem*.

A date before 1580 might be too early for London-4131, but it could make sense as the date of another variant, which this map imitated without updating its topographical content. This might also be an explanation for the absence of the Sultanahmet these boats ran between certain landing points. Twelve of the twenty-two boat lines recorded at the end of the sixteenth century connected locations across and along the Golden Horn. See C. Orhonlu, "İstanbul'da kayakçılık," esp. Table I.

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207 In Nuruosmaniye-2990, the mosque drawn at the same spot is identified as the Mosque of Mehmed Aga, see below n. 218.

208 The original building, an early work of Sinan, burnt down in 1721. For a discussion of its architecture, see A. Kuran, *Sinan, the Grand Old Master of Ottoman Architecture* (Institute of Turkish Studies: Washington DC and Istanbul: Ada Press, 1987), 42 and 247; (hereafter cited as *Sinan*).
Mosque, built in the early years of the seventeenth century. Yet for this map and, as we shall see, for other variants of the group, the absence of important buildings cannot offer chronological limits since the topographical details are somewhat random, as indicate, for example, in the case of London-4131, the absence of the shipyards at Kasımpaşa, west of Galata, or that of Hagia Sophia between the depictions of the Topkapı Palace and the Süleymaniye.

University-123 (fig. 61), the other undated variant of this group, which also very closely reproduces the coastlines of Topkapı-337, gives the impression a richer topographic detail than London-4131. But this is mainly due to a larger number of houses depicted on the Istanbul Peninsula, and only a few details are worth mentioning.

The buildings of the Topkapı Palace are depicted somewhat differently from those in London-4131. More notable is that this detail also includes the cypress trees which characterized the palace site.

The depictions of mosques are as standard as those in London-4131. In Istanbul, two of the larger mosques depicted have four minarets. The mosque west of the Topkapı Palace

209 The Istanbul map is on fol.470r of MS T. 123 of İstanbul Üniversitesi Kütüphanesi (İÜK). It was bound, probably around the turn of the twentieth century, together with a copy of Katip Çelebi’s Levāmi‘ al-nūr fi zulumāt-1 Atlās Mīnūr (ca. 1654), a commented translation of G. Mercator’s Atlas Minor, which forms the first part of the present volume. The latter manuscript is datable to the early eighteenth century. A watermark on its last page, “grapes surmounted by crown” is very similar to no.364 (from 1721) in Nikolaev, Watermarks of the Ottoman Empire. The Bahriye manuscript could date either from the late sixteenth or early seventeenth century. The frequent watermark "Anchor in a circle surmounted with a six-armed star" bears the characteristics of the early phase but is not conclusive. Bahriye manuscript is re-paginated to follow the last page of the Atlās Mīnūr, i.e. it starts with fol. 300 and ends with fol. 470. Bound at its beginning are miscellaneous Bahriye maps and text. The short-version text begins on fol.309v. A note on fol.470v gives the number of folios of the original volume as 170. Its maps were all copied by impressing with a pointed tool, and then these blind outlines were inked over. In the case of the Istanbul map, a small piece of paper separated along the impressed line at the left edge of the folio. For the legends of University-123, see Appendix 11.
probably represents the Hagia Sophia, and the other one further west the Süleymaniye. Their drawings are not very characteristic except that the Süleymaniye is depicted on a cliff or hilltop as actually located.

Similarly, the depictions of the two extra-muros mosques on the Galata side are very approximate, and one could only conjecture which mosques they represent. For example, the mosque east of Galata was originally drawn with two minarets and a saddle roof instead of a cupola, a configuration that would not correspond to any mosque built on that shore as far as we know. The other mosque west of Galata and shown as having a cupola and a single minaret may be identified as the Sokollu Mosque at Azapkapi, rather than the Kasım Pasha Mosque, particularly because it is drawn adjacent to the walls of Galata and east of the river (a small detail partly obscured by the shipyards starting right on its western bank and by the Kasım Pasha Bay drawn over it sometime later).

Inside Galata, among the houses, two buildings stand out: in the middle a domed building with a thick and adjacent tower, and further west, next to the walls, a tall building, also with a domical roof. The first one, even though its drawing is not very accurate, may be identified with the Arap Cami, the biggest mosque on the Galata side that was converted from the principal church of the Genoese after the conquest. Its appearance as a topographic detail in this variant might be connected with repair work undertaken between 1595 and 1603.\footnote{The Church of St. Paul of the Dominicans dates from the thirteenth or fourteenth century, has an oblong plan and its belfry is located on its east side. It was converted into a mosque in 1475/8 and belonged to the foundations of Mehmed II. The late-sixteenth-century repair works were done under the reign of Mehmed III, see S. Eyice, "Arap Cami," in \textit{IstA}, 1:294-5. Also see Bildlexikon, 79.}

The other prominent building with a tower-like shape must represent the Galata Tower itself, apparently drawn in conformity with the viewing direction and, consequently, almost indistinguishable.

\footnote{The Church of St. Paul of the Dominicans dates from the thirteenth or fourteenth century, has an oblong plan and its belfry is located on its east side. It was converted into a mosque in 1475/8 and belonged to the foundations of Mehmed II. The late-sixteenth-century repair works were done under the reign of Mehmed III, see S. Eyice, "Arap Cami," in \textit{IstA}, 1:294-5. Also see Bildlexikon, 79.}
Either because the Galata Tower passed unnoticed or was considered a depiction that does not suit its visibility from the sea, a later hand added another Galata Tower that surmounts the walls of Galata as in Topkapı-337 or London-4131. The four cypress trees (one later effaced) west of this drawing and seen from the same direction also seem to be by this hand. 211 However, two more corrections of different character may or may not be done at the same time with these additions: the effacing of one of the two minarets which the eastern extra-muros mosque initially had, and the drawing of a deep inlet in the coastline of the Golden Horn between the shipyards and Galata to indicate the mouth of the Kasım Pasha River, originally not there as in London-4131.

The most significant difference of University-123 from both Topkapı-337 and London-4131 is that all its topographical details are drawn according to a single viewpoint, the northern viewpoint used to depict Istanbul. It is a departure from the typical way of drawing topographical details in nautical cartography, which Bahriye maps follow in the first place, and may have been influenced by contemporary European topographical maps and drawings or by the cartographic illustrations of printed island books. 212 Nevertheless, several place-names appearing upside down in this map reveal that coasts were meant to be looked at from the sea and, hence, the Istanbul map was also turned around like any map used for navigation.

A unique viewpoint for the depiction of topographical details also characterizes the two other variants in the group,

211 These trees probably symbolize the cemetery located northwest of Galata that was densely planted with cypresses.
212 The map of Venice in MS University-123 (fig. 86c) is an adaptation of the Venice map contained in the island book of Benedetto Bordone (fig. 89). The manuscript also has some detail maps bound at its beginning that have small town vignettes accompanied by European place-names and drawn not facing the sea but, as in island books, the presumed user of the book. These detail maps seem to have served as a model for MS University-123's detail maps. See above n. 138 and fig. 91.
Nuruosmaniye-2990 and Kuwait-75 (1688-9). Both maps seem to be relating more directly to University-123 than to London-4131, but in different ways.

Nuruosmaniye-2990 (fig. 62), which dates from 1645, resembles London-4131 in its drawing style and coloration. But except for the depiction of the lighthouse on Cape Kalamış, its topographical details are more similar to those of University-123. Details such as the Topkapı Palace, the Hagia Sophia, the town of Galata and the two extra-muros mosques are depicted almost the same as in University-123.

Nuruosmaniye-2990 also presents new or improved topographical details. However, it is not consistently more precise in depicting buildings and in general remains quite casual. For example, it has a better depiction of Süleymaniye that distinguishes its courtyard and in relation to it, the correct position of minarets that have triple or double balconies. The same attention applies only to the minarets of Hagia Sophia, which are not depicted with double balconies as in University-123 but correctly with single balconies. However,

213 The Istanbul map is published in color (redrawn for reproduction purposes?) as the frontispiece in Lloyd A. Brown, The Story of Maps (Boston: Little, Brown and Co., 1950). The manuscript, which was at the time of this publication in the private collection of Philip Hofer, Boston, USA, was later acquired by the Dar al-Athar, Kuwait. The manuscript, now preserved as LNS. 75 in that museum, and its date are mentioned in Esin Atil, Islamic Art and Patronage: Treasures from Kuwait (New York: Rizzoli, 1990), cat. no. 78.

214 The Istanbul map is on fol.160r of MS 2990 of Nuruosmaniye Kütüphanesi, Istanbul. The manuscript has a colophon on fol. 159v that gives the copyist's name as "Ahmed bin Mustafa, sâkin-i (resident of) Beşiktâş" and the date as AH 1055/AD 1645; for full text of colophon see Appendix 12. The copyist might have been a professional for the handwriting of the text (in talik style) is rather elegant. The map's title and annotations also have the same handwriting. An owner carefully noted his name on the side of the colophon as "Sâhibi Mehmed Paşalı odalalası Ahmed Ağa". The volume was donated by sultan Mahmud I, the original founder of the Nuruosmaniye Library. His seal and a short foundation statement were on fol.2v and now are concealed under the sheet pasted on that side of fol. 2. The shelf number "2990" is visible on fol. 1v. Also on the same page are the seal and foundation statement of sultan Osman III, who completed the construction of the library after Mahmud I’s death in 1754 and appropriated its patronage.
the depictions of other mosques appear as standard as in London-4131 and University-123, and the Sultanahmet Mosque (completed in 1619) remains wanting.

On the Galata side, the Galata Tower is missing, either because it was overlooked — if based on University-123 — or forgotten. But the bay at Kasımpaşa is there, drawn exactly as the correction in University-123, together with the residential district and the shipyards properly located and distinguished. In addition, a new detail, the town of Eyüp and its mosque are squeezed in the place left between the western extremity of the Golden Horn and the edge of map.

The presence of these new details of Kasımpaşa and Eyüp in Nuruosmaniye-2990 also correspond to an increased interest in depicting the Golden Horn as an urban area, an interest that is also reflected in the names of several city gates noted only in that area of the map. The names of the gates, however, might have been added to this map by an owner of the volume for, as all the other place-names in black ink, they clearly differ from the original inscriptions on the map. The same person might also have drawn next to the southernmost promontory on the Asian coast (i.e. Point Dragos) a lighthouse and a "garden" projecting to the sea, which he identified as the "Fenar Bağçesi", apparently because he did not recognize the light house and the garden pavilions already represented on the proper Cape Kalamış, as in London-4131.

215 These gates are, from east to west, Yenikapu, Bâb-ı Fenar, Bâb-ı Balat, Bâb-ı Ayyvansaray. These gates were also locations of boat landings for peremes, hence their names also give more substance to the representation of the boat traffic on the Golden Horn.

216 The original place-names were written in red ink, like the title which appears in a box in the upper right corner, and identify the islands, the Kızkuleşı, and the residential districts of Beşiktas and Kadıköy. Their handwriting unmistakably matches the handwriting of the Bahriye text and of annotations found on other maps of the manuscript. For a complete transcription of the inscriptions on Nuruosmaniye-2990, see Appendix 12. The handwriting of place-names in black ink have a resemblance with that of the ownership note appearing next to the colophon on fol. 159v.

217 The place-name "Kadıköy" written next to the proper detail of Cape Kalamış in red ink by the maker of the map, might also have obscured the
Among the added place-names there is also one that identifies a topographic detail existing in all the variants of this group, that is the eastern extra-muros mosque on the Galata side. It is here annotated "Tobhâne, Camî'-i Mehmed Aga" (Tophane, the Mosque of Mehmed Aga). This identification is compatible with a mosque more or less contemporary with Nuruosmaniye-2990, which was, however, unquestionably less significant than the other mosques in that area. Hence, this particular identification may not reveal which mosque was

identity of the lighthouse and the garden pavilion depicted there. The maker of Nuruosmaniye-2990, if he relied on London-4131, was possibly misled himself by the already erroneous identification "Kalamış Burnu" given to the southernmost land projection on London-4131. He did not copy that place-name for some reason but rather shifted the place-name "Kadıköy", which occurs a little further north in London-4131, next to the detail of Cape Kalamış, which had been left unidentified in the model. 218 No mosque attributable to any Mehmed Aga exists today in the Tophane or Fındıklı districts but the identification given on this map is a plausible reference to a mosque built not long before the copy date of MS Nuruosmaniye-2990 and which is listed in the nineteenth-century source Hadika, 2:69, as "Câmi'-i Rast Mehmed Aga kurb-i Tophane". Its builder, who died in 1630, was Sipahiğâde Mehmed Ağa, a renowned man of his time. The mosque is qualified in Hadika as fevkânî (raised, with an upper floor) and had some dependencies, which were built after Mehmed Ağa's death by his sister. Also Eremya Kömürçüyan mentions the Mehmed Ağa Mosque at Sâlpazari, near Tophane, noting that gave its name to the neighborhood around it, in İstanbul Tarihi: XVII. Asırda İstanbul (ca. 1680), trans. and ed. by H.D. Andreasyan, rev. by K. Pamukcuıyan (İstanbul: Eren Yayınları, 1988), 39; (hereafter cited as İstanbul Tarihi). Also the eighteenth-century author Sarkis Sarraf-Hovhannesyan locates this mosque at Sâlpazari, which had by then become the drill-ground of the artillerymen, in Payitaht İstanbul'un Tarihçesi (1800), trans. by E. Hançer (İstanbul: Tarih Vakfı Yurt Yay., 1996), 43; (hereafter cited as Payitaht). Mehmed Ağa Mosque is also mentioned by Evliya Çelebi in Seyahatname, 188, among the mosques of the Tophane district and as distinct from the Mosque of Molla Çelebi (Molla Çelebi being the surname of Vüsûli Mehmed Efendi, the kâdi of İstanbul) built ca. 1560. Evliya noted both mosques, one after the other, as being in the Fındıklı area and "at the waterfront" (leb-i deryada). Moreover, he specified that the first was a "low mosque" (tahtanj cami') [i.e. either not raised on a substructure or not a tall building], while the second had a high dome (kubbe-i 'âliî). He also remarks that the steep stairs leading to the Cihangir Mosque on the cliff started right behind the Mehmed Ağa Mosque. This remark locates the mosque just to the east of modern warehouses at Sâlpazari. The mosque is already missing in a Bostancıbaşı register from ca. 1814, see R. E. Koçu, "Bostancıbaşi Defterleri," İstanbul Enstitüsü Mecmuası, 4 (1958):67-8.
always represented on the same spot in each variant. Yet it is interesting in suggesting that users of manuscripts, and conceivably the copyists or makers of maps too, associated unidentified topographical details with what was more important or recent in their own time, or perhaps presented some personal interest.

The latest variant of the group, Kuwait-75 dates from 1688-9 (fig. 63).219 It is a variant that stands out in the group with its idiosyncratic drawing style. Its depiction of topographical details is somewhat stiff compared to other variants but also curiously ornate, as is particularly evident in the different renderings of mosque cupolas and windows. Its style cannot be associated with any particular drawing tradition, and appears to be a mixture of different influences.220 Yet with regard to topographical details, Kuwait-75 closely replicates University-123.

On the Istanbul Peninsula, the depictions of the Topkapı Palace, the Hagia Sophia and Süleymaniye are strikingly similar to the respective details of University-123, moreover all the other mosques correspond in number and location. The only new detail is a spiral tower on the Marmara side of the Topkapı Palace, which because of its location, recalls the lighthouse near Ahırkapı.221

219 My discussion of this variant is based on a reproduction published, as the frontispiece, in Lloyd A. Brown, The Story of Maps (Boston: Little, Brown and Co., 1950). At the time of that publication, the manuscript was in the private collection of Philip Hofer, Boston, and was subsequently acquired for Dar al-Athar, Kuwait. The manuscript, preserved as LNS. 75 in that museum, is briefly commented on in E. Atil, Islamic Art and Patronage: Treasures from Kuwait (New York: Rizzoli, 1990), under cat. no. 78. The date of the manuscript is given, ibid., as 1688-9.

220 While enhancing the coastlines and islands as well as the base lines of details depicted in elevation with a color wash is typical of nautical cartography, the cross-hatching of saddle-roofs and dotting applied to certain sites suggests an inspiration perhaps taken from engraved prints. The use of shading is also particular to this variant but it was not unusual in town vignettes of nautical charts especially from sixteenth and seventeenth centuries.

221 The only lighthouse on the Marmara coast of Istanbul is the one at Ahırkapı, which historical sources mention as having been first built.
On the Galata side, the relation between the topographical details of the two variants is more intricate because not all the corrections and additions done to University-123 are incorporated into Kuwait-75. The two extra-muros mosques, for example, are very similar, and notably, the eastern one has two minarets as in University-123 prior to the correction. The coastline in the Kasım Paşa area also corresponds to the uncorrected state of University-123. The depiction of the shipyards, too, although slightly more elaborate, is very similar. On the other hand, two identified buildings, "divanhâne" (assembly hall) at the western end of the shipyards, and the "mevlevihâne" (mevlevi convent) north of Galata, are new details. But neither building was a recent construction when Kuwait-75 was drawn, and the depictions appear to be more fanciful than representational. In fact, the depiction of the Mevlevi convent here seems to complement an during the short reign of Osman III (1754-7), see Necdet Sakaoğlu, "III. Osman" in İstA, 6:157. This date, however, is much later than the date of MS Kuwait-75.

222 The fact that the corrected coastline was already present in Nuruosmaniye-2990 dated 1645, somewhat complicates its explanation. Two possibilities come to mind: first, that the correction was not made before 1688-9 when Kuwait-75 imitated University-123, and the maker of Nuruosmaniye-2990 had relied either on another variant in which that detail occurred or introduced it himself; secondly, the correction was already made but it was ignored as it partly conflicted with the detail of the shipyards that is drawn as in University-123.

223 For a complete transcription of writings in Kuwait-75, see Appendix 13. "Divanhâne" corresponded to the official seat of the admiral of the fleet (Kapudanpaşa) at the naval shipyards. With respect to its location here in the western section of the shipyards, it rather represents the "new" divanhâne. The "old" divanhâne, clearly depicted in variants of another subgroup, was located further east, in the section of the shipyards that dated back to the fifteenth century. The two buildings are hardly distinguished in modern sources, and their construction dates are not certain. For a discussion of their mention in some historical sources, see further below n. 277.

224 This convent of the Mevlevi dervishes is located not far from the Galata Tower. It was founded by İskender Pasha in 1491 during the reign of Bayezid II (1481-1512), see Can Kerametli, Galata Mevlevihanesi (İstanbul: TTOK, 1977), 17; also see Ekrem İğın, "Mevlevilik" in İstA, 5: 424.
inscription that already noted in University-123, at the same spot, the presence of a "mevlevihâne".

The depiction of the town of Galata itself, too, is derived from University-123. It is only modified to have a rectangular layout, apparently for stylistic reasons. The Galata Tower, shown among other intra-muros buildings is somewhat more easily recognizable than in University-123 due to its situation, but the two other tower-like buildings to its west are fanciful additions.

On the Asian side, two clusters of buildings and a group of cypress trees give the impression that Kuwait-75 presents more topographical detail in that part of the map than the other variants belonging to this subgroup. The buildings facing Kizkulesi stand for the town of Üsküdar and, in fact, are a large-scale version of a detail that exists in all the other variants. The other group of buildings do not have a precedent and possibly represent the town of Kadıköy. All these details on the Asian side, as well as that of "mevlevihâne", do not really serve as topographic depictions but rather seem to fill the empty areas of the map. Their exaggerated sizes, too, appear to serve the same purpose rather than conveying any kind of emphasis. Hence, they may be considered elements matching the overall decorative character of this late variant.

If we leave aside Kuwait-75, the other variants form a consistent group that displays the characteristics of Bahriye maps in general, with recognizable features derived from nautical cartography. In conformity with that tradition, these variants do not present a particularly elaborate topographical content. Yet despite their limitations as topographical maps,

225 The legend (or perhaps two legends superimposed?) next to these buildings cannot be deciphered. This depiction might also stand for the Üsküdar Garden and its buildings. On the other hand, the cypresses most probably represent the Karacaahmet cemetery situated between the towns of Üsküdar and Kadıköy and densely planted with these trees. Why these two details are drawn with respect to an independent viewing direction is difficult to explain, especially since the detail of Üsküdar on the same coast conforms to the general viewing direction.

220
London-4131, University-123 and Nuruosmaniye-2990 succeed in depicting the northern view of Istanbul as seen on the Golden Horn and do not fail to distinguish and emphasize its principal elements, the Topkapı Palace, the Hagia Sophia and the Süleymaniye. They also display a particular attention to the Golden Horn, which is evident in a gradual addition of topographical details in that area. This focus on the Golden Horn might also explain the striking absence of the Sultanahmet Mosque (1619) in these maps of the early to mid-seventeenth century, a very visible building but not from the Golden Horn.

### 2.3.2. Nuruosmaniye-2997 and Yenicami-790: The Topographical Elaboration of the Istanbul Map

In comparison to the subgroup of variants discussed above, Istanbul and its three towns, Galata, Üsküdar and Eyüp, are depicted in a detailed way in another variant subgroup from the early seventeenth century. Two Istanbul maps, Nuruosmaniye-2997 contained in a manuscript dated 1629, and Yenicami-790 in an undated manuscript (figs. 64 and 65). The two maps cannot be far apart in date, for they appear to be the work of the same person or of the same workshop. Their coastlines and

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226 This Istanbul map is on fol. 203v of MS 2997 of Nuruosmaniye Kütüphanesi (NOK), Istanbul. On the same page as the map are also the last three lines of the chapter concerning the Red Islands followed by the colophon giving the completion date of copying as "sene bin otuz sekiz, evaşit-i şehir-i Zilhicce, fi yevm-i Düşenbe" (the year of AH 1038, between the 11th and 20th of the month of Zilhicce, on Monday), which corresponds to [AD] August 6th, 1629. The copyist also gives his name as Mustafa son of Mehmed el-Cündi. For a transcription of the colophon and the legends of this map, see Appendix 14; and

227 This variant is on fol. 201v of MS Yenicami-790 of Süleymaniye Kütüphanesi, Istanbul. Until the 1910s, it was in the library attached to Yeni Valide Mosque (the Yeni Cami) at Eminönü and founded by Ahmed III in 1724-5. The map-page bears the two last lines of the Red Islands chapter but no colophon. In Soucek and Goodrich, "List of MSS," 290, under no.15, a copy date for this manuscript is given as AH 959/AD 1551, which may be traced back to the card catalogue of the Süleymaniye Library. However, I have not found any date noted in this manuscript. For the legends of Yenicami-790, see Appendix 15.

228 The close similarity of these Istanbul maps well reflects the relation between the manuscripts housing them. Both manuscripts are copies of the short-version Bahrîye. Their present bindings differ but this is probably due to a rebinding of MS Nuruosmaniye-2997 when it was designated to
topographical details are nearly identical. They are only colored somewhat differently.\textsuperscript{229} With their elaborate and finished look, Nuruosmaniye-2997 and Yenicami-790 appear quite distanced from Bologna-3613, and no particular feature in these two maps betrays a direct link with that early map. Yet an overall similarity to Bologna-3613 (fig. 55) is noticeable in their layout and coastlines, particularly in the depiction of the islands and the Asian coastline facing them,\textsuperscript{230} in the relative narrowness of the Bosphorus and the Golden Horn that meet at a right angle, and in the coastline of Galata, whose only accentuated feature is the bay at Kasımpaşa. The Istanbul Peninsula, although drawn larger and with its tip projecting toward the Bosphorus, also has the simple, triangular form as in Bologna-3613.

enter the Nuruosmaniye Library collection in 1750s. MS Yenicami-790 seems to have preserved its original binding. The pages of Nuruosmaniye-2997 were apparently trimmed during this rebinding as one can easily notice at the right hand edge of the Istanbul map. The volumes now measure N: 287 x 199 mm and Yc: 298 x 200 mm, but must originally have had very similar dimensions. The number of pages (N: 204, Yc: 201) and the number of maps (N: 128, Yc: 124) are also close, and the text pages have the same number of lines (17 lines). For both volumes, paper of Venetian origin, with tre lune-watermark (three horizontally lined-up crescents) was used. However, the countermarks consisting of pairs of letters vary slightly. MS Nuruosmaniye-2997 also has some folios with other watermarks such as "single-armed anchor in a circle surmounted by a clover" and "crown surmounted by a star and a crescent". The comparison of the tre lune watermarks of the undated MS Yenicami-790 with samples in Velkov and Andreev, Filigranes dans les documents ottomans, was not quite conclusive; some watermarks from this catalog match the dimensions of crescents and their positions with respect to chain lines but not their contours. These samples and the similar Yenicami-watermarks are the following: no. 15 (1628)/fol. 43, no.17 (1629)/fol. 113, no. 370 (1694)/fol.201.

\textsuperscript{229} The most remarkable difference in coloration is that, on Yenicami-790, the body of water is entirely painted with a bluish pigment, which has faded (?) irregularly; on Nuruosmaniye-2997 the same pigment seems to have been used to paint a band all along the coastlines, and on both maps also to indicate the lead-covered roofs, mainly cupolas. Otherwise, the same pigments were used in both maps only with minor differences. Gilding is used in both maps for finials on cupolas and minarets, for roof cornices and minaret balconies; in Nuruosmaniye-2997 also the compass circle of the wind rose is gilded.

\textsuperscript{230} The promontory corresponding to Cape Kalamış is the only element that is shaped as in Bologna-3613 even though its geographic position and pointing direction are different, and perhaps corrected.
It is possible that the cartographic layout presented in Nuruosmaniye-2997 and Yenicami-790 relates to Bologna-3613 through an unknown intermediary, perhaps a variant from the late sixteenth century, in which the mentioned modifications of coastlines were already introduced. The sure and at the same time stylized drawing of coastlines in Nuruosmaniye-2997 and Yenicami-790 also suggests that they were copied from another map.\(^{231}\)

The topographic contents of the two maps are drawn so similarly that the few differences that can be found must be incidental rather than due to a different hand. For the same reason, it is difficult to determine on the basis of these differences which map is the earlier one. In both variants, Istanbul, Galata and Üsküdar are filled with red-roofed houses, which are drawn slightly smaller in Nuruosmaniye-2997, and amidst them appear several mosques and other prominent buildings that are distinguished by their lead-covered cupolas or roofs neatly painted in blue. In Istanbul, only two mosques, the Süleymaniye and the Hagia Sophia, are differentiated from the rest, and more clearly so in Yenicami-790. Especially in Yenicami-790, the Süleymaniye appears as the most imposing mosque of the city and is shown in a remarkably precise side elevation with its four minarets correctly situated and distinguished by triple and double balconies. The Hagia Sopias, shown between the Topkapı Palace and the Süleymaniye Mosque, stands out as the second biggest mosque. Even though not very characteristic in either map, its depiction remarkably has three minarets, a configuration that characterized the building until 1574-5.\(^{232}\) A small and unexpected detail between these

\(^{231}\) In both maps the coastlines, except those of the islands, are traced as two parallel lines and the space in-between was then filled in red. These smoothly undulating coastlines appear to be a stylized version of typical nautical chart coastlines.

\(^{232}\) The minaret drawn in the middle brings to mind the wooden minaret to the right of the western semidome known to have existed until the two identical minarets, designed by Sinan were built to flank the northwest facade in 1574-75. It is mentioned in an imperial firman dated AH
two mosques is also present in both maps, and shows the Egyptian obelisk. Another small detail, the Shore Kiosk is also shown in both maps on the narrow strip of land below the Topkapı Palace. In Yenicami-790, the kiosk's roof is architecturally more complete (fig. 65a).

Apart from these negligible differences of drawing, Nuruosmaniye-2997 has four buildings that are wanting in Yenicami-790.

Two of these buildings are shown on the Asian side, opposite Kız Kulesi (fig. 64a). Although not identified, the mosque cannot be confused with any other and represents the mosque of Şemsi Ahmed Pasha completed in 1580. The long building with a red roof next to the mosque might be the residence of Şemsi Ahmed Pasha, known as the "Şemsi Ahmed Paşa Serayı". The third additional detail in Nuruosmaniye-2997 is

Zilhicce 980/ AD April 1573 and concerning an assessment of necessary repairs. A slightly later firman, dating from June of the same year, indicates the location of this minaret as "nim kubbe üzerinde" (upon the semidome), see Ahmed Refik, Onuncu asr-i hicri'de İstanbul hayatı (1495-1591) (1935; Istanbul: Enderun Kitabevi, 1988), 21, 23; for an English paraphrase of the two documents see Necipoğlu, "The Life of an Imperial Monument: Hagia Sophia After Byzantium," 206-7. The investigation of W. Emerson and R. L. van Nice revealed that the south turret on the northwest facade of Hagia Sophia (i.e. to the right hand side of the western semidome when looking at it from the north) served as base to this minaret, see Emerson and Van Nice, "Hagia Sophia and the First Minaret Erected After the Conquest of Constantinople": 36-7 and fig. 1; for a discussion of Lorichs's panorama (1559) and of the "Freshfield Sketch" (1573-4) as visual documents for that minaret, see ibid., 37-9. Its depiction in Nuruosmaniye-2997 is very rudimentary, but in Yenicami-790 the kiosk's cupola and projecting eaves as well as its gilded finial and two chimneys are shown (fig. 65a). This particular roof form of the kiosk corresponds to its final stage when it was completely rebuilt in 1591-3 (fig. 99). See Necipoğlu, Topkapı Palace, 232.

The work of Sinan, the mosque incorporated on its waterfront the tomb of Şemsi Ahmed Pasha (died 1580) and formed with a madrasa a small complex (fig. 101). After having occupied the posts of beylerbeysi (governor general) of Anatolia and then of Rumelia, Şemsi Ahmed Pasha became a vizier as well as musahib (gentleman-in waiting) of Selim II and then of Murad III.

The residence of Şemsi Ahmed Pasha is identified that way in later variants Paris-956 (fig. 66d) and followers; see fig. b. Pasha's
the Eyüp Sultan Mosque that was built in the fifteenth century. It is shown outside of the northwest corner of Istanbul where the town of Eyüp is represented as a group of houses, but was possibly complete before the map's edge was trimmed off. The fourth building depicted in the upper east section of the walled town of Galata is also a mosque but cannot be identified with certainty. 237 Yet the absence of these details from Yenicami-790 does not mean the map was dated earlier than Nuruosmaniye-2997. The graphic similarity of the two maps does not permit to consider 1580, the date of the Şemsi Ahmed Pasha Mosque, missing in Yenicami-790, as a terminus ante quem as it would separate the two maps by fifty years. Furthermore, this missing detail, considered together with the missing Eyüp Sultan Mosque, appears incidental. However, the absence of an important and then recent monument such as the Sultan Ahmed Mosque both in Nuruosmaniye-2997 and Yenicami-790 is intriguing. Even though this absence might have been incidental too, it is tempting to consider it together with the depiction of Hagia Sophia in its three-minaret phase and think that Nuruosmaniye-2997 and residence must have preceded the small mosque complex that was completed the year of his death. İsmail H. Konyalı noted, without mentioning his sources, that Şemsi Ahmed Pasha had made it a gift to Selim II, in Konyalı, Abideleleri ve kitabeleriyle Üsküdar Tarihi (İstanbul: Türkiye Yegilay Cemiyeti, 1976), 1:292; (hereafter cited as Üsküdar Tarihi). The building must have been worthy of the sultan even for its site alone that afforded an exceptional view. It was rebuilt for Ahmed III by his grandvizier Nevşehirli İbrahim Pasha, possibly in 1709-10 when he constructed a new water system in Üsküdar, and appears on an eighteenth-century water supply map. It was rebuilt a second time in 1816 and seems to have disappeared before 1865, see H. F. Yılmaz, "Şerefâbâd Kasrı," in İstA, 7:163. 237 There were very few mosque inside Galata, especially in its northeastern section. If we interpret the long, saddle-roofed building shown in both maps below the Galata Tower as a depiction of the palazzo comunale di Pera (the former Genese town hall) the only mosque in the area to its east and in the vicinity of the tower was the Bereketzade Mosque, built by Hadji Ali bin Hasan, a warden of the Galata Tower during the reign of Mehmed II. The mosque was torn down in 1948. See Ayvansarayî, Hadika, 2, 35; T. Öz, İstanbul Camileri, 2, 13. For its location and that of the palazzo comunale, see the map of Galata in Bildlexikon, 321.
Yenicami-790 largely relied on an earlier variant that predated not only the completion of the Sultan Ahmet Mosque in 1617 but also that of the identical minarets of the Hagia Sophia in 1574-5.\textsuperscript{238} This conjecture also appears plausible since both maps display a particular attention to view-commanding buildings and sites, especially of royal character and depict them as conspicuous topographical details.

