



THE UZUN HASAN MOSQUE IN TABRIZ: NEW PERSPECTIVES ON A TABRIZI CERAMIC TILE WORKSHOP

Tabriz, the former capital city of the Ilkhanid and Jalayirid rulers (r. 1256–1335 and 1335–1432, respectively), located at a commercial crossroad, was a significant intellectual and artistic center during the Turkmen Qara Qoyunlu (r. 1380–1468) and Aq Qoyunlu (r. 1378–1508) dynasties (fig. 1). The city remained a state capital until 1555, during the reign of the Safavid Shah Tahmasp I (r. 1524–76). 1

During the fifteenth century Tabriz was famous for its workshops (sing. kitābkhāna). Its manuscript production was renowned, as were its ceramics. By the end of the century, a Tabrizi craftsman was even said to have attempted an imitation of porcelain,² an episode that illustrates the dynamism of the city's workshops. As far as Cairo, Damascus, Bursa, and Shahr-i Sabz, potters bearing a *nisba* (element of a name indicating relation or origin) from Tabriz perpetuated the fame of its prestigious workshops.3 Turkmen rulers also built great architectural complexes in Tabriz.4 But between the sixteenth and eighteenth centuries, a number of earthquakes severely damaged this flourishing city, devastating its historical monuments.⁵ In addition to these natural disasters, in 1514 Tabriz was attacked and its treasuries plundered by the Ottoman army.6

Consequently, very little is known about Tabriz's heritage. The remains of the Mosque of 'Ali Shah, the Rab'-i Rashidi complex of pious and charitable institutions (named after its founder, whose mausoleum was part of the complex), and the former Masjid-i Jami' appear to be a very faint echo of what may have been great architectural complexes erected by the Mongol rulers Ghazan Khan (d. 1304) and Rashid al-Din (d. 1318).⁷ In his famous depiction of the city, Matrakçı Nasuh

(d. 1564), a painter who followed the Ottoman sultan Süleyman during his military campaign in Iran and Iraq between 1533 and 1536, offered a glimpse of the magnificent heritage of Tabriz.8 As for the fifteenth century, the famous Blue Mosque built in 1465 by the Qara Qoyunlus has long appeared to be the last remnant of Turkmen architecture and decoration in the city. It was while studying this monument that scholarly attention first focused on the innovative distinctiveness of ceramic tile production in Tabriz—in the originality of its range of "blue-and-white" ornaments, its lusterware, and even its gilded cobalt tiles, some of which long constituted the only known examples of their type. 9 The recovery of the Mosque of Uzun Hasan, however, has brought to light new evidence of similar examples. Restored by the Sazman-i Miras-i Farhangi (Organization for National Cultural Heritage) in 2006–7, this structure has been identified as the mosque built by the Aq Qoyunlu ruler Uzun Hasan (r. 1457-78). 10 Its ceramic decoration, which will be presented below, leaves no doubt regarding this attribution while also confirming previous assessments as to the outstanding and original quality of Tabrizi tile production during the Turkmen dynasties.

THE FOUNDING OF THE UZUN HASAN MOSQUE AND THE NASRIYYA COMPLEX

The Mosque of Uzun Hasan (known locally as Masjid-i Hasan Padishah) formed a part of the Nasriyya Complex, located on a former plaza called the Maydan-i Sahibabad, on the north side of the river crossing Tabriz. ¹¹ This

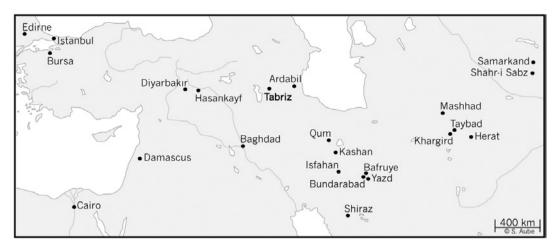


Fig. 1. Map showing Tabriz and related cities. (Map: Sandra Aube)

plaza has now vanished and, apart from the newly recovered Mosque of Uzun Hasan, only the Sahib al-'Amr Mosque (founded during the time of the Safavid ruler Shah Tahmasp I) remains in the vicinity, on the north side of the former complex.¹²

We know from historical sources that the Maydan-i Sahibabad was founded during the time of the Qara Qoyunlu sultan Jahanshah (r. 1438-67), who built his own palace there in 1466.13 When the Aq Qoyunlu rulers seized the city in 1467, they added their own buildings and decorations to the palace.¹⁴ In 1472, the Venetian ambassador Josafa Barbaro described the mosaic panel decorations of the audience hall during the reign of Uzun Hasan. 15 Some years later, Khunji Isfahani (d. 1519) mentioned the construction of a *mazār* (tomb) during Khalil's reign (r. 1478) and further restorations (or perhaps a complete reconstruction?) undertaken by Uzun Hasan's son and successor, Sultan Ya'qub (r. 1478–90), between 1483 and 1486.16 Khunji Isfahani reports that there was an elevated octagonal palace, described as a "turquoise throne." After Ya'qub's renovations were completed, the palace was apparently renamed the "Hasht Bihisht" (Eight Paradises);17 it has been proposed that the Hasht Bihisht may be the first known example of this plan type. 18 At the beginning of the sixteenth century, Francesco Romano, a Venetian merchant, thoroughly described the amazing paintings decorating the palace.¹⁹ The Hasht Bihisht was the main palace connected with the Nasriyya Complex, where the Uzun Hasan Mosque was erected.

Construction began on the architectural complex of Nasriyya in 1477-78, under the patronage of Uzun Hasan, and seems to have been completed seven years later, during the reign of Sultan Ya'qub—that is to say, around 1484.20 The complex comprised a mausoleum, a mosque, a madrasa, and a hospital. Karbala'i Tabrizi (fl. sixteenth century) describes the complex as a mosque (jāmi'-yi Nasriyya), but his contemporary Qazvini also writes about a garden (bāghcha-i Naṣriyya). The Nasriyya seems to have had a funereal purpose as well, since its patrons—Uzun Hasan and Ya'qub—were said to be buried there.²¹ The best architects and craftsmen would have worked on the construction of the Nasriyya Complex, and a certain Darvish Qasim was apparently in charge of building the mausoleum erected in the middle of a garden.²² Khunji Isfahani refers to this structure as a red and blue monument (surkh va kabūd); this probably indicates a brick construction with brick or terra cotta ornamental patterns arranged with tiles in dominant blue tones.²³ On the north side of this mausoleum was an older shrine, the Pir-i Rumi, dated Rabi' I 874 or 884 (September-October 1469 or May-June 1479) by one stone inscription, and 768 (1366-67) by another.²⁴

The mosque attached to this complex replaced a Qara Qoyunlu mosque located in the same place. The new building was founded by Uzun Hasan. Yet Khunji



Fig. 2. Tabriz, Uzun Hasan Mosque, general view of the south side of the domed chamber. (Photo: Sandra Aube, 2014)

Isfahani describes the mosque's state of disrepair during the reign of Ya'qub, when the queen mother, Malika Saljuqshah Begum, funded its restoration: a new portico was built, decorated with tiles $(k\bar{a}sh\bar{\iota})$ and surmounted by a cupola covered with blue tile revetments. ²⁵ Surprisingly, the mosque is said to have been a stone construction, which, if true, would make it a rare example of such a structure in Aq Qoyunlu architecture of the region. ²⁶ It seems more likely, however, that the reference to stone concerns the many marble panels decorating the walls (on which, see below).

During the Safavid era, the Uzun Hasan Mosque was damaged when the Ottomans besieged the castle in 1585: Tabrizi forces apparently used the Aq Qoyunlu mosque as one of their points of departure against the assailants. In 1635, when the Ottomans again pillaged the city, the Uzun Hasan Mosque seems to have mostly been spared, but the adjoining Safavid mosque that had previously been built on its east side was ruined. This latter mosque was restored in 1679. The earthquake of 1780, however, severely damaged the entire Nasriyya Complex.²⁷ The adjoining Safavid mosque was restored

once again in 1794, and the Uzun Hasan Madrasa was rebuilt in 1826, by Mirza Mahdi Qadi, a remote descendant of Uzun Hasan.²⁸ But from this time forward there is no longer any mention to be found of the original Uzun Hasan Mosque.

