ÜNVER RÜSTEM

MAPPING COSMOPOLITANISM

An Eighteenth-Century Printed Ottoman Atlas and the Turn to Baroque

ABSTRACT

Among the most remarkable works of eighteenth-century Ottoman art, and one of the earliest examples of Ottoman-Turkish printing, is İbrahim Müteferrika's edition of the *Cihānnümā*, a world atlas published in Istanbul in 1732. Illustrated with forty copperplate engravings by Ahmedü'l-Kırımı (Ahmed the Crimean) and the Armenian Istanbulite Mıgırdıç Galatavi, the book synthesizes a wide range of Islamic and Western sources for both its written and visual elements, which include a series of cartouches creatively adapted from European Baroque models. Not only do these designs emblemize the *Cihānnümā*'s claims to being a cutting-edge worldly product, but those signed by Mıgırdıç—whose Ottoman-Armenian identity situated him at the center of a vast transregional network—anticipate by almost a decade the wider embrace of the Baroque in Istanbul's architecture. The cartouches thus shed vital light on the role of printmaking and of non-Muslim Ottoman artists in bringing about the cosmopolitan turn that would transform eighteenth-century Ottoman visual culture.

In 1732, İbrahim Müteferrika (d. 1747)—founder of the first Turkish-language Ottoman printing press—published the *Cihānnümā* (World Mirror), a global atlas adapted from the mid-seventeenth-century geography of the polymath Katib Çelebi (1609–1657).¹ This was the eleventh work to come out of Müteferrika's printing press, which had been established in 1726 in his own residence in Istanbul, capital of the Ottoman Empire (ca. 1299–1922). In common with the majority of Müteferrika's output, the *Cihānnümā* was designed to approximate the look of a traditional Ottoman manuscript, as evident from the layout and calligraphic styling of its text and, more tellingly, from the illumination-like printed headpiece of its opening page, which in most surviving copies has been colored and further embellished by a painter (fig. 1). Yet the book's most distinctive visual elements—its twenty-eight copperplate maps and twelve copperplate diagrams—point to a different canon from the Islamic arts of the book: the printed atlases of Western Europe. Inherently portable, such cartographic materials had been circulating in the Ottoman Empire since the sixteenth century, inspiring a number of textual and visual responses that Ottoman authors—Katib Çelebi among them—adapted in keeping with Islamic geographical conventions.² Müteferrika's edition of the *Cihānnümā*, however, went

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FIGURE 1. Colored and uncolored impressions of the opening text page, from Katib Çelebi (1609–1657), *Kitāb-ı Cihānnümā* (Istanbul: İbrahim Müteferrika, AH 1145/1732). Ink (woodcut and letterpress) on paper, with additional color and gold on the right; each copy (with binding) approx. 31 x 20 cm. Left: Bayerische Staatsbibliothek, Munich, Res/2 A.or. 371, p. 1; right: Uppsala University Library, Bokband 1800-t. Orient. 1, p. 1

much further than these existing works in its cross-cultural borrowings, even to the point of flaunting them. Besides their obviously printed appearance, which designates them immediately as products of an imported technology, the book's plates feature a series of decorative Baroque cartouches that derive from, and thus underscore their relationship to, the European atlas tradition. These cartouches, which frame captions and other textual information, differ from the maps and diagrams that they accompany in having no practical basis for their engagement with Western models. That is, whereas the *Cihānnümā*'s cartographic and diagrammatic contents are functionally dependent on their visual kinship to their foreign sources, the cartouches could perform their job just as well if they did not resemble their Western counterparts. Nor can they be explained as the incidental outcome of the larger transfer process, for rather than being verbatim copies of identifiable originals, the cartouches are peculiarly Ottoman reconfigurations that bespeak a deliberate and purposeful response to the Baroque.

The aim of this article is to explore why and with what results the *Cihānnümā*'s printmakers, evidently with Müteferrika's approval, chose to assimilate and indeed build on the Baroque models at their disposal. These questions arise out of the intrinsic significance of the cartouches

themselves: small as they may appear on the page, their role in containing the plates' very titles gave them outsize prominence in how reader-viewers experienced the atlas. The design of the cartouches must therefore be treated as more than a matter of ornament alone. While much of the reason for their Baroque stylization lies in the *Cihānnümā*'s own framing as an up-to-date, cosmopolitan product, the cartouches also relate to a much broader context that renders them still more resonant as case studies: they anticipate by almost a decade the emergence of an analogous building style—the Ottoman Baroque—that would revolutionize the architecture of Istanbul and usher in a far-reaching transformation of the empire's visual culture. Given that the leading builders and artists associated with the Ottoman Baroque belonged to Istanbul's internationally connected Greek and Armenian communities, it is striking that those cartouches in the *Cihānnümā* that most clearly prefigure later architectural developments occur on plates signed by the engraver Mıgırdıç, an Armenian Istanbulite. What, then, does the *Cihānnümā* tell us about the crucial part played by non-Muslim Ottoman artists in bringing about the larger stylistic shift heralded by the book's cartouches? Moreover, what light do these cartouches shed on the contribution of prints and printmaking to engendering, facilitating, and ultimately achieving the kinds of transregional syntheses epitomized by both Müteferrika's *Cihānnümā* and the Ottoman Baroque?

The term "Baroque," which is central to this analysis, warrants some explanation. An ex post facto label that has been variously employed and defined, the word has faced substantial criticism even in the Western historiographic context in which it originated.³ Nonetheless, it has survived this scrutiny and continues to serve as a useful, if imperfect, umbrella term for a widespread, diverse family of seventeenth- and eighteenth-century artistic practices linked by certain telltale features and approaches. Most relevant to the present discussion is a recurrent set of decorative forms—dynamically adapted from Classical prototypes—that includes scrolls shaped as the letters C and S, seashells, and curving acanthus leaves. This ornamental repertoire thrived in the graphic arts as much as it did in architecture and the arts of the object, a point exemplified by the cartouche, which, as an elaborate framing device that lent itself especially well to Baroque enrichment, found broad application across media, whether printed in atlases or carved on buildings. Such intermedial connections are worth stressing, because one of the reasons for the Baroque's far-flung reach (the style has been dubbed the first to go truly global) was the role of early modern print culture in disseminating models that encouraged numerous kinds of adaptation and translation, often into different art forms.⁴ As creations that bear the imprint of their imported sources, the *Cihānnümā*'s cartouches already constitute important evidence of this phenomenon, but their relationship to subsequent architectural developments means that they must also be considered in their own right as a generative stage in, rather than an ancillary byproduct of, the Ottomans' turn to the Baroque.

The Making of the *Cihānnümā*

Any discussion of the cross-cultural factors at play in the *Cihānnümā* must grapple with the larger narrative—itsself cross-cultural in scope—surrounding Müteferrika and his printing press. An ethnic Hungarian whose original name is unrecorded, Müteferrika was born in the 1670s in the town of Kolozsvár (present-day Cluj-Napoca, Romania) in the Principality of Transylvania (1570–1711), then a vassal state of the Ottoman Empire. He converted from Protestantism (probably Unitarianism) to Islam and became an Ottoman subject in the early 1690s, immersing himself in the study of Turkish and the Islamic sciences after already having learned Latin as part of his Christian college education. By 1715, he was a member of the household cavalry (*kapıkulu sipāhisi*) of Sultan Ahmed III (1673–1736, r. 1703–30) in Istanbul, and a year later,

he was appointed a *müteferrika*, a high-ranking steward, the role that gave him his nickname. His court career, which would last until his death in 1747, spanned a variety of diplomatic and bureaucratic duties that made use of his deep learning and command of languages, including missions to Belgrade and Kiev.⁵ He further distinguished himself as a translator of European scientific and historical works and as an author in his own right, notably of an influential 1732 treatise promoting Ottoman military reform.⁶

Müteferrika is best known today, however, for his publishing activities. Set up in his own house in the Fatih quarter in 1726, Müteferrika's press received official approval a year later, becoming the first state-sponsored printing press not only in the Ottoman Empire but also in the Islamic world at large.⁷ The apparent lateness of this development, together with Müteferrika's identity as a European convert, has contributed to an enduring notion that the Ottoman Empire, weakened by a series of military losses at the hands of its Christian rivals, begrudgingly succumbed to Western models in the eighteenth century in a bid to save itself.⁸ Contrary to this myth of belated and reluctant Westernization, the Ottomans were in fact already long attuned to European arts and technologies, prints and printmaking included. Presses operated by non-Muslim Ottomans had existed for centuries in Istanbul, the earliest founded by newly arrived members of the Sephardic Jewish community back in 1493, with Armenian and Greek presses established in 1567 and 1627, respectively.⁹ The delay in the uptake of printing among Muslim Ottomans sprang from a number of factors, among them the relative difficulty of using movable type to reproduce Arabic-based scripts and unease with the prospect of printing the Qur'an and other religious texts, which were traditionally the preserve of highly trained and esteemed calligraphers.¹⁰ Even so, elite Ottoman Muslims had been actively collecting European printed books and images since at least the fifteenth century, as attested by extensive holdings of such materials—many of them annotated in Turkish—in Istanbul's Topkapı Palace Library.¹¹ Geographical and topographical works ranked high in these collectors' interests and, as indicated above, had already helped pave the way for the seventeenth-century manuscript versions of Katib Çelebi's *Cihānnümā*, a work that derived its maps, and some of its textual content, from such sources as the *Atlas Minor* of Gerardus Mercator (1512–1594) and Jodocus Hondius (1563–1612), first published in Amsterdam in 1607.¹² Later manuscript copies updated their source material as necessary, keeping pace with more recent printed imports (figs. 2, 3).

Far from being a foreign imposition, then, Müteferrika's press capitalized on an existing familiarity with and appreciation for printing among the Ottoman upper classes. Indeed, the enterprise enjoyed the support and financial backing of the diplomat Mehmed Sa'id Efendi (d. 1761), a prominent member of the court who was particularly well acquainted with printed books from his time in Paris, where he had served between 1720 and 1721 as the private secretary to his father, Yirmisekiz Çelebi Mehmed Efendi (d. 1731), the first Ottoman ambassador to France.¹³ To be sure, Müteferrika did have to make his case for state sponsorship to Sultan Ahmed III through the grand vizier, Damad İbrahim Pasha (d. 1730), by means of a petition entitled "The Usefulness of Printing" (*Vesiletü't-ıbbā'a*), but the only real potential sticking point concerned religious writings, which Müteferrika promised not to print. Not only did he succeed in obtaining the sultan's approval, but the empire's chief religious authority, the grand mufti, also issued a fatwa in his favor.¹⁴

Although we can therefore dismiss the idea that Müteferrika's press represented a belated concession to Western superiority, the eighteenth-century timing of its establishment is nonetheless significant.¹⁵ This was a period of sweeping change for the Ottoman Empire, which sought to put itself on a more diplomatic footing with its Christian rivals and vigorously address

FIGURE 2. World map, from Nicolas Sanson (1600–1667), *Atlas Nouveau* (Paris: Hubert Jaillot, 1691). Ink (engraving) and color on paper, 55.8 x 90.1 cm. Geographicus Rare Antique Maps, Wikimedia Commons

FIGURE 3. World map, from a manuscript copy of Katib Çelebi, *Kitâb-ı Cihânnümâ*, Istanbul, ca. 1729. Ink, color, and gold on paper; 15.5 x 28.6 cm. Bibliothèque Nationale de France, Paris, Supplément turc 215, fol. 33a

some of the causes of its diminished geopolitical standing. These endeavors entailed, but were not defined by, a heightened openness to Western models in such areas as military training.¹⁶ In Ottoman artistic and cultural spheres, too, the eighteenth century saw a number of self-assured cross-cultural adaptations, of which Müteferrika's printing press and the emergence of an Ottoman Baroque are two important examples.

True to his petition, Müteferrika limited his output to secular topics, publishing a total of seventeen lexicographical, historical, geographical, and scientific titles between 1729 and 1742, when his press fell into abeyance for reasons that are unclear.¹⁷ The *Cihānnümā*, of which five hundred copies were printed, may have come eleventh in this sequence, but the cartographic theme was fundamental to Müteferrika's project. As early as 1719–20, nearly a decade before the press went into operation, Müteferrika had produced a woodblock-printed map of the Sea of Marmara for presentation to İbrahim Pasha, and this was followed in 1724–25 by a largescale map of the Black Sea made up of four copperplate engravings (fig. 4).¹⁸ These earlier ventures underscore how heavily Müteferrika relied on cartography to promote and prepare for his greater enterprise, and indeed, of the six printing machines that composed his press, two were dedicated to mapmaking.¹⁹ Where Müteferrika obtained this equipment remains an open question. Some eighteenth-century European sources give a French origin, while others claim that the apparatus was prepared and at first even staffed by specialists brought from Germany. Much of Müteferrika's equipment probably was imported from Western Europe, following the practice of Istanbul's minority presses, although there is good evidence that Müteferrika himself manufactured the Ottoman type.²⁰ Regardless of where its components came from, the press quickly matured into a distinctly Ottoman concern, and the *Cihānnümā*—building on more than ten years' experience and experimentation—occupies an especially prominent place in its history.

The *Cihānnümā*'s text is taken mostly from Katib Çelebi's own second version of his work, which was itself written on the basis of numerous Islamic and European sources and left incomplete upon his death in 1657.²¹ Following Müteferrika's preface as editor, the book begins with an outline of the sciences of geography and cosmography before giving an overview of the seas and continents. The rest of the book—more than eighty percent of its almost seven hundred pages—comprises a region-by-region, East-to-West description of Asia from Japan to the Ottoman Empire, going beyond Katib Çelebi's stopping point of Armenia and incorporating material from another notable seventeenth-century work, the translation by Abu Bakr al-Dimashqi (d. 1691), executed between 1675 and 1685, of the monumental *Atlas Maior* (Amsterdam, 1665) of Joan Blaeu (1596–1673).²² A postscript by Müteferrika promises a second volume on Europe, Africa, and the Americas, but no such sequel was produced.²³ Although their placement does not perfectly align with the text, the forty plates illustrating the *Cihānnümā* cover the same subject matter and proceed largely along the same trajectory, starting with a depiction of an armillary sphere and concluding with a map of Istanbul.²⁴

Four individuals are associated with the creation of these plates, their names inscribed on nineteen of them.²⁵ Already responsible for compiling and editing the text, Müteferrika also takes credit for a diagram of the heavenly spheres that appears early in the book with the label "By the hand of the humble İbrahim the geographer from among the stewards to the Exalted Throne," words that almost certainly refer to the act of drawing the image rather than engraving it.²⁶ Another İbrahim—"of Tophane," a suburb of Istanbul—is identified explicitly as having drawn, but not engraved, a map of Anatolia and Rumelia; as some scholars have assumed, this may be the same man as Müteferrika himself.²⁷ The remaining signatures belong to two engravers who seem to have held a dominant artistic role in the project: Ahmedü'l-Kırımı (Ahmed the Crimean),

FIGURE 4. Map of the Black Sea composed of four copperplate engravings. Printed by İbrahim Müteferrika, İstanbul, AH 1137/1724–25. Ink (copperplate) and color on paper, 67 x 98 cm. Lund University Library, L.O. * No. 13. B

whose name appears on eleven plates; and the aforementioned Mıgırdıç Galatavi (Mıgırdıç of Galata, another of İstanbul's suburbs), by whom seven plates are signed.²⁸ Nothing is known about either of these men except for the information encoded in their names. Whether Ahmed truly hailed from the Crimea, which was then an Ottoman vassal state under Tatar rule, or claimed more distant descent from the region is impossible to say. As for Mıgırdıç, his name is unmistakably Christian and Armenian in contrast to the Muslim appellations of the other men, a distinction that seems to have shaped his handiwork in ways that will be explored below.²⁹

The Cartouches and Their Contexts

Seventeen Baroque cartouches in total appear across twelve of the *Cihānnümā*'s plates, sometimes in doubles.³⁰ They mostly serve as they do in Western cartography to frame and highlight information pertaining to the images, although several smaller examples are reserved for the signatures of the printmakers, who not only engraved the cartouches but also designed them. Broadly speaking, the cartouches can be divided into two categories. The first, which comprises eight examples, entails a hybrid approach whereby the elaborated curved and scrolling forms characteristic of Baroque cartouche design are fused with elements drawn from the Ottomans'

own decorative tradition. One such cartouche, on a map of Arabia signed by Ahmed, is a roughly oval composition made up of leaf-edged scrolls that take on the guise of thick curls of paper at each side (figs. 5, 6). Hatched lines lend plasticity to the design, the curling sides of which appear to protrude forward, and a stylized palmette crowns the whole in the manner of a finial. A similar cartouche by Ahmed, this time taller and with a minuscule pediment instead of a finial, is emblazoned on a map of the Caucasus (figs. 7, 8), while a slightly different scheme—in which the lateral curls have been moved to the lower corners of the oval and rendered as thick ribbons with molded edges—can be seen together with the armillary sphere on the book's first plate, which again is engraved by Ahmed and has both a large title cartouche and a smaller replica for his signature (fig. 9).

Cartouches comparable to these are found in numerous seventeenth- and eighteenth-century European works, including Blaeu's *Atlas Maior*, a copy of which had been gifted by the Dutch to Sultan Mehmed IV (1642–1693, r. 1648–87) in 1668.³¹ Mütferrika acknowledges this famous atlas, or rather al-Dismashqi's Turkish rendering of it, as the source that enabled him to complete Katib Çelebi's unfinished text, and it is possible that he and his team had

FIGURE 5. Ahmedü'l-Kırımı, map of the Arabian Peninsula, from Katib Çelebi, *Kitāb-ı Cihānnümā* (1732). Ink (copperplate), color, and gold on paper. Houghton Library, Harvard University, Cambridge, MA, Typ 794.34.475, double-page plate between pp. 483 and 484

FIGURE 6. Detail of the map illustrated in figure 5, showing the title cartouche. Photograph by the author

access to the royal copy (the same one from which al-Dimashqi had produced his translation).³² Whether directly known to the engravers or not, Blaeu's cartouches are analogous in format and makeup to those of the *Cihānnümā*, their oval shape and curved and curling edges being standard features that date back to the motif's origins in sixteenth-century Italian art (*cartoccio* meaning "roll of paper"; fig. 10).³³ Precedents abound also for more specific aspects of the Ottoman designs, such as the recurrent use of mirrored S-shaped scrolls to form the cartouches' bases, for which a close match is found on a map of the Caspian Sea from the *Atlas Maior* of Reiner Ottens (1698–1750), published in Amsterdam in 1729 (fig. 11). Further examples are the ragged foliate protrusions sprouting from some of the scrolls and the molded ribbon-like curls of the armillary-sphere cartouches (see figs. 8 and 9), details that have equivalents in the decorative repertoire of the highly influential adaptations by Hubert Jaillot (ca. 1632–1712) of the maps of Nicolas Sanson (1600–1667; fig. 12), whose *Atlas Nouveau*, as published by Jaillot in Paris in 1689, is among the holdings of Istanbul's Military Museum and may have provided Müteferrika with the model for his double-hemisphere world map (see fig. 2).³⁴

Copious and conspicuous as these similarities are, however, the differences are no less significant. With their crisp outlines, symmetrical hatching, and exclusively abstract and vegetal ornamentation, the Ottoman versions are more linear and geometrized than their Western counterparts, the scrolls of which typically take the form of dense, fleshy strapwork lit from one side and embellished with heraldic and figural motifs. The distinctive approach of the *Cihānnümā* designs is easy to explain once we realize the extent to which Ottoman art already encompassed ingredients that resonated with the language of the Baroque cartouche. Despite their relationship to Western models, the sinuous lines, tight curls, and serrated and cusped leaves of Ahmed's cartouches are equally (or occasionally more) reminiscent of the arabesque interlace and split-leaf palmettes typical of Ottoman ornament since the fifteenth century.