In these two maps, not only the major urban settlements Istanbul, Galata and Üsküdar are depicted as facing different directions, but also some sites within them are similarly differentiated. Particularly noticeable are the Topkapı Palace and the Yedikule Fortress, whose buildings are oriented differently than the rest of the buildings on the Istanbul Peninsula.

The orientation of the Yedikule Fortress toward the Marmara Sea is not surprising since the fortress is best visible from that sea. On the other hand, the orientation of the Topkapı Palace is not so obvious because of its site at the tip of the Istanbul Peninsula, it can be seen from many different directions. Here, however, its depicted buildings are clearly oriented west. This depiction highlights the residential wing of the palace, the Harem, which indeed is oriented as shown and enjoys a particularly deep and rich vista along the Golden Horn, also encompassing Istanbul’s own monumental cityscape. Hence, the depiction of the palace here not only emphasizes its Harem wing but also the view it affords, more precisely the view that distinguishes it the most.

The depiction of the Topkapı Palace suggests that the orientation of buildings in this cartographic representation not only depends from which direction they are visible but also relates to the view available from their sites. Hence, it

\textsuperscript{238} The addition of the Şemsi Ahmed Pasha Mosque to Nuruosmaniye-2997 might then be interpreted as a partial updating.
allows us to consider other topographical details whose orientations are not so conspicuously differentiated in a reciprocal relation of "visibility and view".

The walled town of Galata, for instance, enjoys the view of Istanbul and vice versa, while its suburb on the Bosphorus faces the town of Üsküdar on the Asian side. The latter town and the coast stretching south toward Cape Kalamış are in their turn characterized by a view encompassing the Istanbul Peninsula, the Golden Horn and Galata.

The emphasis on viewing and being visible seems to underlie the drawings of some topographical details that are particularly prominent in these two maps. The depictions of the Mihrimah Complex and the Üsküdar Garden on the Asian side and the Tersane Garden on the Galata side are not only elaborately drawn but are also characterized by a conspicuous frontality (figs. 64a and 65b). As such they command the view of the respective coasts but also appear as fully exploiting the view their respective sites afford.

The Mihrimah Complex (fig. 64a), depicted amidst the town of Üsküdar, comprises the mosque and the madrasa to its left, as well as two similarly long buildings on the coast.

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239 Note also that the hills behind Galata and its suburb of Tophane underlie the different orientations of these two settlements.

240 These buildings must be the two caravanserais, very clearly described by Evliya Çelebi as "two fortress-like buildings on the waterfront and on the two sides of the mosque that are entirely covered with lead [i.e. their roofs]" (cami'in iki tarafında, leb-i deryada, gûyâ birer kal'adîr, serâpâ kurgum ile mestürdur), in Seyahatname, 203. "Two waterfront caravanserais" are also mentioned by the seventeenth-century historian İbrahim Peçevi, Peçevi Tarihi, ed. by M. Uraz (İstanbul: Neşriyat Yurdu, 1968), 228. Today these buildings do not exist, and the original configuration of the complex remains conjectural. Lists of Sinan's buildings from the late sixteenth century only mention an imaret other than the mosque and the medrese. The waqfiyya prepared in 957 (1550), however, seems to distinguish to accommodation facilities; it mentions "a guesthouse (misafirhane), stables, a storeroom (kiler), a storehouse (anbar) and a khan (han)," quoted in Konyali, Üsküdar Tarihi, 2:230-1. Evliya, ibid., mentions separately the imaret, serving as a soupkitchen for the caravanserais, and the medrese. For the hypothetical places of complex units that have not survived, see Kuran, Sinan, 58-9; and Doğan Kuban, "Mihrimah Sultan Külliyesi," İstA, 5:456-7.
Characterized by their blue, lead roofs, the buildings of Mihrimah Complex not only constitute the center of the town but also its coastal front visible from the Bosphorus and the opposite shore.241

Further south, the coast facing the Topkapı Palace is similarly dominated by the gardens and the royal residence that were simply referred to as the Üsküdar Garden (Üsküdar Bağçesi). The residential building, shown here on a background formed by cypress trees, comprise a prominent pavilion in the middle and several other domed units that seem to be unified in a long-stretched facade parallel to the waterfront to benefit from the view. This depiction of the palace buildings appears somewhat summary yet reflects the same overall configuration that is suggested also in some Ottoman and European representations.242

The Fener Garden located on Cape Kalamış is also present on Nuruosmaniye-2990 and Yenicami-790 as a topographical detail.243 Even though it does not appear distinct from the

241 The legend noted in red ink, in Nuruosmaniye-2997, below the mosque erroneously identifying it as "eski valide [mosque]" is a later addition as the doors drawn on the two caravanserais, the second smaller tower of the Kizkulesi and its legend.

242 For late-sixteenth-century depictions, see the Sehingehname map of Istanbul (fig. 34b), the panoramic view preserved in Vienna (fig. 97) and the map of Bosphorus in an anonymous costume book (fig. 98), also see n. 376. Various documents indicate that the Üsküdar Garden gained importance during the reign of Süleyman I in the 1550s, and some residential buildings were built there by architect Sinan, see Necipoğlu, Topkapı Palace, 165. In the spring of 1573, the Frenchman Philippe du Fresne-Canaye observed that Selim II went to this palace daily, see Le voyage du levant de Philippe du Fresne-Canaye (1573), ed. by M. H. Hauser (Paris: E. Leroux, 1897), 90. Murad III’s frequent stays there are mentioned in Necipoğlu, op. cit. Buildings in this garden were restored, rebuilt and added at different times until the end of the eighteenth century, see W. Müller-Wiener, "Das Kavak Sarayi—Ein verlorenes Baudenkmal Istanbuls," Istanbuler Mitteilungen 38 (1988): 363-76; (hereafter cited as "Kavak Sarayı"). For a discussion of Nuruosmaniye-2990/Yenicami-790 depiction in comparison to depictions in other Istanbul map variants and European and Ottoman depictions, see below p. 280-1.

243 The lighthouse itself is remarkably similar to its depiction in London-4131. In fact, notwithstanding their different Istanbul maps, MS London-4131 and Nuruosmaniye-2997 might have been prepared by the same person or in the same workshop for there is an obvious similarity between
Üsküdar Garden, the site is identified as "Fenerlik" (site of the lighthouse), and both the lighthouse at the tip of the cape and a longitudinal building facing Istanbul, which must have corresponded to the main pavilion, are clearly depicted (fig. 64a). 244

The Tersane Garden, another prominent garden with a royal residential complex, is depicted to the west of the shipyards at Kasımpaşa after which it was named (fig. 65b). 245 The site of the Tersane garden is a promontory between the Kasımpaşa Bay and Hasköy and afforded a good view of Eyüp as well as of the

their other maps. Especially an ornamental allover pattern of tiny tulips covering the land surface of some islands in maps of both manuscripts is quite unusual and clearly indicates a kinship between these manuscripts. It can be seen, e.g. in maps on fols. 56r and 140v (published by Soucek in "Islamic Charting" as figs. 14.14 and 14.15) of MS London-4131 and in maps on fols. 51v and 107v of MS Nuruosmaniye 2997.

244 The depiction of this pavilion somewhat varies in Nuruosmaniye-2997 and Yenicami-790. Although in both details the building is shown in an oblong shape, the elevation is fenestrated in the first and arcaded in the second. The Fener Garden is counted among works of Sinan in the late-sixteenth-century lists of his buildings. It is known that an important pavilion raised on a platform occupied a central location on the cape but the overall arrangement of the site and its buildings remain uncertain. For some hypotheses and a reconstruction of the central pavilion after some historical documents and excavation findings, see S. H. Eldem, Köşkler ve kasırlar - A Survey of Turkish Kiosks and Pavilions, 2 vols. (İstanbul: M.E.B. Basimevi, 1974), 67-87; (hereafter cited as Turkish Kiosks).

245 As with the Üsküdar Garden and its royal pavilions, the beginnings of the residential buildings in the Tersane Garden are not well known. Evliya Çelebi traces back the gardens to the Byzantine period and attributes the first Ottoman buildings and the planting of cypress trees in a grid pattern to Mehmed the Conqueror, to the second half of the fifteenth century. Naima notes the construction of a "lofty pavilion" (kâsr-ı 'ali) in 1613-4 by Ahmed I, and Evliya mentions the construction of a waterfront pavilion by İbrahim I, see Hâluk Y. Şehsuvaroğlu, "Aynalı Kavak Sarayı yahut Tersane Sarayı," in İST/A/KOCU, 3:1610-5. A waterfront kiosk with a hipped roof, a garden wall and cypress trees are depicted in the Istanbul map in Menâzil, to the west of the shipyards (fig. 8c); they are also visible in the Hünernâme map and the map of the Kırkçeşme water supply system in Tâhir-i Sultân Süleyman (fig. 33). This depiction also corresponds to what is represented on the Vienna panorama (fig. 32). When the neighboring shipyards were extended westward in 1590, a part of the garden was given up, see W. Müller-Wiener, "Zur Geschichte des Tersâne-i Âmire in Istanbul," in Türkische Miszellen: Robert Anhegger Festschrift/Armağan/Mêlanges, ed. by J.-L. Bacqué-Grannmont et al. (İstanbul: Editions Divit Press 1987), 256; (hereafter cited as "Tersâne-i Âmire").
lower Golden Horn and the Seraglio Point. The detail here primarily faces Eyüp and depicts the waterfront buildings that were interconnected by a wall following the coastline: a domed, central pavilion with wide eaves, a smaller pavilion also covered with a dome, and three others with pointed roofs. The detail does not fail to include the cypress trees that particularly characterized this garden and its view.

With the addition of the Üsküdar and Tersane Gardens, the topographic content of the Istanbul map becomes considerably more elaborate. More importantly, in Nuruosmaniye-2997 and Yenicami-790, the two royal gardens and the pavilions they comprise emerge as prominent elements of Istanbul's surrounding landscape, particularly as compositions of built and natural forms. Their depictions pay equal attention to the rendering of cupolas, conical roofs, chimneys, and finials as well as cypress trees that are shown either as alternating with or as providing a background to these architectural elements.

With Nuruosmaniye-2997 and Yenicami-790, the Istanbul map included in Bahriye manuscripts attains a genuine topographical character. The well-balanced distribution of topographical depictions in the mapped area and their meticulous drawing betrays a more formal and professional attitude. Remarkably, this attitude involves conventions deriving from the miniature painting as well as from the nautical cartography. The most

246 The residential facilities in this garden formed another, smaller summer palace. Historical sources suggest that the main residential buildings were away from the waterfront. Yet it seems that from the beginning on, a waterfront pavilion occupied the eastward point of the promontory, which offered the best view, and was rebuilt several times. In later pictorial sources, from the eighteenth and nineteenth centuries, a principal waterfront pavilion appears to occupy the same spot. For an approximate reconstruction of its architecture in the eighteenth century and a discussion of historical sources, see Eldem, Turkish Kiosks, 1:250-84.

247 The stylized coastline, the hills and particularly the extension of the map drawing beyond the frame are features that might be associated with the miniature painting, while the wind rose and the islands picked out in red clearly originate in nautical cartography. It is more difficult to associate the drawings of buildings with one of these traditions exclusively, yet the ornate character of some buildings,
significant aspect of this topographic composition, that is the differentiation of viewing directions as a representational device, seems also to originate in this fusion of pictorial traditions. As a result, the viewpoints that were significant in the perception of Istanbul and its environs, especially the reciprocity of viewing between different parts of the city, becomes evident, much more so than in earlier maps of the Bahriye-group we have already examined.


This subgroup formed by five variants comprises all the known Istanbul maps included in copies of the long-version Bahriye plus Bologna-3609, which is part of a volume that consists only of the maps of the long version (figs. 66-70). The manuscripts are all very meticulously and elegantly produced volumes except MS Topkapı-1633. They were all prepared at unknown dates, except for MS Paris-956 and MS Bologna-3609 that contain some evidence indicating a date around the mid-seventeenth century, a date that is also consistent with the cartographic evidence provided by the Istanbul maps contained in them. The derivation links between these maps suggest that the earliest variants of the group are Paris-956 and Bologna-3609.

The variants in this subgroup are characterized by a rich topographic content with many new details, most of which are identified with legends. They are most carefully depicted especially of Süleymaniye in Yenicami-790, is more reminiscent of a miniature painter's approach.

248 In addition to maps, MS Bologna-3609 has a preface and a table of contents, i.e. localities covered by the maps. This manuscript has been published in a black-and-white facsimile edition and with an introductory essay by Hans Joachim Kissling, see Der See-Atlas des Sejjid Nūh. 1. Teil: Einleitung und Karten (Munich: R. Trofenik, 1966) Kissling also planned a second part in which he wanted to examine the annotations on the maps but it remained unrealized.

249 This group of variants offers an interesting source for Istanbul's toponomy, as one can observe how certain place-names got transformed in
and identified in Paris-956 (fig. 66) and offer reliable evidence to date this variant. The variants Köprülü-171, Topkapı-1663 and Baltimore-658 stem from Paris-956 as revealed by their topographic and toponymic contents. The relation of Bologna-3609 to Paris-956, however, is less obvious despite an overall similarity. This map lacks some of the new topographic details appearing in Paris-956 while having some others in common with it. Yet Bologna-3609 does not have a chronologically consistent topographic content. For that reason I shall start with Paris-956, which has a carefully and consistently depicted topographical content, and then compare it with Bologna-3609 and the other variants.

Paris-956 appears to be the earliest instance of an Istanbul map occurring in a long-version Bahriye. The manuscript containing this variant resembles in many respects MS Topkapı H.642 and MS Ayasofya 2612.250 As in them, the same three maps concerning the Marmara Sea come after the formal ending of the text.251 The Istanbul map immediately follows them and occupies the last page of the volume.252
Up until now, MS Paris-956 has been held to date from the second half of the sixteenth century. However, the watermark evidence and a concordant ownership note suggest a later date, around the mid-seventeenth century but not later than 1651. Such a date is also consistent with several topographic details on this Istanbul map. The ownership note is also significant in that it reveals that this handsome volume was

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*Catalogue des manuscrits turcs de la Bibliothèque Nationale* [1933], 2:108.


254 The frequent watermark "three intersecting crescents", also to be found on the folio bearing the Istanbul map, occurs in slightly different forms where the degree of overlapping varies. The only published example of this watermark known to me is no.119 in the catalogue prepared by Velkov and Andreev, *Filigranes dans les documents ottomans*, and dates from 1646 (A similar design, but much smaller in size and accompanied by the name of a paper maker, "B. Perret" underneath it, is featured in Briquet's catalogue as no. 5374 and a variation of it with a cross on top, as no. 5375, dating respectively from 1569 and 1571). The other frequent watermark in MS Paris-956 is the "crowned head in a circle", which also has a few variants. One of these is very similar to Heawood no. 2607 (from 1646). This particular watermark design also originates in the second half of the sixteenth century but continued to be used in the seventeenth century, too. The catalogue dates mentioned correspond to the publication dates of printed material or to dates of manuscript documents for which a certain paper was used. Therefore, the actual production date of the paper in question may go somewhat further back, according to V. Nikolaev not more than five years, see *Watermarks of the Medieval Ottoman Documents in Bulgarian Libraries I* (Sofia, 1954), 2.

255 The ownership note, which has not been mentioned anywhere so far, is on fol. 435v. This note appears upside down at the lower left corner of the page, which must have been bound upside down like as the preceding page bearing the Istanbul map. It is written with red ink, with black diacritical signs, and reads: "Sâhibi ve mâlikî Hâcı 'Abdi Kapudân fî 22 şeyr'üs-Safer'ül-muzaffer sene ihâd vü sittin vü el[f] [the letter "f" is blurred] (The owner and possessor [of this book is] Captain Hadji Abdi at the date 22 Safer 1061 [= AD 14 February 1651]). Another ownership note (without (?) a date) is written on fol. 1r: "[-?] fî mülk-i Mahmûd bin Hasan el-Niğî". This note is apparently by the same hand that wrote, with the same red ink the incongruous title: "Portulân-ı Kebir[-i] l'ali [sic] kapudân".
the property of a sea captain. Moreover, the date on which this
captain came to own the manuscript is very close to its likely
production date and, hence, suggests that the copy might have
been prepared for him. On the other hand, dirt and water stains
noticeable throughout the book, as well as various annotations
related to navigation added here and there, on the maps and on
text page margins, indicate that the manuscript was likely used
as a manual on board. The manuscript's practical use might
have ended in the early eighteenth century when it became the
property of Count of Pontchartrain.

The Istanbul map in MS Paris-956 (fig. 66) is a
predominantly topographical map and has smoothened coastlines
yet several features point to its origins in nautical charts,
such as the use of red dots to indicate sandy shallows, and
the writing of legends in an unbroken sequence along the
coastline. It also fits into the cartographic evolution of the
Istanbul map in Bahriye manuscripts since its layout and

256 E.g., the marginal note on fol. 426v reads: "Mezbur adacığa seferdir.
Ve boğazda kulaç 26 adeddir, gaflet olunmaya." (voyage to the aforesaid
island. And [the depth of] the strait is 26 fathoms, do not mistake).
257 See Berthier, Vers l'Orient, 26. Berthier also quotes the French
orientalist Antoine Galland's remark on this manuscript in his diary
entry for 19 March 1711. Galland, who was in Istanbul during 1672-3 and
collected oriental manuscripts himself, had heard about the manuscript
from two persons. He briefly reported that it contained more than 200
maps and that it was dedicated to Sultan Süleyman. See Antoine Galland,
Journal parisien d'Antoine Galland (1708-1715), ed. by H. Omont (Paris,
1919), 97. Louis de Phélypeaux, Comte de Pontchartrain (1643-1727) was
chancelier de France between 1699 and 1714. Since the manuscript is
classified as "supp. turc 956", i.e. "supplément" to the section of
Turkish manuscripts, it must have entered Bibliothèque Nationale around
the turn of the twentieth century (?).
258 On Paris-956, red dots are marked along the Marmara coast to the east
of Fenerbahçe, to the west of Yedikule, between Kizkulesi and the
mainland and at the upper end of the Golden Horn.
259 On nautical charts, the seaside of the coastline was always left bare
in order not to obscure any coastal feature, and the place-names were
written on the landside where no topographic details were depicted. This
convention was not always applied in Bahriye-maps, and the place-names
were varyingly noted on either side of the coastline. Here the convention
is reversed since the landside of the coastline is filled with
topographical details and the legends concerning coastal locations or
buildings are consistently written on the seaside. Remarkably, they make
a full, counterclockwise tour around Istanbul's walls.
representation of urban topography incorporates elements from other variants.

Conceived in the same vertical format and oriented south as well as depicting the Istanbul Peninsula in a compact, triangular shape with a crown-like Yedikule Fortress, Paris-956 relates to all the variants. But its most obvious link is with Millet-1 (fig. 58), which is suggested by the outline of the Istanbul Peninsula and more particularly by a similar inclusion of a larger area outside the landwalls. But the coastlines of Galata and the Asian side, the course of the Bosphorus and the position of the Red Islands are modified in Paris-956 and improved.

Despite its compact appearance, the Golden Horn's northern coastline is well articulated especially in the area of the shipyards (fig. 66a). The continuation of the same coastline towards the Bosphorus and the opposite coast of the Asian side also reflect the actual coastline better than in other variants, even though the Kalamış Bay seems to be obscured by the depiction of the Fener Garden (fig. 66b), and the Marmara coast facing the islands is too inclined eastward. Yet the cartographic representation of the islands is better than we have seen in other variants, for the axis along which they line up is adjusted and almost matches SE-NW.\(^\text{260}\)

Despite the fact that in Paris-956 the urban areas are also filled with standard houses and mosques, several details stand out. The majority of these topographic details relate to legends which seem to be contemporary with the drawing of the map itself.\(^\text{261}\) Remarkably, most of these details are on the coastline or on the periphery of the urban areas and show

\(^{260}\) Also here the islands are shown closer to the city than they are in reality. The Island of Burgaz, due to its central importance, is depicted also here as the biggest island. Its burgaz (castle) and the moles of its harbor are also shown. These moles, present also on all variants of Paris-956, were previously depicted only in Deniz-990 and Millet-1, and hence reveal another direct link to that strain of variants.

\(^{261}\) The handwriting of legends on the Istanbul map as well as on other maps of the manuscript is very similar to that of the text.
buildings or settlements from the late sixteenth century to the mid-seventeenth century, and many of them and their legends occur for the first time in this map.\textsuperscript{262}

Outside the landwalls of Istanbul, other than Eyübb which is fully represented for the first time, two settlements are shown. They are identified with the buildings around which they developed: the settlement on the Marmara shore bears the legend "tabakhâne" (tannery),\textsuperscript{263} and the other settlement further north "mevlevihane" (Mevlevi convent).\textsuperscript{264} On the Galata side, at the two extremities of the urban expansion are depicted "Orta köy" and "Has köy", two other districts in full development. On the Asian side, "Kadî köy" is depicted for the first time as a settlement of some importance and with its unique mosque rather than by only a place-name as it was the case in earlier variants.

The royal gardens, too, feature among the clearly distinguished details of Paris-956; their depictions stand out, more than anything else, with their dense plantations of cypress trees. Among the royal gardens featured, "İskender Paşa bağçası" and "Dolma bağçe" appear for the first time.

The İskender Paşa Garden is indicated only by a legend on the Marmara coast, to the west of the Tabakhane settlement. The Dolma bağçe (literally "the filled garden"), however, appears as a topographical detail on the Bosphorus coast of Galata.\textsuperscript{265}

\textsuperscript{262} For a complete transcription of legends on Paris-956, see Appendix 16.
\textsuperscript{263} The tannery itself dates from the end of the fifteenth century but the nearby site became a flourishing neighborhood by the mid-seventeenth century according to the contemporary author Evliya Çelebi. See \textit{Seyahatname}, 166.
\textsuperscript{264} The convent of the Mevlevis, more precisely the Yenikapı Mevlevihanesi (in reference to the "Yeni Kapı", i.e. the new gate of the landwalls) was founded in 1597. A settlement developed around the convent in the seventeenth century. See E. Işın and B. Tanman, "Yenikapı Mevlevihanesi" in \textit{İSTA}, 7:476, 481. Also see \textit{Seyahatnâme}, 166.
\textsuperscript{265} Dolmabağçe was created around 1613-1619 through the filling of a bay situated between Fındıklı and Beşiktaş and thus extending towards the sea the flat grounds of the valley behind, which were already being used by the sultans for recreational purposes. See \textit{OTDTS}, 1:471. The precise date of filling must be 1614 since the Italian traveller Pietro della Valle, who was then in town, reports on the on-going work, in a letter dated 25
It is depicted as an area densely filled with trees and has a fenestrated wall on the seaside and a hipped-roofed building at the northern end of that wall. The Tersâne Garden on the Golden Horn appears with a somewhat smaller waterfront (fig. 66a). Of its two visible buildings, one is a pavilion right at the water and clearly occupies the most projecting spot of the garden’s coastline. Other areas on the Galata side characterized by cypress trees are not royal gardens but must have been noted as similar elements of landscape.

On the Asian coast, the Fener and Üsküdar Gardens, too, are presented primarily as dense groves (fig. 66b). This depiction seems to relate to the aspects that these gardens acquired in the seventeenth century with their fully grown trees. In the depiction of the Fener Garden no building is visible except the lighthouse and the enclosure wall. In the depiction of the Üsküdar Garden the cypress trees seem to hide...
all but two buildings, a domed pavilion right at the waterfront and another slightly behind, with a hipped roof.\textsuperscript{270}

Besides trees, the site of the garden seems to be characterized by its site elevated above the sea level. The detail of Paris-956 shows the Üsküdar Garden as occupying the southernmost of the hilltops that begin after the Şemsi Ahmed Pasha Complex and continue until a land projection, north of a location designated "Kavak".\textsuperscript{271} The larger of the two visible pavilions stands on the last hilltop here and clearly commands the view of the Üsküdar Garden, while a long retaining wall, behind which another pavilion is shown, forms the rest of the garden's front overlooking the sea.\textsuperscript{272} This depiction might be highlighting the Revan Kiosk, a pavilion built by Murad IV, which was a recent and probably the most important addition to the royal buildings in that garden when Paris-956 was prepared.\textsuperscript{273} Although the precise location of the Revan Kiosk

\textsuperscript{270} The late-seventeenth-century description by Eremya Kömürcüyan seems to emphasize the curtain-like character of the trees in this garden. Kömürcüyan notes that "the trees of this garden, planted in a circular pattern, recall a 'tulle' [net, curtain] hanged around the kiosk"(bu bahçede, dairevi şekilde dikilmiş ağaçlar, köküne etrafında gerilmüş bir "tülü" andırırlar), İstanbul Tarihi, 49. The meant kiosk seems to be the kiosk built by Murad IV, which Kömürcüyan previously notes in his account, but the passage is not unambiguous, see below n. 274.

\textsuperscript{271} This land projection is named "Kavak Burnu" (Point Kavak) on city maps of the nineteenth century. See e.g. the Istanbul map by F. Kauffer (ca. 1786, rev. by J.D. Barbic du Bocage, 1819). The origin of the place-name "Kavak" cannot be established, but in this map the legend seems not yet to refer to the point but to a small settlement or group of buildings south of it. Üsküdar Garden or rather the royal residential complex it comprised seems to have been referred to also as Kavak Sarayı in the eighteenth and perhaps even in the late seventeenth century, see Erdoğan, "Bahçeler": 171 and also Eremya's remark, quoted below in n. 271. On the meanings associated with the word "kavak" and disagreeing opinions on the identity of the Üsküdar and Kavak Palaces, see A. Süheyl Ünver, "Üsküdar Kavak Sarayı hakkında vesikalara sıralama ve bir deneme," Yücel (July and August 1937), 177-8; (hereafter cited as "Üsküdar Kavak Sarayı"); and Konyalı Üsküdar Tarihi, 2:214 and 468-9.

\textsuperscript{272} This depiction differs from what we have seen in Nuruosmaniye-2997 and Yenicami-790 in important ways. I shall discuss the varying depictions of the Üsküdar Garden in Istanbul map variants in relation to the one another and to other visual sources at the end of this chapter.

\textsuperscript{273} This kiosk was built by Murad IV following his military campaign of 1635 to Erivan (Revan), as a commemoration, and constitutes a kind of counterpart to the Revan Kiosk built around the same time in the third

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remains somewhat conjectural, it seems to have been located on
the retaining wall and overlooked the sea.274

The legends that are noted all along the coastlines in
Paris-956 clearly reflect a convention originating in nautical
cartography, but appearing in such large number, they
constitute a particular feature of this variant. More
importantly and notwithstanding their conventional character,
they emphasize that the depicted area is first and foremost
perceived from the sea, as a landscape that is defined from its
coastline inward.

The legends that surround the Istanbul Peninsula recount
the gates of the fortification walls which then marked the
border between the sea and the city in a very concrete way. The
sequence of these legends also corresponded to locations of
boat landings and neighborhoods.275 Relating to the walls that
enclosed Istanbul, the legends continue on the landside and identify other gates thus completing a full tour of Istanbul from the outside.

On the Galata side, the legends mark districts on the Bosphorus and citygates on the Golden Horn, simultaneously referring to their boat landings, yet a good number of them concern the Kasımpaşa shipyards, depicted in a particularly detailed way in this variant (fig. 66a). The individual buildings, distinguished and identified on Galata's coast, with the exception of "Kurşunlu Mahzen", are all in the area of the shipyards, something which indicates that either the mapmaker or his client was affiliated with the navy. The buildings identified are "mahzen" (storehouse), "divân hâne" (the assembly hall), "küreklik" (the storehouse for oars), and "eski divân hâne" (the old assembly hall).277

recorded in Ahmed Refik, Türk Mimarlığında, 130 (doc. no. 41). Alpons M. Schneider suggested that this gate, which was also called "Yeni Cibali Kapı" or "Yeni Aya Kapı", in reference to the neighboring gates to its east and to distinguish it from the two other "Yeni kapi"s opened elsewhere in the walls, was opened to facilitate the access from the shore to the recently built bath of the queen mother, "Mauern und Tore am Goldenen Horn zu Konstantinopel," Nachrichten der Akademie der Wissenschaften in Göttingen, phil.-hist. Klasse (1950): 73.

276 Kurşunlu Mahzen is depicted in Paris-956 with an emphasis on its particular location, that is where Galata's coastline juts southward before bending west. Also noticeable is that is depicted with the thick tower on its eastern side as in Dresden-389, Köprüli-172, Nuruosmaniye-2997 and Yenicami-790 (figs. 53, 54, 64, and 65).

277 The seventeenth-century and earlier topography of the shipyards is not well known. Its depiction in Paris-956 is particularly significant in showing the old assembly hall the location of which has remained somewhat obscure until today. Modern sources either do not mention this building at all, e.g. Uzunçarşılı, Bahriye Teşkilatı, 396-9; Semavi Eyice, "İstanbul-Tarihi Eserler" in İA, 5/2:1214; Müller-Wiener, "Tersane-i Âmire," 256, or do not distinguish its site from that of the "divân hâne", i.e. the new assembly hall and official residence of the fleet admiral, which is depicted here on the west side of the bay. See A. H. Emir, quoted in OTTE 3: 464, or A. H. Alpagut, Marmara'da Türkler (Istanbul, 1941), 107. Only in a recent study, the two divanhanes are clearly distinguished, see İdris Bostan, Osmanlı bahriye teşkilatı: XVII. Yüzyılda tersâne-i Âmire (Ankara: TTK, 1992), 10-1. Basing himself on archival documents, Bostan specifies that the old divanhan house the office of the tersâne kethüdâsi (the deputy of the kapudanpaşa at the
In the area behind the shipyards there are also several identified details that give evidence of the topographical precision of Paris-956. On the hill, at the northern limit of the residential area, is shown the sixteenth-century mosque of a former admiral, the Piyâle Pasha Mosque (1573) with its characteristic roof of multiple cupolas. To southwest of this mosque is the tiny detail of a "namâzgâh" (open prayer ground), and below it is a hipped-roofed building next to which is noted "karlik" (storage for snow).278 Further north of the Piyale Pasha Mosque, on the eastern river that flows into the Golden Horn, is a small settlement and a prominent, longish building.

shipyards) and the new divanhane that of the kapudânpaşa (the fleet admiral). Bostan also mentions several refinISHings and renovations of the old divanhane in the seventeenth century, ibid., n. 69, 74. It is not known when the old divanhane was first built. Bostan suggests that it was built by Mehmed I, ibid. But it might also date either from the reign of Bayezid II (1481-1512), or from 1515-6, when the shipyards were expanded under Selim I. More is known about the new divanhane. According to the eighteenth-century author Hâfiz Hüseyin Aycansarayi, it was built around 1540s when the post of the "Kaptan-ı Deryâ" (i.e. kapudânpaşa). It was constructed on a site different from that of the old divanhane: "Fi ʾl-aṣl divanhane aşer maḫalde olaraḳ, mescid-ı mezbūrūn (i.e. Divanhane Mescidi) etrāfi ḥāliydi. (...) Sultan Suleyman Han Gazi zamanında ḥala tersâne-ı ʾâmire olan maḥal tertib olunub, kapûdan paşa olanlarra daḥi bir divân maḥalli lazım olduğundan, bu camî-1-şerifîn üç tarâfi ʾihâta ile bir saray-ı ʾali ve bir divanhane-i kebir binâ buyurmuşlardır," Hadîka, 2:13. From 1721 until the late nineteenth century, this building was rebuilt several times but always on the same spot. The old divanhane must have also existed for a while but perhaps not later than the mid-eighteenth century since Ayvansarayi felt necessary to specify it was located elsewhere than the new divanhane. The only seventeenth-century source that mentions the separate locations of the two divanhanes, in addition to all the other buildings depicted in Paris-956 in the same spatial order, is Eremya Kömürçüyan, İstanbul Tarihi, 34.