Today, only a part of the great domed chamber of the mosque is still standing.²⁹ Its east side is obviously missing, having been replaced by a Safavid and then a Qajar building. The west side of the room seems to have retained its three original alcoves, formed by two plain pillars and two massive corner pillars, whereas remnants of only two alcoves survive on the north and south sides (fig. 2). Together the four sides once constituted a square domed chamber (around 20 m wide) surrounded on each side by four pillars (two plain and two corner). But the cupola collapsed and today the height of the domed chamber reaches only three meters. This chamber used to be a prayer room and the mihrab niche has been preserved. Its spatial organization brings to mind the architecture of the Qara Qoyunlu Blue Mosque, as well as the Safavid Sahib al-'Amr Mosque in Tabriz, both of which are completely covered with cupolas, an archi-



Fig. 3. Tabriz, Uzun Hasan Mosque, window frame with bannā'ī decoration. (Photo: Sandra Aube, 2014)

tectural feature that is closer to Ottoman models than to Iranian architectural traditions.³⁰ Alongside this mosque one finds the ruins of the former madrasa that was rebuilt in the nineteenth century.³¹

A great number of ceramic revetments have been discovered in the rubble of the mosque. Some of them have been restored and replaced on the pillars (fig. 6), but most of the tiles are in storage. Their technical and stylistic features, presented below, clearly belong to the Aq Qoyunlu period.

CERAMIC TILES FROM THE UZUN HASAN MOSQUE

The exterior of the north wall of the mosque is ornamented with cobalt and turquoise *bannā'ī* bricks that probably framed the openings. The border is composed of a series of cobalt dots on a turquoise ground, framed by cobalt lines (fig. 3). The *bannā'ī* (lit. "builder's" decorative brickwork) technique, which was widespread in the Iranian zone, was primarily used for external decorations. In the rubble of the mosque, some small square underglazed tiles have also been discovered painted

with a white quatrefoil motif outlined in black, on a cobalt background (fig. 4). Such "blue-and-white" tiles were perhaps arranged along with <code>bannā</code> decorations on the outer walls, since the same kinds of tiles and composition are still to be found at the back of the Qara Qoyunlu Blue Mosque (fig. 5). The two Turkmen monuments contain exactly the same tiles and both were clearly made by the same team.

The strong links between both of these Turkmen monuments in Tabriz are also demonstrated by the internal decoration of the Mosque of Uzun Hasan. Ceramic tiles remain along the pillars and alcoves. The architectural decoration is composed of dadoes sectionally ornamented with underglazed painted tiles combined with stone polygons (figs. 6 and 16). Each projecting angle is highlighted with a stone column topped with a muqarnas. A calligraphic stone band is spread over the dadoes. The upper part of the pillars was mostly covered with mosaic tile panels. The mihrab itself is not tiled but is instead composed of a rectangular alabaster slab, ornamented with a simple sculpted arch (fig. 6). The panel above the mihrab is covered with square cobalt and gilded tiles; this technique was not



Fig. 4. Tabriz, Uzun Hasan Mosque, blue-and-white square tiles, restored into a brick panel (kept in the storeroom). (Photo: Sandra Aube, 2014)

common at that time, and its use on a wall instead of on dadoes is quite surprising (fig. 7).

Many mosaic tile panels have been found in the rubble of the Uzun Hasan Mosque (fig. 8). The palette employed floral and vegetal patterns characteristic of the Turkmen repertoire that developed during the second half of the fifteenth century. Only some mosaic tile panels are still visible on the largely restored pillars. The top panels on the pillars display geometrical compositions fitted with fine vegetal designs that were typical of the fifteenth-century Iranian repertoire (fig. 9). Mixed with these compositions are small, lozenge-shaped blue-and-white tiles depicting vegetal patterns on a white background (figs. 9 and 10).

Examples of fifteenth-century blue-and-white tiles are very limited in Iran and Central Asia.³⁴ Yet many blue-and-whites were found in the Uzun Hasan Mosque. For example, the lozenge-shaped blue-and-whites (fig. 11) illustrate the wide range of "blue-and-white" tiles produced in Tabriz. In the ruins of the mosque a small section of a blue-and-white inscription was also discovered (fig. 12). The fragment shows a part of two white



Fig. 5. Tabriz, Blue Mosque, blue-and-white square tiles mounted into a *bannā'ī* panel, (exterior walls of the mausoleum). (Photo: Sandra Aube, 2004)



Fig. 6. Tabriz, Uzun Hasan Mosque, qibla wall featuring gilded cobalt tiles over an alabaster mihrab. (Photo: Sandra Aube, 2014)



Fig. 7. Tabriz, Uzun Hasan Mosque, detail of square gilded cobalt tiles over the mihrab. (Photo: Sandra Aube, 2014)

cursive letters delineated by a black line on a cobalt background. Although this fragment is too small to read, it should probably be compared to a square blue-andwhite tile kept in the Museum of Islamic Art in Doha (fig. 13).35 Although these kinds of blue-and-white tiles have often been dated to the fourteenth century, the discovery of such evidence in Tabriz must call this dating into question, leading us to propose a new late-fifteenth century attribution. Also found in the rubble of the Uzun Hasan Mosque was one of the most unusual examples created in Tabriz: fragments of vegetal-shaped blue-and-white decoration in relief. Examples of such decorations were also found on the minarets of the Blue Mosque of Tabriz (fig. 14). For a long time, these few pieces were the only known evidence of this original type of decoration. However, more than two bags full of



Fig. 8. Tabriz, Uzun Hasan Mosque, fragment of a calligraphic mosaic tile panel (found in the ruins of the mosque). (Photo: Sandra Aube, 2014)



Fig. 9. Tabriz, Uzun Hasan Mosque, mosaic tile and blue-and-white decoration on the upper part of a pillar. (Photo: Sandra Aube, 2014)



Figs. 10 and 11. Tabriz, Uzun Hasan Mosque, two blue-and-white tiles (kept in the mosque's storeroom). (Photo: Sandra Aube, 2014)



Fig. 12. Tabriz, Uzun Hasan Mosque, fragment of a blueand-white inscription (kept in the mosque's storeroom). (Photo: Sandra Aube, 2014)



Fig. 13. Square calligraphic underglazed tile painted with cobalt and black on a white background. Tabriz, Uzun Hasan Mosque (?), ca. 1480. Doha, Museum of Islamic Art, inv. no. PO.354.2004. (Photo: Sandra Aube, 2011, with the kind authorization of the Museum of Islamic Art, Doha)



Fig. 14. Tabriz, Blue Mosque, blue-and-white decoration (now kept inside the mosque) from the minarets. (Photo: Sandra Aube, 2004)

similar pieces have now been collected inside the Uzun Hasan Mosque (figs. 15 and 26). This remarkable discovery may constitute the most important extant grouping of this unusual architectural decoration.

The range of blue-and-white tiles is even larger. The remaining dadoes are composed of geometrical networks combining ceramic tiles and stone polygons. The composition is based on stars surrounded by lozenge shapes, pentagons, and double pentagons. On the qibla side, these compositions are filled with various other types of similar tiles (fig. 16); hence, the Uzun Hasan Mosque definitely displays an unexpected range of blue-and-white tiles.

A closer analysis of these blue-and-white dado tiles reveals that two different techniques of production were employed here. Most of these tiles have an underglazed decoration painted with white, cobalt, and black:



Fig. 15. Tabriz, Uzun Hasan Mosque, bags filled with hundreds of blue-and-white ceramic decorations featuring vegetal designs that were found in the rubble of the mosque. (Photo: Sandra Aube, 2014)



Fig. 16. Tabriz, Uzun Hasan Mosque, blue-and-white tiles in a geometrical network on the dadoes from the qibla side of the mosque. (Photo: Sandra Aube, 2014)

these are clearly the so-called blue-and-white tiles. But a very small number of tiles—although presenting the same shapes—have an overglazed decoration: they are painted in cobalt on a white glazed background and delineated by a black line (fig. 17). This corresponds to the "black line" tiles is, however, extremely rare in Turkmen lands, and one question still remains: Why did tile-makers employ two different techniques to decorate the same kind of tile with the same pattern? Although we do not have any clues at this point, these examples may at least reveal that "black line" decoration was not as sparsely employed as the lack of evidence to date had seemed to suggest. ³⁷

One last feature is worth mentioning. All the borders framing the dadoes, as well as the polygons from

secondary spaces surrounding the courtyard, are ornamented with a still more surprising kind of tile. These tiles feature vegetal designs with a very fine relief. The lower parts are painted with a black slip under a transparent colored glaze. The range of colors is remarkable: in addition to a cobalt glaze (fig. 16: see tiles on the frame) and a turquoise one (fig. 18), some other panels employ a green glaze, as well as an exceptional yellowish brown one (fig. 19).