FIGURE 7. Ahmedü'l-Kırımı, map of the Caucasus, from Katib Çelebi, *Kitâb-ı Cihānnumâ* (1732). Ink (copperplate), color, and gold on paper. Uppsala University Library, Bokband 1800-t. Orient. 1, double-page plate between pp. 431 and 432

Particularly close parallels are offered by the vibrant decorative vocabulary of Iznik ceramics (fig. 13), revivalist emulations of which were being manufactured at Tekfur Sarayı in Istanbul during the second quarter of the eighteenth century.³⁵ The palmette atop the Arabia cartouche (see fig. 6), for instance, closely recalls the leafy trefoil forms that pervade Iznik scrollwork, both in its general composition and, more precisely, in the little downward-facing lily-like motif within its bulbous center (fig. 14).

When considered in light of such comparative materials, this first category of cartouche gives the effect of a Western Baroque armature that has been reconfigured and reskinned according to Ottoman visual norms—what we might describe as an *Ottomanized Baroque*. This approach is taken to perhaps its most revealing level in the title cartouche for the map of Transoxiana, which is the work of Mıgırdıç rather than Ahmed (fig. 15). Here, only the frame's delicate undulating outlines are definitively Baroque; the serrated leaves growing from them may hint at the Classically derived acanthus, but in their patterned regularity, they ultimately come closer to the stylized foliate borders employed in such traditional Ottoman art forms as brocaded silk velvet (fig. 16).³⁶ Gone from this cartouche

FIGURE 8. Detail of another impression of the map illustrated in figure 7, showing the title cartouche. Ink (copperplate) and color on paper. Houghton Library, Harvard University, Cambridge, MA, Typ 794.34.475, double-page plate between pp. 431 and 432. Photograph by the author

is any suggestion of bulging, three-dimensional curvature; in its place emerges a marked emphasis on planarity and linework.

The second and larger of the *Cihānnümā*'s Baroque cartouche categories, which includes nine examples, is altogether more overt in its embrace of the Baroque style. The intricately delineated, mostly oval frames belonging to this group teem with naturalistic and deeply shaded leafy scrolls that grow lushly out of and around each other, forming almost sculptural entities, their tops and bases variously embellished with protruding flourishes. In some cases, as in a signature cartouche on a map of Northern India by Mıgırdıç, the leaves essentially constitute the entirety of the design (figs. 17, 18), while in others, the scrolls are bedecked with additional elements such as fruits and flowers. A beautiful example of this fancier type appears on a map by Mıgırdıç of the Malay Archipelago: surmounted by a seashell, the cartouche descends at its base into an acanthus frond that is flanked by and merges with two C-shaped scrolls, while clustered at either side of the frame are what appear to be closed blossoms or round fruits (figs. 19, 20). Much more so than the hybridized examples of the first group, this cartouche and the others in its category invite comprehensive comparison with those found in the maps of Blaeu and Sanson/Jaillot, especially in their full-fledged plasticity and use of the quintessentially Baroque C-scroll (fig. 21; see also fig. 12).

As in the first category, however, the *Cihānnümā* versions assiduously avoid the figural and heraldic elements that populate their Western counterparts, and the motifs that they do include—although aesthetically much closer to European norms than to established Ottoman standards—remain broadly consonant with local decorative canons. This is obvious enough in relation to vegetal scrollwork, but even the blossoms or fruits of the Malay cartouche (see fig. 20) can be seen as part of a contemporaneous trend toward naturalistic depictions of fruits and flowers in eighteenth-century Ottoman painting and carving (fig. 22).³⁷ Moreover, and somewhat paradoxically, the cartouches of this group are actually less faithful than those of the first in replicating the furling and projecting strapwork that is so characteristic of Western

FIGURE 9. Ahmedü'l-Kırımı, armillary sphere, from Katib Çelebi, *Kitāb-ı Cihānnümā* (1732). Ink (copperplate), color, and gold on paper. Uppsala University Library, Bokband 1800-t. Orient. 1, plate between table of contents and p. 1

cartouche design, instead favoring streamlined hatched bands to form their underlying oval frames. These cartouches are, then, resolutely Baroque in content and effect even as they contrast in palpable ways with their counterparts in Western cartography. Decidedly untraditional in their overall look, they derive their distinctiveness not from stylistic localization as such but from an original and coherent adaptation of borrowed elements, and we may therefore call this category straightforwardly Ottoman Baroque, a term discussed at greater length below. Also to be considered is the clear correlation between the two categories and their respective authorship: whereas the Ottomanized group is overwhelmingly associated with Ahmed (all but Mıgırdıç's Transoxiana cartouche are by his hand), the Ottoman Baroque designs appear exclusively on plates signed by Mıgırdıç, a distinction that leaves no doubt that the cartouches were drawn by the engravers themselves.³⁸

Two things noted previously are vital to restate about our cartouches, regardless of the group to which they belong. First, their participation in the Baroque is not a functional necessity or inevitability. On the contrary, most of the book's textual information is presented using different framing solutions, from plain rectangular boxes to cartouches that take a more normatively Islamic route, fashioned as lobed or teardrop medallions usually edged with spiky leaves (figs. 23–25). These Islamic cartouches—which again recall textile design and also echo the arts of bookbinding and illumination, including the *Cihānnümā*'s own half-medallion headpiece (see

FIGURE 10. Map of the Margraviate of Moravia, from Joan Blaeu (1596–1673), *Atlas Maior* (Amsterdam, 1665), vol. 3, map 5. Ink (engraving) and color on paper, 38 x 48 cm (including omitted margins). David Rumsey Map Collection, David Rumsey Map Center, Stanford Libraries, Stanford, CA, 10017.140

figs. 1 and 16)—are engraved by both Mıgırdıç and Ahmed, underscoring the lack of obligation on either printmaker's part to follow European customs. Indeed, a further option open to the artists, which they both explored in a small number of cases, was to produce designs that teeter noncommittally between Western and Islamic approaches (fig. 26), or that qualify as Baroque but more explicitly Ottomanize their source material (fig. 27). That both men chose to employ the Baroque to the extent that they did in the face of these alternatives is significant. Their decision to do so was not determined by subject matter or geographical considerations, for the Baroque cartouches are distributed unevenly throughout the *Cihānnümā* without any discernible pattern to their incidence or thematic connection to the maps and images that they accompany. In some cases, different cartouche types—Islamic, Ottomanized Baroque, or Ottoman Baroque—are mixed and matched on one and the same plate (see figs. 5, 7, and 17).

The second point to reiterate, one that should already be apparent from the foregoing comparisons, is that all of the *Cihānnümā*'s Baroque cartouches inventively and in different ways tweak, reconfigure, and cross-fertilize the European models to which they refer, never directly

FIGURE 11. Cartouche of a map of the Caspian Sea, Amsterdam, ca. 1720. Equivalent to Reiner Ottens (1698–1750), *Atlas Maior* (Amsterdam, 1729), vol. 7, map 23. Ink (copperplate) and color on paper. Harvard Libraries, Cambridge, MA, Pusey Map Collection, G5692.C3 1720.08 (detail)

FIGURE 12. Cartouche of a map of the County of Mark, from Nicolas Sanson, *Atlas Nouveau* (Amsterdam and Paris: Hubert Jaillot/Pierre Mortier, 1708). Ink (engraving) and color on paper, full map: 44 x 57 cm. David Rumsey Map Collection, David Rumsey Map Center, Stanford Libraries, Stanford, CA, 12178.088 (detail). This map, not found in the 1689 *Atlas Nouveau*, was originally published in 1674.

copying their source material. Although easier to spot in the case of the Ottomanized examples, this practice is amply demonstrated also by Mıgırdıç's more fully realized Baroque designs, even (and indeed especially) on the rare occasion when his work can be tied to a specific prototype. A vivid case in point is the splendid bipartite cartouche that accompanies his map of Northern Asia (figs. 28, 29). Perhaps the most impressive of Mıgırdıç's creations, the cartouche comprises two intertwined scrollwork ovals—a larger one for the title and a smaller one beneath for the signature—from which issue, in descending order, symmetrical pairs of grape bunches, bellflowers, and tulips. While the bellflowers are endemic to the *all'antica* repertoire on which the Baroque draws, the diminutive bunches of grapes are a less generic motif that Mıgırdıç almost certainly borrowed from the *Atlas Maior*'s map of Crete, where two analogous grape bunches extend from the cartouche's upper flanks just as they do in his design (fig. 30). In its entirety, however, the rather standard *Atlas Maior* cartouche bears scant resemblance to Mıgırdıç's ambitious two-tier arrangement, which demonstrates greater rapport with (not to say dependence on) the Sanson/Jaillot tradition (fig. 31; see also fig. 21). His artistic self-assertiveness

FIGURE 13. Tankard with split-leaf palmette design, Iznik, ca. 1590. Fritware, polychrome painted under transparent glaze; 17.2 x (base diam.) 12.4 cm. British Museum, London, G.107

FIGURE 14. Border tile with palmette design, Iznik, ca. 1575–85. Fritware, polychrome painted under transparent glaze; 25 x 25 cm. Courtesy of Amir Mohtashemi Ltd.

is confirmed by the final pair of embellishments, the tulips, which, with their spiky and wavy petals, have little to do with European renditions of the flower and instead place us squarely in the Ottoman visual landscape, where tulips of this kind had been a staple since the sixteenth century (see fig. 16).³⁹ More specifically, the attenuated and splayed shape of Mıgırdıç's flowers very much reflects the artistic and horticultural tastes of his own eighteenth-century Istanbul milieu, as illustrated by a near-contemporaneous album of paintings dedicated to such tulips and by a Tekfur Sarayı tile design that, like the cartouche, presents its tulips in a symmetrical arrangement alongside scrolls and stamened flowers (figs. 32, 33; see also fig. 22).⁴⁰

Mıgırdıç's introduction of this fashionable and unmistakably Ottoman tulip—the only conventionally local motif seen in the Ottoman Baroque category—colors the cartouche as a whole, revealing the essential compatibility of the remaining vegetal and floral elements with the Ottoman decorative idiom, which did indeed include its own versions of grapes and bellflowers.⁴¹ Mıgırdıç must have been especially proud of what he crafted here, as this design is unique in the *Cihānnümā* for combining the title and signature cartouches. It is notable that, whereas the grapes and bellflowers spring from the upper frame, the tulips flank the signature, as if to

FIGURE 15. Mıgırdıç Galatavi, title cartouche of a map of Transoxiana, from Katib Çelebi, *Kitāb-ı Cihānnümā* (1732). Ink (copperplate) and color on paper. Houghton Library, Harvard University, Cambridge, MA, Typ 794.34.475, double-page plate between pp. 347 and 348 (detail)

FIGURE 16. Length of *çatma* velvet (detail), Bursa or Istanbul, late 16th or early 17th century. Voided and brocaded silk velvet, overall: 157.5 x 63 cm. Kunstgewerbemuseum, Berlin, Inv. No. 1884,903. © Kunstgewerbemuseum, Staatlichen Museen zu Berlin, photograph by Karen Bartsch

FIGURE 17. Mıgırdıç Galatavi, map of Northern India, from Katib Çelebi, *Kitāb-ı Cihānnümā* (1732). Ink (copperplate), color, and gold on paper. Uppsala University Library, Bokband 1800-t. Orient. 1, double-page plate between pp. 193 and 194

emphasize Mıgırdıç's Ottomanness. Although unusual in some of its particulars, the design as a whole is emblematic of the assured and creative quality that unites all of the *Cihānnümā*'s Baroque cartouches. We are dealing not with an unthinking importation of a Western art form, but with an intelligent, locally repurposed deployment of the style that must reflect certain aims and concerns peculiar to the book's eighteenth-century Ottoman context.

To Europe and Back Again: The Cartouches and Itineraries of Knowledge

How, then, are we to account for the conscious aesthetic choice that our cartouches represent? Various factors may have been at play, none of them mutually exclusive of the others. One explanation—and in a sense the most neutral—is that Ahmed and Mıgırdıç simply welcomed the chance for novelty that the new medium of printmaking offered, taking advantage of the project's circumstances to dabble in some cross-cultural experimentation. Both men were evidently pleased with their handiwork, which they have signed with a frequency and prominence unusual both by Ottoman artistic standards and by comparison with European atlases.⁴² These

FIGURE 18. Detail of another impression of the map illustrated in figure 17, showing the signature cartouche. Ink (copperplate) and color on paper. Houghton Library, Harvard University, Cambridge, MA, Typ 794.34.475, double-page plate after p. 135. Photograph by the author

signatures, together with the clear stylistic differences between the two cartouche groups, tell us that Ahmed and Mıgırdıç were eager to go beyond the minimal requirements of their task by contributing something of their own to the plates' look. In this regard, the cartouches offered not only a means of highlighting their names but also an opportunity for the engravers to show their dexterous handling of design elements outside the bounds of the predetermined cartographic and diagrammatic prototypes that they were charged with translating. The closest parallels to their signatures may be found among the works of the famous court artist Levni (d. 1732), who died the year of the *Cihānnümā*'s publication, and whose single-figure album paintings of the preceding decades often feature small but conspicuous monogram cartouches fashioned as lobed medallions issuing floral sprays.⁴³ This overlap with Levni's signing practice (itself atypically showy) suggests that Ahmed and Mıgırdıç considered themselves on a par with other high-ranking Ottoman artists of the book, with their novel cartouches distilling and advertising their ingenuity.

Creative excitement and pride cannot have been the whole or even main story, however, if only because Mütferrika would never have allowed such artistic freedom if it did not also benefit his goals as publisher. That Mütferrika himself well understood the semiotics of stylistic otherness is evident from the one book in his oeuvre not intended for Ottoman audiences: the *Grammaire turque*, a French guide to Turkish that he published in 1730 in collaboration with Jean Baptiste Daniel Holdermann (1694–1730), a Jesuit from Strasbourg.⁴⁴ Printed with type brought from France, the *Grammaire turque* is the only one of Mütferrika's publications to mimic the appearance of a Western product, its pages interspersed with floral decorations and arabesques that are identical to those found in early modern European books and seem likewise to have been printed with imported equipment (fig. 34).⁴⁵ Here, in this use of a foreign visual language to appeal to the *Grammaire*'s foreign target market, we see how intentional Mütferrika was in his utilization of Western forms. As far as the Baroque is concerned, its meaning

FIGURE 19. Mıgırdıç Galatavi, map of the Malay Archipelago, from Katib Çelebi, *Kitāb-ı Cihānnümā* (1732). Ink (copperplate), color, and gold on paper. Uppsala University Library, Bokband 1800-t. Orient. 1, double-page plate between pp. 133 and 134

for *Müteferrika* must have held particular association with the geographical genre: the style is absent from his books except for the *Cihānnümā*, although it had already been evoked in his standalone Black Sea map of 1724–25, which bears a large shield-like cartouche with a shape vaguely reminiscent of European Baroque models (see fig. 4).

This cartographically underpinned application of the Baroque apparently served to bolster the *Cihānnümā*'s claim to authority by stamping it as a cutting-edge product that had incorporated the best of what Western learning had to offer. As we have seen already, the Ottoman elite held European mapmaking—and, with it, European geographical knowledge—to be at the forefront of the discipline. This attitude is fully expressed in Katib Çelebi's introduction, where he discusses how the Mercator-Hondius *Atlas Minor*, which had been translated for him from Latin by a French convert collaborator, allowed him "to make good the deficiencies of Turkish and Arabic books on this science."⁴⁶ Additional references to the *Atlas Minor* and other Western works are scattered throughout the book, so that the cartouches, by referring in their own manner to European models, provide an eye-catching visual complement to these textual citations, instantly signaling the book's relationship to an admired foreign corpus.

FIGURE 20. Detail of another impression of the map illustrated in figure 19, showing the title cartouche. Ink (copperplate) and color on paper. The Lilly Library, Indiana University, Bloomington, DR 403 .M835, double-page plate between pp. 133 and 134. Photograph by the author

To be sure, the cartouches are not alone in this operation, for the plates brandish their European ties in multiple ways. Patently based on an engraving first published in the *Atlas von hundert Charten* (Nuremberg, 1712) by Johann Baptist Homann (ca. 1664–1724), the armillary sphere that opens the *Cihānnümā*'s illustrative program is striking for its perspectival construction, which differs markedly from the less volumetric pictorial norms of Ottoman painting (see figs. 9 and 35). More generic borrowings include the semi-naturalistic galleon that sails across Ahmed's depiction of the Arabian Sea and the diminutive fleurs-de-lis that, true to European convention, indicate north on the maps' compass roses (see figs. 5, 17, and 28; compare to fig. 21).⁴⁷ That the maps themselves are so heavily indebted to European cartography renders it impossible to miss the point. Nevertheless, our cartouches play a special role in this visual arsenal by virtue of their entirely unrequired use of the Baroque, which redoubles the *Cihānnümā*'s Western associations more than it results from them. Where some of the Europeanizing features of the atlas, including the galleon and compass rose, had appeared in Ottoman cartography since as early as the sixteenth century, and others, such as the armillary sphere, were novel as a necessary consequence of their models, the cartouches represented a further, more insistent layer of cross-cultural engagement, amplifying the book's visual worldliness in a manner that would surely have caught the attention of contemporary viewers.⁴⁸ The effect could even be termed a sort of "house style" that points more specifically to Mütferrika's act in creating a new, definitive edition of the atlas that makes still greater use of European sources.⁴⁹ As well as relying on al-Dimashqī's translation of the *Atlas Maior* in order to complete the text, Mütferrika added his own excursus to the introduction in which he promotes Copernican heliocentrism, invoking René Descartes (1596–1650) along the way.⁵⁰ Mütferrika's textual updating of the *Cihānnümā*—part of what Harun Küçük has traced as a larger pursuit of natural philosophy among certain Ottoman intellectuals of the time—thus worked in tandem with the aesthetic innovations of his edition, which, through its Baroque cartouches in particular, stood quite apart from existing manuscript copies.⁵¹

Just as important as this stylistic distinction is a related technical difference that rests on the cartouches' crisply graphic appearance. Thoroughly unpainterly in their delineation and hatching, the designs become signs of the book's very printedness, confirming its technologically current, hot-off-the-press character. This quality gives visual endorsement to one of

FIGURE 21. Title cartouche and compass rose of a map of the British Isles, from Nicolas Sanson, *Atlas Nouveau* (1708). Ink (engraving) and color on paper, full map: 58 x 90 cm. David Rumsey Map Collection, David Rumsey Map Center, Stanford Libraries, Stanford, CA, 12178.034 (detail)

Müteferrika's key claims in arguing for the printing press, namely that published books, being mass produced and the result of a rigorous editorial and proofreading process, are less vulnerable to error than those copied by hand. Laid out in detail in Müteferrika's aforementioned petition to the grand vizier and sultan, these arguments are recapitulated in the *Cihānnümā*'s preface, which quotes extensively from the edict that, parroting Müteferrika's own words, had granted the press royal approval.⁵² Scribes and copyists, this preface tells us, "have become deficient in their efforts and careless in their endeavors," whereas printing is "a useful science that guarantees and ensures . . . the correctness of [a book's] text."⁵³ A comparison is then drawn between the printing process and the striking of coins, implying for Müteferrika's enterprise the same trustworthiness as the imperial mint.⁵⁴ With their self-evidently engraved cartouches, the *Cihānnümā*'s plates leave the reader-viewer in little doubt of the book's status as a printed—and thus ostensibly more reliable—work.