278 The depicted "namâzgâh" (open prayer ground) must be the one at Okmeydanı, the former archery ground, and the hipped-roofed building possibly represents the lodge of the archers. Evliya notes a major renovation of the lodge during the reign of Murad IV (1623-40); he also mentions a nearby excursion spot called "Hasan karlıği," Seyahatnâme, 179. The snow accumulated and stored in large, covered pits was sold in the summer. Seemingly leased to individuals, such storages brought revenue to the state treasury. Evliya mentions three such "karlik", ibid. 219. Yet they were some private "karlik" as well, see Salomon Schweigger, Zum Hofe des türkischen Sultans (1608), ed. H. Stein (Leipzig: VEB F. A. Brockhaus Verlag, 1986), 128. A "karlik harmanı" (snow dump or heap?) in an area approximately corresponding to the spot pointed out in Paris-956 is mentioned in an imperial decree dated 1582, see Ahmed Refik, Hicri Onuncu Asırda İstanbul, 53 (document no. 16).
Remarkably, the legend "Kâğıd hâne" (paper mill) is noted next to that building and not next to the settlement.279

On the Asian side, there are relatively fewer legends both along the coast and inland, yet they too provide precise topographic information. Among the legend pertaining to the coast, a legend north of Üsküdar provides an important dating evidence by identifying a longish, waterfront building as "Kaya Sultân Sarâyî", the palace of Kaya Sultan (fig. 66d). This palace was one of the two summer residences of the Ottoman princess İsmehan Kaya between 1644-1659.280 Two other long

279 The area and the village got its name from a paper mill that is supposed to have stayed in function until the early sixteenth century, see İstA., 4:380. Evliya mentions the paper mill in connection with the village. He dates its building to the Byzantine period (kefere zamanından) and describes it as "constructed with large, masonry cupolas and having a place for water wheels whose water used to pass beneath the mosque of Daye Hatun" (azîm kârgî kubbeler ile mebni kâğıdânesi var, su dollablarî [sic] yeri var kim Dâye Hatun cami’î altından suyî ‘übûr idermiş). He qualifies the building as "desolate" (harâb) but not difficult to repair and be transformed into a powder mill, Seyahatname, 207. Evliya describes in the vicinity of the village also three important buildings: the actual "baruthane" (powder mill) with water wheels on the river and a lead-covered roof, the "Kâğıdhanê tekkesî", a very elaborate convent for dervishes, and the palace of Emirgüneoğlu, a favorite courtier of Murad IV, ibid., 207-8. For these mentions and a detailed discussion of the historical accounts on Kâğıdhanê from the 16th to 19th century, see Münir Aktepe, "Kâğıdhanê'ye dair bazı bilgiler," in Ord. Prof. İsmail Hakki Uzuncarşılı'ya Armağan (2nd ed. Ankara: TTK, 1988), 335-63, esp. 339-41; (hereafter cited as "Kâğıdhanê").

280 This tiny detail which might be the only depiction of Kaya Sultân's Üsküdar palace is significant in providing a terminus post quem for Paris-956 around the mid-seventeenth century. İsmehan Kaya was the daughter of Murad IV. She got married in 1644, at a very young age, to Melek Ahmed Pasha and died in 1659. It may be assumed that her summer palace near Üsküdar was built sometime between these dates, or at least was at her disposal then. Her various residences are mentioned by her contemporary Evliya Çelebi, who was a relative of Melek Ahmed Pasha, in Seyahatname. Kaya's principal residence was in Topçular, a district between the landwalls of İstanbul and Eyüb, and her other summer palace was at Eyüb on the Golden Horn shore. For the mentions of all three palaces by Evliya, see Robert Dankoff, The Intimate Life of an Ottoman Statesman Melek Ahmed Pasha (1598-1662) (Albany, NY: SUNY Press, 1991), 54, 155; for the Üsküdar palace 91, the Topçular palace 224, and the Eyüb palace 231. Also Eremya Kümürçüyan notes the Üsküdar palace, İstanbul Tarihi, 47. This building and its gardens, referred to as Kaya Sultan's Gardens, were still extant in the mid-eighteenth century according to İnciyân, 18. Asîrda İstanbul, 133.
buildings, which are situated exactly the same way as in the
detail of Mihrimah Complex in Nuruosmaniye-2997 and Yenicami-
790 (figs. 43a and 44), are identified as "hanlar" (khans) and, hence, confirm that the two caravanserais belonging to the complex were indeed on the waterfront. Similarly confirmed here is another detail of Nuruosmaniye-2997, namely the mosque and the palace of Şemsî Ahmed Pasha that are depicted in a similar coastal location, at the southern limit of the town. Although the legend only refers to "Şemsî Paşa Sarayı", the detail clearly shows, side by side, the mosque and the palace, a building with a hipped roof.281

While no other building is identified or distinguished within the town of Üsküdar, on the road leading south from there is a small settlement identified as "miskınler" (the lepers), referring to the isolated village of the lepers (fig. 66b).282 Further south, the road runs between what appears to be cultivated fields, and where it turns east, it passes over a bridge identified as the "Büstâncı başı Köprüsi".283 These precise details, even though not very numerous, provide valuable topographical information on the areas lying beyond the coastal towns of Üsküdar and Kadıköy, while some details and notes added later suggest that an owner of the manuscript, possibly the captain who owned it around 1651, was also familiar with that area.284

281 The location of the palace with respect to the mosque is the same as in Nuruosmaniye-2997 although the architectural form of the palace somewhat differs in these two maps.
282 The village to shelter the lepers was founded in 1514 on the grounds of the Karacahmet cemetery. See M. Sertoğlu, Osmanlı Tarih Lugatı (rev. 2nd ed.; Istanbul: Enderun Kitabevi, 1986), 227 and S. Eyice, "İstanbul-Tarihi Eserler," 1214.
283 According to Ayvansarayî, the bridge was first built in 1523-4, see S. Eyice, "Bostancibaşı Köprüsü," İŞTA, 2:309. The nearby area must have been indeed cultivated since Eyice notes that the land on two sides of the river was the property of Çamaşircibaşı Kuluğlu Mustafa Bey and was endowed upon his mosque built in 1602, see "Bostancı," ibid., 302.
284 A note added, on the seaside, next to the sketch of a mole at the mouth of the river clearly differs from the other legends in Paris-956. It points out a harbor for small boats, see Appendix 16. Also the same hand must have drawn the hills and a village on Point Dragos, originally
On the Istanbul Peninsula, as in Üsküdar and Galata, the urban area filled with houses and mosques does not contain legends. Nevertheless, the monumental buildings that are visible elements of the cityscape on the Golden Horn have somewhat characteristic depictions. From east to west the Topkapı Palace as domed pavilions amidst cypress trees, the Hagia Sophia with its four minarets, slightly behind it the Sultan Ahmet Mosque, the Süleymaniye and the Old Palace right behind it, and finally Tekfur Palace, a rectangular building adjacent to the landwalls are recognizable (fig. 66e). However, among the legends that surround the walls of the city, there is one that refers to a pavilion on the coast. The legend, simply reading "köşk" (kiosk), appears between "Saray burnı" (Seraglio Point) and "Bağçe kapısı"

identified as "Mâl tebe", and written the note explaining where hares can be found in certain weather. Possibly the same hand also sketched a settlement near the left edge of the map, to north of the road, and identified it as "Vîrân köy". This added detail, like the rest of the additions, was copied in Köprülü-171 but the name of the village in that variant has a slightly modified spelling that might be read either "Ören köy" or "Orun köy". "Ören köy" has the same signification as "Vîrân köy" and means "ruined or deserted village". This detail seems to concern a village that was abandoned after 1639 when its water descending from Kayıdağ was conducted to an area nearer to the bridge, today known as İçerenköy. The abandoned village, named "Tekkebağ" founded in 1353, is mentioned in Ayşe Hürr, "Erenköy," İstA, 3:178. The place-name, spelled exactly as in Köprülü-171, occurs in a map showing the water supply system built by Nevşehirli İbrahim Pasha and drawn in the eighteenth century (Türk ve İslam Eserleri Müzesi, İstanbul, No. 3336). On that map, this place-name is noted next to Kayıdağ and near Alemdağ and Sultan Çiftliği, see Kâzım Çeçen, Üsküdar suları (Istanbul, 1991), map no. 1. Çeçen's proposed transcription is "Orenköy (Erenköy?, [sic])," ibid., 78. From the six minarets of the Sultan Ahmet Mosque, only five (?) can be distinguished. The depiction also seems to comprise the mosque's entrance courtyard and some other domed structures.

Tekfur Palace, commonly associated with Constantine the Great by European travellers yet of uncertain date, did not have any prestigious use under the Ottomans. Its depiction here is clearly related to its visibility. It was always represented in European profile views that extended until the landwalls, such as those by Lorichs (1559), Loos (1710). Its visibility from the Golden Horn (in alto assai, che del mare e dal porto si scuopre) was also noted by Pietro della Valle, Viaggi, 1:34. Conversely, Eremya Kömürcüyan remarked that it is a building overlooking the sea [the Golden Horn] (denize nâzır), in İstanbul Tarihi, 21.
(Garden gate). Although the identifying word is in singular and seems to refer to the Shore Kiosk, a close look reveals that the corresponding detail rather depicts two buildings: behind the Shore Kiosk that has a triple arcade and a tiny cupola there is another building distinguished by its color.\footnote{Their overlapping depictions apparently prevented the copyists of Paris-956 from recognizing them as two buildings, see figs. details Köprülü-171, Topkapı-1633. This reading must have been also encouraged by the identifying legend in singular.} Although partly obscured by the Shore Kiosk, its wide-eaved roof and domed lantern are clearly visible. It unmistakably depicts the Basketmakers' Kiosk, which was built in 1643 to replace a more modest pavilion on the enclosure wall of the palace (figs. 100 and 109b),\footnote{According to Gülru Necipoğlu, the initial structure, which was referred to either as the "Tower Kiosk" or the "Sepet Kiosk", was built on one of the fortification towers of the enclosure wall around 1591. This kiosk was then "enlarged and rebuilt from its foundation" in 1643, see Necipoğlu, Topkapı Palace, 240-1. This second structure, which has survived until today, is raised on a substructure that incorporates the palace wall and its fortification tower and has a long-stretched plan parallel to the shore. It consists of an open and a closed space both housed under the same hipped roof which is surmounted by a central cupola.} and hence provides a \textit{terminus post quem} that is, as the detail of Kaya Sultan's Palace, much later than all the other details pertaining to the seventeenth century such as the Sultan Ahmet Mosque (1619) and the Dolmabahçe (1614-19).

Considering that the maker of Paris-956 made an effort to represent most of the recent constructions of his time, particularly those located at the shore, the absence of Yeni Valide Mosque (Yeni Cami) from this map is very unlikely to be incidental. Completed in 1660 by an influential queen mother, the Yeni Valide Mosque was the most important monument built in the second half of the seventeenth century. Moreover, it occupied a prominent site at the foot of the Topkapı Palace and at the entrance to the Golden Horn. Therefore, its completion date 1660 might be safely accepted as a \textit{terminus ante quem} for Paris-956. The ownership note from 1651 also taken into
account, this variant Istanbul map must have been drawn not more than a few years before the manuscript containing it became the property of Captain Hadji Abdi.

While Paris-956 is a map whose topographic content rather precisely reflects the moment it was drawn, it is very difficult to say the same about Bologna-3609 (fig. 67).\(^{289}\) Judging by its topographic content, Bologna-3609 might date from the early seventeenth century, but the preface to the volume containing it suggests that it was most probably not drawn before 1648.

MS Bologna-3609 comprises the maps of the long-version Bahriye, to which are added nine maps dealing with the Black Sea coast and the Istanbul map. Its short preface presents all these maps as the work of Seyyid Nuh,\(^{290}\) "a gentleman who, in the early years of Sultan Mehmed[\'s reign], depicted (tasfir\(^{\text{sic}}\) eyleyüb) the lands that he travelled and composed this book and named it Deniz Kitâbi (the Sea Book)."\(^ {291}\)

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\(^{289}\) The Istanbul map is on fol.10v of MS 3609 of the Biblioteca Universitaria Bologna (BUB), which consists of 211 maps. In Kissling's facsimile edition Der See-Atlas des Sejjid Nuh, 1. Teil: Einleitung und Karten, see above n.248, the maps appear in a modified sequence. The Istanbul map is to be found in that edition under no. 19.

\(^{290}\) Franz Babinger, who first reported on this manuscript, considered it to be by the hand of Seyyid Nuh, whose identity, however, he could not clarify. See F. Babinger, "Seyyid Nuh and His Turkish Sailing Book," Imago Mundi 12 (1955): 180-2. Kissling observed that this work cannot be an original work by Seyyid Nuh since it is largely based on the maps of Bahriye, ibid., XIV-XV. For this view, argued in a much more assertive manner, see Svat Soucek, review of Der See-Atlas des Sejjid Nuh, 1. Teil: Einleitung und Karten, ed. by H. J. Kissling, Archivum Ottomanicum 1 (1969):327-31. Soucek suggested that Seyyid Nuh was a fictitious person invented by the copyist of MS Bologna-3609.

\(^{291}\) The preface also claims that the book "is being used by all the sea captains" and that its author put it together "to find the ports of the Black Sea and the Mediterranean because the greater part of these seas is important." It is impossible to make an exact translation of the preface for its Turkish is defective, and any paraphrase remains largely an interpretation. For Babinger's paraphrase in English, see op. cit., 181, and Kissling's paraphrase in German, see op. cit., XI. The following, full transliteration is mine: ikbu kitâb sultan Mehmedden evâ'il-i pâdshâhînda [sic] Seyyid Nuh nam efendi gezdûgi vilâyetleri tasfir [sic] iyleyüb bu kitâbi telif [sic] iyleyüp Deniz Kitâbi ism komuglardir. Nakîliya fi 'l-cûmle re'isân mabeynînde isti'mâl olunur zîrâ eker Bahr-ı Esved ve Bahr-ı Ebyâz mûhûm olmağa lîmânîlîn bulmaçûn vazî.
However, as pointed out by Hans J. Kissling, the poorly phrased preface does not clearly convey whether Seyyid Nūh travelled during the indicated period or prepared the maps, nor which Sultan Mehmed was meant. Kissling agreed with a Latin translation of the preface, inserted in the manuscript and stating that "the maps were drawn at the beginning of Sultan Mehmed IV's reign" (1648-87), and accepted that Seyyid Nūh's compilation most probably dates from around 1650. He also considered some annotations added to maps as further evidence in support of this date. But this evidence is not quite conclusive and offers at best a terminus ante quem for the making of MS Bologna-3609. Hence, it remains somewhat unresolved when during the second half of the seventeenth century the maps were drawn and whether MS Bologna-3609 was Seyyid Nūh's autograph or not, besides, of course, the real identity of Seyyid Nūh.

292 Kissling, op. cit., XII. Babinger, e.g., considered that Seyyid Nūh rather travelled in the early years of Sultan Mehmed, see his paraphrase in op. cit., 181. The two possibilities are Mehmed III (1595-1603) or Mehmed IV (1648-87).

293 Kissling, op. cit., XII. Kissling held possible that the translation is by "the person who acquired the volume," op.cit., X. The person meant is Count Marsili, see below n. 296. If this translation is indeed by the hand of Count Marsili the question would be pretty much settled, but for some reason Kissling did not elaborate on that point nor say if he had compared the handwriting of the translation with Marsili's own. Also needed to be verified are the watermarks of the paper used for the volume. Babinger, op.cit., 181 n. 2, mentioned two watermarks dating from the second half of the seventeenth century.

294 The annotations designate some Aegean Islands that were controlled by the Ottomans until 1687 as being under Venetian control. Since these annotations were added by a different hand, according to Kissling "by a third hand", he extrapolates that the maps must have been made before the islands change hands, op. cit., XII-XIII.

295 Both Babinger and Kissling suggested that Nūh most probably was a convert and had a first hand knowledge of the seas, see Franz Babinger, "Seyyid Nūh and His Turkish Sailing Book," Imago Mundi 12 (1955): 181; and Kissling, See-Atlas, XIII. The reference to Seyyid Nūh in the third person led Kissling to think that the manuscript might not be an autograph, ibid., XII. Soucek, on the other hand, considers Seyyid Nūh a fictitious name invented by the copyist of the long-version Bahriye maps (the reference to Seyyid Nūh in the third person is part of that
the volume was acquired by the Italian Count Marsili most likely during one of his stays in Istanbul in 1679-80 or 1691-2, and that the larger number of maps were not an original work of the so-called author Seyyid Nûh.

All the maps pertaining to the Mediterranean Sea in MS Bologna-3609 are unmistakably based on the maps of the long-version Bahriye — if not directly copied from them — to which are also added some maps dealing with the Black Sea as well as the Istanbul map, whose evolution in various manuscript copies we have followed until the mid-seventeenth century. Some of the long-version maps are combined into one, but such reworking and even replacement of maps is not at all unusual in manuscript copies of Bahriye copies, and even the addition of the Black Sea maps might not have been a first.

The most remarkable aspect of maps in MS Bologna-3609 is that they prominently display the characteristic coastline of nautical charts. Composed of regular arcs with sharp joints,

fiction), "who left out the text (...) but compensated for the resulting anonymity of the atlas by adding this symbolic and poetical touch," 330. In my opinion, the pseudonym goes with the plagiarism which might have originated in a professional copyist, as assumed by Soucek, but might have been devised as well by a layman who had Bahriye's maps copied and then himself wrote the preface.

296 Before entering the Biblioteca Universitaria Bologna, the manuscript was in the possession of Count Luigi Ferdinando Marsili 1678-1730 together with two short-version Bahriye manuscripts, MS 3613 and MS 3612. Marsili was twice in Istanbul on diplomatic mission. For Marsili's familiarity and relations with Ottoman courtiers and intellectuals, traced from his own diaries and notes, see H. Wurm, Osmanische Historiker, 137-49.

297 On that point, see Kissling, op.cit., XIV and also Soucek, op. cit., 329.

298 The entire coastline of the Black Sea is shown in five maps that appear at the end of a short-version copy, Sûleymaniye Kütûphanesi, MS, Hüsrev Paşa 272 . The manuscript, dated 1570, has a very old (original?) leather binding later covered with fabric. The additional Black Sea maps have an independent pagination and are all drawn on paper marked with a "crown with nine points surmounted by a star with six points and then a crescent". The crown watermark in this configuration seems to have appeared in the late sixteenth century. Nikolaev lists several examples with varying dates ranging from 1611 to 1659 with a concentration in the 1650s, see Watermarks of the Ottoman empire, I: nos. 159, 167, 171, 183, 185, 191, 203, 207, 208, 210, 216, and 220.
the coastlines are very boldly drawn in all the maps, including the Istanbul map (fig. 67), and betray a sure hand trained in tracing nautical charts. The drawing and coloring of topographical details also conform to the style of nautical cartography more than to any other tradition and give further evidence that the maps constituting MS Bologna were prepared by a professional chartmaker. Yet all these features, especially the drawing of the coasts, also reveal a certain stylization, perhaps most evidently so in the Istanbul map.

The outlines and configuration of the landmasses and islands, and the depiction of urban settlements in the Istanbul map almost exactly match Paris-956. There are also some topographical details that are strikingly similar to details in Paris-956, such as the crown-like Yedikule Fortress, the ditch at the northwest corner of Istanbul's landwalls connecting to the Golden Horn, the Tersane Garden, Kağıthane and Dolmabağçe details on the Galata side, and Fener Garden, Bostancıbaşı Bridge and nearby fields on the Asian side. There are also a few details that are slightly more elaborate and different from the corresponding details of Paris-956. For example, the depiction of the Üsküdar Garden not only shows the two pavilions above the cliff as in Paris-956 but also other buildings next to and behind them, including the cypress trees. The depiction of Kızkulesi reveals a second and smaller tower. But several other buildings that are depicted in Paris-956 are missing in Bologna-3609, such as the Sultan Ahmet Mosque, Kaya

299 Seemingly disregarding all the obvious features pointing at a professional in producing nautical charts, scholars tried to associate the manuscript with miniature artists. Babinger thought that the topographical views of harbours betray an oriental origin, op. cit. 181, and Soucek considered the maps the work of an "illustrator of illuminated manuscripts" because of their exquisite coloring and gilding, op.cit., 330. Another manuscript, consisting of 188 maps but no text, TSMK, MS, B. 338, is evidently produced by the person who prepared MS Bologna-3609, cf. the two maps, reproduced under cat. no. 39 in Portolani e Carte Nautiche, 120-1, and the maps no. 79 and no. 80 in Kissling's facsimile edition of Bologna-3609. Among the maps of the Topkapı manuscript there is, however, no map of Istanbul.

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Sultan's Palace, the buildings forming the settlement around Tabakhane, the mosque and palace of Şemsi Ahmed Pasha as well as the buildings of the Topkapı Palace, and the entire Old Palace. Since these missing details are not consistently from the early seventeenth and the sixteenth centuries their absence appears to be somewhat arbitrary rather than indicative of an earlier date for the making of Bologna-3609. This lack together with inaccurate depictions of other details give the impression that Bologna-3609 was not as carefully drawn as it appears to be. Among its topographical details only Dolmabağçe is a safe evidence and provides a terminus post quem, that is 1614-19.

With regard to their toponymical contents, the two variants offer fewer points of comparison since Bologna-3609 bears considerably fewer legends than Paris-956. Besides wind names and the names of the Red Islands, the original legends identify only the principal urban areas. Coastal locations are named consistently only along the Bosphorus coast of Galata and are the same as in Paris-956. Among them, one place-name suggests, as does another and later terminus post quem for this map, the year 1639. The few other legends that appear along the Golden Horn were added by another hand that also corrected the names of the two westernmost Red Islands, "Yassica" and "Yumruca". This mistake is common to all the

300 E. g. the Hagia Sophia depicted with two minarets, the Yali Kiosk covered by a dome and appearing as part of Topkapı Palace's wall, the schematized shipyards. The most suggestive detail, however, is the road leading southward from Üsküdar, which is confused with the river near Bostancıbaşı Bridge and passes under it.

301 For the complete transliteration of legends in Bologna-3609, see Appendix 20. Bologna-3609 and Topkapı-1633 are the only variants in which the names of winds are noted on the wind rose.

302 These legends are, from north to south, Orta köy, Beşiktaş, Tolma bağçe, Findıklı, Mehmed Aga, Tophane. The place-name "Mehmed Aga" derives from the mosque built by Rast Mehmed Aga and hence provides a terminus post quem. For the same legend appearing in Nuruosmaniye-2990 and this mosque, see above n. 218.

303 In fact, these very small islands are for the first time identified in this subgroup, but the islands themselves are mistakenly depicted in reversed positions in all of the variants forming the subgroup. The names
variants including Paris-956 and, hence, provides a significant link between that map and others including Bologna-3609, as do the peculiar depictions of the Fener Garden that hides the Kalamış Bay, the road between Üsküdar and the Bostancıbaşı Bridge flanked by fields, and the Dolmabağçe.

The common details of Bologna-3609 and Paris-956 provide sufficient evidence that both maps are related either directly to one another or through an intermediary. Given its consistent accuracy, Paris-956 is not likely to have been based on Bologna-3609, although the reverse cannot be excluded. It seems, however, more likely that both maps had a common model dating from the early seventeenth century, from which each map retained certain details while modifying others.  

The topographic details of Paris-956 and its general cartographic layout are carefully repeated in the other three variants of the subgroup. Among them, Köprülü-171 (fig. 68) appears to be the variant closest to Paris-956, possibly also in date. It reproduces so closely the topographic details of the Red Islands do not vary from one variant to the other except that "Yumruca" in Bologna-3609 replaces "Sivrice" used in others, but meaning more or less the same.

I consider a date rather in the early seventeenth- and not in the late sixteenth century because of the detail of Dolmabağçe (created in 1614), which is depicted in a very similar way in both maps and, hence, links them to a common source if not directly to one another.

The Istanbul map is on fol. 428r of Köprülü Kütüphanesi, Istanbul, MS 171. As MS Köprülü-172, MS Köprülü-171 was endowed upon the library by Elhadj Hafiz Ahmed Pasha. His various seal stamps are to be seen on the flyleaf preceding fol.1, and one of them bears the date [AH] 1170 = AD 1756-7. In the paper used for this undated volume, several papermarks can be discerned. A rather elaborate design of "grapes surmounted by framed initials(?) and crown", and a simpler version occur only in the flypages, six at the beginning and six the end that might be connected with a rebinding of the manuscript. Somewhat resembling watermarks, of French paper, with dates varying between 1600-1736 are presented in E. Heawood, Watermarks Mainly of the 17th and 18th Centuries (Hilversum: The Paper Publication Society, 1950), plates 313-4, nos.2365-71 and 2370-1. Nikolaev gives three examples varying between 1721-90, Watermarks of the Ottoman Empire, nos. 364, 450, 718. The Bahriye pages variably contain "Three hats" with a countermark (?) C|C, "Three hats(?) in a double-line circle" and another consisting of the initials "GMZ" surmounted by a potent cross and a fourth letter "C" below the "M". In the catalogues I have consulted, I have not found an exact match for the "Three hats" that look somewhat deformed. According to Heawood, "Three hats", a typical
Paris-956 in terms of drawing style and coloring that at first sight the two maps appear to be the work of the same person. Unlike the situation of Yenicami-790 and Nuruosmaniye-2997, it can be demonstrated that Köprülü-171 was copied from Paris-956 by someone else who meticulously reproduced all of its original and added topographical details, legends and notes in a uniform handwriting. It is, however, remarkable that the place-names are often spelled somewhat differently, even though they carefully follow the sequence in which they are presented in Paris-956.
Another variant, Topkapı-1633 (fig. 69) also carefully repeats the coastlines of Paris-956 and presents the same set of place-names. Yet the topographical content is peculiarly schematized in this variant mainly by the grouping of buildings of the same type in horizontal rows. The mosques, for example, form rows in which cupolas and minarets alternate, and, with few exceptions, are not distinguishable as individual buildings. Similar rows are also formed by smaller buildings with saddle roofs, flat roofs or cupolas. All these rows are aligned in a parallel fashion among themselves and are separated by double lines so that the whole of the urban fabric appears regularized as if having a gridiron plan. Yet this was probably not intended since these double lines also separate

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308 The Istanbul map is on fol. 434r of Topkapı Sarayı Müzesi Kütüphanesi (TKSM), Istanbul, MS, R. 1633. It was estimated to date from the sixteenth century, see in F. E. Karatay, Topkapı Sarayı Müzesi Kütüphanesi: Türkçe yazmalar kataloğu, 1:444-5. In Soucek and Goodrich, "List of MSS," 291, it is considered to date either from the late seventeenth- or early eighteenth century. The wind names and the place-names are written by different hands. The sequence of place-names follows rather correctly that of Paris-956. However, it is remarkable that instead of "Ayvansarı" this map uses the spelling "Ayyūb Ansarī" as in Köprüli-171, something that would suggest that possibly that map served as a model rather than Paris-956. There are also several words that are misspelled, apparently due to misreading as if the their writer was not mastering Turkish well, such as "Mehammed Āni" instead of "Mehammed Aga", "Kayd Sultān" instead of "Kaya Sultān", "Şemsī Başar sararı" instead of "Şemsī Paşa sarayı", and "Tōnāncı baş körprüsi" instead of "Būstāncı baş körprüsi". Other particularities concerning the legend in Topkapı-1633 are that "Odun Kapusi" occurs twice, the second time in the place of "Un Kapānī Kapusi", and that on the Galata side several gates between "Azeb Kapusi" and "Tob hāne" are left out. The windnames, written with red ink, perhaps by the mapmaker, replace the customary "Kible"(qiblah) with "Cenūb., "Gün toğusu" with "Şark", and "Batı" with "Garb", see Appendix 18.
the domes from their substructures, and vertically, separate individual buildings from one another without intersecting the horizontal lines. It is more likely that the maker of Topkapı-1633 so sought to schematize the urban fabric, especially because he used this particular depiction for all the densely built areas within Istanbul and Galata as well as for the suburbs of Eyüp and Üsküdar and the small but densely populated districts of Kasımğa, Beşiktaş and Ortaköy. The sparsely built settlements on the fringes are not subject to this peculiar order of alignment.

This boldly schematized drawing transforms the topographical content of Topkapı-1633 into an almost abstract pattern, an effect that is also sustained by the use of bright colors. Yet it is difficult to draw a border between this schematizing attitude and misrepresentation. While the detail of the Old Palace depicted as a hexagon may be considered a neat simplification, that of Fener Garden where the cypress grove is transformed into a cylindrical structure appears to have been misunderstood. Other details showing areas densely planted with cypress trees strengthen that impression for they have become in Topkapı-1633 patches filled with hatching. However, the depiction of the Üsküdar Garden somewhat complicates our evaluation. In this detail, the cross-hatching is only performed on the trees and a baseline, the retaining wall seems deliberately detached from the depiction of hilltops. Above setence very unclear. It is difficult to interpret such a transformation of a detail of Paris-956 as resulting from a misunderstanding. Moreover, Galata's fortification walls that are extended to the Bosphorus, and in part to the Golden Horn, also appear arbitrary rather than misunderstood. 309

309 Note the Galata Tower shown at its proper location but reduced to a tiny conical roof between other buildings forming the uppermost row.
All these modified details make one wonder if the schematized drawing of topographical contents of Topkapı-1633 does not involve a casual and somewhat whimsical attitude. In any case, the way it is, Topkapı-1633 remains a enigmatic variant. It is clearly drawn by a skilled and quick hand yet its style does not manifestly relate either to nautical cartography or to miniature painting. However, it contains a few elements that suggest a familiarity with both traditions. It is noticeable, for instance, as in some other variants of the Istanbul map, that the red and blue pigments are used to distinguish tiled roofs from lead-covered roofs. On lead-covered cupolas, the blue wash is applied partially to create a shadow effect, and in some cases it is enhanced with a grey wash, also used on the vertical surfaces of fortification towers and minarets, which is an effect of three-dimensionality also encountered in town vignettes. The use of a color-enhanced baseline for certain topographical details must also derive from town vignettes.\textsuperscript{310} On the other hand, the particular arrangement of the cypress trees in alternation with the minarets is strongly suggestive of miniature painting, more precisely of a compositional feature of architectural settings in Ottoman miniatures of the sixteenth century (figs. 102a and 102b).\textsuperscript{311}

In its overall character, Topkapı-1633 turns the representation of the city into a bold, colorful sketch that blurs topographical details. Nevertheless this schematization, especially in organizing the urban fabric as parallel rows of

\textsuperscript{310} Besides in the detail of the Üsküdar Garden, an orange baseline appears under a row of cypresses in the lower right corner of the map, under the fragment of fortification walls further above the same, and under a group of buildings facing south near the Bosphorus coast.