A few examples of black-and-green or black-and-turquoise ceramics are known from the late fifteenth century and are generally associated with the "Kubachi" label (a label encompassing different kind of ceramics that were primarily associated with the village of Kubachi in the Caucasus). But this technique was rarely employed for ceramic tiles from the Aq Qoyunlu period.



Fig. 17. Tabriz, Uzun Hasan Mosque, detail of two tiles from the dadoes of the qibla: on the right is an underglazed tile painted with cobalt and black on a white background ("blue-and-white" type); on the left is an overglazed tile painted with cobalt surrounded by a black line on a white glazed background ("black line" type). (Photo: Sandra Aube, 2014)



Fig. 18. Tabriz, Uzun Hasan Mosque, detail of a dado decoration displaying low-relief painted tiles with a black slip under a light blue transparent glaze. (Photo: Sandra Aube, 2014)



Fig. 19. Tabriz, Uzun Hasan Mosque, detail of a dado decoration featuring low-relief painted tiles with a black slip under a green or a yellow transparent glaze. (Photo: Sandra Aube, 2014)



Fig. 20. Diyarbakır, interior of Safa Camii, detail of underglazed tiles painted in black under a turquoise glaze. (Photo: Sandra Aube, 2006)

Besides a series of rectangular tiles painted in black under a turquoise glaze framing the dadoes of the Safa Camii in Diyarbakır (ca. 1450; fig. 20),³⁹ the only other known examples are some tiles with inscriptions from the region of Yazd.⁴⁰ Yet all these tiles present a black motif instead of a colored design on a black background. Thus, the aesthetic of the Tabriz tiles evokes the contemporaneous group of "Cizhou" wares associated with Nishapur, the origins of which go back to the "silhouette" wares of the Saljuq period.⁴¹ Yet no ceramic tiles seem to have been previously associated with this group. Moreover there is no other known evidence, during this period, of tiles with a green or yellow transparent glaze such as the Tabriz ones.⁴²

Finally, it is worth mentioning one last tile fragment found in the rubble of the Uzun Hasan Mosque. This item displays a calligraphic design with a light relief effect and polychrome underglazed paintings (fig. 21). This unusual feature highlights even further the originality of the tile production of Tabriz. The evidence found in the Uzun Hasan Mosque is most certainly noteworthy.



Fig. 21. Tabriz, Uzun Hasan Mosque, epigraphic tile fragment with underglazed black, cobalt, and turquoise painting on a white slip with a slight relief effect. (Photo: Sandra Aube, 2014)

TABRIZ: A LABORATORY FOR EXPERIMENTS

The case of the Uzun Hasan Mosque highlights the continuity between the Qara Qoyunlu and Aq Qoyunlu workshops in Tabriz. Many original decorative features were brought to light through the example of the famous Blue Mosque of Tabriz, which was endowed in 1465 by Khatun Jan Begum, the wife of the Qara Qoyunlu ruler Jahanshah (r. 1438–67). Several of its ceramic tiles were believed to be unique. It is now known, however, that the Blue Mosque and the Uzun Hasan Mosque share several traits; this observation is significant because it highlights the distinctiveness of Tabriz's ceramic tile workshops.

The alabaster slabs illustrate this parallel. The Uzun Hasan Mosque has the same elegant mihrabs as the Blue Mosque of Tabriz: two of them are conserved in the ambulatory of the oratory and another fragment is located in the mausoleum (fig. 22).⁴⁴ Moreover, in the Blue Mosque, the alabaster dadoes are surmounted by a long stone inscription;⁴⁵ this feature is repeated in the Mosque of Uzun Hasan, where similar sculpted stone inscriptions are found above the dadoes, although these are less detailed than in the Blue Mosque (see the fragment at the bottom of fig. 9).

In the mausoleum of the Blue Mosque, the walls and inner cupola were completely covered with hexagonal cobalt and gilded tiles (fig. 23).46 This technique, which is similar to the one used in the Uzun Hasan Mosque, deserves special attention given their unusual placement. Although examples of such tiles are most often found on dadoes (see, for example, the Darb-i Imam in Isfahan, 1453 [fig. 24], and the Safavid shrine of Shaykh Safi al-Din in Ardabil, sixteenth century [fig. 25]), they were placed directly on the upper walls in both of the Turkmen mosques of Tabriz. The only known example of such a placement outside of Tabriz was in the domed chamber of the Masjid-i Shah (or Masjid-i Haftad va Du Tan Shahid [Mosque of the Seventy-Two Martyrs (of Karbala)]) in Mashhad. Interestingly, the portal of this Timurid mosque, built in 1451 by the amir Nizam al-Din Malikshah Yahya, is signed by an architect-mason (bannā') from Tabriz: Ahmad Shams al-Din Muhammad Banna' al-Tabrizi.47 What decisions did he personally

make regarding the decorative architectural elements? To what extent was he influenced by Tabrizi architecture? It is probably impossible to answer these questions. Nevertheless, the link with the Tabrizi style is certain.

The most significant parallel between the two Turkmen mosques of Tabriz is seen in the presence of blueand-white tiles in each. As stated above, this large group contains some unique examples. The aforementioned small, square blue-and-white tiles (about 5 cm wide) arranged with bannā'ī decorations are seen in both monuments (fig. 14).48 And the high-relief vegetal-shaped "blue-and-white" tiles found on the minarets of the Blue Mosque were believed to have been exceptional—until the recent discovery of numerous such items in the rubble of the Mosque of Uzun Hasan (figs. 15 and 26).49 This feature demonstrates the originality of Turkmen ceramic tile production in Tabriz. Many other blue-andwhite tiles have been attributed to the Blue Mosque of Tabriz in the archives of the late Professor Turabi Tabataba'i: lozenge-shaped and square tiles, as well as seventy triangular underglazed tiles painted with floral motifs in white and cobalt and outlined with black (fig. 27).50 These numerous identifications, combined with the broad range of blue-and-whites newly discovered at the Uzun Hasan Mosque, confirm both the diversity and importance of blue-and-white production in Tabriz.

The parallels seen between these two mosques illustrate the continuities in the techniques handed down from master to disciple in Tabrizi ceramic workshops, whether their patronage was Qara Qoyunlu or Aq Qoyunlu. This artistic transmission is also apparent in the geometrical patterns used in Tabriz: both the Blue Mosque and the Mosque of Uzun Hasan employed decorative models found in the so-called Topkapı Scroll, which Gülru Necipoğlu examined in her seminal 1995 work on this document.⁵¹ Comprising 114 drawings intended as models for architectural decoration, the scroll might have been compiled in the kitābkhāna of the Topkapı Palace from different designs brought from Iran to Istanbul by Ottoman armies. Rediscovered inside the Topkapı Palace Inner Treasury in the 1980s, the drawings of this scroll (Ms. H.1956) have been attributed

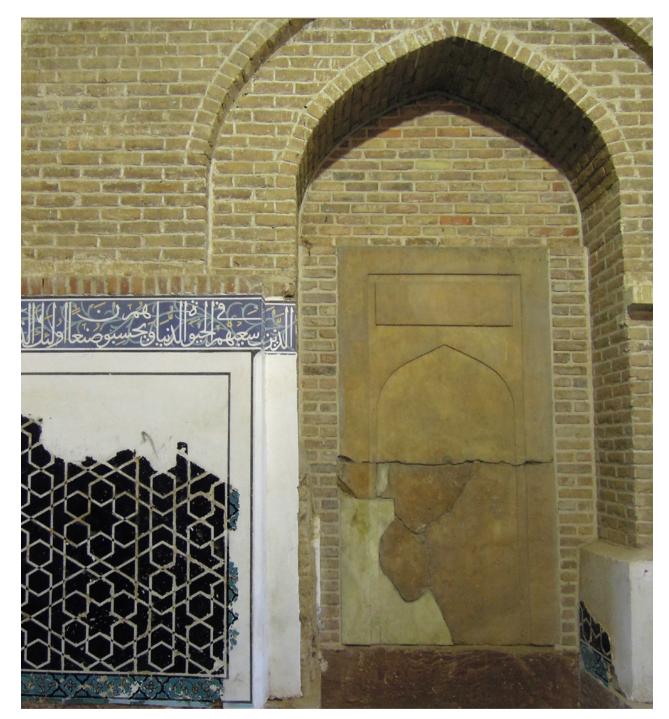


Fig. 22. Tabriz, Blue Mosque, fragment of the mihrab located in the western ambulatory of the oratory. (Photo: Sandra Aube, 2014)



Fig. 23. Tabriz, Blue Mosque, cobalt and gilded tile decorations inside the mausoleum. (Photo: Sandra Aube, 2014)