Such accuracy was not merely an end in itself, however. As also explained in the preface, because error-free printed books were cheaper and easier to produce in large numbers than manuscripts, they would greatly facilitate the dissemination of knowledge useful to the empire's wellbeing, so much so that "the effort to bring such a wondrous art out of concealment, like a bride unveiled, would earn the Eternal Sublime State [i.e., the Ottoman Empire] the unending prayers of all the people of Islam."⁵⁵ Müteferrika frames this project as a reclamation of a lost Islamic golden age, describing how Muslims once possessed an unrivaled body of scholarly literature that rendered them "superior to the peoples of all other nations and religions," after which the ravages of war and other catastrophes—above all "the incursions of Genghiz [Khan] the Troublemaker and Hulagu the Uncouth, and the invasion of Andalusia by the Frankish infidels"—destroyed most of these books and left the Muslim world impoverished of learning.⁵⁶ This remarkable narrative turns on its head the notion of Western influence by recasting the Ottoman adoption of the printing press as a sort of homecoming through which the Islamic world might recover the capacity for education that it had been

FIGURE 22. Privy Chamber ("Fruit Room") of Ahmed III, Topkapı Palace, Istanbul, 1705. Painted and gilded wooden panels. Photograph by the author

partially deprived of by hostile outsiders, whether Mongols or Europeans. The preface's message is entirely consistent with the text of the *Cihānnümā* itself, in which European works are valued only insofar as they could add to the diminished (though still considerable) legacy of earlier Islamic authorities. Not only does Katib Çelebi make substantial use of the celebrated writings of Qazvini (1203–1283), al-Maqdisi (d. 991), and other Islamic authors, but he is also far from uncritical in his engagement with the Western alternatives.⁵⁷ Before launching into his description of individual lands, he faults Western atlases for their Christian bias and their tendency to start with and focus on Europe, and announces that he will instead begin in East Asia and work his way West, an itinerary that, probably not by accident, places the Ottoman Empire at its fulcrum.⁵⁸ The tone for this far-reaching and synthetic methodology, which integrates rather than assents to European knowledge, is already set in the introduction's opening passages, where Katib Çelebi hails geography's ability to feed the appetites of those who would, "from the comfort and security of their own mansions . . . , see and travel around the world in one instant."⁵⁹

The *Cihānnümā*'s visual references to Europe must be understood in similarly cosmopolitan terms. We saw above the degree to which the cartouches modify their foreign models and

FIGURE 23. Plate showing geometrical shapes and patterns of the eclipses, with lobed cartouches, from *Katib Çelebi, Kitāb-ı Cihānnümā* (1732). Ink (copperplate), color, and gold on paper. Uppsala University Library, Bokband 1800-t. Orient. 1, plate opposite p. 8

bring out affinities between the Ottoman and the Baroque, and the same is true for the rest of the plates' components. The base of the armillary sphere, for example, is transformed from the *all'antica* figural baluster of the original into a splaying foot with vegetal and geometric decoration (see figs. 9 and 35), while the fleurs-de-lis of the compass roses seem less foreign when we think back to the palmette finials of traditional Ottoman ornament (see fig. 14). In addition, as Sonja Brentjes and Emily Zoss have shown, the maps themselves are sometimes more similar to Ottoman manuscript adaptations of Western atlases than to the original atlases (see figs. 2, 3, and 24).⁶⁰ What makes the *Cihānnümā*'s references to European art so effective, then, is that they do not stop at pointing westward, but rather circle back to the Islamic context in which—and for which—the *Cihānnümā* was created.⁶¹

Indeed, we must recall that all of this visual matter is contained in what Yasemin Gencer has aptly termed a “printed manuscript,” a work that, in its overriding aesthetic, pays tribute to the manual arts of the book even as it demonstrates the advantages of mechanized production.⁶² A faithful translation into print of hand-done illumination, the headpiece that, with its cusped arch, crowns the text's first page displays the same traditional forms that have already been noted in relation to ceramics and textiles, including arabesques and palmette finials (see figs. 1 and 14).⁶³ Like the text as a whole, the title below the headpiece is designed to look like calligraphy, alerting us to the fact that the “printed manuscript” effect extends

FIGURE 24. Ahmedül'l-Kırımı, world map (with signature cartouche below the left hemisphere), from Katib Çelebi, *Kitâb-ı Cihānnümā* (1732). Ink (copperplate), color, and gold on paper. Uppsala University Library, Bokband 1800-t. Orient. 1, double-page plate between pp. 71 and 72

also to the amply inscribed plates.⁶⁴ Presumably copied from handwritten originals (and in some copies overwritten by hand), the plates' inscriptions find a particularly suitable vehicle in the cartouches, the linearity of which bears out Yael Rice's characterization of engravings as "decidedly calligraphic."⁶⁵ That most surviving copies of the *Cihānnümā* are colored by hand augments their manuscript-like appearance while at the same time strengthening their relationship to printed European atlases, which, too, are often painted by hand.⁶⁶ Such care in balancing novelty with established practice runs throughout Müteferrika's publications, all of which preserve and indeed stress their relationship to Ottoman custom. Even as outwardly foreign a work as the *Grammaire turque* gestures to its Ottoman origins, for while its imported arabesques may be of the Renaissance variety, they are close enough to Islamic prototypes to reinforce to the viewer that the book was printed, as its title page tells us, "à Constantinople."⁶⁷

An especially vivid illustration of the *Cihānnümā*'s integrative force is offered by a double-page celestial map that appears toward the start of the book as part of Müteferrika's Copernican excursus (fig. 36). Signed by Mıgırdıç, this extraordinary engraving—the only instance of figural art in the whole of the *Cihānnümā*—shows the two halves of the celestial sphere filled

FIGURE 25. Details of the maps illustrated in figures 5, 7, and 17, showing two signature cartouches (upper left and upper right) and a title cartouche (below)

with mostly human, animal, and hybrid portrayals of the constellations. Such astral imagery, which belongs to a Classically derived tradition that straddled East and West, would have been familiar to Ottoman viewers from illustrated Islamic astronomical manuscripts, particularly those springing from the work of the tenth-century Iranian astronomer ‘Abd al-Rahman al-Sufi (903–986). His advancement of the Ptolemaic system, infused with Bedouin Arab celestial knowledge, had circulated also in Europe in Latin translation, leaving an enduring mark on Western scholarship during the medieval and early modern periods.⁶⁸ Müteferrika’s inclusion of this map is thus in itself a sign of the commensurability and even mutual indebtedness of Western and Islamic learning, although it is to a recent, European branch of this shared astronomical inheritance that the engraving most directly refers: not only are double-hemisphere views of the entire heavens foreign to traditional Islamic celestial mapping, but the stars depicted include a number of non-Ptolemaic southern constellations observed by Dutch navigators at the end of the sixteenth century.⁶⁹

The map is modeled very closely on one first published in 1706 or 1707 in the popular French encyclopedia *La science des personnes de cour, d’épée et de robe* (fig. 37), and it is worth considering why this prototype was chosen over the many other Western celestial maps then available.⁷⁰ Beyond its encyclopedic origin, which may have added to its appeal in Müteferrika’s eyes, the French map offered a clearly delineated, relatively pared-down visual blueprint that was easier to adapt than some of the more elaborate treatments of the subject.⁷¹ Notable in this regard is the representation of Andromeda, who appears toward the top of the left (northern) hemisphere in a stiff, standing frontal pose that is quite unlike the writhing and often rear-facing position that she assumes in most other European celestial maps of the time. In fact, except for her nude torso, this front-facing Andromeda has more in common with traditional Islamic

FIGURE 26. Mıgirdiç Galatavi, title cartouche of a plate showing wind diagrams, from Katib Çelebi, *Kitāb-ı Cihānnümā* (1732). Ink (copperplate) and color on paper. Houghton Library, Harvard University, Cambridge, MA, Typ 794.34.475, plate opposite p. 60 (detail). Photograph by the author

FIGURE 27. Ahmedü'l-Kırımı, title cartouche of a plate showing orbital charts, from Katib Çelebi, *Kitāb-ı Cihānnümā* (1732). Ink (copperplate) and color on paper. Houghton Library, Harvard University, Cambridge, MA, Typ 794.34.475, plate opposite p. 34 (detail). Photograph by the author

portrayals of the constellation, a resemblance that may well have caught the attention of its Ottoman borrowers.⁷² Likewise distinctive is the depiction of Cetus, which, looming large at the top of the right (southern) hemisphere, takes the form of a grotesque whale rather than the more usual dragon-like sea monster.⁷³ It is perhaps significant that this variant Cetus is found also in a view of the constellations from the monumental Armenian-inscribed world map that was engraved by the Dutch brothers Peter Damiann Schoonebeek and Adriaan Schoonebeek (d. 1705) and printed in Amsterdam in 1695 by one of the city's longstanding Armenian presses.⁷⁴ In view of Mıgirdiç's own Armenian identity, we might wonder whether this important work, which bears a supplementary Persian/Ottoman title, was known to Müteferrika and his team and further encouraged their use of the French map, the design of which shares a number of other features with the Schoonebeeks' depiction.⁷⁵ Despite its pictorial dependence on a European source, however, the *Cihānnümā*'s version of the map is rooted firmly in the Islamic world as far as its textual content is concerned, with almost all of the constellations labeled according to established Arabic nomenclature.⁷⁶ Admittedly, the resultant amalgam

FIGURE 28. Mıgırdıç Galatavi, map of Northern Asia (titled “Map of the Lands of the Great Desert”), from Katib Çelebi, *Kitâb-ı Cihânnümâ* (1732). Ink (copperplate), color, and gold on paper. Uppsala University Library, Bokband 1800-t. Orient. 1, double-page plate between pp. 165 and 166

has little real instructional value: as in the French map from which they are taken, the stars underpinning the constellation imagery are schematically and incompletely plotted, while the accompanying Ottoman labels are in a few instances missing or erroneous.⁷⁷ More than scientific accuracy, the goal here is to declare the Ottomans’ continued stake in an evolving Ptolemaic tradition to which the Islamic world, too, was heir.

Below the map, partially nestled between its two hemispheres, is an equally arresting vignette that shows a large multistory building situated alongside two smaller structures within a walled enclosure, in front of which is a fountain. The Classicizing architecture, complete with balustrades at the top of the main edifice, is highly un-Ottoman, and the sense of alterity is magnified by the pronounced use of shadow and foreshortening—techniques borrowed from Western practice—to render the buildings and the paved floor around them. This unexpected companion image comes from another Western star map: a view of the constellations of the southern hemisphere by Johann Gabriel Doppelmayr (1677–1750) that was published in Ottens’ *Atlas Maior* of 1729 (among other places) and is distinguished by the depictions of famous European observatories that occupy the plate’s corners (fig. 38).⁷⁸ An obvious translation of Doppelmayr’s view of the Kassel Observatory (1714), the *Cihânnümâ* vignette

FIGURE 29. Detail of another impression of the map illustrated in figure 28, showing the combined title and signature cartouches. Ink (copperplate), color, and gold on paper. The Lilly Library, Indiana University, Bloomington, DR 403 .M835, double-page plate between pp. 165 and 166. Photograph by the author

FIGURE 30. Cartouche of a map of Crete, from Joan Blaeu, *Atlas Maior* (1665), vol. 2, map 27. Ink (engraving) and color on paper, full map: 38 x 52 cm. David Rumsey Map Collection, David Rumsey Map Center, Stanford Libraries, Stanford, CA, 10017.120 (detail)

underscores not only the range of materials consulted—the map itself, as we have seen, has a different model altogether—but also the ability of Müteferrika’s team to access the very latest of sources.⁷⁹

Mıgırdıç’s depiction makes a number of key changes to the original, from the omission of the figures and the main building’s belvedere-like observation tower to the introduction of the gridded pavement and spouting fountain, both of which are Westernizing features in their own right.⁸⁰ Shorn of its tower and devoid of any identifying labels, the *Cihānnümā*’s version has gone from being a specific scientific site to a more generalized monument to learning. Its modern, stately, and cosmopolitan appearance marks it as a locus for the production and dissemination of knowledge, a conceit boosted by the measuring instruments that fill the engraving’s corners, the source for which is yet another celestial map by Doppelmayr.⁸¹ This metaphorization means, moreover, that the building at least notionally can be claimed for and situated in the Ottoman milieu, notwithstanding its foreign look. A modern edition of the *Cihānnümā* designates the structure as the “Müteferrika Presshouse”; although this interpretation has no factual basis, it is not farfetched to suppose that Ottoman viewers, too, saw the edifice as an emblem of Müteferrika’s own house of knowledge.⁸² Both the position and the connotations of the vignette are mirrored by a sprawling Baroque cartouche that floats

FIGURE 31. Double cartouche of a map of the County of Holland, from Nicolas Sanson, *Atlas Nouveau* (1708). Ink (engraving) on paper, full map: 84 x 57 cm. David Rumsey Map Collection, David Rumsey Map Center, Stanford Libraries, Stanford, CA, 12178.136 (detail)

above the hemispheres at the upper center of the plate, its scrolls terminating in a seashell pendant. Inscribed with a description of the map, this imposing composition reverberates with the same meanings as the architectural image below, which is itself surrounded by a cartouche-like frame of feathery leaves.⁸³ The message—expanding on what the map already tells us—is that of the cultural and intellectual capaciousness of the *Cihānnümā*, a book so assimilative that it might turn even the Kassel Observatory and the Baroque scroll into Ottoman entities.

Beyond the Book: Baroque Networks and the Emergence of a State Style

While the *Cihānnümā* itself provides a convincing framework in which to explain our cartouches, they must also be considered in light of a quite different story that goes well beyond the book. The story in question is announced specifically by the designs of Mıgırdıç, which are uncannily prescient of a new building style that would sweep Istanbul during the 1740s and remain the dominant mode of Ottoman architecture into the early nineteenth century. Rich with acanthus leaves, seashells, C- and S-scrolls, and, indeed, cartouches, the exuberantly carved stonework associated with this architecture bears an unmistakable resemblance to Mıgırdıç's equally sculptural designs (figs. 39–41).⁸⁴ The overlap comprises not only form but also sensibility: like the printed cartouches, the architectural examples recast and recontextualize their Western models to yield original adaptations of the Baroque. The distinctness of these adaptations arises less from any obvious continuity with earlier Ottoman aesthetics than from the contrast that they present to other versions of the style, particularly in their discarding of figural elements. This new decorative vocabulary—already well suited to answer the existing Ottoman penchant for vegetal ornament and scrollwork—was utilized for long-established local

FIGURE 32. Painting from an album of 49 tulip depictions, Istanbul, ca. 1725. Color and ink on paper. Private collection. From Turhan Baytop, *İstanbul lalesi* (The Istanbul tulip) (Ankara: T.C. Kültür Bakanlığı, 1998), 51, pl. 35

building types and copiously interwoven with calligraphy. What we have here, in short, is an architectural manifestation of the very same approach exhibited by Mıgırdıç's designs: the Ottoman Baroque.⁸⁵

The advent of Ottoman Baroque architecture is itself part of a longer process that began in 1703, when the newly installed Sultan Ahmed III returned the court to Istanbul following extended periods of residence in the empire's second city, Edirne. Istanbul's reinvigoration as capital precipitated a building boom characterized by a taste for novelty and a greater receptiveness to foreign styles, bringing about a series of works during the first third of the century that enlivened a largely traditional decorative repertoire with select motifs inspired by Iranian, Western, and possibly Mughal models (fig. 42, left; see also fig. 22). Decoratively more luxuriant and variegated than older Ottoman monuments, these energetic new buildings succeeded in standing out against the austere architecture of the past in spite of their typically smaller scale. An expanding base of well-to-do citizens could partake as patrons in this diversified aesthetic landscape, but the sultan and the elite retained their spot at the top of the pile, making a show of the court's vitality and presence by leading the regeneration of the formerly neglected capital.⁸⁶ Comparable to the *Cihānnümā* in its syncretism (although not nearly as overt in its Western citations), this spirited breed of architectural novelty gave way at the start of the 1740s to the Ottoman Baroque, a bolder route to the city's rebranding that engaged much more fully with European art. The new style marked a dramatic and decisive shift in Ottoman visual culture, swiftly replacing centuries-old motifs with a fresh, eye-catching idiom that was soon taken up in media other than architecture and in regions outside Istanbul (fig. 42).⁸⁷

The use here of "Ottoman Baroque"—a term still more contentious than "Baroque" in its unqualified form—requires some elaboration before we proceed. Those who coined and

FIGURE 33. Tiles with bouquets of paired tulips and other flowers, manufactured at Tekfur Sarayı, Istanbul, ca. 1730s; installed in the mihrab (prayer niche) of the Ağalar Mosque, Topkapı Palace, Istanbul. Fritware, polychrome painted under transparent glaze; each tile approx. 25 x 25 cm. Nurhan Atasoy Archive, courtesy of the Turkish Cultural Foundation

popularized the label (or rather its predecessor, “Turkish Baroque”) in the twentieth century often employed it disparagingly for what they regarded as an ill-conceived Eastern imitation of an intrinsically Western thing, attempted by an empire on the backfoot.⁸⁸ More recent scholarly correctives have understandably tended to eschew the term as a Eurocentric imposition that distracts from the material’s own significance. Judiciously reclaimed, however, the concept offers a helpful means of conveying what the Ottomans themselves arguably intended by this visual overhaul, which was to participate—deliberately and on their own terms—in a widely resonant aesthetic of power and magnificence.⁸⁹ The Ottoman Baroque thus (re)defined is not a pale reflection of a foreign manner but a robust expression of the larger stylistic family that we know today as Baroque, a stylistic family that achieved success of global proportions in its own time. Indeed, recent work on the Baroque has shone more and more light on its unprecedented worldwide reach, whereby the manner transcended its Western origins and took on a multitude of local forms that were keyed to their particular geographies and cultures even as they capitalized on the style’s cachet as a transregionally prestigious language.⁹⁰ The Ottoman Empire joined this Baroque network with purpose and gusto, forging its own highly idiosyncratic variant that encompassed Rococo themes and even incorporated certain Byzantine features that, by invoking Istanbul’s own antique patrimony, staked a local claim to the Classical heritage on which the Baroque was built.⁹¹

The Ottoman Baroque’s architectural ascent was spearheaded by the state under Ahmed III’s successor, Mahmud I (1696–1754, r. 1730–54), soon after a notable victory against the Habsburgs in 1739, a development that culminated in the erection of a grand new imperial mosque, the Nuruosmaniye, in the heart of Istanbul between 1748 and 1755 (fig. 43; see also fig. 40).⁹² The first mosque to be commissioned by a sultan in the capital in more than a century, the Nuruosmaniye is a vigorous Baroque reworking of a fundamentally Ottoman building type, remarkably inventive in itself as well as by the standards of the two traditions that it synthesizes. Its rounded courtyard—unique among Ottoman imperial mosques—happily combines with the more conventional shape of its domed prayer hall, while its dazzlingly novel stonework is peppered with Arabic inscriptions that complement the decor’s curvilinearity.⁹³ Here is proof enough that the Ottoman Baroque was no clumsy or defeatist move, but a confident endeavor by which the empire could reassert its relevance in ways that more directly

FIGURE 34. Dedication page with arabesque headpiece (detail), from Jean Baptiste Daniel Holdermann (1694–1730), *Grammaire turque* (Istanbul: İbrahim Müteferrika, 1730). Ink (woodcut and letterpress) on paper, full page: 20.5 x 15 cm. Houghton Library, Harvard University, Cambridge, MA, *FC7.H7116.730g, unnumbered opening page. Photograph by the author

answered its Western rivals without neglecting local circumstances and customs. Contemporary audiences, Ottoman and Western alike, were certainly impressed with what they saw, as writings from the period attest.⁹⁴

Although the Ottoman Baroque as an officially sanctioned mode came about at a particular moment through a top-down strategy, a fascinating complication to this narrative—as signaled by Mıgırdıç’s cartouches—is that the style already seems to have been current among Istanbul’s native non-Muslim communities several years before it was launched into the cityscape. Not only did these communities enjoy longstanding mercantile and cultural ties with Western Europe, and especially Italy, where a stream of Ottoman Christians traded and studied, but they also included in their number many prominent architects and artists.⁹⁵ Indeed, the leading figures of eighteenth-century architecture (among them the architect of the Nuruosmaniye Mosque) were Greek and Armenian masters who, benefiting from their communal networks, would have had every opportunity to assimilate European fashions from imported books, prints, and objects.⁹⁶ Some of these architectural and artistic actors may themselves have participated in this traffic of people and goods by traveling to the West in person, although their movements are not recorded in the known documents.⁹⁷ Besides their practical advantages in accessing foreign models, many Ottoman Greeks and Armenians had their own independent interest in European art, fueled by a growing sense of cultural affinity with Western Christendom that merged with, rather than overtook, their identity as Ottomans.⁹⁸ Precious little survives of non-Muslim Ottoman visual culture from this period, particularly where architecture is concerned, but a number of carved marble tombstones in Istanbul’s Armenian cemeteries already reveal a developed taste for the Ottoman Baroque by 1737, almost half a decade before the style went public (fig. 44).⁹⁹ These same tombstones also feature such traditional Ottoman motifs as the pointed arch, emphasizing that the non-Muslim architects and artists under discussion here were fully capable of switching between, or combining, various aesthetic modes as circumstances required. In their work for Muslim patrons, they conformed to a more normatively Islamic approach until the 1740s, when they were called upon by members of the ruling class to unleash their expertise in the Baroque. A manner that seems to have functioned briefly and primarily as an inward expression of an Ottoman-Christian *esprit de corps* thus took on a very different role when coopted by the Muslim elite, who gave it new ideological associations in service of the state.¹⁰⁰

FIGURE 35. Depiction of an armillary sphere, from Johann Baptist Homann (ca. 1664–1724), *Grosser Atlas über die ganze Welt* (Nuremberg, 1731). Ink (copperplate) and color on paper. University of Wisconsin–Milwaukee Libraries

It is when we consider the style's special and early connection to non-Muslim Ottoman communities that Mıgırdıç's Armenian identity comes into sharper focus. In fact, his cartouches are the oldest examples of Ottoman Baroque design currently found, and they bespeak a well-honed fluency that almost certainly preceded Mıgırdıç's involvement in the *Cihānnümā* and arose from a deeper acquaintance with Baroque forms and practices. This would explain how his cartouches are so thoroughly Baroque without replicating the underlying armature of their Western counterparts, in contrast to the route taken by Ahmed, whose knowledge of the style seems to have sprung more directly from the *Cihānnümā*'s source materials. Mıgırdıç's designs thus appear to capture a moment when the Ottoman Baroque was in its initial burgeoning among Istanbul's Greeks and Armenians, and his approach presumably grew out of a more broadly shared Ottoman-Christian artistic manner, although the other instantiations of this manner—painted, drawn, or carved—have left barely any trace before the 1740s. Valuable records of the otherwise undocumented formative years of the Ottoman Baroque, the cartouches have survived both because they were reproduced in multiples and because they brought the style (apparently for the first time) to a wider Muslim audience.