\textsuperscript{311} The cypress trees in Topkapı-1633 appear in the "row of mosques", on the Istanbul Peninsula above the hexagonal spot corresponding to the Old Palace. The use of cypress trees as alternating elements in a composition with cupolas, as an equivalent of minaret-like chimneys or together with them, occurs in Ottoman miniatures from the second half of the sixteenth century.
buildings facing a respective viewpoint, gives much more visual emphasis to the viewing directions incorporated in the map.

In contrast to Topkapı-1633, Baltimore-658 displays strikingly minute detailing (fig. 70). This map is drawn with an extremely fine pen and is not colored. As a result all the details can be clearly seen except at a few damaged spots. The use of a fine pen seems intentional since the maker of the map made full use of it to draw the city’s buildings in the smallest scale possible and with considerable attention to their architectural forms.

Most of the topographic details of Paris-956 are reproduced in Baltimore-656 but there are also novel details, some of which belong to the early eighteenth century and hence provide evidence of the period when it was drawn.

The topographical details that were already present in Paris-956 are in general rendered clearer and more elaborate through the minute drawing of Baltimore-658. In the detail of the Topkapı Palace, for example, the various structures remain approximate despite their clearly visible forms. But the west-oriented, elongated facade of the harem wing is better distinguishable, as is the Tower of Justice surmounting other roofs (cf. figs. 66e and 70a). Below the harem facade, amidst cypress trees, there is also an added detail, an independent pavilion which must represent the Tiled Kiosk. In front of the palace wall facing the Golden Horn, the Basketmakers' Kiosk is not any more partly hidden behind the Shore Kiosk as it was in Paris-956 but is clearly depicted as a separate building (fig. 70a). 312

The depictions of the great mosques located along the northern side of the Istanbul Peninsula are also architecturally more precise, and among them the Şehzade Mosque, shown to west of the Old Palace, and the Mihrimah

312 The unmodified legend "köşk" in the singular form confirms the genealogical relation between this map and Paris-956.
Mosque near the landwalls, stand out as particularly accurate depictions (figs. 70b and 70c). While part of the standard mosque drawings in Paris-956, these two mosques are depicted here with their distinctive architectural elements such as the four half-domes in the case of Şehzade and the large tympanum in the case of Mihrimah (fig. 70c).\(^\\text{313}\) The depiction of Sultan Ahmet Mosque is another remarkably accurate drawing, particularly in revealing its site at the Hippodrome, another accurate detail of Baltimore-658 (fig. 70b). The depiction of this open space in bird's-eye view not only allowed to situate the Sultan Ahmet Mosque properly but also the three commemorative columns. Another open space, which borders at the landwalls, is also a novel detail and shows Yenibahçe, the vacant part of the Bayrampaşa (Lykus) Valley. Its depiction includes a road that crosses it transversally as well as some houses that encroach on it at its eastern end and some agriculture (fig. 70c).

The roads in general receive a particular attention in Baltimore-658, even though shown only outside the densely built areas. In a sense, they complement what was left missing in Paris-956. On the Asian side, for example, a branch, added to the road connecting Üsküdar to Bostancıbaşı Bridge, leads to Kadıköy. The road network outside the landwalls of Istanbul, however, is entirely new. It consists of a road that runs along the walls starting possibly at the Ayyub Ansari Gate near the Golden Horn shore. The principal accesses to this road from the Edirne and Topkapı Gates are not visible, nor is an access from "Yeni kapu" shown. One can however see a branch separating there, which continues west passing through the settlement

\(^{313}\) A curious contrast, however, is presented by the mosque depicted as having a pyramidal roof and two minarets on each side. Its situation suggests that it stands, despite this uncharacteristic depiction, for the Yeni Valide Mosque that was completed in 1660. Also slightly inaccurate, or rather outdated, is the depiction of the Shore Kiosk, which is shown with a roof lantern instead of its final architectural form realized in 1593.
around the Mevlevi convent. Right after, the road bifurcates, and south of "Silivri kapası" a second road, also running westward, intersects its two branches heading toward the Marmara coast, one to the settlement around the "Tabakhane" and the other to the "İskender Paşa bağçesi".  

This garden, of which only the location was indicated by a legend in Paris-956 and related variants, is depicted here for the first time as a topographical detail that shows it as surrounded by trees and containing three buildings (fig. 70d).

On the Galata side, the depiction of another garden, the Dolmabahçe, and the neighboring royal palace are slightly clearer than the detail in Paris-956. In the depiction of Baltimore-658, the windows in the enclosure wall of the garden

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314 The road network represented here is probably not complete. Stéphane Yerasimos notes that the travellers coming from Europe had two options to access the city once Küçük Çekmece (Ponte Piccolo) on the Marmara coast was reached. The road that followed the coastline led to the Yedikule Gate, the other running slightly further inland, led to the Edirne Gate, see Les voyageurs dans l'empire ottoman (XIVe-XVIe siècles) (Ankara: Société Turque d'Histoire, 1991), 53. But here no road is shown to arrive either at the Yedikule Gate or the Edirne Gate. Instead, roads relating to Silivri Gate and Yeni Kapu (or the Mevlevihane Gate), where also west-leading roads started, are shown. The elaboration of the network in relation to these two roads perhaps simply has to do with extramuros settlements shown as topographical details.

315 The original builder of this seaside garden was İskender Çelebi who served as defterdar (finance minister) during the earlier part of Süleyman I's reign (the legend identifying him as "İskender Paşa" seems to confuse him with another statesman), and after his death the garden had become royal property. Evliya suggests that under Süleyman I some constructions were made there by the architect Sinan, Seyahatname, 206. Arslan Terzioğlu notes that there was also a palace school in that garden, see Die Hofspitäl ter und andere Gesundheitseinrichtungen der osmanischen Palastbauten (Munich: Rudolf Trofenik, 1979), 199. For archival documents from the end of the seventeenth century and later concerning this garden, see Erdoğan, "Bahçeler," 156-8. Erdoğan mentions documents from AH 1110 and 1111 (AD 1698-1700) which concern the rebuilding of a powder mill in the İskender Çelebi Garden, ibid. 157. Yet at least some of the royal residences must have still existed in AH 1116/AD 1704 since an official inventory from this date lists their furnishings, ibid., 158. On the other hand, Sarraf-Hovhannesyan states that the powermill destroyed by fire in AH 1110 was elsewhere (near Yenibahçe) and that the İskender Çelebi Garden was chosen thereafter as the site of the new power mill, see Payitaht, 31. For its site plan (ca. 1950), see Eldem, Turkish Kiosks, 1:215.

316 See above n. 266.
can be better seen, and in addition there is a door where this wall recedes to enclose the coastal palace from behind (fig. 70e).

The depiction of the naval shipyards at Kasımpaşa similarly benefits from the minute drawing of topographical elements, of which the most conspicuous is the enclosure wall (fig. 70f). Although the buildings shown and identified by name remain the same as in Paris-956 and other variants, Baltimore-658 features a new building in the western section of the shipyards. The mosque that is situated where the last row of ship construction vaults begin may easily be identified as the mosque built by Çorlulu Ali Pasha in 1707, and hence provides a terminus post quem for Baltimore-658. But the detail that situates this map incontestably in the eighteenth century concerns the Kağıdhanı area that occupies the lower right corner of this map.

While in Paris-956 and the other variants of this subgroup, only a few houses, a bridge and a larger building are depicted on the Kağıdhanı River, in Baltimore-656 the same area appears entirely transformed (fig. 70f). This new detail unmistakably shows the Saadabad, projected and realized between 1721 and 1723 on the initiative of Nevşehirli İbrahim Pasha, the grand vizier of Ahmed III. Saadabad, the most sumptuous of the royal construction projects of that period, involved the landscaping of a large area along the river with new plantations, bridges, water basins and cascades, in addition to the construction of a royal palace on the river itself where its bed was straightened and cased in marble, as can be seen in

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317 The site was walled around in 1547 on the order of Sokollu Mehmed Pasha, who was then the admiral of the fleet. See Müller-Wiener, "Tersane-i Amire," 256.
318 The Kağıthane River, ancient Barbyzes, is the eastern waterway. The Ali Bey River, the ancient Kydaris, joins it from the west. Both rivers are shown each with a bridge on Paris-956 and its variants, although on Paris-956 there seems to be depicted a second bridge to the north of the conspicuous one.
319 See Aktepe, "Kağıdhanı," 343-57.
This part of the river, which received the poetic name Cedvel-i sim, is clearly represented at the lower limit of Baltimore-658 (fig. 70, top in fig. 70f!), and where the river starts winding again, the new mosque as well as the palace grounds defined by trees planted in straight rows are depicted. The rectangular plots of land that line up at some distance along the two banks of the river seem to correspond to the allotments made to the notables for the purpose of further embellishing the site with pavilions, vineyards and orchards.

This elaborate representation of Saadabad permits us to push the period during which Baltimore-658 must have been drawn to after 1723, that is the date of the completion of the principal constructions. In 1730, during the popular upheaval called the Patrona rebellion, Saadabad became one of the principle targets. Yet 1730 may not necessarily be a terminus ante quem, for, unlike the kiosks and gardens of notables completely destroyed and looted by the rebels, the royal buildings apparently survived with some damage and were repaired under Mahmud I after 1740. In fact, the elaborate

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320 This name means "the silver ruler or margin line" as well as "the silver canal".
321 The contemporaneous accounts by the chroniclers Rāgid Mehmed, Küçük Çelebiçade Ismail Asım and Subhi particularly emphasize these allotments which numbered about hundred seventy and specify that being located on the hillsides on both sides of the river, the built gardens and kiosks presented a very beautiful view, see Aktepe, "Kağidhane," 349, 352-3. It seems that these garden allotments were a very important part of the project as they transformed the visible limits of the Kağidhane landscape.
322 Another detail that accords with 1723 as a terminus post quem is the depiction of the Eyüp Mosque whose minarets are shown as having double balconies, a state corresponding to the rebuilding of the minarets in 1723-4, noted by the historian Küçük Çelebiçade Asım Efendi. See Mustafa Cezar, "Osmanlı devrinde İstanbul yapılıarda tahribat yapan yangınlar ve tabii afetler." Türk Sanat Tarihi Araştırmalar ve İncelemeleri 1 (1963): 173; (hereafter cited as "Yangınlar"). Also see A. Kuran, "Eyüp Külliyesi," in Eyüp: Dün/ Bugün, ed. by T. Artan (İstanbul: Tarih Vakfı Yurt Yay., 1994), 131.
323 See S. H. Eldem, Sa'dabad (İstanbul: Milli Eğitim Basıım.ev, 1977), 23. Eldem demonstrated, on the basis of a survey (keşif) dated 1740 and the accurate sketches and measured site plan made by Baron Philip Franz.
detail of Kağıdhanî in Baltimore-658 might rather relate to the rehabilitation of Saadabad by Mahmud I, who also seems to have commissioned the Bahriye manuscript containing this map. 324

By depicting the Kizkulesi with a second but much smaller tower, Baltimore-658 modifies another detail of Paris-956 (cf. figs. 66b and 70g). 325 Otherwise, the topographical details on the Asian side are much less specific and suggest that the maker of Baltimore-658 did not update systematically what he had found represented in his model. For example, the mosque that stands out as the most prominent building in Üsküdar may be identified as the Mihrimah Mosque only on the basis of its situation and the two caravanserais in front of it, but not on the basis of its architectural features (fig. 70g). 326 Three other mosques that were patronized by queen mothers, the Atik Valide Mosque (1583), the Orta Valide Mosque (1640) and the Yeni Valide Mosque (1710), 327 could have been at least distinguished by their double minarets but they remain

Gudenus (ca. 1740), that the palace complex had well survived. Both groups of documents are reproduced and discussed in Eldem, op. cit. Also see Aktepe, "Kağıdhanî," 357-9.

324 See above n. 132.

325 On Bologna-3609 the respective detail somewhat resembles the depiction here but the smaller tower on the east and not on the west side of the Kizkulesi. Although it cannot be ascertained, the small tower might have corresponded to an early-eighteenth-century addition or rather to its rebuilding. Bildlexikon, 334, mentions a fire in 1721 that destroyed the wooden upper structure, which was being used as a lighthouse, and Konya, Üsküdar Tarihi, 2:282, wrote, without mentioning his source, that Nevşehirli İbrahim Pasha had constructed on one of the corners a lighthouse tower in wood, which burnt in 1720 but got rebuilt in stone immediately after. Sarraf-Hovhannesyan also notes the use of the tower as a lighthouse on the order of Nevşehirli İbrahim Pasha in AH 1133/AD1720-1 but does not give further detail, see Payitaht, 68. Other than on Bologna-3609 (fig. 67), the Kizkulesi is also shown as having two towers in Topkapı-337, Vienna-192 and Nuruosmaniye-2997 (figs. 56, 59 and 64). On the latter map the second tower was clearly added by a different hand and with red ink.

326 The drawing is quite detailed and shows the central dome elevated on a high drum. The small cupolas, of which only two on the north side are visible, seem to rest on corner towers.

327 The Atik Valide Mosque was already represented on other Istanbul maps of the Bahriye-group such as Ayasofya-3161, Bologna-3609, as well as the Şehingehnâme map, see figs. 92f, 67, and 34b respectively.
undifferentiated among the standard depictions of mosques.\textsuperscript{328} The depictions of the small coastal mosque of Şemsi Ahmed Pasha and the palace known after him, as well as the depictions of the Üsküdar and Fener Gardens present without any significant change the same topographical information as in Paris-956.\textsuperscript{329} However, we find in this variant a stronger emphasis on the views that the Asian coast afforded, or rather a clear differentiation between the views available from the town of Üsküdar and the area to its south. In Baltimore-656, not only the Üsküdar Garden but the entire area starting south of Kızkulesi until Cape Kalamış is depicted as facing west, in other words as viewing the Istanbul Peninsula.

2.3.4. London-718 and Berlin-57: The Istanbul Map in Double-Folio Size

The evolution of the Istanbul map as a topographical view culminates in London-718 and Berlin-57 (figs. 71 and 72). London-718 is contained in a volume composed only of the maps

\textsuperscript{328} However, the depiction that is uncharacteristic for the Mihrimah Mosque recalls certain features of the Yeni Valide Mosque, especially with the conspicuous drum of its dome. The mosque, which was built by Ahmed III for his mother Gülüş Emetullah Sultan in 1708-10, was the most recent mosque building in Üsküdar at the time Baltimore-658 was possibly drawn. It comprises a small group of dependencies and forms the second important mosque complex at Üsküdar's center.

\textsuperscript{329} Yet this depiction is somewhat outdated for the original late-sixteenth-century palace was already replaced in 1710 by a new building (with a T-shaped plan) which was built for Ahmed III under the patronage of the grandvizier Nevşehirli İbrahim Pasha according to the historian Râgid, quoted in Konyali, Üsküdar Tarihi, 2:258. It is represented in that new configuration in the water supply map (Türk ve İslam Eserleri Müzesi, Istanbul, MS, 3336) that shows the water works realized around the same time in Üsküdar by the same grandvizier. See A. Erdoğan, "Üsküdar su yolu haritası," Türk Tarih Arkeolojisi ve Etnografiya Dergisi, no. 4 (1940): 139-43. The new palace was semi-officially given the poetic name "Şerefâbâd", repeatedly mentioned in a panegyric poem by Nedîm, and also in "Sâhil-nâme", a description in verse of various locations on the two banks of the Bosphorus, see below p. 295 and n. 407. However, the building was seemingly continued to be referred to as "Şemsi Paşa Sarayı", see Konyali, Üsküdar Tarihi, 2:257, and Hadîka, 2:191: "Şemsi Paşa ismiyle müsemma olan kasr". This latter reference must postdate the original composition date of Hadîka, i.e. 1779, for it occurs in the section dealing with the Adliye Mosque built in 1816. Also identified this way, it is visible on Kauffer's map.
of Bahriye. 330 Berlin-57 is part of a similar compilation of maps except that a good number of the maps in that volume bear, in small characters, the text of the corresponding chapter. 331 The text that appears on maps of MS Berlin-57 matches the short-version text of Bahriye while the maps, in both manuscripts, seem to be largely derived from the maps of the

330 The Istanbul map is on fols. 3v-4r of MS London-718. This volume comprises 119 maps that were originally sewn together in varying numbers. They are drawn on different types of paper displaying three different watermarks datable to the second half of the seventeenth century. For Soucek's detailed study of the volume, see Turkish Mapmaking, 108 ff. It also features, under no. 75, in the exhibition catalogue, Empire of the Sultans: Ottoman Art From the Collection of Nasser D. Khalili, ed. by J.M. Rogers (London, 1996), 121 (Istanbul map is reproduced in color, on 124-5). This volume surfaced rather recently, in 1989 when it was brought to the Süleymaniye Library by a bookdealer and a prospective Turkish buyer, Halil Bezmen, for evaluation (I studied it from its b/w microfilm made at that time in the library and available there under no. 3574). Apparently bought by Bezmen, the volume was subsequently sold abroad—in violation of the Turkish law forbidding the exportation of cultural goods—to art collector Nasser D. Khalili of London. See Soucek and Goodrich, "List of MSS," 291, 292 n. 31. It is presently preserved in Khalili's private collection as MSS. 718.

331 Berlin-57 is the variant that was noticed before all the other Istanbul maps in Bahriye manuscripts. It was discussed and reproduced by E. Oberhummer in Konstantinopel (...) aufgenommen (...) durch Melchior Lorichs..., 22-3 and pl. 22. This Istanbul map occupies one half of fol. 28, i.e. the quarters marked a and b, of MS Diez A fol 57. This manuscript, which Soucek believed lost in the Second World War, is preserved in the Staatsbibliothek zu Berlin-Preussischer Kulturbesitz (The library joined, since 1st January 1992, the collections divided between east and west German libraries after the war). When MS Diez A fol 57 was acquired in Istanbul in 1789 by the Prussian consul Heinrich Friedrich von Diez the map sheets were folded in the middle but not bound together. Diez had the loose sheets bound together in the order he had received them. The maps were until then in the Topkapi Palace and were sold away by the harem women leaving for the Old Palace after Selim III's enthronement. A detailed description of the maps and of the circumstances of their acquisition, given in H. F. von Diez, Denkwürdigkeiten aus Asien (Berlin, 1811), vol. 1, are quoted in Kahle, "Einleitung," XXXI-II. For the manuscript itself, I have relied, besides this description also on Kahle's own observations, ibid. XXX-XXXII. Among other things, Kahle noted that the map sheets were originally bound in groups of more or less three. Dr. Hartmut-Ortwin Feistel of Staatsbibliothek's Orientabteilung kindly informed me that the paper used for all sheets is uniform, without watermarks but contains "chain-" and "laid lines," letter to the author dated July 21st, 1994. A lengthy description of the manuscript and its map content is to be found under no. 184 in Wilhelm Pertsch, Verzeichnis der Türkischen Handschriften der Königlichen Bibliothek zu Berlin (Berlin, 1889), 203-10.
long version, but they also include, besides the Istanbul map, other later additions such as the maps of the Marmara Sea and the Black Sea. Hence, the two manuscripts, but especially MS Berlin-57, present a particular fusion of the two strains of Bahriye manuscripts typically including various types of modifications brought to them throughout the copying process.

Drawn across two pages in a horizontal format, Istanbul appears in London-718 and Berlin-57 in a much larger size and scale than in the variants we have seen so far. However, despite this new map format and some cartographic modifications connected with it, the coastal outlines and several topographic and toponymic details indicate that London-718 and Berlin-57 are genealogically linked to the subgroup of Paris-956. More importantly, these two maps share with all the other variants the characteristic south orientation that invites us to look at Istanbul from the north. The use of the double-folio format in these maps seems mainly to have served to "decompact" the Istanbul Peninsula from a simple triangle to its due shape and size and at the same time to enlarge the drawing scale and thus the topographic details.

Even though the place-names in London-718 and Berlin-57 were written by different hands, the two maps are clearly

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332 It is Kahle who noticed that the chapter texts occurring on several maps are from the short-version Bahriye while the maps are derived from the maps of the long version. For this and for the entire group of maps in MS Berlin-57 I rely on Kahle's observation and his detailed list of them in which he also proposed a sequence. These were Kahle's final observations on MS Berlin-57, which he communicated in a letter to Dr. L. Hülle, then the director of the library's oriental department, dated December 11th, 1930. I became aware of this letter thanks to Dr. Feistel.

333 On Berlin-57 there are clearly different handwritings. The easiest to distinguish, however, are a few later additions, a note in four lines naming Istanbul (not totally legible) place-names, written next to existing ones along the southern cost of the Golden Horn and exactly repeating them (in larger characters perhaps to facilitate reading for someone who did not see so well). In the text of the chapter concerning the Red Islands, the parts differing in the size of characters nevertheless seem to be by the same hand who certainly wrote also the place-name "Salacak" to left of Kızkulesi. Another place-name "Kavak" matches the handwriting of the chapter title, both are in red ink. The rest and the majority of the place-names are written with a different
the work of one person, and internal evidence indicates that they were prepared sometime between 1670 and the early eighteenth century. Their somewhat different size and geographic coverage suggests that the mapmaker explored two possibilities when he tried a new map format. While the map scale is the same for both, London-718 is drawn on a smaller sheet that corresponds to the average size of double-folio maps in Bahriye manuscripts which is almost entirely used to depict the Istanbul Peninsula. In its improved outline, Istanbul nearly fills the right half of the sheet and its pointing tip, prominently occupied by the Topkapı Palace, projects toward the Asian coast shown near the sheet's left edge. The Red Islands, in the same position and group configuration as in the subgroup of Paris-956, are shown in the upper left corner. But London-718 lacks a compass rose, the habitual place of which is occupied by seven galleys depicted in an animated style, rushing with full-blown sails and oar strokes in the direction of the Dardanelles. Istanbul's three townships, Üsküdar, Eyüp and Galata, are not in this picture. Perhaps all three were

pen. Their style is very similar to the chapter's text but there seem to be small differences, yet it remains difficult to attribute them to a different hand. The writings on London-718 are uniform and by a hand different from any of the writings on Berlin-57. Yet some other maps of MS London-718 also bear different handwritings, at least by one other person. That handwriting as we find it in the map of Crete (Soucek, Turkish Mapmaking, pl. 28) is quite similar to the handwriting of the chapter in Berlin-57, i.e. the Istanbul map, while the notes on the Venice map (ibid., pl. 24), are all uniform and seem to match with the handwriting of the place-names in Berlin-57. In both manuscripts topographical notes and explanations in general relate well to depicted details and hence may be assumed to be contemporary with the making of the maps.

Topographical details, two Istanbul maps considered together, permit to delimit the probable period between 1660 and 1715. But two topographical details from Berlin-57, which however seem to be conflicting, could modify the later limit as 1707 or 1724-5, see below n. 392 and n. 342 respectively. Soucek, on the basis of his detailed study of MS London-718 and circumstantial evidence related to Crete's passing under Ottoman control, has proposed a date for that map that must be not much later than 1669 when Candia, the island's capital fell to the Ottomans. For Soucek's discussion of watermarks in paper used for MS London-718, termini provided by topographical details in its Istanbul map and evidence related to Crete, see Turkish Mapmaking, 108-10.
meant to be represented separately but we find Galata alone on
the next page (fig. 71c).\textsuperscript{335} It occupies a single folio and is
depicted, as in most of the Istanbul variants, as facing south,
that is the Golden Horn and Istanbul are on its opposite shore.
Galata's depiction is a topographical view rather than a map,
and in its triangular configuration, it strikingly resembles
the depiction of Galata in the Istanbul map of \textit{Menâzîl}
(fig. 8).

Berlin-57 is drawn on a considerably larger sheet to give
more substance to the depiction of the Asian side but also to
include Galata in the same picture, that is to show more of
Istanbul's surroundings, for the coastal outlines and the scale
in which the land masses are depicted in London-718 are not
modified.\textsuperscript{336}

The addition of Galata's coastline in the lower part of
Berlin-57 makes the shape of the Golden Horn as well as that of
the Bosphorus emerge. Consequently, the cartographic link of
both maps to the subgroup of Paris-956 becomes apparent.
Another link with this subgroup of variants is suggested
by legends which similarly surround Istanbul and run along
Galata's coast to mark the gates and their boat landings, and
the important buildings in the shipyards.\textsuperscript{337} Besides this close
relation to Paris-956 and its subgroup representing the long-
version manuscripts, Berlin-57 also relates to the short
version in a very concrete way by bearing the text of the
chapter on the Red Islands. It occupies the habitual place of

\textsuperscript{335} Galata's depiction is on fol. 4b, its Golden Horn coast parallels the
left edge of the page, i.e. the center of the volume.
\textsuperscript{336} The dimensions of Berlin-57 (42.2 x 56.2 cm) approaches that of the
\textit{Hünernâme} map (49.2 x 63.0 cm). The only other \textit{Bahriye} manuscript in
which double-folio size maps have similarly large dimensions (42.1 x 55.4
cm) is MS Bologna 3609, which also contains maps but no text.
\textsuperscript{337} For a complete transcription of place-names in these two maps, see
Appendix 21 and 22 respectively.
the compass rose while that element appears near the left edge of map, on the Asian side.\textsuperscript{338}

With regard to their depiction of Istanbul, London-718 and Berlin-57 seem to have been largely based on Paris-956. As a topographic view, Istanbul remains the same uniform fabric of houses punctuated by mosques despite the larger scale of drawings of topographic elements. As a result of the larger scale, though, the monumental mosques which line up near the Golden Horn front as in Paris-956 appear as more elaborate structures and are depicted with entrance courtyards and several smaller cupolas.\textsuperscript{339}

The few details that are added to the topographic content of Istanbul are all very visible structures such as the aqueduct and the Byzantine columns.\textsuperscript{340} Also remarkable, especially in Berlin-57, is a mosque with a saddle roof and a projecting apse, obviously one converted from a basilical church.\textsuperscript{341} The most important addition, however, is the Yeni Valide Mosque, which is shown below the Hagia Sophia right

\textsuperscript{338} The design of the wind rose is no longer the simple circle divided by simple lines of wind rays but resembles the elaborate designs that had been used on nautical charts to elaborate the rhumb line centers since the sixteenth century. This is a relatively sober design but in the Cairo map of MS Berlin-57 (fig. 85c) the same design has its center filled with a double rose motive, and in MS London-718 that same design appears alone, in a huge size, as a frontispiece to illustrate the wind directions. See Soucek, \textit{Turkish Mapmaking}, pl. 18).

\textsuperscript{339} These depictions, however, are not quite accurate. The distinctive number of minarets, e.g. is not consistently respected in London-718 where all the great mosques have double minarets and only the Hagia Sophia four (?), one of which possibly coinciding with the central folding line is not visible; in Berlin-57 the Süleymaniye has its characteristic four minarets but others appear with varying number of minarets which seems to depend whether they are drawn as a side elevation or in bird’s-eye view.

\textsuperscript{340} The Column of Arcadius is present in both maps and the Column of Constantine is shown only in London-718. The disappearance of the first in 1715 provides a \textit{terminus ante quem} for both maps as has also been noted (for London-718 only) by Soucek, \textit{Turkish Mapmaking}, 110.

\textsuperscript{341} There were several such mosques in the southwest section of the city. This one, however, because of its proximity to Yedikule, must correspond to the İmrahı́r Mosque, the former Studios Church converted at the beginning of the sixteenth century, see \textit{Bildlexikon}, 147-52.
behind the walls. Its completion date 1660, provides a safe terminus post quem for both maps.

Unlike the intra-muros area of Istanbul, the mapmaker seems to have made more use of the larger map scale to show several new details along the walls, perhaps because these areas are in the foreground. One of them, the Tekfur Palace adjacent to the landwalls, is in the same register as the monumental mosques and its depiction in a bird's-eye view reveals its architecture and situation well.\(^{342}\)

The area that stands out as topographically more detailed is the narrow strip of land between the coastline and the walls on the Golden Horn. It is shown as densely built with houses,\(^{343}\) and among them, below the Süleymaniye, two buildings stand out. The location, identified as "Bâb-ı dakik ma'a horôs" (Flour Gate with the rooster) in London-718 (fig. 71b) and as

\(^{342}\) This Byzantine palace of uncertain construction date is also recognizable in the subgroup of Paris-956 as a tiny rectangular roof, but it is in these two variants that it becomes a conspicuous detail, and its legends display different versions of its popular name, "Sarây-ı Tekûr. [or Tekfur, or Tekvûr]" in London-718 and "Sarây-ı Tekîr" in Berlin-57. But in Berlin-57 the legend also includes "kâşihâne" (glazed tile workshop). It is known that after a decision taken in 1718-9, the opening of a tile workshop in this building's courtyard with the collaboration of masters from Iznik took place in 1724-5, see Bildlexikon, 245 and S. Eyice, "Tekfur Sarayı," in İstâl, 7:234; for the royal decree, see A. Refik, Onikinci asr-ı hicri'de İstanbul hayatı (1688-1785) (1930; Istanbul: Enden, 1988), 65. It should be noted, however, that a document from 1568-9, prepared by architect Sinan to indicate water distribution to public fountains from the Kırkpçeğme and Kâşifhâne waterways, already mentions a "kâşihâne" in an area near Tekfur Palace, though seemingly further north, i.e. between Eğri Gate and Balat Gate; for this document see K. Çeçen, İstanbul'da Osmanlı devrindeki su tesisleri (İstanbul: İTÜ, 1984), 102-12, esp. 104. The documented use of the Tekfur Palace itself as "kâşihâne" in 1724-5 postdates the terminus ante quem provided by three other topographical details I consider reliable. It would also conflict with a fourth terminus ante quem suggested by the absence of an early-eighteenth-century mosque at the shipyards where the buildings are very carefully depicted, see above p. 259. At the present state of our knowledge about the varying uses of Tekfur Sarayi: that seemingly served as a royal menagerie or to house small manufacture, alternatingly with periods of abandon, this evidence cannot be further ascertained.

\(^{343}\) Residential areas and commercial activities, alongside boatlandings, are vividly described by Eremya Kömürçüyan, see İstanbul Tarihi, 14-9.
"Bâb-ı Kapân" (Gate of the public weighing machine) in Berlin-57 (fig. 72b), would correspond to modern Unkapanı. Yet the mosque drawn next to the imposing storehouse for wheat and flour must be the mosque of Rüstem Pasha, somewhat mislocated. Its proper location is further east, near "Bâb-ı Zindân" (Prison Gate), whose name is noted to the left of a peculiar detail, "bokluk" (dunghill). The mosque seems, however, to have been located in these two maps in visual relation to Süleymaniye Mosque, with which it makes a particularly remarkable sight on the Golden Horn.