Fig. 24. Isfahan, Darb-i Imam, detail of gilded tiles from the former vestibule dadoes. (Photo: Sandra Aube, 2014)

by Necipoğlu to northwest Iran, probably Tabriz, as it was the most outstanding artistic center in the region. Necipoğlu proposes dating the scroll to the second half of the fifteenth century.⁵² This attribution is strongly convincing since many of these models can be identified in Qara Qoyunlu and Aq Qoyunlu monuments in Tabriz, as well as in other Turkmen decorations in Iran. For instance, drawing no. 28 from the Topkapı Scroll is used as a model for the geometrical composition covering the upper parts of the pillars of the Uzun Hasan Mosque in Tabriz (figs. 9 and 28); drawing nos. 1, 69b, and 42 are used to decorate both the Blue Mosque of Tabriz and the Masjid-i Jami' of Yazd (restorations from



Fig. 25. Ardabil, Shrine of Shaykh Safi al-Din, detail of gilded tiles on the dadoes surrounding the tomb. (Photo: Sandra Aube, 2015)



1457); and calligraphic compositions seen in the Blue Mosque of Tabriz echo drawings nos. 51, 65, 68, and 69, as well as 71, 74, 75, and 91. We can also mention drawing no. 8, repeated on the Turkmen-period minbar of the Taqi al-Din Dada Mosque in Bundarabad (ca. 1473–74) and on the dadoes of the *pīshṭāq* (monumental portal) of the Masjid-i Jami' of Yazd; drawing no. 41, employed on the Qara Qoyunlu minbar of the Masjid-i Maydan-i Sang in Kashan (ca. 1463–64); drawing no. 43, which is used for the Qara Qoyunlu-period dadoes of the Masjid-i Jami' in Bafruye (about 60 km North from Yazd, 1461–62); and drawing no. 47, used on the Darb-i Kushk in Isfahan (1496–97). Likewise, the relief effects proposed, for example, by drawing no. 49 are developed at the Blue Mosque of Tabriz, and the Darb-i Imam and Darb-i Kushk

Fig. 26. Molded underglazed revetment painted in cobalt and black on a white slip. Tabriz, ca. 1465–84. Los Angeles County Museum of Art, The Madina Collection of Islamic Art, gift of Camilla Chandler Frost, inv. no. M.2002.1.305. (Photo: © LACMA/Public Domain High Resolution Images)



Fig. 27. Tabriz, Blue Mosque, some triangular blue-and-whites. Sèvres, Cité de la Céramique, MNC 18958. (Photo: Sandra Aube, 2009, with the kind permission of the Cité de la Céramique, Sèvres)

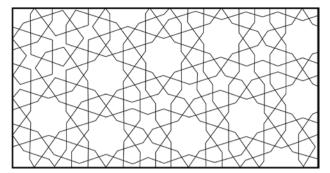


Fig. 28. Model no. 28 from the "Topkapı Scroll." (Drawing: Sandra Aube, based on Gülru Necipoğlu, *The Topkapı Scroll: Geometry and Ornament in Islamic Architecture; Topkapı Palace Library MS H.* 1956 [Santa Monica, Calif., 1995], p. 300)

in Isfahan, as well as in the Aq Qoyunlu mausoleum built for Zaynal Beg at Hasankayf (ca. 1473–74), and in some Timurid monuments as well.⁵³ Thus, there are plenty of examples that illustrate the use of the Topkapı Scroll models on Qara Qoyunlu and Aq Qoyunlu architectural ornament. This illustrates artistic transfers from Tabriz to western Iranian Turkmen territories. Most of these works are located in Tabriz, giving further credence to

Necipoğlu's hypothesis that they originated there. Based on all these examples, it seems more accurate to date the Topkapı Scroll drawings to the third quarter of the fifteenth century, that is to say, to the transitional period from the Qara Qoyunlu dynasty to the Aq Qoyunlu dynasty in Tabriz.

The group of ceramic tiles associated with Tabriz provides further evidence for the innovative and characteristic features of Tabrizi workshops. Several of them are still unparalleled, while others provide new insights into the transmission of techniques in the region, such as the "black line" tiles, which establish for the first time that this kind of decoration was used in the Turkmen capital. Examples of "black line" tiles are found in eastern Iran, in Timurid Herat, Mashhad, and Khargird (at the Ghiyasiyya Madrasa, ca. 1436–43 [fig. 29]⁵⁴), but none of these have the same technical properties as the items from Tabriz. In western Iran, specimens of fifteenth-century "black line" tiles are extremely rare. The main evidence in Turkmen territories is located in the aforementioned Safa Camii in Diyarbakır (ca. 1450, fig. 30). 55 Some others are found in Timurid Iran: in the Masjid-i Jami' of Simnan, in the Khanqah of Shahrukh located in the Shrine



Fig. 29. Khargird, Ghiyasiyya Madrasa, "black line" and blue-and-white tiles from the southwestern iwan. (Photo: Sandra Aube, 2015)



Fig. 30. Diyarbakır, Safa Camii, detail of one of the three types of "black line" tiles from the dadoes. (Photo: Sandra Aube, 2012)

of Imamzada Ja'far at Damghan (all dated ca. 1405–47, fig. 31), and in the Imamzada Zayn al-'Abidin in Sari (Mar'ashi dynasty, late fifteenth – early sixteenth century). ⁵⁶ The range of colors and technical features differs from the few exemplars recovered in Tabriz. It is clear, however, that a great amount of "black line" evidence is still missing, since the technique could not have simply disappeared from western Iran in the fifteenth century. The few examples found in Tabriz prove that the "black line" technique continued to be used in Aq Qoyunlu lands.

Moreover, it is worth recalling how little is known about blue-and-whites in Iran during the fifteenth century. Aside from the case of Tabriz, there are a limited number of Aq Qoyunlu examples. We can mention the inscription on the Mosque of Panja-yi 'Ali in Qum (dated 1481–82, fig. 32),⁵⁷ but its style and quality are nonetheless different. In fact, the few examples comparable to Tabrizi blue-and-whites are from Timurid Khurasan. Several blue-and-white tiles of various shapes, along with mosaic tile panels and the already mentioned "black line" tiles, are found in the Ghiyasiyya Madrasa at

Khargird, commissioned by the Timurid vizir Pir Ahmad Khvafi and signed by the famous Qavam al-Din b. Zayn al-Shirazi (figs. 29 and 33).58 The quality of these blueand-whites seems to be superior to the Tabrizi specimens. Yet the shape and decoration of some of these specimens bring to mind examples from Tabriz: for instance, the lozenge-shaped tiles, or the square ones ornamented with a quatrefoil motif. In 1444-45, Pir Ahmad Khvafi also patronized the building of the Zayn al-Din Mausoleum in Taybad.⁵⁹ The largely restored spandrels of the entrance's iwan feature lozenge-shaped blue-andwhites arranged with mosaic tiles that once again recall some of the Tabrizi items (fig. 34). Moreover, in the Zayn al-Din Mausoleum in Taybad we find another interesting analogy with the architectural decoration of Tabriz: its dadoes (on the entrance façade as well as in the domed shrine chamber) form a geometrical network centered on star motifs, combining ceramic panels with stone designs (fig. 35). This feature has close parallels with the decoration of the dadoes in the Uzun Hasan Mosque—although the techniques employed are different. Furthermore, in both monuments the projecting



Fig. 31. Damghan, Imamzada, detail of a "black line" tile from the Khanqah of Shahrukh. (Photo: Sandra Aube, 2014)



Fig. 32. Qum, Panja-i 'Ali Mosque, blue-and-white inscription. (Photo: Sandra Aube, 2014)



angles are ornamented with a marble column topped by a sculpted muqarnas. The same disposition is already employed in Timurid monuments from Transoxiana: these marble decorations are found on the dadoes in the so-called Bibi Khanum Mosque (1398–1406, fig. 36), as well as in the Ulugh Beg Madrasa in Samarkand (1417–21, fig. 37).