Mıgırdıç must, then, be situated in the same circles as the artists and architects who would reshape the built environment in subsequent decades, and this affiliation reminds us of the larger relationship between printmaking and architecture in the Baroque. Critical to the style's spread due to their reproducibility and portability, printed models helped to inform Baroque building projects in various geographies, including the Ottoman Empire, where architects and artists collected, consulted, and responded to large numbers of Western architectural books

FIGURE 36. Mıgırdıç Galatavi, celestial map, from Katib Çelebi, *Kitāb-ı Cihānnümā* (1732). Ink (copperplate), color, and gold on paper. Uppsala University Library, Bokband 1800-t. Orient. 1, double-page plate between pp. 27 and 28

and prints.¹⁰¹ Preserved among such materials in the Topkapı Palace Library is a mid-eighteenth-century Ottoman Baroque architectural drawing with deft pen-and-ink linework that exemplifies, in a language that echoes Mıgırdıç's cartouches, the verve with which Ottoman artists absorbed European ideas and brought them to bear on the changing cityscape (fig. 45).¹⁰² Mıgırdıç's engravings, with their precise draftsmanship and three-dimensional hatching, may themselves have joined this printed corpus as architectural models in their own right.

His ethnicity and specialization also place Mıgırdıç in another important artistic context: early modern Armenian print culture, which was centered in Istanbul during the eighteenth century but flourished in numerous Eurasian cities such as Amsterdam, Venice, and Isfahan.¹⁰³ Made with the use of imported as well as locally crafted equipment, the materials that came out of Istanbul's Armenian presses cast a wide net for their imagery and ornamentation, juxtaposing Western(izing) Renaissance and Baroque elements (including the same arabesques seen in Mütefferika's *Grammaire turque*; see fig. 34) with motifs taken from Armenian manuscript illumination and the Ottoman arts of the object (figs. 46, 47).¹⁰⁴ The same eclecticism also obtained in Armenian publications from other cities. Whether as a consumer of such works or as an artist with some professional connection to them, Mıgırdıç was thus steeped in a diverse print tradition that would have equipped him to move with ease between different aesthetic registers.¹⁰⁵ The most distinguishing aspects of his work, however, remain difficult to account for even against this background. For one thing, the Baroque as manifested in the Armenian materials has more to do with European models than it does with Mıgırdıç's Ottoman

FIGURE 37. Reprint of a celestial map first published in 1706 or 1707, from S.D.V. de Chevigny, Henri Philippe de Limiers, and Pierre Massuet, *La science des personnes de cour, d'épée et de robe*, rev. ed., 7 vols. (Amsterdam: Chez Z. Chatelain & Fils, 1752), vol. 1, part 1. Ink (engraving) on paper. Bibliothèque Nationale de France, Paris, département Philosophie, histoire, sciences de l'homme, G-13214, foldout opposite p. 206

adaptation. Furthermore, the Armenian presses of Istanbul relied exclusively on woodcut and other relief printing methods as opposed to Mıgırdıç's technique of copperplate engraving, which does not seem to have been practiced in Istanbul prior to Mütferrika's press. This leaves open the questions of where, how, and from whom Mıgırdıç received his training. It is tempting to imagine that he spent some time in one of the Western centers of Armenian printing where engraving was present (recall the world map published in Amsterdam in 1695), but given that the same questions apply to his non-Armenian colleague, Ahmed, the likelier scenario is that both men learned the technique from a specialist brought to Istanbul by Mütferrika.¹⁰⁶

For further light on Mıgırdıç's connections and activities, we must turn to the only work other than the *Cihānnümā* with which he is securely associated: the *qible-nümā*, or qibla finder, created by Bedros Baronian (d. after 1765), an Ottoman Armenian from Kayseri who forged his career in Istanbul's diplomatic scene, serving as dragoman (interpreter) to the embassies of Britain and the Kingdom of Naples, among other functions.¹⁰⁷ Produced and surviving in multiples, the *qible-nümā* in its usual form is a large, circular, lidded instrument of wooden construction that is designed to aid Muslim worshippers in finding the direction of Mecca (fig. 48).¹⁰⁸ Its main section, which is fitted with a compass and an arrow, displays a map of the upper half of the eastern hemisphere together with a table of place names beneath. Inside the accompanying lid is a similar arrangement of visual and written elements, in this instance an aerial view of the Great Mosque of Mecca and, below it, a text that describes Baronian's invention of the finder, provides instructions on how to use it, and gives the date AH

FIGURE 38. Depiction of the Kassel Observatory from a map of the southern celestial hemisphere, from Johann Doppelmayr (1677–1750), *Atlas novus coelestis in quo Mundus Spectabilis* (Nuremberg: Heirs of Johann Baptist Homann, 1742). Ink (engraving) and color on paper, full map: 51 x 60 cm. David Rumsey Map Collection, David Rumsey Map Center, Stanford Libraries, Stanford, CA, 12129.023 (detail). This map, originally engraved in the 1720s, was published previously in Reiner Ottens's *Atlas Maior* (Amsterdam, 1729).

1151, equivalent to 1738–39.¹⁰⁹ While extant specimens of the *kible-nümā* are all individually painted and gilded, the underlying pictorial and textual elements are identical from object to object, because these elements are printed on sheets of paper that have been pasted into the instrument's two halves. Floating beside the semi-naturalistic view of Mecca inside the lid is a large Baroque cartouche that contains praise for the Kaaba (Islam's most sacred site in the Great Mosque of Mecca) and for the grand vizier Yeğen Mehmed Pasha (d. 1745), to whom Baronian dedicated the instrument. A smaller Baroque cartouche is tucked into the left corner of the map of the main section. Although this cartouche is almost invariably filled with gold in the known examples, four extant impressions of the print—including two that were never mounted within *kible-nümās*—reveal that the unaltered cartouche bears the signature of Mıgırdıç, confirming what the visual evidence already suggests (fig. 49).¹¹⁰

In addition to representing a partnership between the two fellow Armenians, the *kible-nümā* also demonstrates a connection between Baronian and Müteferrika, who must have contributed the use of his equipment to print the instrument's copperplates.¹¹¹ This was not the first project by Baronian to involve cartography: in 1733, on the heels of the *Cihānnümā*'s publication, he completed his own manuscript adaptation of a French geographical treatise (borrowing from the *Cihānnümā*'s engravings) and presented it to an earlier grand vizier, Hekimoğlu Ali Pasha (1689–1758), who rewarded him with a commission for a silver universal equinoctial ring dial (a kind of portable sundial).¹¹² Finely engraved and featuring a suspension ring with scrollwork brackets, this European-inspired instrument raises the additional possibility that Mıgırdıç (and perhaps also Ahmed) came from a metalworking background before taking up the printmaker's burin.¹¹³ What emerges from the Baronian-Mıgırdıç-Müteferrika nexus is a snapshot of the collaborative and networked milieu—peopled by an assorted cast of Muslim and non-Muslim artists, intellectuals, translators, and dignitaries—in which the Ottoman Baroque gained increasing currency and meaning, a milieu itself embedded in a much larger web of connections extending to Western Europe.¹¹⁴

FIGURE 39. Upper part of the gate of the *'imāret* (public soup kitchen) of the Hagia Sophia, Istanbul, 1742–43. Photograph by the author

FIGURE 40. Detail of the semivault over the main entrance into the Nuruosmaniye Mosque, Istanbul, 1748–55. Photograph by the author

FIGURE 41. Detail of the fountain of Sultan Abdülhamid I, showing a cartouche with the sultan's monogram, Emirgan, Istanbul, 1782–83. Photograph by the author

FIGURE 42. Comparison between part of the Fountain of Ahmed III, Istanbul, 1728–29 (left), and part of the gate of the Hagia Sophia 'imāret, Istanbul, 1742–43 (right). Left: Wolfgang Moroder, Wikimedia Commons; right: photograph by the author

Although, as we have seen, the style held particular appeal among Christian Ottomans before going mainstream in the 1740s, both the *Cihānnümā* and *ķible-nümā*, as products made for elite Muslims, show that this link did not impede a wider appreciation for the Ottoman Baroque. On the contrary, figures like Mıgırdıç and Baronian played a significant role in fostering such appreciation, demonstrating to the Muslim elite that the aesthetic had a legitimate place in the Ottoman canon.¹¹⁵ Müteferrika, for one, needed no convincing of the Baroque's utility to his project, for reasons that we have explored already. If the visual evidence is anything to go by, he not only allowed but also encouraged his engravers to use the manner, taking full advantage of Mıgırdıç's conversance with it. Lest we be tempted to explain Müteferrika's attitude as a reflection of his own Christian background, it should be noted that other members of the Ottoman Muslim elite likewise had existing knowledge of the (European) Baroque from imported luxury objects as well as the kinds of Western printed materials mentioned above.¹¹⁶ Surviving copies of such books and prints in the Topkapı Palace Library often bear Turkish inscriptions (some of them authored by Müteferrika) substantiating their viewers' deep engagement.¹¹⁷ The aesthetically well-versed individuals who collected and looked at these imported works would not have struggled to recognize or admire the *Cihānnümā*'s take on the Baroque.

As a medium already associated with the viewing, enjoyment, and contemplation of foreign modes, print made an especially suitable platform for the style's incipient localization among Ottoman Muslims. The cartouches of the *Cihānnümā*, and later of the *ķible-nümā*, thus became homegrown intermediaries in the chain of transmission, helping to root the Baroque in the

FIGURE 43. Ali Rıza Bey, aerial view of the Nuruosmaniye Mosque (1748–55), with the Sultan Ahmed Mosque (1609–17) in the right background, ca. 1880s. Photograph, albumen print. Library of Congress, Washington, DC, Prints and Photographs Division, Abdul Hamid II Collection, LC-USZ62-78322 (detail)

visual culture of Istanbul and in the consciousness of the objects' users. Mıgırdıç's cartouches may stand out for their conspicuous novelty, but they share the *Cihānnümā*'s pages quite comfortably with Ahmed's more traditionally based designs and sit well within the overall "printed manuscript" matrix. Along with their *kible-nümā* counterparts, these Baroque creations were clearly deemed welcome and meaningful in the eyes of their Muslim viewers, for whom their cosmopolitanism was redolent of technological modernity and scientific reliability—allusions appropriate to their host objects. The specificity of these allusions may explain why the style seems at this stage not to have made significant inroads into other types of artworks designed for Muslim audiences, including other arts of the book.¹¹⁸ A few years later, however, when political circumstances prompted the state to seek a new and internationally intelligible architectural image, the Baroque—or rather, an already proven Ottoman Baroque—offered itself as a visually and semantically fitting vehicle, acquiring an expanded, more ideologically charged set of meanings in its new function.

Nothing about this phenomenon was inevitable, and in no way are we dealing with a teleology that had to end in Ottoman Baroque architecture. Nonetheless, the cartouches assist us in tracing the steps by which this manner, out of a larger range of possibilities, achieved the visibility, traction, and prestige that it did. The process is embodied by a less common version of the *kible-nümā* in which the two printed circles are set within a single rectangular panel crowned by an Ottoman Baroque pediment, with a cabinet to hold the structure (fig. 50).¹¹⁹ A

FIGURE 44. Marble tombstone, Armenian cemetery, Balıklı, Istanbul, dated 1737 (1186 in the Armenian calendar). Photograph by the author

FIGURE 45. Unknown Ottoman artist, architectural design inserted into a volume comprising two seventeenth-century French works on architecture, ca. 1740s. Ink on paper. Topkapı Palace Museum Library, Istanbul, H. 2609

dated example of this variant format indicates (as already implied by its architectural character) that it was devised later than the usual lidded arrangement in the mid-1760s, by which time the style was well established in Istanbul's urban fabric.¹²⁰ Building on and fleshing out the engravings' own Baroque attributes, this later architectural reworking of Baronian's *kıble-nümā* stands as a lucid summation of how the Ottoman Baroque moved between different (albeit overlapping) social spheres and artistic categories, shifting semantic contours as it did so. The various associations that the style carried and accrued during its ascendancy all entailed references to the West, but they were not motivated by, or geared toward, Westernization per se. Whether communal, technological, or political, the Ottoman Baroque's significations were ultimately shaped by, and served the interests of, their various Ottoman beneficiaries, from Armenian artists to grand viziers.

Conclusion

Notwithstanding its ambition and broader stylistic importance, the *Cihānnümā* left little mark on Ottoman printmaking. Müteferrika's press remained in operation for only ten more years before its premature demise, and none of the titles issued by it in this period was decorated beyond an illumination-like headpiece. Although efforts were made to revive the press from 1755 onward, it was not until the end of the eighteenth century, under the

FIGURE 46. Frontispiece, from Zenob Glak (4th century), *Girk' patmut'eants' erkrin Tarōnoy* (The History of Taron) (Istanbul: I Tparani Grigori Marsēwanets'woy, 1719). Ink (woodcut and letterpress[?]) on paper. Library of Congress, Washington, DC, Near East Section, African and Middle Eastern Division, DS51.M8 Z46 1719

FIGURE 47. Decorated page, from St. Cyril of Alexandria (ca. 375–444), *Dzayn aṛ baghdzalin* (A Cry to the Desirable One) (Istanbul: I Tparani Karapeti ordi . . . Astwatsatroy, 1717). Ink (woodcut and letterpress) on paper. Library of Congress, Washington, DC, Near East Section, African and Middle Eastern Division, BR65.C953 D4 1717

FIGURE 48. *Kible-nūmā* of Bedros Baronian (d. after 1765), with engravings by Mıgırdıç Galatavi, Istanbul, engravings dated AH 1151/1738–39, object probably assembled 1750s. Paint, ink (engraving and letterpress), and gold on paper and wood, with glass and metal instruments; diam. 31 cm. Chester Beatty Library, Dublin, T. 443

FIGURE 50. *Ğible-nümā* of Bedros Baronian in an architectural format with an accompanying case, Istanbul, engravings dated AH 1151/1738–39, object assembled ca. 1765. Paint, ink (engraving and letterpress), and gold on paper and wood, with glass and metal instruments; case (open): 85 x 90 cm. Private collection. Photograph courtesy of the Alif Art A.Ş. archive

emblems that might indicate a polity's rulership or assert dominion over newly conquered territories, as in British maps of America (see figs. 21 and 31).¹²⁷ Such iconographic utterances find no place in the Ottoman cartouches, which instead use the language of form and style. If we are tempted to see a geographical nod in the seashell crowning the Malay Archipelago cartouche, we should remember that the same motif—a Baroque staple—appears also in plates that have nothing to do with tropical island climes (see figs. 20 and 36). The one cartouche in the *Cihānnümā* that is pictorially individuated to any substantive degree is the grape- and tulip-laden design that, for no thematic reason, appears on the map of Northern Asia, the Ottoman title of which—“Map of the Lands of the Great Desert”—stands in ironic contrast to the lush imagery of the surrounding frame (see figs. 28 and 29). While this imagery may not speak to, or of, the map that it overlies, however, it performs another kind of communication that emanates from all of the cartouches, including Ahmed's: it tells of an assured capacity for comprehending, naturalizing, and instrumentalizing foreign ideas—that is, of a cultural worldliness that elevates both the book and its reader.

Rather than speaking about their associated maps, then, the *Cihānnümā's* Baroque cartouches become statements in themselves, articulating the larger aims of the book and responding to the lively and changing conditions of their time. Their immediate and original context gave a primarily intellectual and scientific inflection to their rhetoric, but a more ideological connotation was latent from the outset, because cartography itself has always been

FIGURE 51. William Faden (1749–1836), map of the Western Mediterranean, London, 1785. Ink (copperplate) and color on paper, 61 x 87 cm. David Rumsey Map Collection, David Rumsey Map Center, Stanford Libraries, Stanford, CA, 2104.022

inextricably bound up with the geopolitical concerns of the societies that produce and consume it.¹²⁸ Müteferrika himself declares as much at the start of his preface when he ties recorded knowledge to “the perpetuation of the laws of the religion and state, and the maintenance of good order in the realm and among the people.”¹²⁹ The Baroque’s potential to serve the larger goals of the empire—a potential that would be realized in the *Cihānnümā*’s wake—is evocatively implied at the other end of the book in its penultimate map, which shows the Ottoman heartlands of Anatolia and Rumelia (fig. 54). Conforming to Islamic cartographic practice, this map, uniquely among those in the book, is oriented southward in what is surely a knowing salute to the empire’s own cultural heritage.¹³⁰ Also exceptional are the plate’s double signatures, one belonging to İbrahim of Tophane, who drew the map (and whom some scholars identify with Müteferrika, as noted previously), and the other to Mıgırdıç. Their names are placed symmetrically at the lower corners within matching rectangular boxes topped by traditional arabesque scrollwork pediments. İbrahim’s pediment, on the left, has a loose and freehand quality, while on the right Mıgırdıç has engraved for himself a finer, more detailed crest, fittingly signaling the difference between the two men’s shares in creating the plate. In the upper right corner, as if being pointed to by the finial over Mıgırdıç’s name, is a round Ottoman Baroque cartouche, its curling leaves both inviting comparison to, and looking very different from, the arabesques

FIGURE 52. Map of the Western Mediterranean, from *Cedid atlas tercümesi*, trans. Resmi Mustafa Agha (Istanbul: Tab'hane-i Hümayun, AH 1218/1803–4). Ink (copperplate) and color on paper. Library of Congress, Washington, DC, Geography and Map Division, G1019 .T2 1803

below. Here, in a remarkable encapsulation of the *Cihānnümā*'s codeswitching, the Baroque is almost literally made part of the Ottoman landscape, inscribed in a map of Islamic orientation and brought into aesthetic dialogue with time-honored Islamic motifs. The cartouche may enjoy some preeminence within this interplay—its fleshiness, location, and novelty are undeniably eye-catching—but the final impression is of something that has been folded into, rather than imposed on, the whole. Where a Western cartouche typically sets the scene, this cartouche, like those of the other plates, too, has been set *in* the scene.