On the outer edge of the city along the coast, there are also other new details. After the Shore Kiosk and the Basketmakers' Kiosk, already familiar details, the Marble Kiosk is depicted at the tip of the peninsula, and in Berlin-57 we also see toward the Marmara Sea the Pearl Kiosk whose hipped roof peaks out behind the city walls (fig. 72a). Further

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344 Both place-names refer to Unkapanı, the storehouse for flour and wheat from where they were distributed after being weighed under official supervision. The gate itself seems to have had a rooster figure on it, as mentioned in Eremya Kömürcüyan, İstanbul Tarihi, 16.

345 The mosque of Rüstem Pasha is the single extra-muros mosque on the Golden Horn of Istanbul that is of an important size. Its precise construction date is not known but its waqfiyya was prepared in 1562.

346 This detail is drawn in London-718 right in front of the Ayazma Gate, "Bâb-ı Ayazma", under which, according to Eremya Köümürüyan, flowed a strong water current into the Golden Horn, and where a pier (possibly to dump rubbish or rather droppings of pack animals) called "Bokluk iskelesi" existed, in İstanbul Tarihi, 16.

347 The Pearl Kiosk was completed in 1591 for Murad III, the Marble Kiosk that marked the tip of the peninsula was an earlier structure built by Selim I in 1519 or 1520. On these two pavilions see Necipoğlu, Topkapı Palace, 220-31 and Eldem, Turkish Kiosks, 1:142-71 and 93-8. The Marble Kiosk appears on several seventeenth-century European views, as here, a single story kiosk. Yet late-eighteenth century views depict at the same spot a very similar but two-story pavilion which seems to have replaced the original structure earlier in the eighteenth century, as noted in Necipoğlu, op. cit., 221, and discussed in Eldem, op. cit., 94-7. Eldem cautiously suggests that this new structure might have been the Mahbubiye Kiosk built in 1741 by Mahmud I, a building that disappeared in a fire in. This hypothesis seems to be confirmed by Sarraf-Hovhannesyan, who notes, describing the very spot, that Mahmud I built there in AH 1132/AD 1739-40 a rectangular building raised on columns, see Payitaht, 12.

Mahbubiye Kiosk's construction date is given as 1735 by Emel Esin on the basis of contemporary accounts of several chroniclers, in "Le Mahbûbiye,
west on the Marmara coast, there is an off-shore fortification
tower that also stands out as a novel detail, and in the
southernmost corner of the city, between the seawalls and the
Yedikule Fortress, an area walled off from the city and
containing mostly trees bears in London-718 the legend "Bucak
Baği" (corner garden) (fig. 71b). Now fallen into oblivion,
Bucak Bağı was apparently one of the renowned intra-muros
orchards of the city in the seventeenth century.

un palais ottoman 'alla franca',' Varia Turcica 3 (1986): 73-86. Hence,
1735 might be considered as a terminus ante quem for Berlin-57.

The tower corresponds to the so-called Belisarius Tower, see A.
Berger, "Langa Bostani": 468. In London-718 it bears a legend that Soucek
has read as "Kulle-i Hamza". Eremya Körüçüyan and Sarraf-Hovhannesyan
note that the tower is called "papas kulesi" (tower of the priest), the
latter explains that when the sea [former harbor] was filled in 1760 and the
tower remained between houses built on the filled ground, Payitaht,
8-9. For this tower's situation before and after 1760, see Berger, op.
cit.: 470 fig. 3 and 471 fig. 4. Remarkably, this tower stands out as a
topographical detail also in a view by Joseph Grelot's and is one of
several details that suggest a link between his views and Berlin-57.

Evliya mentions the "Bucak Baği" on two occasions: first when he
counts "the mirth increasing excursion grounds of Istanbul that are
accessible to the servants of the sultan and to the public" (hass u 'amm
için bi-tekellüf olan mesiregâh-i ferâh-fezâlar), Seyahatnâme, 206; and a
second time when he explains the guild of the gardeners that look after
"the gardens within the walled area of Istanbul" (dâhil-i hisâr-i
İslâmboI), ibid., 264. He notes that these intramuros gardens are very
numerous but only thousand of them are "known to the sultans" (padişâh
ma'lumu olmûş), and while naming them he also specifies some of the
particular fruits grown there and finally informs us that harvested
fruits were sold by the gardeners to fruit vendors. From Evliya's latter
mention we may deduce that Bucak Bağı was an orchard looked after by
gardeners who held a license to exploit and sold the fruits seemingly on
their own behalf since Evliya does not mention fruit sent to the palace.
Whatever the extent of administrative control over their exploitation,
these gardens must have constituted a separate category from the orchards
and vegetable gardens on the Topkapı Palace grounds looked after by a
special class of servants (bostancı) and harvested primarily for the
royal consumption and only the surplus being sold directly to the public, see
Necipoğlu, Topkapı Palace, 203. Their accessibility to public, which
Evliya underlines also points to an intermediary status. Now fallen into
oblivion, Bucak Bağı was indicated on some nineteenth-century city plans
of Istanbul such as those prepared by F. Kauffer (1786; rev. by J.D.
Barbié du Bocage 1819), by B. R. Davies (1840) and by C. Stolpe (1866) as
well as on some Ottoman maps from the same period. There is an entry
"Bucakbaşı Bostanları" by Hakki Göktürk in İstA/Kocu, 6:3095 and
Ayvansaraylı notes a masjid which suggests that a small community had
developed there, Hadika, 1:62.
In fact, the presence of Bucak Bağı is consistent with the particular attention given to the depiction of gardens in these two maps. In London-718 we find the preliminaries: the depiction of the Topkapi Place as a conspicuously green site occupies a central place in the map and the royal gardens and pavilions that constitute the major topographic details of the Asian coast appear as its counterparts. In Berlin-57 this content is further developed to present the gardens as important elements of Istanbul's landscape. They constitute a very important part of the additional topographic content in Berlin-57 outside Istanbul's landwalls yet more so on the Asian coast.

To the west of Istanbul, three walled gardens are depicted, and green areas intermingled with buildings continue all the way toward the Golden Horn (fig. 72b). The walled gardens situated across from the Yedikule Fortress are depicted as adjacent to one another and contain more elaborate buildings than Bucak Bağı. They might be standing for similar, semi-public gardens or extra-muros royal gardens that are known to have existed at some distance from the landwalls. However, their identity remains conjectural.

350 The depiction of the extra-muros area, to the immediate west of the landwalls, is remarkably matched by Eremya Kömürçüyan's description of the same area. His account of the city gates along the landwalls begins at the southernmost gate, Eğri Kapı, and proceeds toward the Marmara coast. Besides gates, the gardens and mansions within gardens constitute a significant part of his description. See Istanbul tarihi, 20-7.

351 As we shall see below with the royal gardens on the Asian side, some of which are identified, locations are somewhat imprecise because the scale of topographical drawings is larger than that of the map. This might be the case of these three gardens as well. Their location on the map relates them to the Yedikule Gate (Bab-ı Yedi Kulle), and they also appear not far from the Tabakhane settlement and "Zeytin burnı" (Point Olive) on the Marmara coast. Two royal gardens, the Halkali Garden and the Siyavuğ Pasha Garden, both walled around and comprising various buildings, were located further west of that area. For a reconstructed plan of the Halkali Garden, see Eldem, Turkish Kiosks, 1:214. Among the names of gardens that Erdoğan encountered in archival documents there is also a "Mehmed Pasha Garden at Yedikule" see "Bahçeler," 154. Eremya Kömürçüyan on the other hand, notes outside walls "in the vicinity of the Yedikule Gate, near the Silivri Gate" a private (?) garden called Süleyman Sahrası that afforded a particularly beautiful, panoramic view,"
The Asian coast that afforded both the view of Istanbul with the Topkapı Palace in the foreground and of the surrounding bodies of water was primarily distinguished as a site for royal gardens. Already emphasized in earlier variants, this character of the Asian coast is further developed in London-718 and Berlin-57 (figs. 71a and 72a). Despite their apparent similarity, however, the two maps somewhat vary in depicting, locating and identifying the gardens and the buildings in this area. It looks as if the depictions were somewhat hastily drawn in London-718, and some adjustments were made when Berlin-57 was prepared. Nevertheless, Berlin-57, too, presents some ambiguities as to locations of gardens and buildings, as well as to their distances from one another. These ambiguities seem to originate in a difference between the scale of topographical drawings and that of the coastline. While they do not really diminish the significance of these depictions, they somewhat complicate their documentary use. Given their weight in the overall composition, especially in Berlin-57, and their elaborateness, the topographical details on the Asian side deserve to be examined closely. A comparison of the respective areas in London-718 and Berlin-57 with one another and with corresponding depictions in other variants of the Istanbul map as well as with other visual sources

İstanbul Tarihi, 27. The same garden is also mentioned by Evliya, Seyahatname, 206, among excursion grounds accessible to "hass u amm" see above n. 349, as "outside Silivri Gate" (Silivri Kapusından taşra). 352 The depictions of the Asian coast in these two maps and in other variants of the Istanbul map add to a very limited corpus of visual material that we have about the Üsküdar Garden and the Asian coast facing the Istanbul Peninsula, an area whose topography got almost entirely transformed and largely lost in the twentieth century. The respective area of Berlin-57 (and more recently of London-718) has already served as illustration to several researchers, especially for the Üsküdar Garden, but has not been discussed nor compared with other sources. The other variants unknown, Berlin-57's topographical representation has also remained without its proper context. See Ünver, "Üsküdar Kavak Sarayı," 219; more recently Eldem, Turkish Kiosks, 1:144; Necipoğlu, Topkapı Palace, Pl. 22a and b, Müller-Wiener "Kavak Sarayı," 373 and pl. 56/2; D. Kuban, Istanbul, An Urban History (Istanbul, 1996), 277, fig. 153 (used the respective area from London-718).
considerably clarifies the logic and identity of the
topographic details presented.

In both maps, two details that have geographically correct
locations with regard to the depicted coastline mark the area
elaborated in topographical terms: the Fener Garden in the
south, near the upper left corner of map, and the Mosque of
Şemsi Pasha in the north, near the lower left corner. The
depiction of Fener Garden, unlike the respective detail in
Paris-956 and related variants, is shown on its proper site
Cape Kalamış and does not obscure the Bay of Kalamış nor Cape
Moda.\footnote{Point Moda, "Moda Burnu", that defines Kalamış Bay from its north side
is named for the first time in Berlin-57.}

The Fener Garden in Berlin-57 is somewhat more exaggerated
in its size but is also more elaborate than in London-718.
Besides the lighthouse and a nearby pavilion (?) at the tip of
Point Kalamış, it also shows a larger pavilion amidst trees and
a gate, facing north, in the garden's enclosure wall.\footnote{For the central pavilion, see above n. 244.}

The Mosque of Şemsi Ahmed Pasha that marks the Asian coast
in the other direction, where it curves in toward the port and
town center of Üsküdar, has also a more elaborate and notably
accurate depiction in Berlin-57 than in London-718 (cf. figs.
71a and 72a). Besides Şemsi Ahmed Pasha's tomb, which is
adjacent to the northeast facade of the mosque, the detail in
Berlin-57 also shows the fenestrated wall and the madrasa wing
to the south which enclose the mosque's courtyard as in the
actual layout (cf. fig. 101).\footnote{The northeastern section of the enclosure wall, now rebuilt, defined
the limit of the tomb garden and was also fenestrated originally if we
may rely on this depiction.} A long building that is
depicted next to the south of this small mosque complex appears
to be the so-called Şemsi Pasha Palace already depicted in a
similar situation in earlier variants.\footnote{As we have seen, in Nuruosmaniye-2997 (figs. 64 and 64a) this building
appears together with the mosque at the same spot, and its shape, though
not its orientation, is very similar to the depiction in Berlin-57. In}
The lower left corner of Berlin-57 contains some of the details not depicted in London-718. The mosque to the east of the Şemsi Ahmed Pasha Complex must be the mosque of Rum Mehmed Pasha built in 1471-2. Below it also appears the Mihrimah Complex with some remarkable details. As if offering a closer look than the respective detail of Paris-956 (fig. 66d), the maker of Berlin-57 showed, in front of the mosque, the same long buildings and the two waterfront caravanserai belonging to the complex. The northern one that bears on its side facade the legend "câmi‘ yanındaki hânlar" (the caravanserais near the mosque) is backed by another structure with three cupolas. The legend written on its side wall identifies it as the "'imaret" and thus reveals the position of this important auxiliary building which was destroyed by a fire in 1722, and thus provides a terminus ante quem.

In the area between Şemsi Ahmed Pasha's mosque and the Fener Garden, the topographical details of Berlin-57 and London-718 vary in more important ways (cf. figs. 71a and 72a). The settlement of Kadıköy, which is identified in London-718 ("Karye-i Kâzî") appears not at its proper place north of Cape Moda but in the Bay of Kalamış (fig. 71a). On Cape Moda stands a solitary pavilion amidst cypress trees, which also continue in a line up the coast northward to a waterfront garden. Walled around and containing a small group of pavilions, this detail is presented by its legend as "Bâğçehâ-ı pâdşâhdır, Kâzî köyi"

Paris-956 (fig. 66b and 66d) and the related variants it is an identified detail.

357 See Bildlexikon, 456-7. One of the earliest of Ottoman mosques in Üsküdar, the mosque was part of a small complex. The auxiliary buildings have today disappeared, the madrasa was already defective in the seventeenth century, see ibid. That no auxiliary building is depicted in Berlin-57 might be related to their declining state. A particularity of the mosque's depiction, however, is that it shows an element that no longer exists, a projecting eave that precedes the entrance portico.

358 Cezar, "Yangınlar": 359. The precise location of the Mihrimah imaret, i.e. tabhane which may have comprised guest rooms and a soupkitchen, has remained somewhat conjectural, see Kuran, Sinan, 58; Kuban, "Mihrimah Sultan Külliyesi," 457. Another notable detail concerns the entrance porch of the mosque itself.
(the gardens of the sultan, [at] Kadıköy). After a boat landing identified as "Salacak", which is either mislocated or misidentified,359 a larger group of pavilions intermingled with trees occupies another projecting spot of the coast that corresponds to Point Kavak. The legend "bâğcêhâ-yı pâdshâh-dîr, mahrûse-i Üskûdar" here refers to the royal gardens at Üskûdar.

In the corresponding section of Berlin-57 (fig. 72a), the topographical details are more numerous. Kadıköy, unidentified but depicted as a similar settlement, is correctly located north of Cape Moda, identified for the first time with a legend, "Moda Burnû." North of Kadıköy and separated from it only by some trees, stands a large building covered with multiple cupolas that is fronted by a tight row of trees toward the sea while a wall seemingly delimits its site inland. The depiction of the Üskûdar Garden in Berlin-57 seems to begin with this building since the legend "Üskûdar Bağçesi" is noted next to it. To the north, the garden seems to comprise a group of diversely shaped pavilions that are very similar to the pavilions of the Üskûdar Garden depicted in London-718 and are also situated in a similar location.

Although the extent of the Üskûdar Garden in the sixteenth and seventeenth centuries is not well known, it is nearly certain that its main buildings were situated near the small promontory terminating with Point Kavak (figs. 71 and 82).360 Above Point Kavak, this site is elevated on a cliff that faces southwest toward the Marmara Sea and southeast toward large

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359 Salacak boat landing was located further north, near Kızılkule, see below n. 384.
360 In the late eighteenth century, the last surviving buildings were situated in that area and in its last phase the site was referred to as the Kavak Palace (Kavak Sarayî) rather than as the Üskûdar Garden. The only attempt at serious reconstruction of its site plan was undertaken by Müller-Wiener, primarily on the basis of a precious set of architectural sketches by Jean-Baptiste Lepère, a French engineer who observed and recorded some of the pavilions as they were during his stay in Istanbul in 1796-8. Lepère's sketches allowed the author to propose a convincing site plan for the area above Point Kavak but less so for the lower area near the Harem boat landing and the principal residential building. See "Kavak Sarayî": 363-74, site plan on 372.
meadows that used to spread along a small stream.\textsuperscript{361} Northeast, the terrain descended evenly toward a valley and an inlet that apparently served as a little port to the Üsküdar Garden (figs. 105 and 106). The boat landing in stone and identified as "Kavak" in Berlin-57 marks this area and corresponds to the landing that has rather come to be known as the Harem boat landing.\textsuperscript{362}

The garden depicted south of Point Kavak in London-718 is clearly a separate garden as its legend indicates. Even though its location may suggest a link, whether it depicted the Haydar Pasha Garden, another royal garden mentioned in historical sources, cannot be determined.\textsuperscript{363} In Berlin-57, the Üsküdar Garden appears to begin in that area, with the large, multiple-domed building, yet a closer look suggests that this building might have been depicted not at its proper location. In fact, its less elaborate version, depicted with a pair of cupolas and chimneys, appears in London-718 among the pavilions of the Üsküdar Garden. It is possible that in Berlin-57 it was dislocated, because its exaggerated depiction did not fit where it belonged, as seems to be the case with other topographical details further north. Its depiction behind other buildings in London-718, might be an indication that it stood further back in the garden, perhaps closer to the garden's eastern limits and to its enclosure wall there, a position of which the wall depicted behind its version in Berlin-57 and the tight row of trees in front might give evidence.

The other buildings of the Üsküdar Garden shown at almost the same location in both maps and with similarly variegated roofs might be more easily related to the pavilions that were

\textsuperscript{361} The meadows were the prime grazing grounds for the horses of the royal stable, but also served as camping grounds for the Ottoman army departing for an eastern campaign. The area is still called today after a royal garden known as the Haydar Pasha Garden.

\textsuperscript{362} See below n. 373.

\textsuperscript{363} The garden's building is attributed to a vizier of Bayezid II. It is mentioned by Evliya but also in archival documents among the royal gardens. Its precise location remains yet unknown.
at the waterfront edge of the garden even though their depictions do not make this very clear.

Several pavilions seem to have occupied the area north of Point Kavak where the terrain descends considerably closer to sea level. A late-eighteenth-century view of this spot and the pavilions there, from a close distance on the sea, is captured in a realistic sketch by Jean-Baptiste Lepère (fig. 107). This view shows them as lining up along the coast behind and partly projecting from a retaining wall that is absent from Berlin-57 but is depicted in London-718. Some pavilions in that position seem to have already existed in the late sixteenth century for they are also recognizable in the Sehinsehnâme map of Istanbul (fig. 34b). Yet this area of the garden seems to have been significantly marked by kiosks in the seventeenth century, perhaps also because the other buildings further behind were hidden by trees. Some other European views

364 Jean-Baptiste Lepère's view and other sketches, all examined in Müller-Wiener, "Kavak Sarayı", seem to be by far the most reliable representations of these buildings. Another sea view, attributed to Jean-Baptiste Hilair, also made from not very far, resembles to Lepère's sea view but appears a less precise record because of its romanticizing approach (fig. 108). In Müller-Wiener's reconstruction of the garden's site plan, these pavilions occupy the entire north west edge of the promontory up to the most elevated spot above Point Kavak. But, I think, this is due to the mistaken scale Müller-Wiener adopted from some eighteenth-century city maps. For their references see idem, "Kavak Sarayı," 373 n. 48.

365 The depiction of the Üsküdar Garden in the Sehinsehnâme map appears to be facing the Marmara Sea but this due to the exaggerated depiction of the coastline, more precisely of its projecting areas and bays in between, in a style unmistakably borrowed from the nautical cartography. The depiction in this map is remarkable because of its emphasis on the buildings rather than the garden itself, and accordingly, its legend reads "Üsküdar Sarayı" (the Üsküdar Palace).

366 The two kiosks named after Selim II and Murad III and mentioned among Sinan's works might have been also on the waterfront. See below n. 379. Constructions in this garden seemingly continued under Ahmed I and Murad IV. The waterfront pavilions were also possibly modified or rebuilt as was the custom with such structures, the best known and prominent example being the Shore Kiosk. The most important pavilion built by the mid-seventeenth century was certainly the new Revan Kiosk of Murad IV. An official inventory of furnishings of buildings in the Üsküdar Garden from 1704-5 which lists various independent structures, besides what seems to be units of larger building(s), is summarized in Erdoğan, "Bahçeler": 171.
chronologically closer to London-718 and Berlin-57 show the pavilions in a larger topographical context. Among these, Joseph Grelot's depiction from the early 1670s relates in a particular way to Berlin-57 (fig. 109).367

Looking at the site in a less oblique angle than in Berlin-57, Grelot's view depicts the buildings of the Üsküdar Palace, "Serrail de Scutari", as a number of loosely grouped pavilions that have variegated roofs very similar to those depicted in Berlin-57.368 Even though the retaining wall is not clearly visible in front of these pavilions, it climbs southward along the cliff until a pavilion standing alone at the highest point of the garden above Point Kavak. This pavilion is likely to be the Revan Kiosk built by Murad IV around 1640 and which I have considered to be represented in Paris-956 (fig. 66b).369

Two other views, one by Cornelius de Bruyn (fig. 112) and the other by Robert Dalton (fig. 113), more or less share Grelot's viewpoint and depict the buildings of the "Üsküdar Palace" at a similar location yet with slightly different emphases.370 In their depictions the pavilions appear as a

367 Best known are two views, one of them is in the mode of Dutch profile views of Istanbul (fig. 86), the other is more a map-view (fig. 87), yet both have a panoramic character. Both views must have been prepared between 22 October 1670 and 9 March 1672, when Joseph Grelot stayed in Istanbul, after which he worked for two years for the French traveller and merchant Jean Chardin in Iran and subsequently accompanied the Venetian nobleman Ambrogio Bembo in Iraq and Syria, and recorded pictorially the places they visited. His sketches concerning the Ottoman capital he published after his return to Europe in 1680 on his own behalf together with an account, Relation nouvelle d'un voyage à Constantinople (Paris, 1680), see S. Yerasimos, Ista, 3:423-4.
368 Especially a pavilion with an imposing roof lantern (or belvedere?) and another with a hipped roof appear side by side. Also noticeable are two other buildings, one domed and the other with a hipped roof, that form a pair as in Berlin-57.
369 See above n. 274.
370 Cornelius de Bruyn was in Istanbul between 1678 and 1680. Although his two general views are largely based on those by Grelot he must have also incorporated his own observations especially in the view from which the detail of Üsküdar Garden is taken. This panoramic profile view extends much further west Grelot's view, and de Bruyn must have compiled it from sketches he made mainly from the sea level, possissibly from the northern
tighter and perhaps more numerous group. The retaining wall fronting them is also visible to varying degrees because of the trees growing on the narrow coastal strip. In de Bruyn’s view, which gives a better sense of the relief of the terrain, the position of the pavilion at the highest spot of the cliff becomes clearer.\textsuperscript{371} Even though these European depictions of the Üsküdar Garden are not very accurate records either, they complement and significantly clarify the depictions in Bahriye variants.\textsuperscript{372}

banks of the Golden Horn. Therefore, it is fair to presume that his improvement of the Üsküdar Garden area was also based on his own observation from the sea. The view drawn by Richard Dalton (17157-1791) featured first in his work \\textit{Museeum Graecum et Aegypticum} (London, 1752) and later in and enlarged edition, \\textit{Antiquities and views in Greece and Egypt} (London, 1791). The caption presents it as "taken from Mr. Lisle’s house above Galata" though he, too, must have enhanced the Üsküdar Garden area by a sketch made from close.\textsuperscript{371}

The different degree of detail in these three European depictions of the Üsküdar Garden must have depended on how well each artist could observe and sketch the site and the buildings from a closer distance since the viewpoint in Galata did not permit a detailed sight. This is revealed by a very skillfully drawn sketch (ca. 1740) by Gudenus from a similar viewpoint above Galata that recorded what is really visible from that distance and nothing more, for its reproduction, see Eldem, \textit{Istanbul Anıları - Reminiscences of Istanbul}, (Istanbul: ALETAŞ, 1979), 290; for a photographic view taken from the Galata Tower, see ibid., 39. Although the makers of the three European views must have substantially relied on in-situ observation from a principal viewpoint corresponding to what is suggested by their drawings, they could not have captured the entire landscape, visible in their drawings, in an authentically unique sight. They possibly sketched an overall view from a particular viewpoint and incorporated in it the partial views of areas not clearly visible from that principal viewpoint. On the construction of unified views ("totalizing image"), especially conceived as bird's-eye views but also as panoramic profile views, see Lucia Nuti, "Mapping Places: Chorography and Vision in the Renaissance," in \textit{Mappings}, ed. by D. Coscrove (London: Reaktion Books, 1999), 90-108, esp. 98ff.\textsuperscript{372}

It is crucial to use pictorial sources, be they Ottoman or European, as well as those of archival character, in critical and complementary manner. Also early city plans from the late eighteenth to nineteenth century cannot be taken at their face value as they seemingly mingled carefully surveyed with approximate and often borrowed details from earlier plans. In the case of research on the long disappeared Üsküdar Garden a reconstruction of the site and buildings seem to depend most particularly on putting in topographic and historical context the visual sources with the help of archival information as well as of other written sources and descriptions which, too, cannot be scrutinized enough since over a period of three hundred years not only the buildings and

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Yet, the sea aspect of the Üsküdar Garden that emerges from these views, and which I have related to the pavilions depicted in Berlin-57 and London-718, does not easily lend itself to a comparison with its depiction in Nuruosmaniye-2997/Yenicami-790 (cf. figs. 64, 64a and 65) nor with two other depictions of a building presented as the "Üsküdar Palace" in the Üsküdar water supply map and in Grelot's other view (figs. 110a and 111).

What is represented in Nuruosmaniye-2997/Yenicami-790 and in the water supply map appears to be a single building, with a long fenestrated facade parallel to the coastline, rather than individual pavilions lining up along and behind a retaining wall. Nevertheless, the facade seems to incorporate pavilion-like units, of which the central one is somewhat dominating. These depictions also suggest that the site of this building was not much elevated from the sea level. While the water supply map's detail does not provide much topographical context, that of Nuruosmaniye-2997/Yenicami-790, notwithstanding its simplification, shows the building partly behind some hills, as if in a valley and where the coast curves in, a location that would correspond to the lower area north of Point Kavak, the area presently called Harem (figs. 93 and 104) and where a major boat landing existed. In spite of not

plantation of the garden changed but also the topography and toponomy of the coastal surroundings, including the names of boat landings. The most recent and thorough study on the buildings of the Üsküdar Garden, referred to as Kavak Sarayi in its later period, together with a critical assessment of visual sources and consideration of archival documents is to be found in Müller-Wiener, "Kavak Sarayi": 366ff. This study also brings to light a very valuable set of architectural sketches by J.-B. Lepère made in the garden in 1797-8. Mainly based on Lepère's sketches and earliest city plans Müller-Wiener presents a tentative site plan, ibid., 372, which however does not situate all considered buildings convincingly, especially the "Harem" building (marked with "a" in the legend).

373 That landing apparently corresponds to the boat landing marked "Kavak" in Berlin-57. The landing that existed there until the mid-twentieth century was rather called the "Harem" landing presumably in reference to its being the principal access to the harem buildings in this garden. It is identified that way in Turkish city maps from the nineteenth- and the early twentieth century, e.g. in Konstantin Kaminar's map (1813), see C.
revealing much about the building's precise location, both maps seem to depict it as visible from the sea. The three gates depicted in the water supply map suggest that there might have been an open space between that building's facade and the coastline (fig. 111). The back facade of the building depicted in the water supply map appears to be represented in Grelot's map that looks at the garden's site from the land side (fig. 110a). It shows a long building situated in an elevated location, not far from it the garden's enclosure wall, and in between a wooded area containing some other pavilions. Yet no link to Grelot's view showing the site from the sea can be found here, something that may indicate that the depicted building stood further back than the pavilions Grelot showed in the sea view. Yet Grelot's depiction provides some clues for identifying the function of this long building. The chimneys and the latticed gallery seen all along the back facade reveal probably the principal residential building in the Üsküdar Garden. The general configuration of the building suggests a

Kayra, Istanbul: Mekânlar ve Zamanlar (n.p., Ak Yay., 1990), insert map 5 as well as in C. Stolpe's map (1863), ibid, insert map 7. The name also survives in the name of a street leading to that spot. In the mentioned maps, another landing situated south of Point Kavak is named Kavak landing. Yet in Kauffer's city map (1786; rev. 1819) it is the landing north of Point Kavak that is identified as the Kavak landing and perhaps records an older appellation. In Davies's map (1840) the names of the two landings are reversed.

Remarkable are not only the matching numbers of chimneys and the positions of different roof forms of pavilions at two ends but also those of subsidiary buildings and a mosque to the south. Could it be that the maker of the water supply map somehow relied on Grelot's depiction? Grelot might not have depicted this building in the sea view either not to load his depiction with too much detail or simply because it was no longer very visible because of the trees. Yet the back view might not have been topographically very accurate. It is obvious that Grelot's view looking at Istanbul from an eastern viewpoint is largely constructed and that the viewpoint assumed by him is much too close and high and simply not a real one. Even a much further inland hill, Bulgurlu, offered a lower angle for viewing from above as can be seen in some later views by R. Dalton (ca. 1750) and William Henry Bartlett (ca. 1835).

Describing the buildings of this garden in 1640, the French traveller Du Loir particularly noted this architectural element, in relation to the apartments of the women, that "La communication de l'un à l'autre appartement pour les femmes se fait par des galleries fermées de
more durable construction, possibly in masonry, which is also suggested by the depiction of the long building with multiple domes and chimneys in Berlin-57. This aspect offers a certain connection between the two buildings despite their somewhat different architectural configurations. The depiction of a wall behind them in both views also seems to sustain that connection.\(^{377}\)

After this comparison of visual sources, the layout of the royal garden of Üsküdar still remains hypothetical. However, it becomes clearer that there are different buildings in what we find depicted as its views from the sea in the variants of the Istanbul map: in the late sixteenth to the mid-seventeenth century a depiction of the principal residential building, the so-called harem with a long-stretched plan; from the middle of the seventeenth century onward the depiction of the pavilions near and on the retaining wall, most likely because the principal building's view from the sea was largely hindered by trees planted between it and the waterfront.\(^{378}\) The buildings of the Üsküdar Garden represented in London-718 and Berlin-57 are largely these waterfront pavilions. Their depiction as an "imagined" aerial view rather than as a view from the sea, however, reflects a pictorial attitude that is particular to these two maps and which I shall discuss at the end.

\(^{377}\) As I suggested earlier, the position of the domed building in Berlin-57 is not a contradiction as it was most probably determined by pictorial concerns than its actual location.

\(^{378}\) These pavilions might have been not exactly in front of the residential building but slightly shifted southward toward the higher part of the garden.
For the area lying between the Üsküdar Garden and Şemsi Ahmed Pasha's mosque only Berlin-57 provides topographical details. Two boat landings, "Kavak" south of the Üsküdar Garden and "Salacak" further north near Kızkulesi, provide correct geographical reference points. But they also reveal that this coastal stretch was drastically compacted, or rather foreshortened, as can be seen when compared to a modern map (fig. 93). Consequently, the buildings and gardens depicted in that area, most probably a selection, appear closer to one another than they were in reality.