Parallels between Tabrizi and Timurid workshops are unsurprising. Both areas share a common cultural legacy. Moreover, during his military campaign in 1386, Tamerlane brought Tabrizi craftsmen back to his court at Samarkand. 60 It is also worth recalling the numerous exchanges between the courts of Tabriz and Herat—in

Fig. 33. Khargird, Ghiyasiyya Madrasa, detail of blue-and-white tiles from the southwestern iwan. (Photo: Sandra Aube, 2015)



Fig. 34. Taybad, Zayn al-Din Mausoleum, detail of the spandrel decoration on the entrance iwan. (Photo: Sandra Aube, 2006)

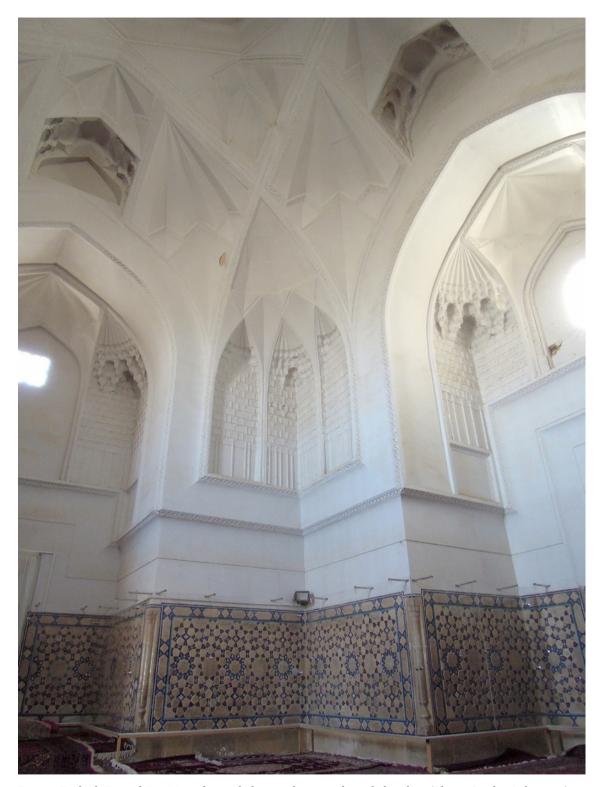


Fig. 35. Taybad, Zayn al-Din Mausoleum, dadoes in the main domed chamber. (Photo: Sandra Aube, 2015)



Fig. 36. Samarkand, "Bibi Khanum" Mosque, detail of inscription above the dadoes in the main entrance. (Photo: Sandra Aube, 2015)

1420, for example, the Timurid Baysunghur subdued a rebellion in Tabriz and then deported craftsmen and intellectuals, and in 1458 the Qara Qoyunlu Jahanshah took Herat and returned to Tabriz accompanied by craftsmen. Indeed, as discussed above, the closest comparisons to the technical repertoire developed in Tabriz are found in Khusarani monuments. The case of the gilded tiles well illustrates this point. Although monochrome tiles with gilded decorations are not widespread

during the fifteenth century, some examples are found on dadoes: we find them inside the Darb-i Imam built in Isfahan during the time of the Qara Qoyunlu Jahanshah (1453, fig. 24), and on the dadoes of the Shirin Bika Aqa Mausoleum in Samarkand (1385–86).⁶¹ But there is only one known example of the unusual placement of gilded tiles on the upper walls, as seen in Tabriz, instead of the dadoes, namely, the Masjid-i Shah in Mashhad (1451), whose builder bore a Tabrizi *nisba*. The analogy



Fig. 37. Samarkand, Ulugh Beg Madrasa, fragment of dado decoration with marble column on projecting angles. (Photo: Sandra Aube, 2015)

between the Tabrizi and Khurasani styles is also well illustrated in the architectural decoration of the Çinili Köşk, built within the Topkapı Palace in Istanbul. 62 Erected between ca. $^{1465-66}$ and $^{1472-73}$ for the Ottoman sultan Mehmet II (r. $^{1444-46}$ and $^{1451-81}$), this "Porcelain Pavilion" is covered with ceramic tile decorations. The style of the mosaic tile panels that decorate the main façade of the pavilion is quite recognizable from Iranian traditions. On each side and above the entrance door, the façade is framed by $bann\bar{a}$ \bar{i} bricks arranged with square blue-and-white tiles (fig. 38). Inside, the dadoes are covered with cobalt or turquoise

gilded tiles; on some panels, hexagonal gilded tiles are framed by rectangular-shaped gilded tiles (fig. 39), while on other panels we find triangular gilded tiles. Several Turkmen manuscript paintings contain this kind of ceramic decoration, 63 but this feature was still uncommon in fifteenth-century Ottoman architecture in Turkey. Necipoğlu has hypothesized that craftsmen from Khurasan introduced these decorations in Istanbul. Her hypothesis was supported by an undated petition from Khurasani tile cutters (kāshī tarāshān-i Khurāsān) asking Sultan Mehmet II to provide further work. 64 Is it possible that this petition could be linked instead to



Fig. 38. Istanbul, Çinili Köşk, blue-and-whites. (Photo: Sandra Aube, 2006)



Fig. 39. Istanbul, Çinili Köşk, inner dadoes. (Photo: Sandra Aube, 2006)

the group of craftsmen working for Mehmet II on his mosque complex in Istanbul and at the Üç Şerefeli Mosque of his father, Murat II (r. 1421–44 and 1446–51), in Edirne? In light of the examples of ceramic tiles known from Tabriz, we may wonder how the styles and techniques employed at the Çinili Köşk might have been influenced by Tabrizi traditions instead of Khurasani ones (see, among others, the blue-and-white and gilded tiles). ⁶⁵ In any event, by merely raising the question of their origin, we may highlight once more the close artistic correlations between Turkmen Tabriz and the Timurid Khurasani style, probably developed in Herat.

CONCLUSION

The characteristics seen in the two Turkmen mosques of Tabriz reflect the creativity of the ceramic tile workshop in Tabriz, which shares a common legacy with the Timurid style from Khurasan. On a broader scale, western Iranian art in the second part of the fifteenth century combines a regional tradition with some Timurid influences from eastern Iran—this holds true for both architectural decorations and the arts of the book.⁶⁶ In a certain way, it is these associations that create an original Turkmen style. These new tendencies were clearly introduced in Qara Qoyunlu and Aq Qoyunlu lands. Let us remember, for example, the specific nature of Aq Qoyunlu metalwork productions, 67 and the development of original calligraphies, such as the "western nasta'līq," a writing style that emerged in western Iranian manuscripts between the 1430s and the end of the fifteenth century and highlighted once again the distinctive traits and originality of Turkmen productions.⁶⁸ Nevertheless, this type of calligraphy does not seem to have been widespread outside the region. The same appears to be true for some of the ceramic techniques developed in the Tabrizi workshop. Although this center developed some extremely original techniques of ceramic tile production, they nonetheless had a limited distribution. The very large range of blue-and-white tiles seen in both the Uzun Hasan Mosque and the Blue Mosque in Tabriz illustrates this point, as do the astonishing small luster tiles located on the bases of the

pishṭāq at the Blue Mosque.⁶⁹ These unusual features might have been technical experiments that ultimately had only limited influence. This is also true for the rare examples of experimentation with the "black line" technique, although it is clear that a great amount of "black line" evidence is missing in Iran.

This point opens up new perspectives on the history of ceramic tiles. For example, how might this finding lead us to reconsider past conclusions about the famed Masters of Tabriz working in Ottoman Bursa and Edirne? Or about productions introduced by Tabrizi craftsmen in Damascus? More than ever, Tabriz appears as a preeminent artistic center—a laboratory for conducting experiments that was especially creative during the peak of the Turkmen dynasties. The discovery of a new range of Aq Qoyunlu ceramic tiles from Tabriz is obviously an important advancement in our knowledge of artistic transmission in the fifteenth century.

Researcher on Islamic Art, Centre national de la recherche scientifique (CNRS), UMR 7528 "Mondes iranien et indien," Paris / ANR-DFG "DYNTRAN"

NOTES

Author's note: I am very grateful to the Institut Français de Recherche en Iran (IFRI) and its former director, Thierry Vielle, for having provided support for this field research in September–October 2014. My sincere gratitude also goes to Dr. Mehdi Muhammad Zadeh (Dean of the Faculty of Islamic Art, University of Tabriz) and Ustad Muhammad Aminiyyan (Sazman-i Miras-i Farhangi [Organization for National Cultural Heritage], Tabriz) for introducing me to the Masjid-i Hasan Padishah and for granting me permission to study its decoration. I am very indebted to Yves Porter, Gülru Necipoğlu, Karen Alexandra Leal, and the anonymous reader for their helpful comments on earlier drafts of this paper. Many thanks to Maria Szuppe for her advice.