Such operations as carried out by the *Cihānnümā*'s cartouches—significant in their own right and also from the perspective of subsequent developments—compel us to think more expansively about the ways in which prints enabled transregional adaptation. While Ottoman artists and audiences gained much of their familiarity with Western models from the importation of printed works, the *Cihānnümā* enlarges our frame of reference beyond processes of transmission and shows us, through its engagement with the Baroque in particular, how prints also served as sites where wandering forms could be fixed, localized, and disseminated anew—sites, that is, of cross-cultural mapping. It is poetically apt that this world atlas, produced by a diverse group of men out of diverse source materials, should have helped to establish and give meaning to the visual cosmopolitanism that would transform the Ottoman Empire in the decades to follow.

FIGURE 53. Detail of a map of England showing the title cartouche, from *Cedid atlas tercümesi* (1803-4). Ink (copperplate) and color on paper. Library of Congress, Washington, DC, Geography and Map Division, G1019 .T2 1803

FIGURE 54. İbrahim of Tophane (drawing) and Mıgırdıç Galatavi (engraving), map of Anatolia and part of Rumelia, from Katib Çelebi, *Kitâb-ı Cihânnümâ* (1732). Ink (copperplate), color, and gold on paper. Uppsala University Library, Bokband 1800-t. Orient. 1, double-page plate between pp. 629 and 630

Ünver Rüstem, PhD (Harvard University), 2013, is the Second Decade Society Assistant Professor of Islamic Art and Architecture at Johns Hopkins University. His research centers on the Ottoman Empire in its later centuries and on questions of cross-cultural exchange and interaction. Rüstem has held fellowships at Columbia University, the University of Cambridge, and Harvard University. The author of *Ottoman Baroque: The Architectural Refashioning of Eighteenth-Century Istanbul* (Princeton University Press, 2019), he has published articles and chapters on subjects ranging from the reception of illustrated Islamic manuscripts to the symbolic deployment of ceremonial in the context of Ottoman architecture. E-mail: urustem@jhu.edu

Notes

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1 The full title is *Kitāb-ı Cihānnümā li-Kātib Çelebi* (The Book of the World Mirror of Katib Çelebi). See note 22 below for relevant literature.

2 For overviews of Ottoman cartography, including its intersection with European mapmaking, see Kemal Özdemir, *Ottoman Cartography* (Istanbul: Avea, 2008); Svat Soucek, “Ottoman Cartography,” in *Studies in Ottoman Naval History and Maritime Geography* (Istanbul: Isis Press, 2008), 225–38; Ahmet T. Karamustafa, “Military, Administrative, and Scholarly Maps and Plans,” in *The History of Cartography*, vol. 2, book 1, *Cartography in the Traditional Islamic and South Asian Societies*, ed. J.B. Harley and David Woodward (Chicago and London: The University of Chicago Press, 1992), 209–27; and Gottfried Hagen, “Ottoman Empire, Geographical Mapping and the Visualization of Space in the,” in *The History of Cartography*, vol. 4, *Cartography in the European Enlightenment*, ed. Matthew H. Edney and Mary Sponberg Pedley (Chicago and London: The University of Chicago Press, 2019), 1073–82.

3 Helen Hills, “The Baroque: The Grit in the Oyster of Art History,” in *Rethinking the Baroque*, ed. Helen Hills (Farnham, UK, and Burlington, VT: Ashgate, 2011), 11–36. As its title suggests, this volume of essays is entirely devoted to interrogating the terminological and conceptual usefulness of the Baroque.

4 See the references in notes 90 and 101 below.

5 For Mütferrika’s life and career, see Maurits H. van den Boogert, “The Sultan’s Answer to the Medici

Press? Ibrahim Mütferrika’s Printing House in Istanbul,” in *The Republic of Letters and the Levant*, ed. Alastair Hamilton, Maurits H. van den Boogert, and Bart Westerweel (Leiden and Boston: Brill, 2005), 266–67; Orlin Sabev, “İbrahim Mütferriqa,” *Historians of the Ottoman Empire*, October 2011, <https://ottomanhistorians.uchicago.edu/en/historian/ibrahim-mutferriqa> (last accessed February 3, 2021); and Orlin Sabev, *Waiting for Mütferriqa: Glimpses of Ottoman Print Culture* (Brighton, MA: Academic Studies Press, 2018).

6 Sabev, “İbrahim Mütferriqa.” See also note 26 below.

7 The literature on Mütferrika’s printing house is considerable. For some of the more relevant and recent scholarship, see Boogert, “The Sultan’s Answer,” 265–91; Yasemin Gencer, “İbrahim Mütferrika and the Age of the Printed Manuscript,” in *The Islamic Manuscript Tradition: Ten Centuries of Book Arts in Indiana University Collections*, ed. Christiane Gruber (Bloomington: Indiana University Press, 2009), 154–94 (esp. 155–61 for the press’s establishment); and Sabev, *Waiting for Mütferriqa*, esp. 36–56. For the history of printing in the Islamic world more generally, see G. Oman et al., “Maṭba’a” (printing), in *Encyclopaedia of Islam*, 2nd ed. (Leiden: E.J. Brill, 1954–2002), 6:794–807; Ioana Feodorov, “Beginnings of Arabic Printing in Ottoman Syria (1706–1711): The Romanians’ Part in Athanasius Dabbās’s Achievements,” *ARAM* 25.1–2 (2013): 231–60; and Hala Auji, *Printing Arab Modernity: Book*

Culture and The American Press in Nineteenth-Century Beirut (Leiden and Boston: Brill, 2016).

- 8 For critical discussions of the belief that the Ottomans were slow and backfooted in their acceptance of printing, see Kathryn A. Schwartz, "Did Ottoman Sultans Ban Print?," *Book History* 20 (2017): 1–39; and Sabev, *Waiting for Müteferrika*, xiv–xvii. On the larger decline paradigm to which this belief relates, see Cemal Kafadar, "The Question of Ottoman Decline," *Harvard Middle Eastern and Islamic Studies Review* 4.1–2 (1997–98): 30–75; and Dana Sajdi, "Decline, Its Discontents and Ottoman Cultural History: By Way of Introduction," in *Ottoman Tulips, Ottoman Coffee: Leisure and Lifestyle in the Eighteenth Century*, ed. Dana Sajdi (London and New York: Tauris Academic Studies, 2007), 1–40.
- 9 Oman et al., "Maṭba'a," 799–800 (section authored by Günay Alpay Kut); Nil Palabiyik, "The Beginnings of Printing in the Ottoman Capital: Book Production and Circulation in Early Modern Constantinople," *Studies in Ottoman Science* 16.2 (2015): 3–32; Nil Palabiyik, "Redundant Presses and Recycled Woodcuts: The Journey of Printing Materials from London to Constantinople in the Seventeenth Century," *Papers of the Bibliographical Society of America* 110.3 (September 2016): 273–98.
- 10 Sabev, *Waiting for Müteferrika*, xvi, 13–15, 46–68. Sabev cautions, however, that such explanations, even if reasonable in themselves, have contributed to the tendency of scholars "to explain something which seems problematic in their own 'eyes' but [was] not problematized or dramatized by the Ottomans themselves." Sabev, *Waiting for Müteferrika*, xvi.
- 11 Gülru Necipoğlu, "Visual Cosmopolitanism and Creative Translation: Artistic Conversations with Renaissance Italy in Mehmed II's Constantinople," *Muqarnas* 29 (2012): 18–21; Julian Raby, "Mehmed II Fatih and the Fatih Album," *Islamic Art* 1 (1981): 42–49; Gül İrepoğlu, "Topkapı Sarayı Müzesi Hazinesi Kütüphanesindeki Batılı kaynaklar üzerine düşünceler" (Thoughts on the Western sources in the Topkapı Palace Museum Treasury Library), *Topkapı Sarayı Müzesi Yıllığı* (Annual of the Topkapı Palace Museum) 1 (1986): 56–72. These imports included works printed in Arabic script with a typeface that Müteferrika criticized: see Boogert, "The Sultan's Answer," 274, 278–79; and Christopher M. Murphy, trans., "Appendix: Ottoman Imperial Documents Relating to the History of Books and Printing," in *The Book in the Islamic World: The Written Word and Communication in the Middle East*, ed. George N. Atiyeh (Albany: State University of New York Press; Library of Congress, 1995), 283, 290–91.
- 12 For the Ottomans' interest in, consumption of, and responsiveness to Western cartography, see Thomas D. Goodrich, "Old Maps in the Library of Topkapı Palace in Istanbul," *Imago Mundi* 45 (1993): 120–33; Gottfried Hagen, "Afterword: Ottoman Understandings of the World in the Seventeenth Century," in Robert Dankoff, *An Ottoman Mentality: The World of Evliya Çelebi*, 2nd ed. (Leiden and Boston: Brill, 2006), 227–33; Gottfried Hagen, "Atlas and Papamonta as Sources of Knowledge and Power," in *Evliya Çelebi Seyahatnamesi'nin yazılı kaynakları* (The written sources of Evliya Çelebi's *Seyahatname*), ed. Hakan Karateke and Hatice Aynur (Ankara: Türk Tarih Kurumu, 2012), 104–29; Hagen, "Ottoman Empire"; Ian Manners, with M. Pinar Emiralioğlu, *European Cartographers and the Ottoman World, 1500–1750: Maps from the Collection of O.J. Sopranos*, exh. cat. (Chicago: Oriental Institute Museum of the University of Chicago, 2007); and Fikret Sarıcaoğlu, "Administrative Cartography in the Ottoman Empire," in *The History of Cartography*, vol. 4, *Cartography in the European Enlightenment*, ed. Matthew H. Edney and Mary Sponberg Pedley (Chicago and London: The University of Chicago Press, 2019), 64–69. For Katib Çelebi and his *Cihānnümā*, see Gottfried Hagen, "Katib Çelebi," *Historians of the Ottoman Empire*, March 2007, <https://ottomanhistorians.uchicago.edu/en/historian/katib-celebi> (last accessed February 3, 2021), which summarizes the same author's *Ein osmanischer Geograph bei der Arbeit: Entstehung und Gedankenwelt von Kâtib Çelebis Cihānnümā* (Berlin: Klaus Schwarz Verlag, 2003); Gottfried Hagen, "Kâtib Çelebi's Maps and the Representation of Space in Ottoman Visual Culture," *Osmanlı Araştırmaları: The Journal of Ottoman Studies* 40 (2012): 283–93; Sonja Brentjes, "Mapmaking in Ottoman Istanbul between 1650 and 1750: A Domain of Painters, Calligraphers or Cartographers?," in *Frontiers of Ottoman Studies: State, Province, and the West*, vol. 2, ed. Colin Imber, Keiko Kiyotaki, and Rhoads Murphey (London: I.B. Tauris, 2005), 125–56, esp. 126–32; and Pinar Emiralioğlu, "The Ottoman Enlightenment: Geography and Politics in the Seventeenth- and Eighteenth-Century Ottoman Empire," *The Medieval History Journal* 22.2 (2019): 298–320, esp. 305–9.
- 13 Boogert, "The Sultan's Answer," 267; Gencer, "İbrahim Müteferrika," 159; Sabev, *Waiting for Müteferrika*, xxi–xxii, 40–41. As Sabev notes, however, scholars are wrong to treat the embassy as the impetus for Müteferrika's press, particularly given that his earliest map had already been printed by the time Mehmed Sa'id and his father left for Paris. Sabev, *Waiting for Müteferrika*, 37.

- 14 Sabev, *Waiting for Mütferrika*, 37–42. See also note 52 below. The English rendering of the petition's title given here is borrowed from the existing anglophone scholarship, although the word "usefulness," which in this context fittingly expresses the intended meaning, is a somewhat oblique translation of *vesile(t)*, the more usual senses of which include "means," "pretext," and "favorable opportunity."
- 15 Sabev, *Waiting for Mütferrika*, xvii–xxiii.
- 16 Hagen, "Ottoman Empire," 1073–75; Kafadar, "Ottoman Decline," 62–67, 70–71.
- 17 For a list of these publications and analysis of their visual, material, and textual characteristics, see Gencer, "İbrahim Mütferrika," 161–79, 185–86, appendix 5.1. On the press's decline, see Gencer, "İbrahim Mütferrika," 182–84.
- 18 Gencer, "İbrahim Mütferrika," 158–59; Sabev, *Waiting for Mütferrika*, 37; Ulla Ehrensverd, "Two Maps Printed by İbrahim Mütferrika in 1724/5 and 1729/30," *Svenska Forskningsinstitutet i Istanbul Meddelanden* (Publications of the Swedish Research Institute in Istanbul) 15 (1990): 46–66.
- 19 Gencer, "İbrahim Mütferrika," 159.
- 20 Boogert, "The Sultan's Answer," 267–68; Edvard Carleson, *İbrahim Mütferrika basımevi ve bastığı ilk eserler/İbrahim Mütferrika's Printing House and Its First Printed Books*, trans. and ed. Mustafa Akbulut (Ankara: Türk Kütüphaneciler Derneği, 1979), 21; Gencer, "İbrahim Mütferrika," 159.
- 21 Hagen, "Katib Çelebi." See also note 12 above.
- 22 Hagen, "Katib Çelebi." Mütferrika's edition of the *Cihannümâ* has generated considerable scholarship, although very little of it is art historical. For a notable exception, see Emily Zoss, "An Ottoman View of the World: The *Kitab Cihannüma* and Its Cartographic Contexts," in *The Islamic Manuscript Tradition: Ten Centuries of Book Arts in Indiana University Collections*, ed. Christiane Gruber (Bloomington: Indiana University Press, 2009), 194–219. For a facsimile of a copy now at the Süleymaniye Library, Istanbul, see Kâtip Çelebi, *Kitâb-ı Cihânnümâ li-Kâtib Çelebi*, vol. 1 (Ankara: Türk Tarih Kurumu Basımevi, 2009). Two other copies—both illustrated in figure 1 of the present article (one being a rare uncolored example)—have been fully digitized and made available online: see "Katib Çelebi: Kitâb-ı Cihânnümâ," MDZ (Münchener Digitalisierungszentrum/Munich Digitization Center), <https://www.digitale-sammlungen.de/en/view/bsb00096220> (last accessed June 15, 2021); and "Kitab-ı Cihannüma li-Kâtib Çelebi," Alvin: Platform for Digital Collections and Digitized Cultural Heritage, <http://urn.kb.se/resolve?urn=urn:nbn:se:alvin:portal:record-235850> (last accessed August 2, 2021). For a very useful modern edition that reproduces the book's pages alongside English and Turkish summaries and explanations, see Kâtip Çelebi, *Kitâb-ı Cihânnümâ/The Book of Cihannuma*, ed. Bülent Özukan (Istanbul: Boyut Publishing Group, 2012), also available in a smaller English-only version under the title *The Book of Cihannuma: A 365-Year-Old Story* (2013). (To avoid confusion with the 2009 facsimile, references to the 2012 edition will hereafter use the English title.) For al-Dimashqî's translation of the *Atlas Maior*, see Brentjes, "Mapmaking in Ottoman Istanbul," esp. 132–35; Emiralioğlu, "Ottoman Enlightenment," 309–13; Hagen, "Afterword," 231–33; and Zoss, "An Ottoman View," 200–202.
- 23 Kâtip Çelebi, *Book of Cihannuma*, 206; Hagen, "Katib Çelebi."
- 24 For a list of the plates, see Zoss, "An Ottoman View," 213–14, appendix 6.1. For annotated reproductions, see Kâtip Çelebi, *Book of Cihannuma*, 42–121. The plates can be viewed also in the facsimile and digitized versions cited in note 22 above. Some of the plates (although none of those with Baroque cartouches) are reused from Mütferrika's earlier publications, as noted in Gencer, "İbrahim Mütferrika," 178; and Zoss, "An Ottoman View," 218 n. 56.
- 25 Zoss, "An Ottoman View," 213–14, appendix 6.1.
- 26 'Alâ yedî'l-ḥakîr İbrâhîmî'l-coğrâfî min mütferrikagân-ı Dergâh-ı 'Âlî, as illustrated in Zoss, "An Ottoman View," 194, fig. 6.1. The translation is taken from Zoss, "An Ottoman View," 213, appendix 6.1. As was traditional for such signatures, the formulation is Arabicizing. Mütferrika employed similar signatures to indicate his authorship of a series of handwritten Ottoman explanations that he added in 1732–33 to a copy of Joan Blaeu's *Nouveau théâtre d'Italie* housed at the Topkapı Palace. See Ünver Rüstem, *Ottoman Baroque: The Architectural Refashioning of Eighteenth-Century Istanbul* (Princeton, NJ, and London: Princeton University Press, 2019), 206–7, 290 n. 84. To return to the *Cihânnümâ* signature, the plate on which it appears, dated 1142 (1729–30), had been published earlier in Mütferrika's edition of the *Tārīḥü'l-Hindî'l-Ġarbî* (History of the West Indies); for this edition, see Gencer, "İbrahim Mütferrika," 162, 168, 176–78, 186, appendix 5.2, no. 4. Such recycling of existing plates occurs elsewhere in the *Cihânnümâ*: see note 24 above.
- 27 *Resemehü İbrâhîmî Toḥḥānevî*. The signature is interpreted as Mütferrika's in Kâtip Çelebi, *Book of Cihannuma*, 118. The possibility that the two İbrahims may be the same is rendered likelier by the fact that Mütferrika's probate inventory records

- his unsold stock as being kept in a location called Tophane near the Mosque of Sultan Selim, the same neighborhood where his house stood; see Sabev, *Waiting for Müteferrika*, 32–33. On the other hand, it seems curious that Müteferrika would associate himself with this toponym when Istanbul had a much better-known Tophane—labeled as such on the *Cihānnümā*'s own map of the city—close to Galata on the other side of the Golden Horn. For the Istanbul map, see Kâtip Çelebi, *Book of Cihannuma*, 120–21.
- 28 Both men sign their names in the Arabicizing manner typical of artists' signatures in the Islamic context. Their wording can vary slightly from case to case, but the usual forms are 'amele Aḥmedü'l-Ḳırımî and 'amele Mıgırdıç Ğalaṭavî, the word 'amele equivalent in meaning to "the work of."
- 29 The name is a variant of Mkr̥tich' (Baptist); see Gabriella Uluhogian, Boghos Levon Zekiyan, and Vartan Karapetian, eds., *Armenia: Imprints of A Civilization*, exh. cat. (Milan: Skira, 2011), 216, cat. no. 63 (entry by Giampiero Bellingeri).
- 30 The twelve plates with cartouches are plates 1, 6, 7, 11, 12, 27, 32, 33, 35, 37, 38, and 39 (following the numbering in Zoss, "An Ottoman View," 213–14, appendix 6.1).
- 31 For the sultan's copy, see Hagen, "Afterword," 231. For a modern edition that reproduces the plates and provides English translations of some of their accompanying texts, see Joan Blaeu, *Atlas Maior of 1665*, ed. Peter van der Krogt (Cologne: Taschen, 2005).
- 32 For Müteferrika's acknowledgement of the *Atlas Maior*, see Kâtip Çelebi, *Book of Cihannuma*, 147 (under "A warning by Muteferrika"); and Kâtib Çelebi, *Kitâb-ı Cihānnümâ*, 422, where al-Dimashqî is referred to as "the translator of the *Great Atlas*" (*mütercim-i Coğrafiyâ-yı kebîr*). On Müteferrika's possible access to the royal copy, see Hagen, "Afterword," 231.
- 33 For the history of the cartographic cartouche, see Edward Lynam, "Period Ornament, Writing and Symbols on Maps," in *The Mapmaker's Art: Essays on the History of Maps* (London: The Batchworth Press, 1953), 48–54; and Sandra Sáenz-López Pérez, "Titles in Cartouches: An Image Is Worth a Thousand Words," in *Marginalia in cARTography*, exh. cat. (Madison, WI: Chazen Museum of Art, 2014), 29–35.
- 34 Goodrich, "Old Maps," 126 (under H 444); Zoss, "An Ottoman View," 209–10. Müteferrika's double-hemisphere world map is shown in figure 24.
- 35 For this ceramic tradition, see Nurhan Atasoy and Julian Raby, *Iznik* (London: Alexandria Press in association with Thames and Hudson, 1989), specifically 287–88 for Tekfur Sarayı ceramics; and Hans Theunissen, "Tekfur Sarayı: Een Korte maar Fascinerende Periode in de Turkse Tegelgeschiedenis" (Tekfur Sarayı: A short but fascinating period in Turkish tile history), *Tegel* 38 (2010): 12–18. For an English-language encapsulation of Theunissen's valuable research on Tekfur Sarayı tiles, focusing on examples in Cairo, see Hans Theunissen, "The Ottoman Tiles of the Fakahani Mosque in Cairo," *Journal of the American Research Center in Egypt* 53 (2017): 307–13, the illustrations of which can be accessed at "Images Documenting the Ottoman Tiles of the Fakahani Mosque in Cairo," Open Context, <https://doi.org/10.6078/M7HM56HB> (last accessed June 15, 2021).
- 36 For discussion of the illustrated velvet and the larger category of textiles to which it belongs, see Amanda Phillips, *Everyday Luxuries: Art and Objects in Ottoman Constantinople, 1600–1800* (Dortmund: Verlag Kettler, 2016), 81–88. I am grateful to Dr. Phillips for her help in obtaining a publishable image of this velvet.
- 37 On this new style of floral and fruit depictions, see Tülay Artan, "Istanbul in the 18th Century: Days of Reconciliation and Consolidation," in *From Byzantium to Istanbul: 8000 Years of a Capital*, exh. cat. (Istanbul: Sakıp Sabancı Museum, 2010), 302; Shirine Hamadeh, *The City's Pleasures: Istanbul in the Eighteenth Century* (Seattle: University of Washington Press, 2008), 190–215; and Rüstem, *Ottoman Baroque*, 35–37.
- 38 In engraving, the intended design usually is drawn out first before the burin is applied to the plate, often by an individual or individuals other than the engraver(s). Because they were working from largely predetermined models, Ahmed and Mıgırdıç were probably entrusted with drawing most of the designs for themselves, although we know that a separate draftsman was involved in the case of a map of Anatolia and Rumelia (discussed in the conclusion). The plates' inscriptions, moreover, almost certainly were provided to, rather than written out by, the engravers, particularly those that are calligraphic in nature. Regardless of the exact division of labor and responsibility, which is impossible to reconstruct based on the information available to us, the cartouches, at least, certainly appear to have been the engravers' own domain.
- 39 Gülru Necipoğlu, "Early Modern Floral: The Agency of Ornament in Ottoman and Safavid Visual Cultures," in *Histories of Ornament: From Global to Local*, ed. Gülru Necipoğlu and Alina Payne (Princeton, NJ: Princeton University Press, 2016), 132–55, esp. 141, 145.