The Asian coast between the southern outskirts of Uskudar and the Üsküdar Garden was occupied into the eighteenth century by gardens with residences that were at the disposal of the royal family members, and some of them may be traced back to influential grandviziers of the second half of the sixteenth century. In a European view from the late sixteenth century that looks at this area from the west, at least three imposing residences are depicted on hilltop sites (fig. 97), one of

379 In works listing Sinan's buildings such as Tuhfat-ül-Mi'marin (TM) and Tezkiret-ül-Ebniye (TE), the residences of Siyavuş Pasha (in TM, TE), Nişancı Mehmed Pasha (in TM), Mehmed Pasha (in TE), Rüstem Pasha (in TE) in Üsküdar are mentioned, see R. M. Meriç, Mimar Sinan (Ankara: TTK, 1965), 41 and 119. Pierre Gilles (ca. 1545) the destruction of a jetty that linked Kızkulesi to the shore and thus creating a small port (see below n. 384 "Taş Liman") by Turks who used its stones to build private residences at Damalis Promontory, i.e.the area we are considering here. See Pierre Gilles, De Bosphoro Thracico (Lyon, 1561), 245. In the Sehingahname map (fig. 34b), it is precisely this area that appears occupied by residences. The earliest of these residences might be that of Rüstem Pasha, grandvizier (1544-53 and 1553-61) to Süleyman the Magnificent and husband of his daughter Mihrimah Sultan, the officially acknowledged patron of the mosque complex at Üsküdar's town center. In 1553, Hans Dernschwamm presents Rüstem as the patron of this mosque and notes that Rüstem had built for himself a large residence surrounded by a garden, in Hans Dernschwam's Tagebuch einer Reise nach Konstantinopol ed. by F. Babinger (Munich and Leipzig, 1923), 57. (Also see below n. 383) The Frenchman Philippe du Fresne-Canaye, who was in Istanbul in 1573 describes in some detail another sumptuous residence, that of Sokollu Mehmed Pasha in Üsküdar which he visited, as well as that of Piyale Pasha, see below n. 386. Both men were married to daughters of then reigning sultan Selim II.
which seems to be featured also in a topographical map of the Bosphorus from 1588 (figs. 98 and 98a). From the buildings and gardens depicted in this area of Berlin-57 only one bears a legend that refers to "Ayazma Bağçesi" (the Ayazma Garden). It appears aligned with the Kavak boat landing and situated at some distance from the coast. The depiction comprises a principal building situated perpendicular to the sea and an enclosed garden with a large water basin. The other site aligned with the boat landing of "Salacak" and the Kızkulesi is left unidentified. Yet, it is clearly a hilltop site surrounded by a wall amidst which stands a single, very large building with a view-affording second floor.

Among the prominent gardens in this area, the Ayazma Garden is perhaps the only one whose location and name has been preserved. While its original boundaries are not anylonger clear, its site today is marked by the Ayazma Mosque built there around the mid-eighteenth century by Mustafa III (fig. 114). In all likelihood, the Ayazma Garden corresponded to Rüstem Pasha's Üsküdar residence and garden. Seventeenth-

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380 This map is on fol. 2r of MS, Bodl. Or. 430. of the Bodleian Library, Oxford. On the manuscript itself, which belongs to a particular genre generally known as costume books, and its dating, see Susan Skilliter's introductory note in Life in Istanbul 1588: Scenes from a Traveller's Picture Book, ed. by S. Skilliter (Oxford: Bodleian Library, 1977). This publication, however, does not reproduce the map, whose legends allowed Skilliter to narrow down the date of the album to 1588.

381 The depiction of the principal buildings is particularly detailed. Its longer, arcaded facade overlooks both the basin and the enclosed garden while a bay window on its shorter facade and a belvedere surmounting its roof afford the view of the sea and the city beyond. Other, smaller buildings adjacent to the enclosure wall on the east may be some outbuildings but perhaps also a nearby neighborhood.

382 A garden with this name is mentioned in some seventeenth-century archival documents but also by Bremya Kömürçüyan. The construction accounts book of the Ayazma Mosque (AH 1171-73/AD 1758-60), Topkapı Palace Museum Archive, no. 1137, defines the site as "Medine-i Üsküdar'da Hadikâ-ı Ayazma demekle ma'ruf mahal" (the location in the town of Üsküdar that is renowned as the Ayazma Garden), see Sadi Bayram and Adnan Tüzel, "İstanbul-Üsküdar Ayazma Camii ve Ayazma Camii inşaat defteri," Vakıflar Dergisi 22 (1991): 225.

383 The connection with Rüstem Pasha is revealed by a reference to this garden as "Ayazma șihretli Rüstem Pasha Bağçesi" (the Rüstem Pasha Garden renown as Ayazma) that occurs in archival records from 1717-30 (salary
and eighteenth-century descriptions of the area suggest that the garden descended to the coast and had a boat landing named after it. Its waterfront was slightly north of Kızkulesi and not far from the Şemsi Pasha Palace.

The geographical location of the Ayazma Garden, as it emerges from these descriptions, better matches the unidentified hilltop site which also seems to have a coastal garden connected to it by a gate in its retainment wall. Hence, the site identified as "Ayazma Bağçesi" becomes anonymous. Not much more can be revealed at this point about the two sites depicted in Berlin-57, nevertheless it is almost certain that they correspond to two of the hilltop residences

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books concerning the staff of royal gardens), mentioned in Erdoğan, "Bahçeler": 172. Erdoğan, ibid., also notes that in earlier salary books (he gives as example a record from AH 1036/AD 1626-7) there is only reference to "Bağçe-i Rüstem Paşa" (Garden of Rüstem Pasha). It seems that Rüstem Pasna's name got gradually detached from the garden's name during the seventeenth century since a document dated 1699, ibid., and also Eremya Kömürçüyan only mentioned the Ayazma Garden, İstanbul Tarihi, 49.

In the late eighteenth century, Sarraf-Hovhannesyan, Payitaht, 67 and İncicyan (after Sarraf-Hovhannesyan?), 18 Asırdâ İstanbul, 134, note that Mustafa III had a mosque [i.e. the Ayazma Mosque] built above a retaining wall near the Ayazma boat landing.

384 The precise location of the Ayazma Garden on the coast emerges from the sequence of coastal locations given by Eremya Kömürçüyan and Sarraf-Hovhannesyan (also by İncicyan). The two accounts roughly separated by a century situate its waterfront between the "queen mother's palace" in the north by Ayşe Sultan's Garden in the south after which came the boatlanding of Salacak. From the main pier in front of Mihrimah Mosque (depiction in Berlin-57) toward the Üsküdar Garden they mention the following locations: Balaban boat landing, Şemsi Pasha Mosque and Palace, Saritaş boat landing and Queen mother's palace, the Ayazma Garden and its boat landing, Taş Limanı [Stone Port] vis-à-vis Kızkulesi and Ayşe Sultan's Garden, boat landing of Salacaköy and at the shore Fatma Sultan's Garden, the Üsküdar Garden. The accounts fully match except in the later account Ayşe and Fatma Sultan's Gardens are referred to as "former" and "Salacaköy" (Salaca Village) as "Salacak" followed by İhsaniye, a new settlement created by Osman III in 1755. See İstanbul Tarihi, 49 and Payitaht, 68, 76

385 The waterfront pavilion that this garden comprises might have a counterpart in Grelot's sea view. Also in that view, a pavilion is shown next to a garden wall in the area just behind the Kızkulesi, yet in a slightly different situation (fig. 109a). On the other hand, Grelot's view from the land side (fig. 110) clearly depicts two walled gardens on two different hilltops between the Üsküdar Garden and Üsküdar itself (bottom right corner), which may be easily compared to the discussed details of Berlin-57.
originally built as residences of influential grand viziers and that were depicted in the late-sixteenth-century panoramic view (fig. 97).\textsuperscript{386}

The second area where Berlin-57 shows substantial topographic detail is the Galata side. Depicted as an aerial view in continuity with the Asian side, it constitutes a kind of foreground for the view of Istanbul (figs 72 and 72b). Compared with the Asian side, this area of the map contains only a few novel elements and is like a close-up version of the topographical details introduced in the subgroup of Paris-956. Nevertheless the larger scale of drawing permitted the maker of Berlin-57 to elaborate the shipyards considerably, and seemingly at the expense of the Tersane Garden.\textsuperscript{387}

In the walled area of the shipyards, besides the vaults used for constructing the ships, we can clearly see the other important buildings, most of which were tiny but identified details in Paris-956 (fig. 66a). They are, from west to east, "kerâste mahzeni" and "büyük mahzen", two storehouses each with

\textsuperscript{386} Even though Berlin-57 is somewhat unreliable with regard to locations, the site identified as "Ayazma Bağçası", because of its proximity to the Üsküdar Garden, might be compared to the hilltop residence closest to the Üsküdar Garden in the Vienna view where also a residential wing perpendicular to the coast is distinguishable. Perhaps a clue about the identity of this site is the large basin depicted in its garden in Berlin-57 as it brings to mind a feature of Sokollu Mehmed Pasha's residence in Üsküdar, a "vivier" (large water basin for fish) that was noted by Philippe du Fresne-Canaye who had visited it in 1573, 89-90. The residence of Piyâle Pasha which du Fresne-Canaye also mentions in relation to fireworks made from its site on the occasion of his daughter's wedding and that he watched from the French embassy above Galata, ibid., 120, might be the residence depicted in the middle in the Vienna view. The site of Piyâle's residence remains conjectural yet it might have been the sumptuous garden, known as "Tunusbağlı" (Tunis Garden), that Ayvansarayî noted as established by Piyâle Pasha in Üsküdar (Üsküdar'da Tunus Bağı dimekle bahçe-i müzeyyen binların binasıdır), \textit{Hadika}, 2:27. Its name is today preserved in a street name, in the modern Doğancilar area, at a location matching the concerned site in the panoramic view and which would have been easily seen from the French Embassy above Galata, from where du Fresne-Canaye watched the fireworks.\textsuperscript{387} The site of the Tersane Garden corresponds to the projecting area of the Golden Horn's northern coastline in the bottom right corner of the map, an area that the mapmaker used to give the shipyards in a full layout.
a large courtyard and used for wood and munitions of war respectively, \(^{388}\) "divanhâne", the office of the admiral of the fleet with an adjacent mosque, "köprü", the bridge over the Kasım Paşa River seemingly incorporating a small masjid, \(^{389}\) "barud mahzeni(?)", the storehouse for gun powder which is a domed building within its own enclosure, \(^{390}\) followed by "küreklik", another courtyard building to store oars of the galleys, and "eski divanhâne", the office of the deputy of the admiral, seemingly having its own masjid. The most prominent detail, however, is the famous prison of the shipyards, the so-called bagno, which is depicted for the first time in this variant. It is shown in the foreground as a large, hipped-roofed building surrounded by a high a wall. Its legend adds further emphasis to its depiction with an affirmative statement: "Tersâne zindânıdır" (This is the prison of the shipyards.) \(^{391}\) Among the shipyard buildings, all carefully depicted and located, the absence of the Çorlulu Ali Paşa's mosque built in 1707 is remarkable. \(^{392}\)

To the east of the shipyards, the depiction of the town of Galata itself does not display any particularity except a few buildings that stand out, such as the mosque of Sokollu Mehmed

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\(^{388}\) On these storehouses, see Alpagut, *Marmara'da Türkler*, 124-6.

\(^{389}\) Right at the edge of the sheet now worn out, the bridge and its relation to the enclosure wall cannot be understood well. Yet it is possible that the bridge incorporated at the same time a gate, the "river gate" of the shipyards. For a small masjid built above that gate, see Alpagut, op. cit., 111-2.

\(^{390}\) The legend is barely legible.

\(^{391}\) It comprised the living quarters of the war prisoners that served as oarsmen on Ottoman galleys at war time and as workers in the shipyards, but also of criminals condemned to galleys. See Müller-Wiener, "Tersane-i Amire": 257, and for references to European accounts describing this prison, see ibid., n. 16.

\(^{392}\) This mosque was shown as a new detail in Baltimore-656, see above, p. 259 and fig. 70f. Given the meticulous depiction of the shipyards in Berlin-57, it is unlikely that this mosque was forgotten. Furthermore, its site between the prison and the two storehouses is an empty area where its depiction could have been easily fitted. Hence, its absence appears a reliable evidence and its construction date 1707 might be considered as a *terminus ante quem* for Berlin-57, which would also be the earliest of all that I have been able to identify.
Pasha, depicted near the shipyards on the Golden Horn and which is also a novel detail, the Kurşunlu Mahzen facing the Seraglio Point with its imposing tower, and the extra-muros mosque of Kılıç Ali Pasha facing Üsküdar. However, the very last detail on Galata's coastline is significant. The canon foundry, identified as "tophane kârânesi", appears for the first time as a clearly depicted and identified detail in a variant.\textsuperscript{393} Its depiction in Berlin-57 that consists of two very similar buildings with hipped roofs and large roof lanterns not only reveals the sixteenth to eighteenth century state of the foundry but also constitutes, in a remarkable way, a symmetrical element to the shipyards.\textsuperscript{394}

Drawn in a larger scale, the map of Istanbul as presented in London-718/Berlin-57 offers the viewer a closer look at many buildings and sites of the city and its immediate surroundings. A substantial use of aerial view as a mode of depiction also contributes to this closer look yet in a quite particular way that deserves attention. In the depiction of Istanbul itself, this mode is used more or less in the conventional way, that is, depicting individual buildings or sites to explain their configuration in the horizontal plane. Hence it allows the map viewer to better grasp the layout of certain topographical details such as the Yedikule Fortress, the two tiers of the landwalls and the Tekfur Sarayı and its courtyard. It is also used to highlight the most important of the city's numerous mosques. Unlike the many mosques depicted as standard elevations, the great mosques, from the Hagia Sophia to Sultan

\textsuperscript{393} For the only other depiction, though unidentified, in Deniz-990 (fig. 57), see above n. 198.

\textsuperscript{394} They must correspond to the original buildings dated to the reign of Süleyman the Magnificent (1520-66) that are known to have burnt down in 1719 and which Evliya describes in length, see Seyahatname 185-7. A resembling depiction of the tophane buildings appears in a late-fifteenth-century variant of Buondelmonti's map, see Manners, "Image of a City": 76. The present Tophane building dates from the eighteenth century. See A. Aran and A. Yetiğkin Kubilay, "Tophane-i Âmire" in İstA, 7:278-80.
Selim, stand out with their elaborate architecture mainly revealed by an aerial view. As they form a row along the Golden Horn side, their emphasis also coincides with an emphasis on this front of the city that is at the origin of the design of Istanbul map in Bahriye manuscripts. In Berlin-57, however, both the aerial view and its use to emphasize foreground elements has a particular pictorial character.

All buildings and sites in the areas that are especially elaborated in this map, such as the Asian side and the extra-muros area west of Istanbul as well as the Galata coast, are all depicted as part of a continuous aerial view with a rather high angle. Toward Istanbul, the angle gradually lowers and a gradation seems to occur in the depictions of monumental mosques that are variably seen from above and from the side, as if to achieve a transition to the rest of Istanbul's buildings which are depicted predominantly in elevation. As a result, the peripheral areas become visually unified around Istanbul and, while their surrounding character is enhanced, the eye of the viewer is led toward the Istanbul Peninsula.

This use of an aerial view in Berlin-57 is different from its somewhat isolated use in traditional compositions, such as in miniature painting. It also presents a significant departure from the customary way of depicting buildings as sea-level profile views in Istanbul map variants in continuity with nautical observations, cartography and coastal descriptions. The buildings depicted this way in Berlin-57 are not buildings or building groups viewed individually but form a unified view that is essentially imagined and constructed in a conscious effort. In this respect, Berlin-57 displays a kinship with

395 While Yeni Valide, Fatih and Sultan Selim are aerial depictions similar to the depictions of great mosques in London-718, Suleymaniye and Sehzade are in elevation but have their full number of minarets, and Haghia Sofya, Sultanahmet, Bayezid are real side elevations with only half the number of minarets. In all these depictions, however, the open space surrounding each mosque is depicted enclosed by a wall seen obliquely from above. Shown from above,
European bird's-eye-views maps of cities.\footnote{The bird's-eye view maps produced from the fifteenth century onward in Italy have been designated "perspective plans" by Lucia Nuti to underline the two essential components, of these views: the measured, geometrically accurate plan and the three-dimensional illusionism that renders them "lifelike". See "Perspective Plan": 117.} Nevertheless, it is a hybrid view. In a certain sense, Istanbul remains a city essentially viewed from all around and mainly from the sea, as emphasized by the sequence of place-names surrounding it, but it is also seen as part of a larger landscape. It is this duality that Berlin-57 seems to reflect by maintaining Istanbul's integrity in the form of a mapped outline and by blending this depiction with its surroundings in a global, topographic view for which the viewpoint of Istanbul's monumental, northern front remains determinant.\footnote{More or less contemporary with Berlin-57, the variants University-123 and Nurusmaniye-2990 (figs. 61 and 62) also display a unified view by depicting all the topographical elements as viewed from the north. Yet being much less elaborate as topographical views than Berlin-57, they do not convey a similar global view.}

3. Concluding Remarks
The map of Istanbul as presented in London-718 and Berlin-57 constitutes the final stage of a cartographic image whose evolution we have followed across a series of variants. Besides the place-names, the depiction of Istanbul is clearly the element that links the more elaborate and complex designs of these late examples to earlier variants. As we have seen, it largely remained the same topographic view that started with a sketchy rendering of the cityscape visible from the Golden Horn...
and gradually included the entire area mapped. The improved coastal outline of the Istanbul Peninsula in the new, larger format of Berlin-57 obviously allows a better representation of its monumental Golden Horn front. However, what is more important about the composition of Berlin-57 is that it is not dominated by the representation of the northern cityscape of Istanbul. Rather, in Berlin-57, that monumental face of the city is put in a larger geographic context, in other words, it is integrated into the landscape that surrounds it.

The topographic view that evolved into what we find in Berlin-57, mainly emphasizes three things: the Istanbul proper, an evenly built city defined by its fortification walls and marked by its numerous mosques, the suburbs, naval shipyards, and gardens that surround it, and the bodies of water. Remarkably, all these elements seem revolving around the Topkapı Palace, the seat of the Ottoman power. However, Topkapı Palace's depiction at the center of the composition is not only an emphasis on the seat of Ottoman sovereignty and its visibility on the most distinguished site of the city but also a presentation of this site as the quintessence of the Ottoman capital: with its site surrounded on three sides by the sea and its landscape combining architecture and gardens, the Topkapı Palace condenses Istanbul's particular geography at the same time the symbolic and aesthetic concepts that shaped it.

The Istanbul map that is realized as a bold and colorful topographic view, spread on a double-folio format, also has its very particular context among other maps of Bahriye. It finally compares with the Venice map that occupied a place of honor in the long-version and, at some point, also in the short-version.

398 The quasi absence of gardens from Istanbul itself should not be interpreted either as an indication of their real absence or insignificance for the seventeenth-century accounts of Evliya and Eremya Kömürcüyan and the European views reveal the contrary. It has, in my opinion, to do with the tightly finished, in a way conventionalized, depiction of the city that the maker overtook from earlier variants while the area west of the walls and the Asian side offered lots of room for elaboration, of course they were also essentially green areas.
manuscripts as the unique, double-folio size map. In MS London-718 and MS Berlin-57, however, the map of Istanbul does not challenge this special status of Venice alone; in these manuscripts, we also find the map of Cairo transformed into a double-folio composition (figs. 85b and 85c).

The volumes of maps containing Berlin-57 and London-718 were prepared in a period when Ottoman naval power and presence in the Mediterranean was in decline. Yet the last and long struggle over Crete, which had ended with Ottoman victory over Venice and its allies, was not so far back. MS London-718 and MS Berlin-57 might be interpreted as a last affirmation of Ottoman presence and claims in the Mediterranean. They seem to have fulfilled a largely compensatory role, or a symbolic function, comparable to that of the numerous island books in the Venetian context. In condensing the view of the Mediterranean offered in Piri's work to its most concrete component, i.e., its maps, MS London-718 and MS Berlin-57 in a way epitomize several other Bahriye manuscripts prepared in the second half of the seventeenth-century. It is, therefore, not surprising that the representation of Istanbul reached its apogee in this purely visual version of Bahriye. At this final stage, the map of Istanbul corresponds to a last instance of Ottoman self-representation within a global view of the Mediterranean. Notably backed by an "expanded" representation of Cairo, the empire's most precious possession, Istanbul stands in a last comparison with Venice (figs. 86f and 86g), which, too, was trying to cope with a similar decline.

The image of Istanbul depicted in Berlin-57, which weaves the city, its suburbs and its natural setting into a colorful, garden-like landscape, also captures the city's seventeenth-century perception by its inhabitants, as we find it expressed in the accounts of Evliya Çelebi and Eremya Kömürcüyan. Besides their very similar emphases on gardens, I have noted above in

399 See above n. 109.
relation to Berlin-57, both accounts relate to the seventeenth-century Bahriye-maps in being structured as excursions mainly following the coastline of Istanbul and its surroundings.

Evliya's account, as far as the Istanbul proper is concerned, does not suggest an itinerary. Outside Istanbul, however, the geographical sequence of suburban towns and districts on the Golden Horn and the two banks of the Bosphorus determine the structure of Evliya's description. Evliya ends his topographic description by briefly recounting all the royal gardens and renowned excursion places (mesiregâh and teferrücgâh), as if to put a final stress on the gardens and excursion sites, which he systematically pointed out, and to suggest that Istanbul and its surroundings were mainly perceived as forming a vast garden landscape. Moreover Evliya's remarks on views, vantage points, and the visibility of buildings and sites in the landscape, frequent throughout his account, reveal how the city's perception was shaped by viewing practised as part of daily life as well as on promenades.

Notably, Evliya characterizes not only gardens and excursion sites but also intra-muros mosque complexes by their beautiful trees, flowers, fountains, sounds and perfumes. In his description of "mosques as gardens", his narrative easily shifts from the interior of a mosque to its courtyard, tomb garden and to distant views seen from its site, spatially weaving them together. Evliya compares each of these units of the built environment to "Bâğ-ı İrem" to qualify them as

400 It has a rather ennumerative structure that allowed him to discuss every topographical component of the city, mainly mosques and various types of public buildings, in a nearly exhaustive manner, something which he seemingly did over many years.

401 He begins the extra-muros tour near the Marmara Sea coast with the area outside Yedikule and descends toward the Golden Horn, toward Eyüp. From there he continues to Galata and subsequently, first describes the west bank of the Bosphorus up to the Black Sea and then, moving southward, its eastern bank down to Üsküdar and Kadıköy, Seyahatnâme, 166ff.

402 Ibid. 205ff.
enchanting gardens and thus offers, in a way, a public and experiential version of the theme "Istanbul as a beautiful garden in the likeness of Paradise".

The perception of the city from the sea is even more clearly conveyed by Eremya Kömürçüyan's account conceived as an imaginary boat tour, a "seyrân" (sightseeing excursion) along the coastline of Istanbul and its surroundings. Eremya's account follows a strictly coastal itinerary, and to simulate a real sightseeing, the author always keeps track of which direction he moves and of what he views. Beginning at the Yedikule, he first tours the Istanbul Peninsula, as if following the legends noted along that coast in Bahriye maps, and continues along the Galata coast. His description of the two banks of the Bosphorus is like a concise version of Evliya's description, and similarly rich in references to beautiful sites, gardens and their views.

Although their audiences were somewhat different, both accounts are in essence a geographic recapitulation of the city and reveal that Istanbul's perception had become a global perception in the seventeenth century, a perception composed of multiple views primarily experienced from the sea.

The pictorial representation of Istanbul, especially in the form we find in Bahriye variants, seem to have formed, in a

403 Eremya Kömürçüyan, a member of the city's Armenian community, wrote this account at the request of his friend Vardapet, the head priest of a monastery in Bitlis (Eastern Anatolia). Since I have read it in Turkish translation I cannot fully appreciate his account. Yet many Turkish terms that Eremya Kömürçüyan used in his text and of which a good number are terms related to excursion practises and places (e.g. seyrân, seyirci, yârân-ı safâ, mesire, teferrüç, yeşilistân, çemenzar, bostân) are distinguished by bold script in the translation of Andreasyan and give evidence of an urban culture largely shared by Istanbul's dwellers.

404 His recounts the city gates and their boat landings, the neighborhoods and important buildings to which they give access, including the gardens and sites appreciated for their panoramic views. He occasionally disembarks to visit e.g., the Hagia Sophia and Istanbul's landwalls. Notably to view and explain the monumental mosques of Istanbul, he "climbs" to Okmeydanı, behind the shipyards, affording a full view of Istanbul's cityscape on the Golden Horn, and later visits on foot some churches and an Armenian cemetery in the Galata area. Each time, however, he continues the coastal tour from where he interrupted.

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certain sense, a natural counterpart, a parallel to these
textual representations. It, too, conveyed a perception formed
by discrete views of the landscape unified by the geographical
layout of coasts.

This kind of pictorial representation directly relates to
the particular experience of viewing the city from the
surrounding sea, which had seemingly become an established
practise in the seventeenth century. Linking a newly acquired
culture related to the sea, that of navigation, and the life in
a newly appropriated city surrounded and shaped by the sea, the
Bahriye maps seem to have offered a suitable medium to capture
the new experience.

The experience of viewing the city when moving about on
the sea, which divides it into parts yet also relates these
parts to one another, is essentially defined by the coastline.
In other words, the coastline offers a very clear and unifying
structure in the form of a visual line behind which the city,
its gardens and green areas rise as a continuous landscape. It
is, therefore, not surprising that the coastline provided a
structure for the city's pictorial representations, such as the
Bahriye maps, as well as for its textual representations, such
as its descriptions by Evliya Çelebi and Eremya Kömürçüyan. Its
crucial place in perceiving Istanbul's landscape is also
suggested by poetic compositions of the eighteenth century,
entitled "sâhîl-nâme" (a writing of the coast). Already
anticipated by the şehrengîz of Ahmed Cemâli from 1564, Fennî's early-eighteenth-century "Sâhîlnâme" devotes a couplet
to each coastal neighborhood on the two banks of the Bosphorus

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405 The sâhîlnâmes did not form a completely new genre but were deriving
from the şehrengîz, popular urban panegyrics composed by Ottoman poets in
the sixteenth century. On the genre of şehrengîz, in a larger Islamic
context, see "Shahrangîz," in EI², 9:218-20, for the Ottoman examples,
see ibid. and particularly A.S. Levend, Türk edebiyatında şehrengizler ve
şehrangizlerde istanbul (Istanbul: İstanbul Enstitüsü Yayınları, 1958).
406 For Cemâli's şehrengîz, see Çelebi, Divan Şi'irinde İstanbul, 31-5 and
also Levend, op.cit., 41-4, 106-12.
and exactly follows their coastal sequence, beginning at Galata and ending at the Red Islands. 407

Another kind of coastal description, apparently used for a practical purpose starting from the late-eighteenth century onward and preserved in records known as "Bostancıbaşı Defteri" or "Bostancıbaşı Sicili", also adopted the same structure in listing all the public and private properties along the coasts of the city and its surroundings. 408 The coastal sequence followed in these lists seems to relate even more directly to a

407 For Fenni's "Sâhilnâme", see Divan Şi'irinde İstanbul, 99-105 or Fevziye A. Tansel, "Dîvân şairlerimizden Fennî'nin Boğaziçi kıylarını canlandırıran mesnevisi," Belleten 40 (1976): 337-45. The poem's authorship is somewhat unsettled for there are two poets who used the penname "Fennî" and who died in the seventeenth century. The poem in question, however, must have been written after 1709-10 since it mentions the coastal palace Şerefağâh, between Üsküdar and Salacak, that was built at that date. On Fennî and this particular poem, also see İskender Palâ, "Sâhilnâmeler" and "Fennî" in İstA, 6:409 and 3:291 respectively. A later poem composed in the same format by İzzet Efendi (died 1797-8) and presented to Selim III was entitled "Kaside der vaşf-ı iskele-i İstanbul der sitâyiğ-ı Sultan Selim-i Sâlis" (Qasidah on the Qualities of Istanbul's Boat Landings and the Eulogy of Sultan Selim III). The "map-like" character of the so-called sâhilnames has been also pointed out recently by Shirine Hamadeh, who qualified Fennî's work "the first literary topographical map of the contemporary city's waterfront," in "The City's Pleasures: Architectural Sensibility in Eighteenth-century Istanbul" (Ph.D. dissertation, M I T, 1999), 169. Hamadeh's context of discussion, however, does not relate to maps. On the other hand, she seems to consider this poetic form characteristic of the eighteenth century (and does not mention its precursor written by Cemâli), see ibid. 167-9.

408 There are seven known examples; earliest being datable to 1790 and latest to 1815, they largely coincide with the reign of Selim III (1789-1807). Presumably used by Bostancıbaşı, the chief of the royal gardeners who was also acting as the official responsible of public order of the urban area along the coasts in this period, these lists seem to have been primarily conceived as an inventory. Yet they do not seem to have been official records. It has been also conjectured that the Bostancıbaşı, who customarily acted as the helmsman of the sultan on his boat trips, used the list to inform the sultan about the coasts. See Koçtu, "Bostancıbaşı Defterleri," 39-90 and Necdet Sakaoğğlu, "Bostancıbaşı Defterleri," in İstA, 2:30. This function remains yet to be researched. It is significant, however, that all these lists start at the Shore Kiosk, where the sultan customarily embarked, and end at Haydarpaşa. They thus exclude Istanbul's Marmara coast, which they should have included to be complete, and hence appear to correspond to a certain itinerary rather then to an inventory.
source proper to navigation, the portolans used by seaman, as well as to Bahriye manuscripts.\textsuperscript{409}

There remains a lot to be discovered about Istanbul's culture centered on the sea, as it evolved from the mid-fifteenth- to the eighteenth century. The cartographic documents I have discussed in this chapter, and their parallels in literature reveal, however, the importance of a sea-based perception of the urban environment and its experience sufficiently. It may be worth concluding by pointing out one more perceptual parallel between maps and poetry. Cemâlî's and Nābî's verses, respectively from the late-sixteenth- and the late-seventeenth centuries, clearly express an enchantment with the sailing promenade and notably compare it to flying, the ultimate experience a human desired to view a city or landscape.\textsuperscript{410} Yet as in the seventeenth-century maps, we find the expression of a global view of the city's landscape in the verses of Nābî. His poem not only elaborates the perception of Istanbul's landscape conveyed by earlier panegyrics, but also presents it as a "map-view", a view from above:

\begin{quote}
(...) what is that joy and delight
When you become a bird on the sea's surface

As you embark, as Solomon [did] his throne,
Both the air and the sea you will command.
\end{quote}

\textsuperscript{409} The "bostancıbaşı" records are organized in the form of tables composed of boxes, each housing one item. In the extant examples, each page is divided into three boxes horizontally and five boxes vertically. Notably, important locations or properties, in this case royal buildings, are written with red ink as was the custom of highlighting important port towns both in nautical charts and portolans. The table of contents, added to the seventeenth-century manuscripts of Bahriye, were also arranged as a grid of boxes into which the chapter titles (i.e names of coastal areas) were incised. It is therefore reasonable to presume that the nautical conventions were mediated to bostancıbaşı records by Bahriye manuscripts. For a facsimile of such a record from ca. 1815 [İÜK, MS, 8830], see Cahit Kayra and Erol Üyepazarci, \textit{İkinci Mahmut'un İstanbul'u: Bostancıbaşı Sicilleri} (İstanbul, 1992), 93-156.

\textsuperscript{410} In his "Şehrengiz-i İstanbul", Cemâlî suggests that "human beings who go partying on a sailboat do not fancy for flying" (iderse anda yelkenile 'âlem/Dahî uçmak hevesin itmez âdem), in \textit{Divan Şi'irinde İstanbul}, 32.
You will lean onto cushions
And look at the silver mirror.

On the air's shoulders, freed from care
You will promenade without needing your feet

Carried on the wings of the wind
Many a town you may visit

All assembled together,
Forty, fifty towns stand there.

They mirror one another,
Their coasts are embellished by the sea,

On which boats either stand still or rush
Like aquatic birds, their wings are sails.