- 1. For a recent study on the history of Tabriz and its intellectual influence, see Judith Pfeiffer, ed., *Politics, Patronage and the Transmission of Knowledge in 13th–15th Century Tabriz* (Leiden, 2014); for the later period, see Christoph Werner, *An Iranian Town in Transition: A Social and Economic History of the Elites of Tabriz, 1747–1848* (Wiesbaden, 2000).
- 2. Khvandamir reported that Hajji Muhammad Naqqash attempted to imitate Chinese porcelain paste. See Ghiyās al-Dīn Khvāndamīr, *Tārīkh-i Ḥabīb al-siyar fī akhbār afrād bashar* (Tehran, 1971 [1350]), 4:348; and Yves Porter, *Le prince, l'artiste et l'alchimiste: La céramique dans le monde*

iranien, Xe-XVIIe siècle (Paris, 2011), 60-61. About the arts of the book in the *kitābkhāna* of Tabriz, see Simon Rettig, "La production manuscrite à Chiraz sous les Aq Qoyyunlu entre 1467 et 1503" (PhD diss., Aix-Marseille Université [Aix-en-Provence], 2011); Barbara Brend, Perspectives on Persian Painting: Illustrations to Amîr Khusrau's Khamsah (London, 2003); Eleanor Sims, with Boris I. Marshak and Ernst Grube, Peerless Images: Persian Painting and Its Sources (New Haven, 2002); Francis Richard, Splendeurs persanes: Manuscrits du XIIe au XVIIe siècle (Paris, 1997); Basil Robinson, "The Turkman School to 1503," in The Arts of the Book in Central Asia, 14th-16th Centuries, ed. Basil Gray (Paris, 1979), 215-49; Ivan Stchoukine, "Les peintures turcomanes et șafavies d'une Khamseh de Nizâmî achevée à Tabrîz en 886/1481," Arts Asiatiques 14 (1966): 3-16. On ceramic tile production in Tabriz, see Sandra Aube, "La céramique architecturale en Iran sous les Turkmènes Qarâ Qoyunlu et Âq Qoyunlu (c. 1450–1500)," 3 vols. (PhD diss., Paris-Sorbonne University, 2010) (publication forthcoming: La céramique dans l'architecture en Iran au XVe siècle: Les arts garâ guyûnlûs et âg guyûnlûs [Paris, 2016]); Lisa Golombek, Robert Mason, and Gauvin Bailey, Tamerlane's Tableware: A New Approach to the Chinoiserie Ceramics of Fifteenth- and Sixteenth-Century Iran (Costa Mesa, Calif., 1996); Jean Soustiel, La céramique islamique: Le guide du connaisseur (Fribourg, 1985), chap. 11, esp. pp. 241-50.

- 3. See the workshop of Ghaybi al-Tawrizi in Cairo and the tile panels in the Tawrizi Complex in Damascus (ca. 1423), the "Masters of Tabriz" working in the Yeşil Camii Complex in Bursa and then in the Muradiye Camii at Edirne (ca. 1420–30), and the work of Tabrizi craftsmen in Timurid centers such as Mashhad or Shahr-i Sabz: Sheila Blair, "Tabriz: International Entrepôt under the Mongols," in Pfeiffer, *Politics, Patronage and the Transmission of Knowledge*, 321–56; Aube, "La céramique architecturale en Iran sous les Turkmènes"; see also Khalida Mahi, "La céramique architecturale des 'Maîtres de Tabriz' dans les édifices ottomans des 15ème et 16ème siècles" (PhD diss., Aix-Marseille Université [Aix-en-Provence], December 2015).
- 4. Jean-Dominique Brignoli, "Les palais royaux safavides (1501-1722): Architecture et pouvoir" (PhD diss., Aix-Marseille Université [Aix-en-Provence], 2009), 135–45; Aube, "La céramique architecturale en Iran sous les Turkmènes," 1:40–50; Ertuğrul Ökten, "Imperial Aqquyunlu Construction of Religious Establishments in the Late Fifteenth Century Tabriz," in Pfeiffer, Politics, Patronage and the Transmission of Knowledge, 371–85.
- 5. Charles Melville recounts the numerous earthquakes that destroyed much of Tabriz and its surroundings in 1503, 1555, 1641, 1651, 1717, 1721, and 1780: Charles Melville, "Historical Monuments and Earthquakes in Tabriz," *Iran* 19 (1981):159–77, at 64–72; Nicholas N. Ambraseys and Charles P. Melville, A History of Persian Earthquakes (Cambridge, 1982), 55.
- 6. It is worthwhile to remember the booty that was brought from Tabriz to the Topkapı Palace in Istanbul in 1514: mentioned in Ludvik Kalus, "Les armures des Timourides, des Aqqoyunlus et des Shirvanshahs," in *Timurid Art and*

Culture: Iran and Central Asia in the Fifteenth Century, ed. Lisa Golombek and Maria Subtelny (Leiden, 1992), 158–67; Michael Rogers, "Kara Mehmed Çelebi (Kara Memi) and the Role of the Ser-nakkâşân," in Soliman le Magnifique et son temps, ed. Gilles Veinstein (Paris, 1992), 227–38; Gülru Necipoğlu, "From International Timurid to Ottoman: A Change of Taste in Sixteenth-Century Ceramic Tiles," Muqarnas 7 (1990): 136–59; and Gülru Necipoğlu, "Geometric Design in Timurid/Turkmen Architectural Practice: Thoughts on a Recently Discovered Scroll and Its Late Gothic Parallels," in Golombek and Subtelny, Timurid Art and Culture, 48–66.

- 7. See Birgitt Hoffman, "In Pursuit of Memoria and Salvation: Rashīd al-Dīn and His Rab'-i Rashīdī," in Pfeiffer, Politics, Patronage and the Transmission of Knowledge, 171–85; Blair, "Tabriz: International Entrepôt," 321–56; Donald Wilber, The Architecture of Islamic Iran: The Il Khânid Period (Princeton, N.J., 1955), 129–31; Donald Wilber and Mojtaba Minovi, "Notes on the Rab'-i Rašīdī," Bulletin of the American Institute for Iranian Art and Archaeology 5, no. 3 (1938): 247–54.
- The painting is from the manuscript Beyān-ı menāzil sefer-i Irāķeyn-i Sulţān Süleymān Ḥān, Istanbul University Library, Ms. T.5964, fol. 27b–28a; reproduced in Nurhan Atasoy, "Matrakçı Nasuh and Evliya Çelebi: Perspectives on Ottoman Gardens (1534–1682)," in Middle East Garden Traditions: Unity and Diversity, ed. Michel Conan (Washington, D.C., 2007), 197–217, esp. fig. 17, p. 212.
- 9. See, specifically, the "blue-and-white" tiles published in Sandra Aube, "La Mosquée bleue de Tabriz (1465): Remarques sur la céramique architecturale Qarā Qoyunlu," *Studia Iranica* 37, no. 2 (2008): 241–77, at 259–61 and fig. 6, p. 263. See also Aube, "La céramique architecturale en Iran sous les Turkmènes," 3:86–94. The information below concerning the Blue Mosque of Tabriz is from Aube, "La Mosquée bleue," adapted into English in Sandra Aube, *Encyclopaedia Iranica*, online edition, 2011, s.v. "Tabriz X. Monuments x(1). The Blue Mosque": http://www.iranicaonline.org/articles/tabriz-x-monuments.
- 10. Bihrūz 'Umrānī and Muḥammad Amīniyyān, "Gumāni zanī dar Maydān-i Ṣāhib Ābād va majmūha Ḥasan Pādishāh," Nashriyya-i Dānishkada-i Adabiyyāt va 'Ulūm-i Insānī, Dānishgāh-i Iṣfahān 50 (1386 [2007]): 91-118.
- 11. On the founding of the Maydan-i Sahibabad, see Abū Bakr-i Tihrānī, *Kitāb-i Diyārbakriyya*, ed. Necâti Lugal and Faruk Sümer (Ankara, 1964), 524; and Ḥāfiẓ Ḥusayn Karbalā'ī Tabrīzī, *Rawżāt al-jinān va jannāt al-janān* (Tehran, 1344–49 [1965–70]), 600. On the localization of the plaza, see Tihrānī, *Kitāb-i Diyārbakriyya*, 523; Josafa Barbaro, "Travels of Josafa Barbaro," in *A Narrative of Italian Travels in Persia in the Fifteenth and Sixteenth Centuries*, ed. and trans. Charles Grey (London, 1873), 1–104, at 51; Fazl Allāh b. Rūzbahān Khunjī Iṣfahānī, *Tārīkh-i ʿĀlamārā-yi Amīnī*, ed. John E. Woods (London, 1992), 46. See also Walther Hinz, "Beiträge zur iranischen Kulturgeschichte. 1. Tabrīz," and Walther Hinz, "Nachtragsbemer-