- 40 For the album, see Turhan Baytop, *İstanbul lalesi* (The Istanbul tulip) (Ankara: T. C. Kültür Bakanlığı, 1998), with an English summary on p. 12. The tiles are difficult to date with certainty, as the structure in which they are found—formerly the main mosque of the Topkapı Palace and today its museum library—was renovated several times subsequent to its erection in the second half of the fifteenth century. An inscription pertaining to one of these refurbishments gives the date 1723–24, although this seems a decade or so too early for our tiles, which show a hint of Baroque in the scrolls from which their bouquets spring. For the mosque, see Semavi Eyice, “Ağalar Camii” (Ağalar Mosque), in *Türkiye Diyanet Vakfı İslâm ansiklopedisi* (Encyclopedia of Islam of the Turkish Religious Affairs Foundation) (Istanbul: Türkiye Diyanet Vakfı, 1988–2013), 1:464; and Ernest Mamboury, “Die Moschee Mehmeds des Eroberers und die neue Bibliothek im Serail des Sultans von Stambul,” *Die Denkmalspflege* 5 (1931): 161–67. I am grateful to Carol Ann Jackson of the Turkish Cultural Foundation for providing me with an image of these tiles, and to Hans Theunissen for his help in contextualizing them. For a more detailed view of a tile with the same design (a publishable version of which I was unable to obtain), see “Pair of Tekfursaray Polychrome Tiles,” Kent Antiques (website). For tiles with comparable floral and scrolling elements, see Theunissen, “Ottoman Tiles,” and its accompanying online images (link provided in note 35 above). Such was the popularity of tulips in Istanbul at this time that the term “Tulip Era” has become firmly entrenched in popular and scholarly framings of Ottoman history during the first third of the eighteenth century, including with regard to Müteferrika’s press (see, for example, Sabev, *Waiting for Müteferrika*, xix–xxii). For discussions of and alternatives to this problematic concept, see Can Ermtan, *Ottomans Looking West? The Origins of the Tulip Age and Its Development in Modern Turkey* (London: Tauris Academic Studies, 2008); and Ariel Salzmann, “The Age of Tulips: Confluence and Conflict in Early Modern Consumer Culture (1550–1730),” in *Consumption Studies and the History of the Ottoman Empire, 1550–1922*, ed. Donald Quataert (Albany: State University of New York Press, 2000), 83–106.
- 41 Examples include an eighteenth-century tile with stylized bellflowers that is now in the British Museum, London (1878.1230.511), and a sixteenth-century Iznik tile with grape bunches housed at the Royal Museum, National Museums of Scotland, Edinburgh (A. 1900.160). See “Tile,” British Museum, https://www.britishmuseum.org/collection/object/W_1878-1230-511 (last accessed June 5, 2020); and Ulrike Al-Khamis, “Two Tiles,” Discover Islamic Art, Museum With No Frontiers, http://islamicart.museumwnf.org/database_item.php?id=object;ISL;uk;Mus03;31;en (last accessed June 5, 2020).
- 42 To be sure, Western maps often include their makers’ signatures, but these are for the most part discreetly integrated into existing cartouches rather than individually highlighted; see figs. 11, 12, 21, and 31 of the present article.
- 43 See, for example, Serpil Bağcı, Filiz Çağman, Günsel Renda, and Zeren Tanındı, *Ottoman Painting*, 2nd ed., trans. Ellen Yazar (Ankara: Republic of Turkey Ministry of Culture and Tourism Publications, 2010), 267–68, fig. 223. I am grateful to Gwendolyn Collaço for prompting me to consider the engravers’ signatures in relation to Levni’s.
- 44 For this book, see Gencer, “İbrahim Müteferrika,” 166–68, 172–75.
- 45 For the imported type, see Boogert, “The Sultan’s Answer,” 268. For the arabesques, see note 104 below.
- 46 *Ol tercüme yi bu kitâbda derc iltizâm ve anîla bu fen-niñ Türkî ve ‘Arabî kitâbları kuşûrunı itmâm kaşdın itdim*. Kâtib Çelebi, *Kitâb-ı Cihânnümâ*, 8. For an English summary of this section of the text, see Kâtip Çelebi, *Book of Cihannuma*, 129. On the identity of this French convert, Mehmed İhlasi, see Hagen, *Ein osmanischer Geograph bei der Arbeit*, 66–68, 277–280.
- 47 For these and other visual elements of Western map-making, see Lloyd Arnold Brown, *The Story of Maps* (Boston: Little, Brown, 1949), esp. 131; and Dennis Reinhartz, *The Art of the Map: An Illustrated History of Map Elements and Embellishments* (New York: Sterling, 2012), esp. 1–9, 41–65.
- 48 For earlier Ottoman cartographic works with such features as the galleon and compass rose, see Dimitris Loupis, “Ottoman Nautical Charting and Miniature Painting: Technology and Aesthetics,” in *M. Uğur Derman 65. yaş armağanı/M. Uğur Derman 65th Birthday Festschrift*, ed. İrvin Cemil Schick (Istanbul: Sabancı Üniversitesi, 2000), 369–97; and note 51 below.
- 49 I am grateful to Gwendolyn Collaço for encouraging me to give more thought to the scientific and intellectual milieu in which Müteferrika published his edition of the *Cihânnümâ*.
- 50 B. Harun Küçük, “İbrahim Müteferrika’s Copernican Rhetoric,” in *Translating Early Modern Science*, ed. Sietske Fransen, Niall Hodson, and Karl A.E. Enenkel (Leiden and Boston: Brill, 2017), 258–85. For this excursus, subtitled *Tezyilü’l-ṭ-ṭābī* (Printer’s Addition), see Kâtip Çelebi, *Kitâb-ı Cihânnümâ*, 22–48, summarized in English in Kâtip Çelebi, *Book*

of *Cihannuma*, 131–34, and translated into modern Turkish in İnan Kalaycıoğlu, “İbrahim Müteferrika ve yeni astronomi/İbrahim Müteferrika and New Astronomy,” *Dört Öge* (Four elements) 6.12 (October 2017): 187–220. Küçük (who misleadingly calls the excursus a preface) notes that Müteferrika’s source was the *Institutiones philosophicae* of Edmond Pourchot (1651–1734), first published in 1695.

- 51 Harun Küçük, *Science without Leisure: Practical Naturalism in Istanbul, 1660–1732* (Pittsburgh, PA: University of Pittsburgh Press, 2020), esp. 183–203. I know of only one Ottoman cartographic manuscript that demonstrates (albeit in a single map) as conspicuous an engagement with European models as Müteferrika’s edition of the *Cihānnümā*. Now housed at the Walters Art Museum (W.658), the manuscript is a copy not of the *Cihānnümā* of Katib Çelebi, but of the *Kitāb-ı bahriyye* (Book of the Sea) of an equally famous Ottoman cartographer, Piri Reis (d. 1553), who, in his capacity as a naval officer and admiral, was an early adopter of Western mapping techniques. The Walters copy of his *Kitāb-ı bahriyye*, a portolan atlas originally composed in 1520–21 and revised thereafter, is among the most luxurious to have survived; seals and inscriptions on the back of its opening text page indicate that it once belonged to Sultan Mahmud I (1696–1754, r. 1730–54) before being expropriated by his brother and successor, Osman III (1699–1757, r. 1754–57), who seems to have given it in endowment to the library that Mahmud had commissioned as part of the Nuruosmaniye Mosque complex (discussed later in this article). The book’s 239 maps are datable mainly to the late seventeenth century and, overall, reflect a characteristically Ottoman take on their borrowed elements. Parts of the manuscript, however, were added in subsequent decades, including a striking double-hemisphere world map (fol. 40b) that Thomas Goodrich has linked convincingly to the influential printed maps of the French cartographer Guillaume Delisle (1675–1726). Very close in its contours to the 1720 edition of Delisle’s mappemonde, the painted Ottoman adaptation retains the flavor of its foreign source material much more overtly than the rest of the manuscript: it even features an oval Baroque title cartouche—topped by a shell and hung with swags—that may have been adapted from the 1700 version of Delisle’s map. This cartouche is a more faithful response to Western prototypes than the cartouches of either Ahmed or Mıgırdıç, and it is matched in tone by the naturalistic ships that punctuate each of the hemispheres and resemble the vessels depicted in Homann’s map of Central and

North America, first published between 1712 and 1730. When the world map was added to the Walters *Kitāb-ı bahriyye* is difficult to pinpoint, although it is telling that the likely timeframe (between around 1720 and 1740) is within a decade either way of the *Cihānnümā*’s publication, placing us in broadly the same cultural and intellectual milieu. Whether it came just before or after the *Cihānnümā*, the map is something of an outlier in the context of Ottoman manuscript art, even by the standards of the book in which it appears. For the manuscript, see “Walters Ms. W.658, Book on navigation,” Digitized Walters Manuscripts, <https://www.thedigitalwalters.org/Data/WaltersManuscripts/html/W658/description.html> (last accessed August 14, 2021); Thomas D. Goodrich, “Supplemental Maps in the *Kitab-i Bahriye* of Piri Reis,” *Archivum Ottomanicum* 13 (1993–94): 117–41, esp. 122; Paul Hepworth, “Production and Date of the Walters’ *Kitab-i Bahriye*,” *The Journal of the Walters Art Museum* 63 (2005): 73–80; Dimitris Loupis, “Piri Reis’ *Book on Navigation* (Kitab-ı Bahriyye) as a Geography Handbook: Ottoman Efforts to Produce an Atlas during the Reign of Sultan Mehmed IV (1648–1687),” in *Eastern Mediterranean Cartographies*, ed. George Tolia and Dimitris Loupis (Athens: Institute for Neohellenic Research/National Hellenic Research Foundation, 2004), 35–49; Çiğdem Kafescioğlu, “Urban Mapping in the Ottoman Empire,” in *The History of Cartography*, vol. 4, *Cartography in the European Enlightenment*, ed. Matthew H. Edney and Mary Sponberg Pedley (Chicago and London: The University of Chicago Press, 2019), 1586–91, where the manuscript is dated 1726; and İffet Orbay, “Istanbul Viewed: The Representation of the City in Ottoman Maps of the Sixteenth and Seventeenth Centuries” (PhD diss., Massachusetts Institute of Technology, 2001), 168–69 n. 132. For the European comparanda, see “Mappemonde a l’usage du roy,” Library of Congress, <https://www.loc.gov/item/2005627023/> (last accessed August 14, 2021); “Mappemonde dressé sur les observations de . . . l’Académie royale des sciences,” Gallica, <https://gallica.bnf.fr/ark:/12148/btv1b53093236q> (last accessed August 14, 2021); and “Regni Mexicani seu Novæ Hispaniæ [. . .],” Library of Congress, <https://www.loc.gov/item/74690812/> (last accessed August 14, 2021).

- 52 For an English summary of the preface, see Kâtip Çelebi, *Book of Cihannuma*, 124. The translations that follow in the main text are my own. For a transliteration and transcription of the edict itself, see Osman Keskiöğlu, “Türkiye’de matbaa te’sisi ve mushaf basımı” (The establishment of the printing

- press and the printing of books in Turkey), *Ankara Üniversitesi İlahiyat Fakültesi Dergisi* (Journal of the Ankara University Faculty of Divinity) 15 (1967): 125–27, 136–37. For existing translations of the edict (the first of them partial), see Caroline Finkel, *Osman's Dream: The Story of the Ottoman Empire, 1300–1923* (London: John Murray, 2005), 367; and Murphy, “Appendix,” 284–85. For the longer petition, see Murphy, “Appendix,” 286–92. For analysis of these documents, see Boogert, “The Sultan's Answer,” 270–79; Gencer, “İbrahim Müteferrika,” 156–58; and Sabev, *Waiting for Müteferrika*, 38–42.
- 53 *Küttâb u müstensîhî'nin da'îi zamânımızda himmetlerine kuşur ve sa'y u ihtimâmlarına fütür fârî olup bu hâl ile yazılan nüsaḥ da'îi habṭ u ḥaṭâdan hâlî olmayup . . . ḥbâ'at-ı kütüb şan'atı . . . şîḥat-ı 'ibâreti zâmin ü kâfîl bir fenn-i müfîd . . . olup [. . .].* Kâtib Çelebi, *Kitâb-ı Cihânnümâ*, first page of the unpaginated preface. See also Murphy, “Appendix,” 284.
- 54 Kâtib Çelebi, *Kitâb-ı Cihânnümâ*, second page of the unpaginated preface. See also Murphy, “Appendix,” 284.
- 55 *Devlet-i 'Aliyye-i ebed-peyvend böyle bir şan'at-ı ğarîbenîñ verâ-yı ḥafâdan mînaşsa-ı zuhûrda cilve-ger olmasına ihtimâm ile 'âmme-i ehl-i İslâm'ın ilâ yevmi'l-kıyâm isticlâb-ı da'vât-ı ḥayriyyelerine tevessül edüp [. . .].* Kâtib Çelebi, *Kitâb-ı Cihânnümâ*, second page of the unpaginated preface. My translation draws on that of Murphy, particularly in its rendering of the rather flowery phrase *mînaşsa-ı zuhûrda cilve-ger* (literally, “coquettish on the bridal throne of revelation”), which Murphy aptly captures in his more streamlined simile of an unveiled bride. He is mistaken, however, in reading *şan'at-ı ğarîbe* (wondrous art) as *şan'at-ı ğarbiyye* (Western technique). See Murphy, “Appendix,” 284–85. Sabev understands *şan'at-ı ğarîbe* to mean “strange art” and believes it reflects a lack of Ottoman familiarity with printing, but this interpretation seems at odds with the Ottoman elite's longstanding and keen interest in Western printed materials. See Sabev, *Waiting for Müteferrika*, 5.
- 56 *Cumhûr-ı Müslimîn ve zümre-i muvaḥḥidîn mü'ellefât-i keşîre ve muşannefât-ı 'adîde ibdâ' u taşnîf birle bi'l-cümle milel ü diyân-ı sâ'ire aşḥâbına tefevvuk etmişleriken mürûr-ı âşâr u eyyâm ve kürûr-ı edvâr u a'vâm ile Cengiz-i fitne-engiz ve Hülâgu-yı bî-temyiz Ḥurûclarında ve memleket-i Endülü's'e kefere-i Efrenc istilâsında ve sâ'ir düvel-i İslâmiyânda pey der pey vukû' bulan ḥurûb u kitâl ve ḥarîk-ı nâr emşâli meşâ'ib ü rezâyâ zuhûrunda ekşer muşannefât 'urza-ı zıyâ' u telef olmağla [. . .].* Kâtib Çelebi, *Kitâb-ı Cihânnümâ*, first page of the unpaginated preface, summarized in English in Kâtib Çelebi, *Book of Cihannuma*, 124.
- See also Finkel, *Osman's Dream*, 367; and Murphy, “Appendix,” 284.
- 57 Kâtib Çelebi lists some of these authorities in his introduction: see Kâtib Çelebi, *Kitâb-ı Cihânnümâ*, 8, summarized in English in Kâtib Çelebi, *Book of Cihannuma*, 129. See also Hagen, “Kâtib Çelebi.”
- 58 Kâtib Çelebi, *Kitâb-ı Cihânnümâ*, 122–24, partially summarized in English in Kâtib Çelebi, *Book of Cihannuma*, 142.
- 59 *Daḳîka-şinâs kâşâne-i emn ü istînâsda mesned-nişin-i çârbâliş-i ḥuzûr iken dūrâdûr seyâḥatde gezen seyyâḥân-ı cihân gibi bir ânda 'âlemi seyr ü devr ider.* Kâtib Çelebi, *Kitâb-ı Cihânnümâ*, 1, summarized in English in Kâtib Çelebi, *Book of Cihannuma*, 129. The assimilative approach of this synthetic methodology is typical of early modern Ottoman geographical writings more generally. See Emirlioğlu, “Ottoman Enlightenment”; and Hagen, “Atlas and Papamonta.” For similar attitudes in other contexts, see Rhoads Murphey, “Westernisation in the Eighteenth-Century Ottoman Empire: How Far, How Fast?,” *Byzantine and Modern Greek Studies* 23 (1999): 116–39, esp. 126–31.
- 60 Brentjes, “Mapmaking in Ottoman Istanbul,” 140; Zoss, “An Ottoman View,” 209–12.
- 61 For further discussion of this Ottomanizing ethos, see Zoss, “An Ottoman View.” It is interesting in this regard that Kâtib Çelebi describes his convert collaborator as a man who had come to the Ottoman Empire with the intention of attacking Islam but instead was inspired to embrace it; see Kâtib Çelebi, *Book of Cihannuma*, 130 (summary of pp. 10–12).
- 62 Gencer, “İbrahim Müteferrika”; the term is introduced on p. 156.
- 63 On Müteferrika's use of such headpieces, see Gencer, “İbrahim Müteferrika,” 168.
- 64 On the role of printed calligraphy in Müteferrika's books, see Gencer, “İbrahim Müteferrika,” 168–72.
- 65 Yael Rice, “The Brush and the Burin: Mughal Encounters with European Engravings,” in *Crossing Cultures: Conflict, Migration and Convergence, Proceedings of the 32nd Congress of the International Committee of the History of Art*, ed. Jaynie Anderson (Carlton: Miegunyah Press, Melbourne University Publishing, 2009), 309.
- 66 The coloring varies considerably from copy to copy of the *Cihânnümâ*. As noted by Gencer, it is unknown whether Müteferrika had an in-house team of painters and binders or outsourced these tasks to independent specialists; see Gencer, “İbrahim Müteferrika,” 160. For the use of color in mapmaking, see Ulla Ehrensverd, “Color in Cartography: A Historical