The beauty [of this view] has no limits
There is no need to make its eulogy

We have not seen its like in any land
Such merriment exists perhaps in Paradise.411

411Nâbi (1642-1712) was a much acknowledged poet of his time. The quoted verses are an excerpt from a eulogy of Istanbul entitled "Der beyân-i geref-i İstanbul" (The Explanation of Istanbul's Excellence), in Hayriyye, a book of advise he composed in 1701 during his residence in Aleppo for his newly born son Ebül-hayr Mehmed. See Abdülkadir Karahan, "Nâbi," in İA, 9:5. For a French translation of this work, see Conseils de Nabi Efendi à son fils Aboul Khair, ed. and trans. by M. Pavet de Courteille (Paris, 1857), for a modern annotated edition in Turkish, see Nâbi, Hayriyye, ed. by İskender Pala (Istanbul: Bedir Yay.,, 1989) and older edition see Hayriyye-i Nâbi (Istanbul, 1307 [1889-90]). In each of the three publications, which seem to have been based on different manuscript copies of the work, the quoted couplets appear in a somewhat different sequence, occasionally not very correct in terms of the flow of ideas. The order in which they appear above, in my translation, seeks to remedy this problem and hence follows in part the three editions and also differs from them slightly.
CONCLUSION: FROM VISION TO VIEW

The maps contained in three manuscript books, Mecmu’-1 Menâzil (1537-8), Hünernâme (1584) and copies of Kitâb-i Bahriye (ca. 1550-1700), are the only known Ottoman representations of Istanbul. These maps neither stem from a single cartographic tradition, nor constitute such a tradition themselves, except for the group of variants in Kitâb-1 Bahriye. Variably relying on the conventions of Islamic miniature painting, Mediterranean nautical cartography and European picture-maps, each map is an individual attempt at visualizing and depicting the city as a topographical view. Despite their pictorial differences, the maps nevertheless form a meaningful group, for, as book illustrations, they share not only a format but also a cultural and symbolic context and, as topographical representations, they reflect different stages of Istanbul's urban development. More importantly, their cartographic emphases, expressed through map layout, orientation, topographic content or viewpoints, convey an evolution in how the city is perceived from the early sixteenth century to the late seventeenth century. It thus seems appropriate to conclude this dissertation by considering these maps as a whole. To establish more clearly their differences and similarities, I shall start by looking at the context of each map in their respective books and continue by briefly summarizing the perception conveyed by these maps.

1. The Cultural and Symbolic Context: Istanbul Maps as Book Illustrations

The cultural context and an overall symbolic meaning of the Ottoman maps of Istanbul produced in the sixteenth and seventeenth centuries are defined by the books they are found in. Prepared for, or at, the Ottoman court, two of these books were not destined for wide circulation but rather for the ruling elite, the sultan and his courtiers. Nasûh's campaign
chronicle Meccmu’-i Menâzil (1537-8) and Lokman’s dynastic history Hünername (1584-5) are prominent examples of Ottoman historiography, which was essentially valued for its role of maintaining the ruler’s fame and reputation. Embedded in a discourse of power and legitimization, the two books reflected an imperial consciousness despite their different contents and somewhat different scopes. Piri Reis’s Kitâb-ı Bahriye (1520s), conceived as a navigation manual to be used in the Ottoman navy, differed from the other two books in its practical purpose and content. However, prompted by the Ottoman naval expansion in the Mediterranean and presenting the entire coastline of this sea as a geography to be known and controlled, this book, too, participated in the imperial discourse.

Among the three books, Nasuh’s Menâzil is the one that displays its imperial scope and eulogistic purpose most overtly through its content and form. It also provides an exceptionally elaborate and symbolic topographical context for the map of Istanbul.

Written as a record and eulogy of a military campaign led by Süleyman I, Menâzil seeks to glorify the sultan by praising not only the successful military events he led but also the territory he brought under control. The book achieves this mainly by portraying the cities and the countryside on the campaign itinerary in a very eulogistic pictorial style. The map of Istanbul is the illustration that opens this series of exclusively topographical and highly charming views. It represents the imperial capital, home to the sultan, the most glorious city of all in the book.

In this profoundly eulogistic context, and in conformity with an elitist symbolism, Istanbul’s image is cast in a map that hierarchizes its parts, its landscape, its buildings. The city’s monuments, made to stand out by size, color and accurate drawing, serve as the “royal ornaments” of the city, and in
this function, they are notably supported by gardens and orchards. In the final composition, the depicted city cannot but be recognized as Istanbul yet it strikingly recalls a contemporary royal caftan, opulent and somewhat stiff, whose precise and colorful motives catch the eye.

While the map itself unveils Istanbul's own urban splendor and beautiful view, the book's context provides the city with an extensive prospect constituted by the city and landscape views that map the territory covered by Süleyman's military campaign. It, hence, defines Istanbul as the "imperial lookout", a place from which the empire is ruled and, in a symbolic sense, "viewed".

Part of a series of shahnames produced in the later part of the sixteenth century, the Hünernâme shares the imperial scope and eulogistic purpose of Menâzil but does not concentrate on territorial gains. Its focus is the Ottoman dynasty itself, and the empire's territorial expansion is not illustrated. The map of Istanbul, which is the only map in this book, hence appears somewhat isolated from its imperial-territorial context. It is a map that depicts the city with much more attention to its actual features than the Menâzil map, and clearly displays an interest in realistic representation of geography rather than symbolic stylization.

As an illustration, the Istanbul map in the Hünernâme accompanies the account of one of the most glorious episodes in the Ottoman dynasty's history, the conquest of the ancient and renowned capital of the Byzantine Empire. But at the same time, the map presents Istanbul as an achievement of the Ottoman sultans by depicting it with its late-sixteenth-century topography, i.e. with all the urban development that took place after the conquest.

In this book's context, the Istanbul map seems to be deliberately isolated in geographical terms in order to focus on the city as home to the dynasty. The three other topographic
compositions found in the same volume support this interpretation of the map, for they focus on the actual imperial residence, the Topkapı Palace. Notably, the composition showing the residence proper of the palace is practically an enlargement from the Istanbul map, and hence makes its focus particularly evident.

The imperial scope of the navigation manual Kitâb-ı Bahriye is seen by its coverage of the entire Mediterranean Sea in a single volume, something that was hardly done in traditional manuals that had inspired its author Pîrî Reis. Bahriye greatly resembles Menâzîl in representing a geographical space by both text and a series of maps. Its representation is even more direct for the book concentrates on describing coastal topography for practical purposes and does it by using text and maps in a strictly complementary fashion.

Originally, Pîrî Reis's navigation manual did not contain a map of Istanbul. The complete tour of the Mediterranean coastline suggested in Bahriye begins further south, from the naval base Gelibolu (Gallipoli) at the Dardanelles and ends at the same place. Nevertheless, the global view that results from this tour is, in symbolic terms, a view afforded by the Ottoman capital. The Istanbul map was added about half a century later, apparently when manuscript copies made from this navigation manual began to circulate. Although the addition's circumstances cannot be fully explained and the book context is somewhat complicated by the existence of two different original versions, the Istanbul map unmistakably relates to Bahriye's geographical scope and its imperial meaning.

The Istanbul map was first added to practical copies of the short-version Bahriye that were used by the seamen. Yet remarkably, the period between 1550 and 1570, from which the earliest known examples date, coincides with renewed Ottoman interest and naval action in the Mediterranean. The appearance of the Istanbul map in the more formal copies made from the
long-version Bahriye, on the other hand, relates to another period of naval enterprise, the siege of Crete that lasted from the 1640s to 1660s. Besides political conjuncture, the Istanbul map's own design and its early evolution suggest that symbolic concerns played an important role in its cartographic conception.

The three earliest examples, all of them different in their designs, can be traced back or related to nautical charts. Their rudimentary designs suggest that they were casually drawn by the seamen themselves, who somehow felt the need to add an Istanbul map to the navigation manual they were using. Yet, already in this very early stage, the map does not seem to have served a fully technical purpose, since it accompanies a chapter dealing not with Istanbul but with nearby islands. Two of these early maps do not show the islands at all, and both the design that was eventually retained and its gradual elaboration in early variants reveal that the islands were not the main subject of illustration.

The map design, which appeared around 1570 and then developed in variants, compromises the cartography of the islands in order to fit them into a layout determined by the depiction of Istanbul. On the other hand, the map orientation chosen gives priority to the more impressive and symbolically important view of Istanbul on the Golden Horn rather than to its southern view seen from the Marmara Sea when approaching from the direction of the islands. Directing the viewer's gaze toward the south, i.e. ahead of Istanbul, this map's orientation also presents the Mediterranean as a destination lying beyond Istanbul. Hence, the global picture of the Mediterranean, composed of a sequence of coastal maps in the book, becomes a view afforded by the imperial capital, the place from which naval campaigns were actually launched.

Due to the informal circumstances of its making and copying, the Istanbul map only gradually became more
topographical, until the seventeenth century. Its addition to the Bahriye manuscripts, copied from the more elaborate long version, seems to have taken place around the mid-seventeenth century. Notably, this late stage of the map's evolution spanning the second half of the seventeenth century corresponds to a period when Ottoman imperial dreams concerning the Mediterranean began to fade. The Istanbul map, the splendid, double-folio composition that it had become in the late seventeenth century, closes a period during which the Istanbul map seems to have fulfilled a primarily compensatory role.

The symbolic meaning of this Istanbul map is nevertheless special in having a wider socio-cultural base in comparison to the Istanbul maps in Menâzil and Hünernâme. The urban image it conveys is the product of a long cartographic evolution to which individuals of seemingly different backgrounds contributed over the years, and therefore reflects the perceptions of a more socially heterogenous group.

On the other hand, the tradition of picturing Istanbul in Bahriye manuscripts, books related to navigation, also has its own cultural significance for it suggests that coming to terms with the city was somehow linked with the experience of the sea. Indeed, experience in nautical matters was somewhat linked with the conquest of Istanbul. The Ottomans' nautical skills developed along with the growing naval enterprise, which itself was inspired by Istanbul's imperial past and also fostered by its geographical command of the seas. Timewise, this development was accompanied by the appropriation of Istanbul, an urban setting defined by the sea and requiring a familiarity and intimate relation with it.

The fact that all the known Ottoman images of Istanbul were conceived as maps must have been no coincidence, for this form of topographical depiction conveys territorial claims and consciousness much more efficiently than others, such as the profile view, bird's-eye view or perspective. Furthermore,
conceived as a map, Istanbul's representation in books of imperial scope seems to have accomplished two things in a single image: a comprehensive portrayal of the Ottoman capital and its inscription into a wider geography, imaginable as extending in all directions beyond the frame or the edges of the map. In two books, the territorial implications of the Istanbul map are supported by the broader geography that appears as Istanbul's prospect, and hence, symbolically qualifies it as an "imperial look-out".


As cartographic images, the maps of Istanbul primarily rely on a representation of the geographical setting and topography in depicting the city. However, each of these maps constructs an image that differs in its depiction of geographic and topographic features and its emphases. Yet unfailingly, each one captures an important phase in Istanbul's urban history and also succeeds in showing how it was perceived in the first place. In the Bahriye series, we also have a kind of "diachronic" representation, for the cartographic evolution of the maps reflects an expansion of both the city and of its perception.

The Istanbul map in Menâzil is the most tightly composed and synthetic image of all the maps studied. It successfully combines the conventions of the traditional miniature painting with an as yet unpractised pictorial format, the picture-map, although a simultaneous use of different modes (plan, elevation, oblique view) within the same composition were common to both pre-modern pictorial traditions. On another level, the Menâzil map also synthesizes the symbolic ornamentalism of the Persian miniatures and the accuracy of topographic recording based on in-situ observation. The layout, the tracing of geographical contours and the selection and distribution of topographical details in the Menâzil map make
up a well calculated composition in which accuracy of depiction is reserved for Istanbul's buildings. This map, however, emphasizes a pictorial symbolism for it shows Istanbul primarily as an ideal city.

Prepared in the late 1530s, the Menâzil map records Istanbul's topography following an early but important period of urban development. The urbanization efforts during the reigns of Mehmed II and Bayezid II, i.e. between 1453 and 1512, concentrated on the rebuilding, repopulating and islamicizing of a city that had suffered a long decline in its final period as the Byzantine capital. The redevelopment of the city was organized around mosque complexes, which provided the city with urban centers suitable for Muslim civic life. While many medium- and smaller-size complexes were built to encourage residential settlement across the intra-muros area, two monumental mosque complexes, the Fatih and Bayezid Complexes, symbolically situated on the northern branch of the Byzantine thoroughfare Mese, transformed the important Byzantine sites into new urban centers. The two royal palaces, respectively sited at the tip and near the center of the peninsula, were the two other monumental components of the new Ottoman capital and hence, like the large mosque complexes, contributed to its new imperial identity and image. Despite these major urban interventions, the walled city of Istanbul still included large stretches awaiting development in the early sixteenth century.

The Menâzil map clearly focuses on the intra-muros Istanbul that was the subject of intensive urbanization efforts since the conquest. The peninsula occupied by the walled city nearly fills one half of the map. The way in which the actual shape of the peninsula is modified in the map allows, on the one hand, to record all the monumental buildings concentrated in the city's eastern section and to depict them in large scale and meticulous detail and, on the other, to give the city a uniformly built appearance by not showing the sparsely
urbanized areas closer to the landwalls. The deliberate distortion of geography hence allows the expression of an urban ideal, the desired but not fully achieved urbanization of the new Ottoman capital. The pictorial emphasis on the individual buildings, which is a particularity of this map, corresponds not only to their importance in Istanbul’s redevelopment but also to their ornamental role. The same role is also played by the gardens and orchards that were part of building programs and which are represented in the map by blossoming fruit trees conspicuously filling the spaces between the buildings.

Without emphasizing any of the buildings nor any vantage point for viewing them, except pointing out symbolical symmetries between the principal monuments (Hagia Sophia–Fatih Mosque), the map conveys that the city is perceived from within. Composed as it is, the map aligns the viewer’s outlook with Istanbul’s west-east axis and thus proposes a sequential view of its major monuments as if one were moving along the principal thoroughfare. Outside Istanbul, however, it proposes perceptual hierarchies, if not views, among the towns of Galata, Eyüp and Üsküdar by depicting them as discrete urban settlements and arranging them in a pictorial balance, among themselves as well as in relation to Istanbul. In brief, the Istanbul map in Menâzil, represents the topography of Istanbul as it was in the 1530s but forms it to fit a vision, an ideal yet to be realized.

The Istanbul map in Hünernâme, prepared in the 1580s, represents the city half a century later, after a period of substantial urban growth including the construction of numerous monumental buildings. It shows the walled area of Istanbul, tightly filled with buildings, except for the Bayrampaşa Valley. Although the density of Istanbul’s intra-muros urban fabric is somewhat exaggerated in this depiction, the city had indeed become much more populous, and new suburban settlements, as shown on the map shows, were growing beyond the landwalls.
More importantly, however, in the second half of the century, Istanbul's urban life and growth had definitively gravitated toward the Golden Horn, where the commercial port and the naval shipyards had been rapidly developing. Consequently, the northern bank of the Golden Horn between Eyüp and Galata, especially the slopes across from Istanbul, also began to be settled as did the suburbs of Kasımpaşa and Tophane next to Galata and the colony of European embassies on the heights behind it. In addition, the second half of the sixteenth century also witnessed the symbolical appropriation of this new urban space centered on the Golden Horn. Starting with the construction of the monumental Süleymaniye Complex in the 1550s on a site directly overlooking the Golden Horn and the port, the monumental development around the Golden Horn continued with the construction of several medium-size mosque complexes on the coast or at nearby sites until the end of the century.

The Hünernâme map, in the first place, seeks to give a sense of the urban growth in and outside Istanbul and especially of its geographic deployment rather than its components. Notably, it does not accentuate individual buildings, not even the monumental mosques and palaces, but blends them into a continuous urban fabric. Its portrayal of the Ottoman capital is clearly guided by a preoccupation with "realistic" depiction of urban topography rather than with symbolic issues. In this regard, this map, prepared in the palace workshop, fits in well with the general trend of realism that had come to characterize the Ottoman miniature painting produced in the palace workshop, especially its treatment of architecture and landscape in figural compositions. Although rarely depicted on their own in the illustrated books produced in the second half of the sixteenth century, topographical themes were typically rendered in a relatively plain style. There was in particular much attention to actual features for which the artists seem to have variably relied on observation.
and on maps and European topographic views. Yet the Istanbul map, perhaps the fruit of an *ad hoc* collaboration with chartmakers, reflects the challenges they faced by embarking on an entirely topographical and also complex subject. It is a kind of experimental "bricolage" with the conventions of miniature painting and nautical cartography.

The concern with realistic depiction is clearly reflected by coastlines that imitate rather than stylize the actual contours of the landmasses and which are derived from nautical cartography. The depiction of the city's buildings forming rows, as if in a profile view, and rising behind the coastline might also be connected with nautical charts, more precisely with the depiction of the topographical elements as landmarks observed from the sea. Yet, the topographic content of the *Hünernâme* map is clearly more elaborate than topographical details and even town vignettes occurring on charts. It reflects the efforts of the miniature artist(s) to construct a "realistic" topographic view. The depiction of buildings in small size and their blending into a continuous fabric also seem to create topographic coherence. There is even some attempt to express hills, valleys and steep slopes. But more importantly, the depiction of topography is derived, even though casually, from actual views. The buildings of Istanbul, drawn either to face the south or the north, form two separate zones as they are seen from the Marmara Sea and from the Golden Horn or its northern banks. Other settlements outside Istanbul are also consistently oriented toward the coast on which they are situated.

Depicted as it is in the *Hünernâme* map, Istanbul is viewed from outside, from a series of vantage points outside its walls, predominantly along the coasts. In the Golden Horn area, Istanbul's external view integrates the extra-muros settlements stretching from Eyüp up to Galata, including the Tersane Garden and the shipyards. Accommodating the largest number of different
vantage points, the Golden Horn emerges as the place from which the city itself and its growth is viewed as an extensive urban landscape, an emphasis that perfectly reflects a recent urban development and the viewing experiences connected with it. Also included in this urban landscape are all of Istanbul's important monuments, as they are indeed best seen from the north. Nevertheless, the Hünernâme map does not single out this aspect of the city that had become definitively shaped as a symbolic cityscape by the end of the sixteenth century. It rather contextualizes, and perhaps also counterbalances it, for its map orientation favors Istanbul's view from the Marmara Sea.

Yet the crux of this map lies in its cartographic expression of a symbolic tension between the new viewing place of the Golden Horn and the inner city space along the main thoroughfare punctuated by important earlier monuments and still the site of ceremonial processions. It depicts the two principal sites on this street, i.e. the Fatih and Bayezid Complexes, as seen from their proper inner city sites, but nevertheless integrates them into the cityscape visible from the Golden Horn.

In keeping with the restrained depiction style and color scheme of the Hünernâme map as well as its deliberate emphasis on urban growth, the green areas and gardens in and around the city do not appear accentuated. Yet the trees depicted throughout the walled area of Istanbul and the bodies of water remarkably enhanced by the silver color convey that elements of the natural landscape were important components of the city's image.

The Kirkçeşme Water supply map, contained in the slightly earlier shahname Târîh-i Sultân Süleymân, may be considered a complement to Istanbul's image in the Hünernâme map, more precisely an elaboration of Istanbul's "garden-like" character, commenting on the abundance of water. Notwithstanding its
straightforward emphasis on the architectural forms of the aqueducts and the network they form, the map shows the area they occupy as being much nearer the city than they in fact are. The green meadows, crisscrossed by aqueducts, appears as a vast, extra-muros garden to Istanbul, to which the upper Golden Horn and the Kağıdhane area, a much appreciated natural park stretching along the two streams, also belong. Hence, the map is not a simple topographical record of the complex water supply system, the most important charitable achievement of Süleyman I rendering the city a better place to live, but also reveals its symbolic function, that is its enhancement of Istanbul's "garden-like" character.

The Istanbul maps occurring in Kitâb-ı Bahriye manuscripts produced between 1550 and 1700 relate to a much longer period in Istanbul's urban history. As a series, these maps both anticipate and complete an urban image that was captured by the Hünernâme map in a midway phase.

The second half of the sixteenth century, during which the cartographic design of the Istanbul map took shape, corresponds to the architectural elaboration of Istanbul's Golden Horn front starting with the construction of the Süleymaniye Complex (1550-7). The Istanbul maps from this period display very little topographical content and mainly consist in coastal outlines. However, as I have already noted, the cartographic search, during which the overall composition of the Istanbul map took shape, coincides with the aftermath of the Süleymaniye Complex and clearly takes into consideration the shaping of Istanbul's cityscape by this major construction.

The navigational context demands a southern or southeastern vantage point for Istanbul, i.e. a vantage point matching the direction of approach from the Marmara Sea, which we find suggested by the map orientations of the earliest Istanbul maps. In these maps, the major mosques of the city are not oriented to face the map's viewer but are depicted as
landmarks, from varying vantage points depending on their visibility from the sea.

An early map that appeared around 1570 proposed a cartographic composition that does away with the orientation demanded by the navigational context. Its cartographic composition, which aligned the general vantage point for the entire mapped area with a northern vantage point, unmistakably favors Istanbul's cityscape on the Golden Horn. The topographic view anticipated by this design emerged rather slowly. In some late-sixteenth- and early-seventeenth-century variants of this map, Istanbul's northern cityscape appears as a rudimentary profile view, i.e. a "composite" landmark, in which the Süleymaniye Mosque, notwithstanding its simplistic depiction, is the most distinguishable and dominant element. But the adoption of this particular composition for all subsequent Istanbul maps sufficiently indicates that the increasing topographic and symbolic importance of Istanbul's Golden Horn view was the main factor in the cartographic design.

The elaborate topographical content of the seventeenth-century variants properly reflects Istanbul's urban growth within and outside its walls. Although there is also an indiscriminate use of standard topographical elements, such as houses and small mosques that make up the residential settlements, important topographical details continue to be depicted in elevation and in reference to sea-based vantage points. This distinction is particularly evident in the Istanbul Peninsula. The cityscape on the Golden Horn continues to be a relatively characteristic profile view, and its major components, the great mosques, become more recognizable. However, the rest of the city, extending behind that monumental front but remaining invisible from the same vantage point, is completely filled with repetitive houses and small mosques. Most of the variants from this period depict all the buildings on the Istanbul Peninsula oriented the same way as the city's
Golden Horn front, and hence unify and conventionalize Istanbul's view.

Yet the most significant aspect of the variants in this later stage is that they depict not only the residential areas extending beyond Istanbul but also the green areas that were developed into prominent waterfront gardens by the sultans mainly in the late sixteenth and the early seventeenth centuries. While the walled city of Istanbul itself is visualized as a densely built urban area, its tip is conspicuously marked by the Topkapı Palace precinct depicted as a green park and notably oriented toward the deep prospect formed by the space along the Golden Horn. Other royal gardens, such as the Tersane, Dolmabahçe, Üsküdar and Fener Gardens, each exploit a different view of the urban area across a body of water while they significantly shape their respective coastal sites as green parks as do the towns and districts growing nearby. Also noteworthy is the fact that some variants from the seventeenth century depict informal green areas either because of their visual impact on the landscape, as was the case of cemeteries densely planted with cypress trees, or because of their importance as places of public excursion such as the Kağıdhanı area.

The evolving topographical content of Bahriye maps shows Istanbul's development with a particular emphasis on its urban landscape, of which buildings, gardens and the natural setting were equally important components. The way the different parts of this garden-like landscape are brought together in a map image as discrete views facing the sea suggests that the perception of Istanbul significantly depended on the nature of its geographical setting. Divided as it is by branches of the sea, this setting was not only connected by the reciprocal visibility of its parts but also invited viewing by the sheer variety of vantage points it offered.
Largely influenced by the sea-based modes of observation, the cartographic tradition that brought about the Istanbul maps in Bahriye seems to have provided the basics of visualizing and depicting Istanbul's topography. Although they were somewhat casually drawn by seamen and not by cartographers, the early variants of the Istanbul map rely on the conventions of nautical charts as suggested by the tracing of the coastlines, the signs indicating rocks and shallows and the use of colors. Most typical of the nautical tradition, however, is the conception of buildings as landmarks and their systematic depiction in elevation, i.e. as tiny profile views observed from the sea.

As their meticulous drawings as well as stylized coastlines and topographical details indicate, the seventeenth-century variants were more often the work of professional copyists, whose skills in general betray a background in chartmaking and occasionally also in miniature painting. Notwithstanding their elaboration into picture-maps, the later maps continue to display cartographic signs pertaining to sea charts and also a new feature, a sequential naming of coastal locations, as in nautical charts or in navigation manuals. This feature suggests that the nautical tradition continued to play an important role in the conception and in viewing the city from its coasts onward.

The professional milieu in which the seventeenth-century variants were produced was also a culturally hybrid one where European topographic prints were apparently circulating and being consulted. In addition, the in-situ topographical recording of Istanbul by European artists had become a commonplace since the sixteenth century. The picture-maps of Istanbul in Bahriye manuscripts remained the only Ottoman depictions of the city, and except in the very last example, they did not become unified bird's-eye views but continued to incorporate discrete views in a map image. Notwithstanding the
force of tradition, an explanation for the persistence of this form of pictorial representation may simply lie in its appropriateness for capturing a city, an urban landscape characteristically divided by the sea into many parts and hence viewed and experienced from a multitude of vantage points on the water and on opposite shores. A picture-map allowed, like no other form of representation, to layout this landscape geographically and yet to visualize it from a number of independent vantage points.

The maps in Mecmu'-1 Menâzil, Hünernâme and the various copies of Kitâb-1 Bahriye reflect different moments in the urban development of Istanbul. The continuity that can be found between them on that level is rather limited. They constitute a series of snapshots taken at different times, and their discontinuity is made stronger by the fact that the way the city is perceived is also different. However, if we temporarily dismiss the differences of topographical content, and if we concentrate on the viewing directions in themselves, then a clearer development can be found. First, there is a gradual shift from an internal viewing of the city and its monuments to an external viewing from the sea. Secondly, there is the transformation from an idealized layout of buildings on a carpet of greenery, to a more empirical picture of buildings, water and land.

Another continuity that prevails through this transformation, is the concept of the city as a garden. Istanbul's idealization as an urban setting that integrates buildings and orchards in the Menâzil map has reached a culmination in the seventeenth-century Bahriye maps. After a development of two centuries, the city, filled with buildings and extending beyond its walls, occupies a large urban area. With its suburban towns and districts, and punctuated by monumental mosques, trees and gardens, it forms a landscape

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centered on bodies of water, viewed and experienced as if a vast garden.

The vision pictorially conveyed in the Menâžil map has its counterpart in panegyrical texts, more precisely in the recurrent comparison of Istanbul, and also of its individual sites and buildings, to the legendary Garden of Iram. The perception and experience of the actual urban landscape, as a garden conveyed in Bahriye maps, on the other hand, is accompanied by contemporary descriptions of the city that are conceived as excursions. These accounts remarkably adopt a coastal itinerary to weave the visited and viewed sites, towns and parks alike, into the extensive topography of Istanbul's landscape.

The importance of conceiving Istanbul as a garden setting and the role it played in shaping architectural and environmental attitudes, however, becomes only evident when we reconsider the sixteenth- and seventeenth-century monumental buildings. The context provided by the maps and texts allows us to interpret mosques and palaces in Istanbul, with their siting and view-oriented features, as "kiosks" that punctuate and embellish a natural landscape while exploiting at the same time the views offered by it. Furthermore, these buildings can also be seen as realizations of "ideal gardens" within themselves, or rather as architectural representations of an imaginary and ideal garden. As may be observed in mosques as well as in royal kiosks or pavilions, the architectural interior is typically defined as a garden by the floral compositions on wall revetments and carpets. At the same time such buildings are visually connected through windows or arcades with the real garden outside. Often, the immediate garden surrounding them also affords distant views and thus integrates the urban landscape as a further enriching element to its proper setting. Perceived in spatial continuity with an actual garden, the
larger urban landscape, in turn, becomes aestheticized as a vast garden.
APPENDIX 1
Dresden, Mscr. Eb. 389, fol. 169v
(Facsimile)
Bu fasıl Kızıl Adaları beyân ider

1) Mezkur Kızıl adaların asıl benâm limânı Birgözlu adadur. Eğer mezkur Kızıl adaya varur
2) olsalar, mezkur adayı sol tarafa alurlar, iki adanın arasına girürler, demür korlar. Palamârı
3) Birgözlnun dökündülerine kârubânserây öününe bağlarlar, demür sûlûka korlar.
4) Yulduza karayile eyü limândur. Furyâz-yıldız berk olucak toğru boğaz içine döner, demür
5) palamâr berk gerek. Amma günlerde bir gün, zikr olan Birgözlu adanun yukarı
6) depe üzerindeki birgöza vardur [sic] ve ol birgözun yanından pusûlâ ile her yerleri
7) nişânladuk, bir vakitle gerek ola diyu. Meselâ Birgözldan İstânbül boğazı, yağını
8) Salâcak cânibi, yıldız-karayil üzerindendür. Birgözldudan Büyükçekmenün burnı günbatısı
9) ve karayil üzerindendür. Birgözldan Marmara adası günbatısı üstünüdür. Birgöz-
10) lidan Bozburun lôdös üzerindendür. Bunlarunu herbirin Birgözlu adadan pusûlaya
11) aldum ki, Marmaradan bertü gelürken, gicelerde gerek olursa
12) bu tarih üzerinde 'amel ideler, hatâ olunmaya vessellâm.
13) Temmetii'l-kitâb bi 'avnallah el-melik el-vahhâb.
14) 'Amel-i kâtib'ül-fâkîr Muhammed Re'is, dümencî-i kapûdân-
15) paşa, yesserallahu mâyesâ.
16) Her ki diler rahmeti hak kazana/ Fâtîha okuya bunu yazana/ Tarih fi şehr-i Rebi'ül-

*      *  
*      *
*

320
This Chapter explains the Red Islands

1) The principal haven of the Red Islands is the Birgozlu Island. If they were to arrive at the said Red Island, taking the said island to their left, they would enter between the two islands, [and] drop anchor and 3) make fast their mooring ropes at the mole of Birgozlu, in front of the caravanserai, and drop the anchor toward sulûk [=sirocco, i.e. SE].

4) It is a good haven from yîldîz [and] from karayîl [N and NW-winds]. If furyâz-yîldîz [NNE-wind] gets strong it turns straight into the strait [between the two islands], [therefore] the anchor 5) and the mooring rope need to be firm. Now, some day in the past, we climbed up to the 6) hilltop fortress of the said island of Birgozlu, and from near it, with the help of the compass, 7) we took the bearings of all the places, thinking it might be useful some time. For example, from Birgozlu the strait of Istanbul [i.e. Bosphorus], that is 8) the bearing of Salacak, is yîldîz-karayîl [NNW]; from Birgozlu the bearing of the cape of Büyükçekme is günbatîsî 9) and karayîl [WNW]; from Birgozlu the bearing of the Marmara Island is günbatîsî [W]; from Birgozlu I took from the Birgozlu Island so that, if needed, when coming from the Marmara Sea at night 12) they should act this way and not make a mistake, so that’s that!

13) The end of the book with the help of God the sovereign Lord, the All-Bountiful. 14) The work of the poor scribe Captain Muhammed, the helmsman of the Kapudân- 15)pasha. God facilitates whatever He wants! 16) Whoever wishes to obtain God’s mercy may recite the Fatiha for [the soul of] the one who has written this, at the date of Rebi’ül-Âhir of the year 961 [March, 1554].