- kung über den Baumeister der Blauen Moschee zu Tabrīz," Zeitschrift der deutschen Morgenländischen Gesellschaft 91 (1937): 58–64, and 421–22. For a synthesis on the Turkmen monuments in Tabriz from textual sources, see Brignoli, "Les palais royaux safavides," 135–45; Aube, "La céramique architecturale en Iran sous les Turkmènes," 1:46–51; Ökten, "Imperial Aqquyunlu Construction"; 'Umrānī and Amīniyyān, "Gumāni zanī."
- 12. Karbalā'ī Tabrīzī, *Rawżāt al-jinān*, 600. Built by Shah Tahmasp I before the Ottoman invasion of 1535, the Sahib al-'Amr Mosque was restored in 1679 and then rebuilt by Ja'far Quli Khan in 1794, following the earthquake of 1780. See Melville, "Historical Monuments and Earthquakes in Tabriz," 171; and Brignoli, "Les palais royaux safavides," 137.
 13. Other buildings surrounded the Qara Qoyunlu palace, but it is not known how they were situated. On Jahanshah's
- it is not known how they were situated. On Jahanshah's palace, see Ṭihrānī, *Kitāb-i Diyārbakriyya*, 437 and 523.
- 14. Karbalā'ī Tabrīzī, *Rawżāt al-jinān*, 598–99.
- 15. See Barbaro, "Travels," 51-52.
- 16. Khunjī Işfahānī, Tārīkh-i 'Ālam-ārā-yi Amīnī, 22, 46, 428 (cited by Karbalā'ī Tabrīzī, Rawżāt al-jinān, 598–99), and see Paris, Bibliothèque nationale de France, Ms. Persan 101, fol. 105.
- Deduced by Sandra Aube, "La céramique architecturale en Iran sous les Turkmènes," from Khunjī Işfahānī, *Tārīkh-i* 'Ālam-ārā-yi Amīnī, 46.
- 18. About the "Hasht Bihisht" type of palace and its development after the reign of Ya'qub in Tabriz, see Brignoli, "Les palais royaux safavides," 140–41.
- 19. This substantial report is found in: Anonymous [Francesco Romano], "The Travels of a Merchant in Persia," in Grey, *Narrative of Italian Travels*, 139–208, at 167–75.
- 20. Karbalā'ī Tabrīzī, Rawzāt al-jinān, 91; Khunjī Iṣfahānī, Tārīkh-i 'Ālam-ārā-yi Amīnī, 94, 442; Būdāq Munshī Qazvīnī, Javāhir al-akhbār: Bakhsh-i tārīkh-i Īrān az Qarā Qūyūnlū tā sāl-i 984, ed. Muḥsin Bahrām Nizhād (Tehran, 1345 [2000]), 80; Qāḍī Aḥmad b. Mīr Munshī, Calligraphers and Painters, trans. Vladimir Minorsky (Washington, D.C., 1959), 33. See also the studies of 'Abdal 'Alī Kārang, Āzār-i bāstānī-i Āzarbāyjān: Āzār va abniyya-i tārīkhī-i sharistān-i Tabrīz (Tehran, 1351 [1972]), 8; and John E. Woods, The Aqquyunlu: Clan, Confederation, Empire; A Study in 15th/9th Century Turko-Iranian Politics (Chicago, 1976), 150; Melville, "Historical Monuments and Earthquakes in Tabriz," 171.
- 21. Karbalā'ī Tabrīzī, *Rawżāt al-jinān*, 600; Qazvīnī, *Javāhir al-akhbār*, 80. It should be noted that Sultan Ya'qub was first buried at Qara Aghach before being transferred to the Nasriyya Mausoleum in Tabriz: Khunjī Işfahānī, *Tārīkh-i 'Ālam-ārā-yi Amīnī*, 94.
- Qazvīnī, Javāhir al-akhbār, 80n4; Darvish Qasim is mentioned in Karbalā'ī Tabrīzī, Rawżāt al-jinān, 89–90.
- 23. See a bayt (couplet) in Khunjī Iṣfahānī, Tārīkh-i 'Ālam-ārā-yi Amīnī, 94 and 442, about the death of Sultan Ya'qub. The term surkh seems to indicate a brick construction rather than tile decoration, since red was not used in ceramics at

that time (unless it describes the interior wall decorations, which could have been red-colored paint instead of tiles?).

- 24. Karbalā'ī Tabrīzī, Rawẓāt al-jinān, 527.
- 25. Khunjī Işfahānī, *Tārīkh-i 'Ālam-ārā-yi Amīnī*, 92 and 428. Karang reports that Nadir Mirza described an architectural decoration made with mosaic tiles (*kāshīhā-yi muʿarraq*), but I was not able to identify this source: see Kārang, *Āṣār va abniyya*, 7–8.
- as being made of marble (reported by Melville, "Historical Monuments and Earthquakes in Tabriz," 171, from Kātib Çelebi's *Cihānnüma*). Stone construction was widespread in Aq Qoyunlu architecture in southeastern Anatolia. There is almost no Aq Qoyunlu architecture left in northwestern Iran; brick masonry was nonetheless preferred in Iran. On this Masjid-i Jami', see Karbalā'ī Tabrīzī, *Rawṣāt al-jinān*, 600; Hinz, "Beiträge," 60; and Lisa Golombek and Donald Wilber, *Timurid Architecture of Iran and Turan*, 2 vols. (Princeton, N.J., 1988), 1:409–10.
- All these events are reported in Melville, "Historical Monuments and Earthquakes in Tabriz," 171.
- 28. Mirza Mahdi Qadi was one of the sons of Mirza Muhammad Taqi, qadi of Tabriz, and a descendant of the Aq Qoyunlu ruler Uzun Hasan, who had made a generous endowment to his descendants through his daughter. Mirza Muhammad Taqi's ancestors are identified as having been in charge of this endowment since at least the reign of Shah Tahmasp II (1722–32), but during the reign of Nader Shah (r. 1736–47), these endowments were removed. See Werner, *Iranian Town in Transition*, 119–21.
- 29. The Iranian team of the Miras-i Farhangi in Tabriz has finally restored this monument: see 'Umrānī and Amīniyyān, "Gumāni zanī."
- 30. Aube, "La Mosquée bleue," 245–46. See also 'Umrānī and Amīniyyān, "Gumāni zanī." On Ottoman architecture, see, among others, Godfrey Goodwin, A History of Ottoman Architecture (London, 1971); Oktay Aslanapa, Turkish Art and Architecture (London, 1971); and, more recently, Gülru Necipoğlu, The Age of Sinan: Architectural Culture in the Ottoman Empire (London, 2005).
- 31. 'Umrānī and Amīniyyān, "Gumāni zanī," 99.
- 32. Aube, "La Mosquée bleue," 259, and fig. 5; Aube, "Tabriz X. Monuments."
- 33. See, for example, a topped, ribbed half-vault found in the ruins of the Mosque of Uzun Hasan, which displays the same kind of composition and motifs as the entry door arch in the vestibule of the Blue Mosque: Aube, "La céramique architecturale en Iran sous les Turkmènes," 3:43B-C. For a typology of the Turkmen repertoire of designs seen on ceramic tile panels, see ibid., vol. 1, chap. 2, pp. 39–58, and vol. 3, pp. 121–63 (illustrations).
- 34. For examples of blue-and-white tiles from the fifteenth century in Iran and Central Asia, see Jean Soustiel and Yves Porter, *Tombeaux de Paradis* (Saint-Rémy-en-l'Eau, 2003), especially 210–12.