- Survey," in *Art and Cartography: Six Historical Essays*, ed. David Woodward (Chicago: University of Chicago Press, 1987), 123–46.
- 67 For an illustration of the title page, see Gencer, "İbrahim Müteferrika," 174, fig. 5.12.
- 68 For the Islamic astronomical tradition and its influence in Europe, see Emilie Savage-Smith, "Celestial Mapping," in *The History of Cartography*, vol. 2, book 1, *Cartography in the Traditional Islamic and South Asian Societies*, ed. J.B. Harley and David Woodward (Chicago and London: The University of Chicago Press, 1992), 12–70, esp. 50–65; and Emilie Savage-Smith, "The Most Authoritative Copy of 'Abd al-Rahman al-Sufi's Tenth-century *Guide to the Constellations*," in *God is Beautiful and Loves Beauty: The Object in Islamic Art and Culture*, ed. Sheila Blair and Jonathan Bloom (New Haven: Yale University Press, 2013), 122–55.
- 69 Manuscripts of the Islamic tradition usually show the constellations individually, with collective portrayals typically reserved for celestial globes: see Savage-Smith, "Celestial Mapping"; and Emilie Savage-Smith, with Andrea P. A. Belloli, *Islamicate Celestial Globes: Their History, Construction, and Use* (Washington, DC: Smithsonian Institution Press, 1985). The earliest surviving Islamic work to emulate the early modern Western format, complete with the recently added non-Ptolemaic constellations, appears to be an engraved Iranian astrolabe made in 1654–55 by Muhammad Mahdi of Yazd, who copied his two hemispheric maps from a pair printed in Paris around 1650 by the French royal cartographer Melchior Tavernier the Younger (1594–1665). Together with two later copies by the same artist, this astrolabe is the only Islamic forerunner known to me of the *Cihānnümā*'s celestial map. See Savage-Smith, "Celestial Mapping," 65–70, where, however, the *Cihānnümā* is mistakenly overlooked.
- 70 Also published under the variant title *La science des personnes de la cour, de l'épée et de la robe*, the encyclopedia was issued in numerous editions between 1706 and 1757, first in Paris and subsequently in Amsterdam. The celestial map seems to have featured in editions going at least as far back as the second; I have not been able to determine whether it also was published in the first. For the map as it appears in the second edition, see S.D.V. de Chevigny, *La science des personnes de la cour, de l'épée et de la robe*, new ed., 3 vols. (Amsterdam: Chez François l'Honoré, 1707), vol. 1, plate opposite p. 144, as shown at "Sieur de Chevigny," Barnebys, https://www.barnebys.fr/ventes/objet/sieur-de-chevigny-j4y_atefx (last accessed August 2, 2021). Today, the map is obscure, and I stumbled upon it online quite by chance at a late stage in this project, immediately recognizing its relationship to the *Cihānnümā* engraving. I was able to trace it to *La science* through the entry at "Le Globe Celeste," Sanders of Oxford, <https://www.sandersofoxford.com/shop/product/le-globe-celeste/> (last accessed July 23, 2021).
- 71 Compare the French map, for example, to the far busier celestial maps cited and linked in notes 72, 74, 75, 78, and 81 below. Indeed, some constellations, including Equuleus and Volans, are omitted altogether from the encyclopedia's map, while those that are shown give only a schematic indication of the stars' number and placement.
- 72 For such representations, which show the figure clothed rather than seminude, see Savage-Smith, "The Most Authoritative Copy," 128–29, 144–56, 153 n. 5. Instances of the turned-away Andromeda can be found in the maps referred to in notes 74, 75, and 81 below. Hovering between these two approaches is the early eighteenth-century celestial map by the Dutch engraver Carel Allard (1648–1709), which shows Andromeda from the front but in contraposto, with her legs raised in a semi-seated stance. For a 1730 edition of this map, see "Planisphaerii coelestis hemisphaerium septentrionale," HOLLIS (Harvard Library), <http://id.lib.harvard.edu/alma/990115280690203941/catalog>; and <https://iif.lib.harvard.edu/manifests/view/ids:10852899> (last accessed December 18, 2020). Allard's portrayal, or one resembling it, was evidently known to Ottoman artists, for a similar depiction of Andromeda can be found in a manuscript (dated 1747) now at the Topkapı Palace Museum (B. 274) that forms part of an Ottoman translation of the Arabic world history of Badr al-Din al-'Ayni (d. 1451). Like the other constellation images in this manuscript, the painting demonstrates a clear iconographic and stylistic relationship to Western models, with the figure's drapery, raised legs, and volumetric rendering strongly recalling Allard's Andromeda. I thank Gwendolyn Collaço for reminding me of this illustrated manuscript, illustrated in Bağcı et al., *Ottoman Painting*, 276–77. A closely related manuscript, today in the Istanbul University Rare Works Library (T. 5953), is erroneously dated 1693–94 in some of the scholarship but was actually copied in 1728. See Salim Ayduz, "Lâle Devri'nde yapılan ilmi faaliyetler" (Scientific activities of the Tulip Era), *Divân* 3 (1997): 155–56 (and 156 n. 69 for the correct date); Savage-Smith, "Celestial Mapping," 68; and Günsel Renda, "XVIII. yüzyılda minyatür sanatı" (Miniature painting in the eighteenth century), in *I. Milletler Arası*

- Türkoloji Kongresi (İstanbul, 15–20 X 1973): Tebliğler* (First International Congress of Turkology [Istanbul, October 15–20, 1973]: Proceedings), vol. 3, *Türk sanatı tarihi* (History of Turkish art) (Istanbul: Tercüman Gazetesi ve Türkiyat Enstitüsü'nün İşbirliği, 1979), 841–42, 854.
- 73 For an example of the dragon-like Cetus, which had become the prevalent iconographical form by the eighteenth century, see the links provided in note 78 below.
- 74 The celestial map is situated at the top of the print, resting on the much larger world map. For a high-quality digitization of a copy at the Bibliothèque Nationale, see “Hamatarac asxarhac ‘oyc,’” Gallica, <https://gallica.bnf.fr/ark:/12148/btv1b530532764/> (last accessed August 2, 2021). For discussion of the map, see Helen C. Evans, ed., *Armenia: Art, Religion, and Trade in the Middle Ages*, exh. cat. (New York: Metropolitan Museum of Art; New Haven and London: Yale University Press, 2018), 302–3, cat. no. 143 (entry by Sylvie L. Merian); Rouben Galichian, *History of Armenian Cartography up to the Year 1918: A Study of the Birth and Evolution of Armenian Cartography* (London: Bennett & Bloom; Yerevan: Zangak, 2017), 29–41; and Uluhogian, Zekiyan, and Karapetian, *Armenia*, 304–5, cat. no. 126 (entry by Melandia Karapetian). See also the following note.
- 75 Contained in a shell at the bottom of the print and presumably intended to address Safavid and Ottoman Armenians, the Persian/Ottoman title of the 1695 map is *jahān-bīn/cihān-bīn*, “world-seeing.” The resemblances between the Schoonebeeks’ celestial map and that published later in the French encyclopedia bespeak a shared ancestry, a key stage of which is represented by the mid-seventeenth-century maps of Melchior Tavernier (see note 69 above). The Schoonebeeks lifted their design directly from a prototype belonging to this tradition, if not from Tavernier’s prints themselves. Although a much looser adaptation, the encyclopedia map almost certainly derives from the same lineage, with the constellations of Auriga, Boötes, and, of course, Cetus offering particularly strong evidence to this effect. The ultimate source of this map is obscure; the earliest version that I have found, without any accompanying information, is an engraving of 1630 titled in French that is missing some of the constellations shown in Tavernier’s later reworking. Much of the iconography of this tradition, including the whale-like Cetus, can be traced back to a celestial globe first issued in Amsterdam in 1603 by Joan Blaeu’s father, Willem Blaeu (1571–1638). See “Antique Vintage Constellation Celestial Hemisphere,” 123RF, https://www.123rf.com/photo_71634622_stock-illustration-antique-vintage-constellation-celestial-hemisphere.html (last accessed August 2, 2021); Robert Harry van Gent, “A Pair of Puzzling Star Maps and Two Unknown Constellations,” <https://web.archive.org/web/20210802111300/http://www.science.uu.nl/~gent0113/celestial/puzzlingstarmaps.htm> (last accessed August 2, 2021); and “Celestial Globe, by W.J. Blaeu, Netherlands, 1603,” History of Science Museum, <http://www.mhs.ox.ac.uk/object/inv/23709> (last accessed August 2, 2021).
- 76 For this nomenclature, see Savage-Smith, *Islamicate Celestial Globes*, 114–212. Except for a few errors and omissions (see the following note), it is in labeling the non-Ptolemaic southern constellations that the *Cihānnümā* necessarily departs from, or rather supplements, the older Islamic terminology. Chamaeleon, Pavo (the Peacock), Phoenix, and Triangulum Australe (the Southern Triangle) are provided with Arabic-derived equivalents to their Latin designations. Dorado, however, is nonsensically inscribed حوت ذو الخاخ, which, as we learn from consulting the book’s preceding text page, turns out to be a garbling of حوت ذو الجناح (*ḥūt-ī ḡūl-cenāḥ*), meaning “winged fish.” In addition to being misspelled on the map, the name is misapplied: Dorado, usually understood as a dolphinfish or swordfish, is dubbed *kelb-i baḥrī* (dogfish or shark) in Müteferrika’s text, with *ḥūt-ī ḡūl-cenāḥ* being his name for another non-Ptolemaic constellation, Volans (the Flying Fish), which neighbors Dorado and is not shown on the map or its French prototype. For the relevant text, see Kâtib Çelebi, *Kitâb-ı Cihānnümâ*, 27, translated into modern Turkish in Kalaycıoğulları, “İbrahim Müteferrika,” 198. It is interesting to compare the new nomenclature devised by (or for) Müteferrika with other, mainly Western, attempts at giving the non-Ptolemaic constellations Arabic names: see Paul Kunitzsch, “Coronelli’s Great Celestial Globe Made for Louis XIV: The Nomenclature,” *Zeitschrift für Geschichte der Arabisch-Islamischen Wissenschaften* 14 (2001): 39–55; Savage-Smith, “Celestial Mapping,” 63, 67; and Emilie Savage-Smith and Colin Wakefield, “Jacob Golius and Celestial Cartography,” in *Learning, Language and Invention: Essays Presented to Francis Maddison*, ed. W.D. Hackmann and A.J. Turner (London: Variorum, 1994), 238–60, esp. 257.
- 77 Two constellations are left unlabeled: the highly recognizable Sagittarius, no doubt passed over in error; and Coma Berenices, which was considered an asterism in the Ptolemaic system, represented here by a fire-like mass of hair. Among the remaining constellations, spelling errors are found in the names of Serpens (*ḥayye[t]ü’l-havvâ* rather than the correct

hayyetü'l-ḥavvā) and Dorado (see the preceding note), while Pegasus, curiously, is misidentified altogether as *feres-i evvel*, “the first horse,” an alternative name for Equuleus. For discussion of these names in other contexts, see Savage-Smith, *Islamicate Celestial Globes*, 153–55, 157, 159, 172.

- 78 For the history of this engraving and its inclusion in Ottens’ *Atlas Maior*, see Robert Harry van Gent, “The *Atlas Coelestis* (1742) of Johann Gabriel Doppelmayr,” <https://www.staff.science.uu.nl/~gent0113/doppelmayr/doppelmayr.htm> (plate 19), last modified October 3, 2006 (last accessed February 9, 2021); and “World Treasures: Beginnings—The Heavens,” Library of Congress, <https://www.loc.gov/exhibits/world/heavens.html#obj89> (last accessed June 5, 2020).
- 79 On the multiple and varied nature of the book’s sources, see Zoss, “An Ottoman View,” 208–12. The Kassel Observatory of Doppelmayr’s engraving is not that erected in 1561 by the future William IV, Landgrave of Hesse-Kassel (r. 1567–92), but the later, lesser-known foundation of his descendant Charles I (r. 1670–1730). The new observatory was soon converted into a residence, the Palais Bellevue, and today serves as a museum. See Berthold Hinz and Andreas Tacke, *Architekturführer Kassel/Kassel Architectural Guide* (Berlin: D. Reimer, 2002), 16.
- 80 In the Ottoman context, spouting fountains were usually found in enclosed or screened-off settings; see Rüstem, *Ottoman Baroque*, 33, 150.
- 81 Part of the same series as Doppelmayr’s other map, and likewise published in Ottens’ *Atlas Maior*, the plate in question shows the constellations of the northern hemisphere and includes, in the four corners surrounding the map itself, winged putti who hold the very same measuring instruments that appear in Mıgırdıç’s engraving: a quadrant, a sextant, a double quadrant, and another device, the name of which I have not been able to determine. See Gent, “*Atlas Coelestis*” (plate 16). As well as removing the putti, Mıgırdıç has changed all of the instruments’ places, although their individual forms are reproduced faithfully. Instruments of this kind had a long history in Ottoman and Islamic astronomy—indeed, many of them had been brought to an advanced state in Muslim lands during the medieval and early modern periods. Mıgırdıç’s inclusion of them therefore plays on a deep-rooted Ottoman tradition even as it looks to a foreign pictorial model. For this larger astronomical context, see Stephen P. Blake, *Astronomy and Astrology in the Islamic World* (Edinburgh: Edinburgh University Press, 2016), esp. 96–111; and Sevim Tekeli, “The Observational Instruments of İstanbul Observatory,” in *International Symposium on the Observatories in Islam, 19–23 September, 1977*, ed. Muammer Dizer (İstanbul: Milli Eğitim Bakanlığı, 1980), 33–43, also available at <https://muslimheritage.com/instruments-istanbul-observatory/>, published June 8, 2008 (last accessed February 9, 2021).
- 82 Kâtip Çelebi, *Book of Cihannuma*, 52.
- 83 A smaller cartouche with Mıgırdıç’s signature appears to the left of the architectural vignette. Curiously, and for reasons that are entirely unclear to me, the signature cartouche is missing from the impression reproduced in Kâtip Çelebi, *Kitâb-ı Cihânnümâ*.
- 84 Of the illustrated examples, the Nuruosmaniye Mosque (fig. 40) is discussed in the main text of the present article. For the Hagia Sophia public soup kitchen (fig. 39), see Rüstem, *Ottoman Baroque*, 70–75.
- 85 My arguments concerning this style of architecture are laid out more fully in Rüstem, *Ottoman Baroque*; for a summary, see Ünver Rüstem, “Ottoman Baroque,” in *The Oxford Handbook of the Baroque*, ed. John D. Lyons (Oxford: Oxford University Press, 2019), 334–69. For an alternative perspective, see Hamadeh, *The City’s Pleasures*.
- 86 For these developments, see Artan, “İstanbul in the 18th Century,” 300–312, esp. 305–8; Hamadeh, *The City’s Pleasures*, esp. 17–109, 199–200, 226–37; and Rüstem, *Ottoman Baroque*, 21–55.
- 87 Rüstem, *Ottoman Baroque*, 57–69, 180–81.
- 88 For historiographical overviews of this label and its use, see Shirine Hamadeh, “Westernization, Decadence, and the Turkish Baroque: Modern Constructions of the Eighteenth Century,” *Muqarnas* 24 (2007): 185–97; and Rüstem, *Ottoman Baroque*, 4–9, 15.
- 89 See note 85 above.
- 90 See, for example, Gauvin Alexander Bailey, *The Andean Hybrid Baroque: Convergent Cultures in the Churches of Colonial Peru* (Notre Dame, IN: University of Notre Dame Press, 2010); Gauvin Alexander Bailey, *Baroque and Rococo* (London: Phaidon, 2012), 349–95; and Michael Snodin and Nigel Llewellyn, eds., *Baroque: Style in the Age of Magnificence, 1620–1800* (London: V&A Publishing, 2009).
- 91 Rüstem, *Ottoman Baroque*, 198–207, 230; Ünver Rüstem, “Spolia and the Invocation of History in Eighteenth-Century İstanbul,” in *Spolia Reincarnated: Afterlives of Objects, Materials, and Spaces in Anatolia from Antiquity to the Ottoman Era*, ed. Ivana Jevtić and Suzan Yalman (İstanbul: ANAMED, 2018), 289–307.
- 92 Rüstem, *Ottoman Baroque*, 57–82, 96–169. See also Selva Suman, “Questioning an ‘Icon of Change’: The Nuruosmaniye Complex and the Writing of Ottoman

- Architectural History," *METU Journal of the Faculty of Architecture* 28.2 (2011): 145–66.
- 93 On the rapport between calligraphy and the Baroque, see Rüstem, *Ottoman Baroque*, 74–75; and Yavuz Sezer, "The Architecture of Bibliophilia: Eighteenth-Century Ottoman Libraries" (PhD diss., Massachusetts Institute of Technology, 2016), 165.
- 94 Rüstem, *Ottoman Baroque*, 154–57, 169, 209.
- 95 Mathieu Grenet, "A Business *alla Turca*? Levantine Trade and the Representation of Ottoman Merchants in Eighteenth-Century European Commercial Literature," in *Global Economies, Cultural Currencies of the Eighteenth Century*, ed. Michael Rotenberg-Schwartz, with Tara Czechowski (Brooklyn, NY: AMS Press, 2012), 37–52, esp. 47–50; Christine Philliou, "Phanariot Hanedans from the Ottoman Empire to the World Around It (1669–1856)," in *Transregional and Transnational Families in Europe and Beyond: Experiences since the Middle Ages*, ed. Christopher H. Johnson, David Warren Sabean, Simon Teuscher, and Francesca Trivellato (New York: Berghahn Books, 2011), 177–99; Traian Stoianovich, "The Conquering Balkan Orthodox Merchant," *Journal of Economic History* 20.2 (June 1960): 234–313. For non-Muslim Ottoman architects and artists, see the following note.
- 96 Rüstem, *Ottoman Baroque*, 46–54, 82–96 (and 120, 147–48, 152, 194, 255 for the Nuruosmaniye's architect, Simeon Kalfa).
- 97 Rüstem, *Ottoman Baroque*, 88–92. See also note 106 below.
- 98 Paolo Girardelli, "Architecture, Identity, and Liminality: On the Use and Meaning of Catholic Spaces in Late Ottoman Istanbul," *Muqarnas* 22 (2005): 233–64, esp. 241–48; Rüstem, *Ottoman Baroque*, 85–86. For the argument that Ottoman Christians were only minimally affected by Western cultural norms before the nineteenth century, see Murphey, "Westernisation," esp. 131–39.
- 99 Rüstem, *Ottoman Baroque*, 94–96, 148–49. See also Girardelli, "Architecture, Identity, and Liminality."
- 100 Rüstem, *Ottoman Baroque*, 108–9.
- 101 İrepoğlu, "Topkapı Sarayı Müzesi Hazinesi Kütüphanesindeki Batılı kaynaklar"; Rüstem, *Ottoman Baroque*, 45–46, 83, 85–88, 99–102, 104, 206–7. For non-Ottoman examples of this phenomenon, see Gauvin Alexander Bailey, "French Rococo Prints and Eighteenth-Century Altarpieces in Buenos Aires," *The Burlington Magazine* 154 (November 2012): 780–85; and Gauvin Alexander Bailey, "Rococo in Eighteenth-Century Beijing: Ornament Prints and the Design of the European Palaces at Yuanming Yuan," *The Burlington Magazine* 159 (October 2017): 778–88.
- 102 Rüstem, *Ottoman Baroque*, 86–88.
- 103 For overviews of early modern Armenian print culture, see Sebouh D. Aslanian, "Port Cities and Printers: Reflections on Early Modern Global Armenian Print Culture," *Book History* 17 (2014): 51–93; and Uluhogian, Zekiyan, and Karapetian, *Armenia*, part 8 ("From the Inkwell to Movable Type"), 261–305, incorporating individual chapters by Alessandro Orengo ("Armenian Printing in the Sixteenth and Seventeenth Centuries," 263–67), Raymond H. Kévorkian ("Armenian Printing and Publishing," 269–73), and Aldo Ferrari ("Places of Armenian Cultural Rebirth in the Seventeenth and Eighteenth Centuries," 275–77). For digitized examples, see "Armenian Rarities Collection," Library of Congress, <https://www.loc.gov/collections/armenian-rarities/> (last accessed June 5, 2020).
- 104 For the Armenian presses of Istanbul and examples of their output, see Kévorkian, "Armenian Printing and Publishing," 271; Dickran Kouymjian, "Grigor Marzvanec'i and Armenian Book Illustration," *Journal of the Society for Armenian Studies* 24 (2015): 29–43; and Uluhogian, Zekiyan, and Karapetian, *Armenia*, 289, 291, 302, cat. nos. 106, 109, 124. The *Grammaire turque*'s woodcut arabesques find their counterparts on the title page of an Armenian bible published in Istanbul in 1705–7; see the digitized copy on the website of the National Library of Armenia, <http://greenstone.flib.sci.am/gsd/collect/armenian/import/astvacashunch1705-07/astvacashunch1705.html> (last accessed June 5, 2020). Identical arabesques appear also in a Greek volume of theological tracts (dubbed "Legrand 167" in the scholarship) published in London in 1626 at the press of William Jones, whose father (of the same name and profession) had used the design going back to 1620. The publisher of the Greek volume, an Ionian monk named Nikodemos Metaxas, moved his operation to Istanbul in 1627; although he does not appear to have used the arabesques again, I cannot help but think that he was responsible for introducing them into the world of Ottoman printing. See Palabiyik, "Redundant Presses," 276, 289–90; and Nil Özlem Pektas [Nil Palabiyik], "The First Greek Printing Press in Constantinople (1625–1628)" (PhD diss., Royal Holloway and Bedford New College, University of London, 2014), 159, fig. 28.
- 105 Further evidence of this ecumenical visual culture is provided by the ceramic industry of Kütahya, which was run largely by Ottoman Armenians. The Kütahya kilns utilized a plethora of styles in their eighteenth-century output, including a Baroque scrollwork design that appears in tiles used for a 1727 renovation of the Cathedral of St. James, Jerusalem. See