1 "Birgozlu ada" literally means "the island with a fortified tower".
2 The compass bearings are given with the names of winds, as it was customary in the Mediterranean seaman's language.
APPENDIX 2

(Descriptions of Port Towns From the Kitâb-ı Bahriye)

Patmos (Patnos Papas) (MS Ayasofya-2612, fol. 99r)

(... bu adanun gün doğusuna karşı hüdüyi/ bir limanı vardırur, mezkür iki çataldur. Ve ol/ limanın üzerinde, zikr olan manastırlık hemân bir kal’a nasılindedür.

(...facing east, this island has a natural harbor which consists in two bays. Over[looking] that harbor, the mentioned monastery complex almost resembles a castle.)

Modon (Moton) (MS Aya sofya-2612, fol. 151v-152r):


(The mentioned castle is situated on a low-lying promontory that faces south. As it is, its three sides are the sea and one side is [faces] the land. That side toward land has a two-tier moat. The castle made inaccessible with construction is especially from the time of the infidels, it is even now inaccessible since, apart from that castle, after having conquered it, the late Sultan Bayezid had at the tip of the mentioned promontory and facing the sea another castle built that is forty cubit long and wide. No foreign ship can ever pass through that strait. And in front of the mentioned [old] castle, facing east, there is an excellent, constructed harbor, Oh Sovereign, bargias cannot enter that harbor for it is shallow, but [a] galley can. When bargias arrive, they lie in front of the harbor, make fast their mooring ropes at the rocks of the harbor [i.e. of its breakwater], and drop anchor toward east, in eight fathoms of water. The place where the ship lies is six fathoms [deep]).
Corfu (Körfoz) (MS Ayasofya-2612, fol. 166r):

Ve asıl kal'ası yılduza karşı vâki' olmuşdur, ma'nide (sic/) bir adaya benzer. Ve ol kal'nın etrafı iki mildür ve önünde olan varoş/ on sekiz bin hânedür (...) ve ba'dehu mezkür kal'anın yılduz tarafında/biné ile yapılmış bir limanı var. Mezkûr limâna gadırgaları girür, yatur. İri/ bargalar ol limandan taşra denizde on sekiz kulaç suda yaturlar./ Kal'a ol yatan geminin kible tarafına gelir, varoş gün batısı tarafına gelir.

(and [Corfu's] principal castle is situated facing north, in a sense, it is an island, and the circumference of that castle is two miles, and its suburb in front consists of eighteen thousand houses. (...) and then, on the northern side of the mentioned castle there is its harbor which is constructed. Their galleys enter and lie in that harbor. The large bargias lie outside of that harbor, in eighteen fathoms of water. The castle falls to the south of the anchored ship and the suburb to its west.)

Genoa (Ceneviz) (MS Ayasofya-2612, fol. 284r-v):


(this city is a big, evident city on the sea coast and faces south. Above it is the mountain, and in front of it is a constructed harbor. That harbor is entered from the south, and then they turn east and drop anchor, oh Sovereign, it is a tight harbor. Each ship gets moored firmly at prow and stern. Small ships lie at anchor at the eastern extremity of the harbor, and big carracks, i.e. very big cocks, lie at anchor at
the mooring post (kolan, colonna) which is to the east of the harbor's entrance. For example, on the two sides of this harbor's entrance, there are two big towers, these towers are lighted every night so that ships trading by night may enter the harbor easily. Oh Sovereign, when they enter this harbor, they advance closer to the eastern tower. But big carracks, when they arrive at this harbor, (fol.284v) they just go around the eastern tower and firmly moor at prow and stern, and lie there. And in front of the western tower, oh Sovereign, outside of the said harbor, there is a haven-like, deep bay (?) (bucak). In front of this bay they build ships. Big carracks are made at this place...
APPENDIX 3

DRESDEN-389

(Upper left corner, with pencil): 170

Wind rose in the center (only one half is drawn), arrow points on all the wind rays.

Names of winds (clockwise from top):

Foryaz
Günçoğusı
Keşişleme
Kible
APPENDIX 4

KÖPRÜLÜ-172

(top left, with black ink) page number: \ \ \ \ [181]

Wind rose, without a circle, is drawn with black ink in the lower left; arrow point indicates north.

No wind names are indicated.

Place-names:

(on the Istanbul peninsula, from upper left downward, in consecutive diagonal rows):

(at the corner of the land and sea walls): Yediğiule

(below a mosque): 'Avrat bazarında olan dikili taş Şehr-i İstânbol

(to left of a mosque): Şultân Mehmed
(below a mosque): Şultân Selîm
(outside the land walls on the upper Golden Horn): Ayub
(to left of a column): 'Avrat pazarında olan dikili taş
(to left of a mosque) Şehzade
(below a mosque) Şultân Mehmed;
(to left of a mosque) Şultân Bâyezid, (to left of a mosque):

Şultân Süleyman

(below a column, obscured by a six-minareted mosque drawn on it): 'Ali paşa çarşısında olan dikili taş

(below the mosque with six minarets) Şultân Ahmed;
(on a square): seray-ı 'atik
(below a mosque) Ayâşofya

(at the tip of the peninsula) seray-ı cedid.
(on the Galata side, counterclockwise from far right):
Kāğīdḩāne
tersḩāne
Kalāṭa
ṭophāne

(on the Asian side, off shore):
Kız kulesi
APPENDIX 5

BOLOGNA-3613

[top center, with black ink]: [page number] "162"

[top right corner]: "4", (below) seal stamp [Count Marsili's?]

(across the upper part of page, in three lines, the end of the portolan text continued from the previous page): inc. burnı Gün batısı ve çara yıl üzerinedür. fin. Bu țiarih üzere 'amel oluna vesselăm ...

Colophon (in the fourth and fifth lines, with red ink):

(...) temmet bi'avnillahi el-Milik el-Vahhab sene-‘i țokuz yüz seksen iki fî el-evâ‘il-i șevvāl‘ül-mükerrem fî yevm‘ül-[âşîr?] fî el-vâkt‘ül-zuhr temâm [...?] bi'avnillahi (Completed with the help of God, the Sovereign Lord, the All-Bountiful in the year of AH 977/AD March 13th, 1570, on a Monday, at noon time completed [...?] with the help of God).

Wind rose, center left, is only faintly visible.
No wind names are indicated.
No place-names are indicated.

(lower right): Library stamp of Biblioteca Universitaria with hand written manuscript number "3613"
APPENDIX 6
TOPKAPI-337

(across the top of the page, in three lines, with black ink)
in. Gün batısi üstinedir; fin. Bu tarık üzere 'amel oluna vesselăm.

Colophon (in two lines, with red ink):
(... temmet bi 'avnillahi el-Milik el-Vahhāb sene-'i ṭokuz yüz seksen iki fī el-evā'il-i zǐlk'ade fī yevm'ūs-sebt fī el-vaqt'üz-zuḥa temām šūd bi 'avnillahi te 'ālā. [completed with the help of God the sovereign Lord and the All-Bountiful in the year nine hundred, eighty two, during the first third of the month of Zilk'ade, on a Saturday in the early morning, is completed with the help of God, whose majesty be exalted = February 27th, 1574]

Wind rose in the center of page; arrow point shows north (i.e. Yıldız), according to wind names indicated.

Names of winds (clockwise from top):
Ka'ble, Lōdōs, Baṭı, Ċara yil, Yıldız, Pōyrāz, Gün ṭoḡusı, Keşişleme.

Place-names (İstanbul peninsula, counterclockwise from top):
Äyä şṭefānos burnı
Yedi ḳulā
İstānbōl
Äyyüb Sul[ṭān]

(on the Galata shore, from right):
Kaşım Paşa
Gašaṭa
Bēşiḳ ṭaṣ
(on the Asian side, down the left side):
harman kaya [sic]
Čalamış burnı
Kâdî köyi
Üsküdar

(off the shore)
Kız kulası

Names of islands (clockwise from top):
Kızıl ada
Heybeli
Berğözli
Kuş adası
Kınalı
APPENDIX 7

DENİZ-990

Title: (top center, with black ink): Қызыл ата іш бу үшкілдір
(this is the shape of the Red island)

Wind rose in the center of page is entirely drawn with red ink;
the arrow point is toward north west.

No wind names are indicated.

No place-names are indicated.
APPENDIX 8

MILLET-1

Title (across the top of frame, with black ink): İstânböl kürtbinde vâ'î Kızıl Adalar (the Red Islands near Istanbul)

Wind rose in the center of page, drawn with black ink and consisting of wind rays only; the arrow points toward northwest.

No wind names are indicated.

No place-names are indicated.

(bottom center right): Seal stamp (unidentifiable)
APPENDIX 9

VIENNA-192

Wind rose with two concentric double circles, is drawn with black ink; no wind names indicated nor any arrow point.

(upper center): Library stamp of "Kaiserliche Koenigliche Hofbibliothek"

Place-names:
(on the Istanbul Peninsula, from upper right, counterclockwise)
Ayästäfanä burnı
Yedi ķulle
İslämböl

(on the Galata side, from right to left)
Äyyüb Sulṭān
Kāsim Paşa
Beşiktaş

(on the Asian side, from below):
Ķız ķullesı
Ķādı köy
APPENDIX 10
LONDON-4131

(Upper left corner, with ink): \( 0 \)
(below it, with pencil): "195"

Wind rose in the center, arrow point indicates NW (?), no wind names indicated.

**Place-names:**

(on the Istanbul peninsula): None

(on the Galata side, from left):

Beş[?]keş tâş
Mevlevî hané

(on the Asian side, from top):

Kalamış burnı
Kâdî köy

**Names of islands** (from top left):

Kızıl ada
Heybeğli
Birğazlı
Kınlalı
Kuş adası
APPENDIX 11

UNIVERSITY-123

(upper left corner, with black ink, later pagination): EV
[470r; originally 170r]

(lower left corner, with black ink): an added note?
Wind rose to slightly left of center; arrow point indicates N
(i.e. Yıldız, as mentioned in the instructions on fol. 469b, as
well as indicated by the opposite direction marked with "O",
i.e. Ostro [Italian for the south or the south wind]). No other
wind name is indicated.

Place-names:
(on the Istanbul peninsula, from top):
Yedi kulle
mahall-i Kostantiniye

(on the Galata side, from right):
mevlevi hanе
Beşik taş

(on the Asian side, from top):
Kalamış burnı
Kadi köyi
Kulle-i dühter (off the shore)

Names of islands (clockwise from top):
Kızıl ada
Heybeli
Birgazlı
Kinalı
Kuş adası
APPENDIX 12

NURUOSMANİYE-2990

Title: (upper right, in a box, with red ink) Eşgāl-i cezā’ir-i kızıl.

(upper center right, with pencil): 160
(top left corner, with ink?): \[.

Wind rose slightly to left of center, arrow point indicates north, no wind names indicated.

Place-names:

(on the Istanbul peninsula, along the Marmara shore, from top):
eterangan Dâvûd Paşa
Yedi külle
cānib-i Yeńi Sarāy

(along the Golden Horn shore, from left):
Yeńi kapu
Bāb-i Fenār
Bāb-i Balāṭ
Bāb-i Ayvānşārī or Ayvānşaray
[Ḫaz]ret-i Eyüb

(on the Galata side, along the Golden Horn shore, from right):
Tershāne
Ḵāşim Paşa
Galāṭa
Ṭobhāne
Cāmī’-i Meh[em]med Ağa
Beşik taş (with red ink)
(on the Asian side, along the shore, from top):

Fenår Bāğcesi
Kāži köyi (with red ink)
Üsküdār
Kız kullesi (off the shore, with red ink)

Names of islands (from top, with red ink):
Kızıl
Heybeli
Bırğozlı or Bergozlı
Kınalı
Kuş adası
APPENDIX 13

Title: (upper right, with red ink) Eşgâl-i mezbûr Kızîl Adalar bu resmêder (this is the picture of the aforesaid Red Islands)

Wind rose upper center, no arrow point, no wind names indicated.

Place-names:

(on the Istanbul peninsula, along the Marmara shore, from top):
Yedi külleler
Serây-ı Cedîd

(on the Galata side, from right):
Dîvânîhâne
Tersâne-i 'âmirâ
Čal[âta?]?
Mevlevî hâne
Beşik taş

(on the Asian side, from top):
Kalamîş burnî
Kâdî köyî
[Üsküdâr?, illegible place-name, looks as if written on Kâvâk or Kâdî köy]?
Üsküdar
Kız kullesi (off the shore)

Names of islands (from top):
Kızîl âta
Heybeli
Börgazîlî or Bûrğazîlî
Kînalî
Kuş atasî
APPENDIX 14

NURUOSMANİYE-2997

(across the top, in a box, with black ink in three lines, the end of the portolan text continued from the previous page):

inc. Gün batısı ve çara yıl üzerinedür. fin. bu ı'tarık üzere 'amel ideler vesselăm.

Colophon (below the box, with black ink, in two lines):
Temmet bi'avnillahi el-Melik el-Vahhāb ketebet'ül-fakīr Muṣṭafa bin Mehemmed el-Cündi. Tāriḥ sene be i otuz sekiz evāsīt-ı şehri Zilhicce fī yevm-i dūşenbih temām... (Completed with the writing of Mustafa son of Mehemmed el-Cündi. Completed in the year of AH 1038, during evāsīt [i.e. between the 11th and 20th] of the month of Zilhicce, on a Monday, August, 6th, 1629).

Wind rose, a yellow circle, wind rays in red, is slightly off center toward left; the arrow point coincides with Yıldız, the north wind, according to wind names indicated.

Names of winds (clockwise from top):
Lōdōs, Baṭı, Ċara yil, Yıldız, Pöryāz, Gün творsi, Kesiği̇leme, cânib-i Ƙible.

Place-names:

(on the Istanbul peninsula, upper right downward):
cânib-i Rūmili
[Ḳal]‘a-yi ˁażīm [...?ı]stānbōl.

(on the Galata side, lower right, downward):
cânib-i Ǧalaṭa
cânib-i Rūmili
(on the Asian side, lower left downward, off shore):
fenârlîk
furtmân ֻyaya
Kız ֻulesi

(inland):
semt-i Üsküdâr
cânîb-i Ânâtöllî
eski vâlîde

(between the islands):
cezîre-‘î ֻzîl adalar
APPENDIX 15

YENİCAMİ-790

(across the top, within the margin, with black ink) inc. Gün baṭısına üstünedür. fin. bu ṭaṙīḳ üzere 'amel ideler vesselām.

Wind rose, an orange circle with black wind rays, is slightly off center toward left. The gilded arrow point coincides with north east, i.e. Pōryāz, according to wind names noted on the wind rose.

Names of winds (clockwise from top):
Baṭı, Ċara yil, Yıldız, Pōryāz, Gün ṭoğısı, Keşişleme, Қible, Lōdős.

Place-names:

(on the Istanbul peninsula, far right, downward):
cānib-i Rūmili, (in three lines) ḫal'a-yī 'azīm ʿul?...l-sitānböl?

(on the Galata side, lower right, downward):
(at the edge of page) Ḥaẓret-i ʿAy[yüb]
(lower corner, from right to left):
cānib-i Rūmili (faded out or erased?)
cānib-i Ĝalaţa
cānib-i Rūmili

(on the Asian side, lower left, downward):

(off shore) Fenārlınி [sic], ḥarmān 塆ya
(inland) semt-i Üskūdār, cānib-i Ānāţölī

(between the islands, in two lines):
Bu cezīreler Қızıl adalardır (These islands are the Red islands).

(bottom, center left): Evrāḳ [...?] 200 [total of folios]

341
APPENDIX 16
PARIS-956

(top left corner, with red ink, original page number): Y V A
[428]

(upper center right): Library stamp of Bibliothèque Nationale.
Wind rose in the center of page, arrow point toward north; no
wind names indicated.

Place-names:
(on the Istanbul peninsula, along the shore, counterclockwise
from top):
İskender Paşa bâğçesi Bâğçe kapusı
tabâk hâne Cuhûd kapusı
Yedi küleler Zindân kapusı
Nârlı kapu Odun kapusı
Samâṭya Ayâzma kapusı
Dâvûd Paşa kapusı Un kapâni kapusı
Lânka Cübb'ali kapusı
Yeâi kapu Yeâi kapu
Küm kapu Fener kapusı
Çatlâdi kapu Balât kapusı
Âhîr kapu Ayvânşaray or Ayvânşarî
Sarây burnı Haţret-i Ayyûb
köşk

(along the landwalls of Istanbul, upward from the Golden Horn)
Egri kapusı
Edirne or Edrene kapusı
Töp kapusı
Yeâi kapu, (and to its right) mevlevîhâne
Silivri kapusı
Yedi külle kapusı

342
(on the Galata side along the shore, from right)

Hâş köy
Tersâne bahçeşesi
tersâneler
mahzen
dîvânîne
küreklik
eski dîvânîne
Meyyit iskelesi
‘Azeb kapusi
Kür[e]kçî kapusî

(on the Galata side, inland, downward):

şarîk
namazgâh
Câmi‘-i Piyâle Paşa
Kâğıdîne

(on the Asian side, along the shore, clockwise from top):

Mâl tebe [sic]
Büstâncî başî köprüsi
* Fener bahçeşesi
Kadî köyi

(on the Asian side, inland, from top):

**
[vîrân köy?], (to its right): 79 \textsuperscript{398}†
miskinler
Üskûdâr bahçeşesi
Names of islands (from left):

Kızıl ada
Heybeli
Kızıl ada
Bürgözli
Kınalı
Sivrice
Yaşşıca

(†) This is a page number following an older pagination.

(*) (added note): Taş lī[mān?], Lōdos da/ küçük kayıkłara yatağdır (Stone port, an anchorage for small rowboats by Lodos wind.)

(**) (added note): Kara tepe-i mezkūrda Lōdos[-da], ziyāde tāvşān yatur, Lōdos furtūnasında (on the mentioned Karatepe, when Lodos wind blows, many hares are to be found, during Lodos storm.)
APPENDIX 17

KÖPRÜLÜ-171

(top left corner, with red pencil): page number ΕΥ Λ [428]
(upper left): seal of Elhac Hafız Ahmed Paşa
(upper center right): seal of Elhac Hafız Ahmed Paşa

Wind rose in the center of page, arrow point toward north. No wind names indicated.

Place names:

(on the Istanbul peninsula, along the shore, counterclockwise from top):

İskender Paşa bağçesi
Tabâkhâne
Yedi kulleler
Nârî kapu
Samâṭya
Dâvûd Paşa kapuşu
Lânqa
Yeñî kapu
Kûm kapu
Çatladî kapu
Aḥîr kapu
Sarây burnî
köşk

(along the landwalls of Istanbul, upward from the Golden Horn):

Egri kapuşu
Edrene kapuşu
Tob kapuşu
Yeñî kapu, (and to its right) mevlevi̇hâne
Yedi külle kapuşu

345
(on the Galata side, along the shore, from right):

Hıs köy  
Tersâne bâğcesi  
tersâneler  
küreklik  
eski dîvânîhâne  
maḥzen  
Meyyit iskelesi  
‘Azeb kapusi  
Kürekçi kapusı

Yağ kapâni  
Karaköy kapusı  
Kûrşunlu mahzen  
Kireç kapusı  
Toğhâne  
Fîndiklı  
Mehemmed Aga  
Dolma bâgçe  
Beşik kaya  
Orta köy

(on the Galata side, inland, downward):

Karlık  
namâzgâh  
Câmi’-i Gâzî Piyâle Paşa  
Kâğıdîhâne

(on the Asian side, along the shore, clockwise from top):

Mâl tebe  
Böstancı başı köprüsi  
†  
Fener bâğcesi  
Kadî köyi

Kaavaş  
Kız kullesi  
Şemsi Paşa serâyî  
hânlar  
Kaya Sulțân serâyî

(on the Asian side, inland, from top):

††  
Ören köy [or] Orun köy  
miskînler  
Üsküdar bâğcesi
Names of islands (from left):

Kızıl ada
Heybeli
Kızıl ada
Bürgazlı
Kinalı
Sivrice
Yaşlica

(†) (nautical info.) taş limān, Lödösda küçük kayıkklara yatağıdır (stone port, anchorage for small boats when Lodos blows.

(††) (information on hares): Kara tepe-i mezkürda, Lödos havasıında, ziyade tavşan yatur, Lödosfurtūnasında (on the mentioned Karatepe, when Lodos blows, many hares are to be found, during Lodos storm).
APPENDIX 18

TOPKAPI-1633

Wind rose slightly off the center (to upper left), (red) arrow point toward north (i.e. Yıldız), according to wind names indicated.

Names of winds:
(with red ink, starting with NE wind and clockwise): Böyräs, Şark, Keşişleme, Cenüb, Lōdōs, Ğarb, Ğarayıl.

Place-names:
(on the Istanbul peninsula, along the shore, counterclockwise from top):
İskender Başa bāğcesi
deb[b]āğhāne
Yedi ƙulleler
Nārlī ƙapu
Samāṭya
Dāvūd Başa ƙapusu
Lankā
Yeñi ƙapu
Kum ƙapu
Çatladı ƙapu
Āḥir ƙapu
Serāy burnı
köyğk

(along the landwalls of Istanbul, upward from the Golden Horn):
Eğri ƙapu
Edrene ƙapusu
Ṭob ƙapusu
Yeñi ƙapu
Silivri ƙapu
Yedi ƙulle ƙapusu

348
(on the Galata side, along the shore, from right)

Hıas köy
Tersâne bahçeşi
tersâneler
mağzen
dīvānḫâne
küreklik
eski dīvānḫâne
Meyyit iskelesi

(on the Asian shore, along the shore, clockwise from top):

Tūnâncı [sic] başı köbrüsi

◊

Fener bahçeşi
Kâdî köy
Kavâk
Kız kulesi
Şemsi Başa serârî [sic]
şânlar
Kâyd [sic] Sultan serâyî

Names of islands (from left):

Kıızıl ada
Heybeli
Kıızıl ada
Bürgâzlı
Kınalı
Sivrice
Yaşşîca

(() (nautical info.): taş limâni, Lōdōsda küçük kayıklara
limândîr (stone port, haven for small boats when Lodos blows).
Title (upper right): Belde-i tayyibe-i  Kasımîyye

(the praised city of Kostantînîyye; "belde-i tayyibe" is the Koranic phrase, XXXIV:14/15, adopted as chronogram for the date of the Ottoman conquest, i.e. AH 857/AD1453).

Wind rose, slightly above center, is a 32-armed star with two arrow points, the bigger and elaborate one, shaped as a fleur-de-lys, indicates north and the smaller one indicates east. No wind names are indicated.

Place-names:

(on the Istanbul peninsula, along the shore, counterclockwise from top):

İskender Paşa bağçesi
tablâk hâne
Yedi kuleler
Nârîli kapu
Samâtya
Dâvûd Paşa
Lanka
Yeşi kapu
Kûm kapu
Çatladî kapu
Ahrîr kapu
Saray burnu
köşk

(along the land walls of Istanbul, upward from the Goldenhorn)

Eğri kapu
Edrene kapusu
Tob kapusu
Yeşi kapu, (and to its right) mevlevî hâne
Silîvrî kapusu
Yedi kule kapusu
(on the Galata side, along the shore, from right)
[Hâ]s köy
Tersâne bâ[ğçe]si
tersâneler
mahzen
dîvânîhâne
küreklik
eski dîvânîhâne
Meyyit iskelesi
'Azeb kapusi
Kûr[e]kçi kapusi

Yağ kapâni
Kağaköy
Kûrşunlu mahzen
Kireç kapusi
Tobhâne
Meh[m]med Aga
Fîndikli
Dolma bâğçe
Beşık taş
Orta köy

(on the Galata side, inland):
(behind the shipyards, across the cypress trees) [...kiytîları]
(further down, along a small river) Piylâle Paşa.

(on the Asian side, along the shore, clockwise from top):
Böstancı başî köbrûsi
Fener bâğcesi
Kadî köy
Kâvâk
Kiz kulesi
Şemsî Paşa serâyî
hanilar
Kâya Sultân serâyî

(on the Asian side, inland, downward):
Üsküdâr bâçgesi, (and to its left) namâzgâh
miskînler

Names of islands (from left):
Kizil ata
Heybeli
Kizil ata
Bûrgâzî [or] Börgâzî
Kînâlî

Sivrice
Yaşsîca
Small wind rose, slightly off center to upper left, is an eight-armed star with a fleur-de-lys-shaped arrow, indicating north, i.e. Yıldız.

Names of winds:
(starting with north wind and clockwise): Yıldız, Pöyräz, Gün toğusu, Keşişleme, Kible, Lüdös, Bati, Kara yil.

Place-names:
(on the Istanbul peninsula):
(to the west of the landwalls) Şehr-i İslâmböl
(further below, near the Golden Horn) Haşret-i Ayyüb Sulṭan
(at the tip of the peninsula) seray bûrûnî

(on the Galata side, along the shore, from right):
bâğçe-i haşşa Meh[em]med Ağa
Kapûdân paşa serâyî Fındıklı
Galaṭa Tolma bâğçe
Kuruşunlî [sic] mahzen Beşik taş
Topḫâne Orta köy

(on the Galata side, inland, bottom right):
Kâğıdîhâne.

(on the Asian side, along the shore, downward):
Fener bâğcesi
Kız kulesi
Üskûdar

(on the Asian side, inland):
Üskûdar bâğcesi
Names of islands (from left):

Kızıl ada
Heybeli ada
Bürgaz [or] Börgaz
Kınalı ada
Yumrıca [scratched out] / Yaş[ş]ıca
Yaşşıca [scratched out] / Yumrıca
APPENDIX 21

LONDON-718

No title and no wind rose.

(upper left corner) page no.: 6

Place-names:

(on the Istanbul peninsula, along the shore, counterclockwise from top):

Kärhâne-i tabâkyân
Bucağ bâgh
Bâb-ı Narlı
Bâb-ı Samaṭya
Bâb-ı Dâvûd Paşa
Kûle-i[?]
Bâb-ı Cedîd
Bâb-ı Kum
Bâb-ı Çatladî
Bâb-ı Âłuur
Serây burnâ
Sulṭân Selîm köşki
Tob kapûsî
[Sepetçiler?] köşki
Sinân Paşa köşki

Odahâ-yî bûstâncîyân
Bâb-ı bâğçe-i pâdisâh
Bâb-ı Şuhûd
[...?]
Bâb-ı Zindân
Bâb-ı Odun
Bâb-ı Āyâzma
Bâb-ı Daḵîḵ maʿ ḥoros
Bâb-ı Cübbe 'Ali
Bâb-ı Āyâ
Bâb-ı Cedîd
Bâb-ı Petrû
Bâb-ı Fânûs
Bâb-ı Bâlaṭ
Bâb-1 Āyyûb Ānsârî

(along the landwalls of Istanbul, from the Golden Horn upward)

Bâb-ı Egri
Serây-ı Tekûr [or] Tekvûr (to the left of the landwall)
Bâb-ı Edrene
Bâb-ı Tob
Bâb-ı Yeñî
Bâb-ı Silivri
Bâb-ı Külle-i ûfeft
(building names indicated within the landwalls, from left to right):
(center left) serāy ‘āḥūr[1?] (below it) Demir ķ[apu]
(upper right) Bāb-ı Yedikule
(lower right, written on three mosques, from top)
Şehzade
Sulṭān Mehmed
Sulṭān Selim

(on the Asian side, along the shore, downward):
Bāğçe-i Fānūs
İskele-i Sālacaḵ

(off shore) Ḳız ḳullesi

(on the Asian shore, inland, downward):
Ḳırḳ ḳavāḳlar
Ḳarye-i Ḳāṣī
Bāğçehā-yi pādšāḥdīr
Maḥrūse-i Üskūdār
Cāmi'-i Şemsī Paşa

Names of islands (from left to right):
Ḳızīl aṭā
Cezīre-'i Būrgöz
Cezīre-'i Heṃbelū
Cezīre-'i Yaşṣī
Cezīre-'i Sivri.

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**Galata map** on fol.4b of MS London-718

**Place-names:**

(along the shore, down the left side):

'Azeb iskelesi  
Bāb-1 'Azeb  
Cāmi'-i Mehmed Paşa  
Bāb-1 Kalafat / Kūr[e]kçi  
Yag Kapâni  
Bāb-1 Yağ

(inland):

(left center, on a building with a saddle roof): 'Arab Cāmi'

(right center, on the wall, next to a gate): Bāb-1 kulle

(far right): Ġalaṭa Kulleşî

(lower center right, on the fortification wall and ditch): Kūcûk Kulleşî kapusî

(bottom left, in the ditch, next to a gate): Bāb-1 Tobhâne
APPENDIX 22

BERLIN-57


Wind rose, a twelfe-armed star inscribed in a circle with an arrow point in fleur-de-lys shape pointing north, is located far left center.

No wind names are indicated.

Place-names:
(on the Istanbul peninsula, along the shore, counterclockwise from top):

Zeytûn burnî
Yedîkûle tebbâglarî
kirişhâne-i Yedîkûle
Yedîkûle
Bâb-1 Nârlî
Bâb-1 Şamâtya
Bâb-1 Yeñî
Bâb-1 Dâvûd Paşa
Bâb-1 Kum
Bâb-1 Çatladî
Aşırkapu
Sinân Paşa köşki
Bâb-1 [Bâgçe?]
(along the landwalls of Istanbul, from the Golden Horn upward)
Bâb-ı Egri
Serây-ı Tekvur [or Tekûr], (right below) kâşihâne
Bâb-ı Edrene
Bâb-ı Tob
Bâb-ı Yeâni
Bâb-ı Silîvî
Bâb-ı Yedîkûle

(building names indicated within the landwalls, from left to right):

(across the center, on a wall): [Aḥûr? hardly legible]
(center right): Câmi‘-i Āyâşîfiyye, (below it): Vâlide Câmi‘
Câmi‘-i Sultân Ahmed
Sultân Bâyezid, (below it): Sûleymâniye
Şehzade
Sultân Mehmed
Sultân Selîm.

(on the Galata side, along the shore, from right to left):
Dîvânîhâne
‘Azeb kapusî
Câmi‘-i Mehmed Paşa
Bâb-ı Kalafad
Bâb-ı Yağ
Bâb-ı Balîk
Bâb-ı Kireç
Kuşunlu mâhzen

(on the Galata side, inland, from right to left):
Kerâste mâhzeni (and below it) tersâne zîndânîdir
bûyûk mâhzen
kôpri
bârûd mâhzenî? [hardly legible]
küreklik
Çalâta [qulesî]
eski dîvânîhâne
Bâb-ı Tob
Tobhânede Câmi‘-‘Ali Paşa
Tobhânê kârhanesi
(along the shore, from right to left):
divânâhâne
'azeb ğapûsî
Câmî'-i Mehmed Paşa
Bâb-ı Kalafad
Bâb-ı Yağ
Bâb-ı Baluq (?)
Bâb-ı Kireç
Kûrşunlî maţzen

(on the Asian side, along the shore, downward):
Fener bâğçesi
Kâvâk
Şalâcağ

(off shore)
Kîz kulesî
Şemsî Paşa

(on the Asian side, inland, downward):
Kîrk kavâkîlar
Mûda burnî
Üskûdâr bâğçesi
Ayaţma bâğçesi
Üskûdâr iskelesi
Üskûdâr iskelesîne olan Mîhrîmâh Sulţân Câmi‘
câmî‘ yanîndaki ûnlar
'imâret

Names of islands (from left to right):
Kîzîl ada
Bûrgoz [or] Bûrgaz adâsî
[Heîbelî? hardly legible] ada
Yaşşî ada
Sivri ada
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<tr>
<td>6</td>
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