- John Carswell, *Kütahya Tiles and Pottery from the Armenian Cathedral of St. James, Jerusalem*, 2 vols. (Oxford: Clarendon Press, 1972), esp. 1:8–9 and 2:45, type 13, illustrated on pl. 10.
- 106 While numerous Ottoman-Armenian artists would travel to Western Europe in the nineteenth century, scant documentation exists of earlier instances of this phenomenon. The two eighteenth-century cases of which I am aware (and the first is far from certain) are that of the court painter Rafael Manas (1710–1780), who worked in a manner informed by Western conventions of naturalism and is said to have had some training in Italy; and that of the translator and artist Kozmas Gomidas Kömürçian (1749–after 1807), who completed his education in Italy before entering into the service of the embassy of the Kingdom of Naples in Istanbul around 1770. Under the Italianized moniker Cosimo Comidas de Carbognano, Kömürçian authored a topographical guide to Istanbul that was published in Bassano in 1794 and illustrated with engravings after his own designs. See Cosimo Comidas de Carbognano, *18. yüzyılın sonunda İstanbul* (Istanbul at the end of the eighteenth century), trans. Erendiz Özbayoğlu (Istanbul: Eren, 1993), esp. 13–17 for his biography; Garo Kürkman, *Armenian Painters in the Ottoman Empire, 1600–1923*, trans. Mary Priscilla Işın, 2 vols. (Istanbul: Matüsale Publications, 2004), 1:260–63, 2:712–14; and Wendy M.K. Shaw, *Ottoman Painting: Reflections of Western Art from the Ottoman Empire to the Turkish Republic* (London: I.B. Tauris, 2011), 37–38.
- 107 For Baronian's life and career, see Thoralf Hanstein, *A New Print by Müteferrika (?): A Comparative View of Baron's Qibla*, Bonner islamwissenschaftliche Hefte 46 (Berlin: EB-Verlag, 2021), esp. 10–18. I am grateful to Tim Stanley for bringing Baronian's scientific instruments to my attention.
- 108 For an excellent and comprehensive new study of the *qible-nümā* that surveys all its known specimens and derivatives, see Hanstein, *A New Print by Müteferrika*. I am grateful to Moya Cary for alerting me to this study, and to its author, Thoralf Hanstein, for reading a draft of my own article and spotting an embarrassing numerical error. For further discussion of the *qible-nümā*, see Feza Günergun, "La traduction de l'*Abrégé de la sphère* de Jacques Robbe, géographe du Roi de France par Petros Baronian, drogman à Istanbul: *Cem-nümā fi fenn el-coğrafya*," *La Révolution française* 12 (2017): 5–7; Giovanni Curatola, ed., *Eredità dell'Islam: Arte islamica in Italia* (Heritage of Islam: Islamic art in Italy), exh. cat. (Cinisello Balsamo: Silvana, 1993), 406–7, cat. no. 260 (entry by Giovanni Curatola); Vladimir Minorsky, *The Chester Beatty Library: A Catalogue of the Turkish Manuscripts and Miniatures* (Dublin: Hodges, Figgis, and Co., 1958), 78–80, cat. no. 443, and pl. 36; Nazan Ölçer et al., *Museum of Turkish and Islamic Art* (Istanbul: Akbank, 2002), 290–91; and Uluhogian, Zekiyan, and Karapetian, *Armenia*, 216–17, cat. no. 63 (entry by Giampiero Bellingeri). For the broader typology to which Baronian's device belongs, see David A. King and Richard P. Lorch, "Qibla Charts, Qibla Maps, and Related Instruments," in *The History of Cartography*, vol. 2, book 1, *Cartography in the Traditional Islamic and South Asian Societies*, ed. J.B. Harley and David Woodward (Chicago and London: The University of Chicago Press, 1992), 189–205; and Anthony Turner, "A Mingling of Traditions: Aspects of Dialling in Islam," in *Scientific Instruments between East and West*, ed. Neil Brown, Silke Ackermann, and Feza Günergun (Leiden and Boston: Brill, 2019), 108–21.
- 109 Hanstein, *A New Print by Müteferrika*, 29–43. Baronian styles himself *el-Baron el-muhter*, Arabic for "Baron the Inventor." The date given in the text is a terminus post quem, and surviving examples of the *qible-nümā* may have been (and, in some cases, certainly were) assembled in subsequent years. In his analysis of the Chester Beatty Library *qible-nümā*, illustrated in figure 48 of the present article, Minorsky notes that the lid's abraded outer surface bears an additional date that he tentatively reads as AH 1170 (1756–57). See Minorsky, *Chester Beatty Library*, 79. Moya Cary, Curator of Islamic Collections at the library, kindly provided me with photographs that confirm the presence of a date in the 1170s (the final digit is illegible), meaning that the object itself was produced or updated almost two decades after the prints contained within it.
- 110 Why most *qible-nümās* obscure Mıgırdıç's name is unclear; the likeliest explanation is that an artist's signature (of a non-Muslim, to boot) was deemed inappropriate for the context. In some instances, the seemingly unobjectionable text of the larger cartouche is also covered up (see, for example, fig. 50 of the present article), perhaps because the dedication to the grand vizier was thought to limit the object's broader appeal. The two independent impressions of the map bearing Mıgırdıç's visible signature are both mounted in an album from the collection of the famous Orientalist and diplomat Heinrich Friedrich von Diez (1751–1817) that is housed today at the Staatsbibliothek zu Berlin (Diez A fol. 58, fols. 10r, 11r). See Thoralf Hanstein (uncredited), "13. Dezember," *SBB aktuell* (blog of the Staatsbibliothek

- zu Berlin), December 13, 2019, <https://blog.sbb.berlin/adventskalender-tuerchen13-2019/> (last accessed February 10, 2021), where links are given to most of the surviving examples of the *ķible-nūmā*; Hanstein, *A New Print by Mūteferrika*, 51, 52, 59–62, 71; and David J. Roxburgh, “Memorabilia of Asia: Diez’s Albums Revisited,” in *The Diez Albums: Contexts and Contents*, ed. Julia Gonnella, Friederike Weis, and Christoph Rauch (Leiden and Boston: Brill, 2017), 66 and fig. 3.8. Another impression with its cartouche visible must have been in the possession of the Jesuit Orientalist Giambattista Toderini (1728–1799), who describes such a print (together with its pendant showing Mecca) and names its engraver as “Mighirdiz of Galata.” See Uluhogian, Zekiyan, and Karapetian, *Armenia*, 216, cat. no. 63 (entry by Giampiero Bellingeri), although Bellingeri is mistaken in identifying Toderini’s prints with those that form part of the Museo Correr *ķible-nūmā*.
- 111 Toderini discusses Mūteferrika’s assumed involvement in the prints; see Uluhogian, Zekiyan, and Karapetian, *Armenia*, 216, cat. no. 63 (entry by Giampiero Bellingeri).
- 112 Based on the *Méthode pour apprendre facilement la géographie* of Jacques Robbe (1643–1721), Baronian’s book is entitled *Kitāb-i Cemnūmā fī fenni’l-coğrāfyā* (Book of the Mirror of the World in the Science of Geography), the word *Cemnūmā* resembling *Cihānnūmā* in both sound and meaning. For this work, see Goodrich, “Old Maps,” 124, 126 (under H 444), 131 (under R 828); Günergun, “La traduction de l’Abrégé de la sphere,” 1–19; Hanstein, *A New Print by Mūteferrika*, 18–24; and Zoss, “An Ottoman View,” 211–12. For the equinoctial ring (my knowledge of which I owe to Tim Stanley), see Hanstein, *A New Print by Mūteferrika*, 24–25; and Turner, “A Mingling of Traditions,” 120–21 and n. 51.
- 113 On the prominent role of Armenian artists in Ottoman metalwork, see James Allan and Julian Raby, “Metalwork,” in *Tulips, Arabesques and Turbans: Decorative Arts from the Ottoman Empire*, ed. Yanni Petsopoulos (New York: Abbeville Press, 1982), 32.
- 114 On this milieu and its constituent groups, see Rüstem, *Ottoman Baroque*, 82–109.
- 115 The individuals and materials that I address in this article have allowed me to develop and refine significantly my earlier thoughts on how the Ottoman Baroque came to the attention of the Muslim elite. See Rüstem, *Ottoman Baroque*, 85–87, 108, 283 n. 90.
- 116 For the Ottoman elite’s exposure to the Baroque through imported goods, books, and prints, see Tūlay Artan, “Eighteenth-Century Ottoman Princesses as Collectors: Chinese and European Porcelains in the Topkapı Palace Museum,” in “Globalizing Cultures: Art and Mobility in the Eighteenth Century,” ed. Nebahat Avcioğlu and Finbarr Barry Flood, special issue, *Ars Orientalis* 39 (2010): 113–47; İrepoğlu, “Topkapı Sarayı Müzesi Hazinesi Kütüphanesindeki Batılı kaynaklar”; and Rüstem, *Ottoman Baroque*, 45–46, 85–86, 87–88, 99–102, 104–5, 107–8.
- 117 Rüstem, *Ottoman Baroque*, 28 (fig. 9), 34 (fig. 13), 83, 85–86, 87–88, 206–7. See also note 26 above.
- 118 Rüstem, *Ottoman Baroque*, 95–96, 180, 288 n. 20. In the art of manuscript illumination, for example, Baroque motifs did not become common before the second half of the eighteenth century, and in the case of Qur’ans, even later. See Şule Aksoy, “Kitap süslemelerinde Türk-Barok-Rokoko üslûbu” (The Turkish Baroque-Rococo style in book decoration), *Sanat* (Art) 3.6 (1977): 126–36; and Tim Stanley, “The Baroque and After,” in *The Nasser D. Khalili Collection of Islamic Art*, ed. Julian Raby, vol. 4, part 2, *The Decorated Word: Qur’ans of the 17th to 19th Centuries*, ed. Manijeh Bayani, J.M. Rogers, and Tim Stanley (London: Nour Foundation in association with Azimuth Editions, 2009), 208–21. A putatively early outlier is an illuminated headpiece comprising Baroque strap- and scrollwork that decorates a prayer book copied by the calligrapher İbrahim Da’imi (d. 1756/57). Now in the Sakıp Sabancı Museum in Istanbul, the manuscript has been dated in the scholarship to about 1725. This dating, however, is based on an Arabic note pasted into the book by one of its owners and does not align with what we know of Da’imi’s career as a calligrapher, which seems to have begun no earlier than the 1730s. On biographical as well as stylistic grounds, then, it is far likelier that the book was copied and illuminated after 1740. See Zeren Tanındı and Ayşe Aldemir Kilercik, *Sakıp Sabancı Museum Collection of the Arts of the Book and Calligraphy*, exh. cat. (Istanbul: Sabancı University Sakıp Sabancı Museum, 2012), 82–83, no. 24; and İsmail Orman, “İbrahim Dâ’imi,” *Hattatlar Sofası* (Calligraphers’ gathering place), published May 1, 2018, <https://hattatlarsofasi.com/aklam-i-sitte-hattatlari/ibrahim-daimi/> (last accessed February 11, 2021).
- 119 Hanstein, *A New Print by Mūteferrika*, 54–58 (Specimens I, J, K). For further discussion of the best-known member of this group—the specimen in the Museo Correr, Venice—see Curatola, *Eredità dell’Islam*, 406–7, cat. no. 260; and Uluhogian, Zekiyan, and Karapetian, *Armenia*, 216–17, cat. no. 63 (entry by Giampiero Bellingeri). Both catalogue entries assign to the object the same date as the prints that

- it incorporates, but, as discussed in the following note, this assumption is surely incorrect. I am grateful to Thoralf Hanstein for providing me with the image used here for figure 50, and to Nihal Sarıgül of Alif Art for granting me permission to publish it.
- 120 The example in question, which is the privately owned Specimen K in Hanstein's classification, has a Baroque cartouche in its pediment that is inscribed with praise for the object and concludes with the year 1178, equivalent to 1764–65. See Hanstein, *A New Print by Müteferrika*, 58. The close resemblance of the three pedimented specimens should encourage us to take this date as roughly representative of the subgroup as a whole.
- 121 Kemal Beydilli, *Türk bilim ve matbaacılık tarihinde Mühendishâne, Mühendishâne matbaası ve kütüphânesi, 1776–1826* (The [role of the Imperial] School of Engineering, its printing press, and its library in the history of Turkish science and publishing, 1776–1826) (Istanbul: Eren, 1995); Sabev, *Waiting for Müteferrika*, 92–108; Sarıcaoğlu, "Administrative Cartography," 67–68. For a list of the seven works (one of them a reissue) published by the successors to Müteferrika's press between 1755 and 1795, see Gencer, "İbrahim Müteferrika," 186, appendix 5.2.
- 122 For the *Cedid atlas tercümesi*, the text of which was translated by Resmi Mustafa Agha, see Sarıcaoğlu, "Administrative Cartography," 67–68 (although I have not been able to substantiate the claim that the plates were engraved in Vienna); and the digitization at "*Cedid atlas tercümesi*," Library of Congress, <https://www.loc.gov/item/2004626120/> (last accessed June 5, 2020).
- 123 Sabev, *Waiting for Müteferrika*, 63–68, where we see that Müteferrika's bestsellers were his lexicographical works, including the *Grammaire turque*. As Sabev notes, some of the "sold" copies of Müteferrika's publications actually may have been "presented as gifts by the printer himself or by the Ottoman court to different royal libraries in Europe," but not in numbers significant enough to change our sense of the sales figures. See Sabev, *Waiting for Müteferrika*, 70. Although only a tenth as expensive as their manuscript counterparts, Müteferrika's books were still beyond the financial means of most people. Unbound and unpainted copies could be obtained for a somewhat lower price (in the case of the *Cihānnümā*, thirty *guruş* [piasters] rather than forty-four). See Gencer, "İbrahim Müteferrika," 160–61, 189 n. 50.
- 124 For a full digitization of this copy (Bokband 1800-t. Orient. 1), see "Kitab-ı Cihānnüma li-Kâtip Çelebi," Alvin: Platform for Digital Collections and Digitized Cultural Heritage, <http://urn.kb.se/resolve?urn=urn:nbn:se:alvin:portal:record-235850> (last accessed August 2, 2021). Like all of the eunuchs of the imperial harem, Moralı Beşir Agha (not to be confused with his more famous namesake and immediate predecessor, Hacı Beşir Agha, d. 1746) was of African origin. His ownership of the Uppsala copy—a fact seemingly overlooked by previous scholarship—is attested by an ex libris and seal on the back of the preface's opening page. The seal is dated [1]158 (1745–46), which is the date it was designed rather than applied; the accompanying ex libris was inscribed sometime during Beşir's tenure as chief eunuch (1746–52). On the importance of Moralı Beşir Agha and other court eunuchs to the empire's cultural and intellectual life, see Jane Hathaway, *The Chief Eunuch of the Ottoman Harem: From African Slave to Power-Broker* (Cambridge: Cambridge University Press, 2018), esp. 129–59, 197–200, 202–10; and Rüstem, *Ottoman Baroque*, 103, 105–8, 155–56, 202.
- 125 J.B. Harley, "Power and Legitimation in the English Geographical Atlases of the Eighteenth Century," in *The New Nature of Maps: Essays in the History of Cartography*, ed. Paul Laxton (Baltimore and London: The Johns Hopkins University Press, 2001), 136–37. See also, in the same volume, Harley's "Maps, Knowledge, and Power," 73–76.
- 126 Lynam, "Period Ornament," 48–54; Pérez, "Titles in Cartouches."
- 127 G.N.G. Clarke, "Taking Possession: The Cartouche as Cultural Text in Eighteenth-Century American Maps," *Word & Image* 4.2 (April–June 1988): 455–74; Harley, "Power and Legitimation," 109–48; Stephanie Pratt, "From the Margins: The Native American Personage in the Cartouche and Decorative Borders of Maps," *Word & Image* 12.4 (October–December 1996): 349–65.
- 128 J.B. Harley, *The New Nature of Maps: Essays in the History of Cartography*, ed. Paul Laxton (Baltimore and London: The Johns Hopkins University Press, 2001), especially the essay "Maps, Knowledge, and Power," 51–81. For examples from the Ottoman context, see Emiralioğlu, "Ottoman Enlightenment"; Hagen, "Atlas and Papamonta," esp. 126–29; Hagen, "Afterword," 231–32; and Sarıcaoğlu, "Administrative Cartography." On the role of cartography (and other related practices) in creating and reifying European discourses of the Ottoman other, see Palmira Brummett, *Mapping the Ottomans: Sovereignty, Territory, and Identity in the Early Modern Mediterranean* (New York: Cambridge University Press, 2015); and Mann, *European Cartographers*.

- 129 *Devâm-ı kıyâm-ı kavânî-i dîn ü devlet ve zâvâbı-ı kıvâm-ı niẓâm-ı mülk ü millet*. Kâtib Çelebi, *Kitâb-ı Cihânnümâ*, first page of the unpaginated preface. See also Murphy, "Appendix," 284. Such a political framing is also suggested by the title of al-Dimashqî's *Atlas Maior* translation: *Nuṣretü'l-Islâm ve's-sürûr fî taḥrîri Aṭlas Mayor* (The victory of Islam and the pleasure in writing the *Atlas Maior*). See Goodrich, "Old Maps," 125 (under B 325–33).
- 130 The same argument is made by Emily Zoss; see Zoss, "An Ottoman View," 213, 218–19 n. 62. For

the Islamic cartographic tradition and examples of such south-oriented maps, see J.B. Harley and David Woodward, eds., *The History of Cartography*, vol. 2, book 1, *Cartography in the Traditional Islamic and South Asian Societies* (Chicago and London: The University of Chicago Press, 1992). The double-hemisphere map of Baronian's *Cemnümâ* (see note 112 above) is oriented to the south; see Goodrich, "Old Maps," 124, fig. 3.