- 35. I am very grateful to Dr. Leslee Michelsen, former head of the Curatorial and Research Section at the Museum of Islamic Art, Doha, for kindly granting me permission to publish this ceramic tile.
- 36. Yves Porter has proposed the term "black line" in order to distinguish this technique from items made using the *cuerda seca* (Span., dry cord) technique: see Yves Porter and Gérard Degeorge, *L'art de la céramique dans l'architecture musulmane* (Paris, 2001), 279.
- 37. For evidence of the "black line" in Iran during the fifteenth century, see Bernard O'Kane, "The Development of Iranian 'Black Line' Tiles and the Transfer of Tilework Technology," in *And Diverse Are Their Hues: Color in Islamic Art and Culture*, ed. Jonathan Bloom and Sheila Blair (New Haven, 2011), 175–203; and see the discussion in Sandra Aube, "Le mausolée Zeyn al-'Ābedin à Sāri: Contribution à l'étude des tours-tombeaux du Māzanderān au XVe siècle," *Studia Iranica* 44, no. 1 (2015): 33–54.
- 38. See Lisa Golombek, Robert Mason, Patricia Proctor, and Eileen Reilly, *Persian Pottery in the First Global Age: The Sixteenth and Seventeenth Centuries* (Leiden, 2014), esp. chap. 4 (pp. 169–81).
- 39. Khalida Mahi, "Tile Revetments from the 15th Century in Eastern Anatolia: A Problem of Attribution," in *At the Crossroads of Empires: 14th–15th Century Eastern Anatolia*, ed. Deniz Beyazıt and Simon Rettig (Paris, 2012), 181–205; Aube, *La céramique dans l'architecture en Iran*, chap. 7 (forthcoming).
- 40. See the tile from the Masjid-i Chaduk in Haftadur (1487), or the hexagonal tile kept at the Musée du Louvre in Paris (Département des arts de l'Islam, MAO 2071). Aube, "La céramique architecturale en Iran sous les Turkmènes," 1:89, 2:59-60, 3:20; and Aube, *La céramique dans l'architecture en Iran*, chap. 6 (forthcoming).
- 41. See Golombek, Mason, and Bailey, *Tamerlane's Tableware*, 133–35. I am indebted to my anonymous reader for having drawing my attention to this group.
- 42. No ware or tile painted in black under a yellow glaze is known, though we do have some examples of wares painted in black under a green glaze. See, for example, an inkwell made in Mashhad in 1444–45 now in the Royal Scottish Museum in Edinburgh, inv. 1888.570, published in Golombek, Mason, and Bailey, *Tamerlane's Tableware*, pl. 55, and Porter, *Le prince*, *l'artiste et l'alchimiste*, cat. no. 262, p. 284. As far as I know, however, there is no known tile made with this green glaze.
- 43. Karbalā'ī Tabrīzī, *Rawṣāt al-jinān*, 43; Ṭihrānī, *Kitāb-i Diyārbakriyya*, 523; and Christoph Werner, "Ein Vaqf für meine Töchter: Ḥātūn Ğān Bēgum und die Qarā Quyūnlū Stiftungen zur 'Blauen Moschee' in Tabriz," *Der Islam* 80, no. 1 (2003): 94–109.
- 44. For an illustration of these mihrabs, see also Aube, "La céramique architecturale en Iran sous les Turkmènes," 3:46B and 171–72 (pl. 171B is also published in Aube, "Tabriz X. Monuments," fig. 4).

- 45. For an illustration, see Aube, "La céramique architecturale en Iran sous les Turkmènes," 3:173.
- 46. See Aube, "La Mosquée bleue," fig. 10; and Aube, "Tabriz X. Monuments," fig. 10.
- 47. See Bernard O'Kane, *Timurid Architecture in Khurasan* (Costa Mesa, Calif., 1987), 227–37; and Golombek and Wilber, *Timurid Architecture of Iran and Turan*, 1:334–36. About its relationship to the Blue Mosque, see Aube, "La Mosquée bleue"; Aube, "Tabriz X. Monuments"; and Blair, "Tabriz: International Entrepôt."
- 48. For an illustration of this decoration in the Blue Mosque of Tabriz, see Aube, "La Mosquée bleue," fig. 5a–b; and Aube, "Tabriz X. Monuments," fig. 11.
- 49. One fragment of such a tile piece is kept in a storeroom of the Cité de la Céramique in Sèvres (France), inv. no. MNC 9597.1; another is held by the Los Angeles County Museum of Art, M.2002.1.305, mentioned in Aube, "La Mosquée bleue," 261n78.
- 50. Illustrations of all these tiles are available in Aube, "La Mosquée bleue," fig. 6; Aube, "Tabriz X. Monuments," figs. 13–15; and Aube, "La céramique architecturale en Iran sous les Turkmènes," 3:85–94. I am once again greatly indebted to the late Professor Turabi Tabataba'i for giving me access to his personal archives.
- 51. See the noteworthy publication of Gülru Necipoğlu, *The Topkapı Scroll: Geometry and Ornament in Islamic Architecture; Topkapı Palace Library MS H. 1956* (Santa Monica, Calif., 1995), as well as Necipoğlu "Geometric Design in Timurid/Turkmen Architectural Practice."
- 52. Necipoğlu does not exclude a later date (first half of the sixteenth century): Necipoğlu, *Topkapı Scroll*, 34–39.
- 53. For further details and examples regarding the influence of the Topkapı Scroll drawings on Qara Qoyunlu and Aq Qoyunlu tiles, see Aube, "La céramique architecturale en Iran sous les Turkmènes."
- 54. See Bernard O'Kane, "The Madrasa al-Ghiyāsiyya at Khargird," *Iran* 14 (1976): 79–92; O'Kane, *Timurid Architecture in Khurasan*, 119–30; and Golombek and Wilber, *Timurid Architecture of Iran and Turan*, 1:328–31.
- 55. For recent studies on the Safa Camii in Diyarbakır, see Mahi, "Tile Revetments from the 15th Century in Eastern Anatolia," 181–205; Aube, "La céramique architecturale en Iran sous les Turkmènes," 1:103–7, 2:232–36, 3:99–101.
- 56. See O'Kane, "Development of Iranian 'Black Line' Tiles," 188. Concerning the Mar'ashi Mausoleum in Sâri, see Aube, "Le mausolée Zeyn al-'Ābedin à Sāri," 50–51.
- 57. About this monument, see Ḥusayn Mudarrisī Ṭabāṭabāʾī [Hossein Modarressi Tabatabaʾi], Turbat-i Pākān, Āṣār va bināhā-yi qadīm-i maḥdūda-i kunūnī-i Dār al-Muʾimīn-i Qum = Historical Monuments and Archaeology in the Region of Qom, 2 vols. (Qum, 1354 [1975]), 2:121–22, and pl. 179; O'Kane, Timurid Architecture in Khurasan, 72n49; Golombek and Wilber, Timurid Architecture of Iran and Turan, 1:404–5; Aube, "La céramique architecturale en Iran sous les Turkmènes," 2:93–96.
- Regarding this monument, see, among others, O'Kane, "Madrasa al-Ghiyāsiyya at Khargird"; O'Kane,

- Timurid Architecture in Khurasan, 119–30; Donald Wilber, "Qavam al-Din ibn Zayn al-Din Shirazi: A Fifteenth-Century Timurid Architect," Architectural History 30 (1987): 31–44; and Golombek and Wilber, Timurid Architecture of Iran and Turan, 1:328–31.
- 59. Bernard O'Kane, "Tāybād, Turbat-i Jām and Timurid Vault-ing," Iran 17 (1979): 87–104; and O'Kane, Timurid Architecture in Khurasan, 223–26; Golombek and Wilber, Timurid Architecture of Iran and Turan, 1:344–46, 2:288–93, fig. 96.
- 60. With Tamerlane bringing back craftsmen from all regions during his military conquests, Samarkand soon became an outstanding artistic center. After Tamerlane's death in 1405, his successor, Ulugh Beg, freed these craftsmen (1411), which led to a significant circulation of artisans, skills, techniques, and fashions throughout the Middle East: see Jean Aubin, "Comment Tamerlan prenait les villes," *Studia Islamica* 19 (1963): 83–122, at 104–5; and Lisa Golombek, "Timurid Potters Abroad," *Oriente Moderno*, n.s., 15 (76), no. 2 (1996): 580.
- 61. See Aube, "La céramique architecturale en Iran sous les Turkmènes," 3:8, for the architectural decoration of the Darb-i Imam. The gold has now vanished from the hexagonal green tiles of the Shirin Bika Aqa Mausoleum (Shah-i Zindeh, Samarkand). The original gilded tiles are mentioned in Golombek and Wilber, *Timurid Architecture of Iran and Turan*, 1:243.
- 62. Concerning the Çinili Köşk, see, among others, Gülru Necipoğlu, *Architecture, Ceremonial, and Power: The Topkapı Palace in the Fifteenth and Sixteenth Centuries* (Cambridge, 1991), 212–17; Necipoğlu, "From International Timurid to Ottoman," 136–59; and John Carswell, *Iznik Pottery* (London, 1998), 27.
- 63. See, for instance, Norah Titley, Persian Miniature Painting and Its Influence on the Art of Turkey and India (London, 1983), pl. 5; Thomas W. Lentz and Glenn D. Lowry, Timur and the Princely Vision: Persian Art and Culture in the Fifteenth Century (Los Angeles, 1989), 238; Basil W. Robinson, Persian Paintings in the India Office Library (London, 1976), pl. 98.
- 64. The petition is kept in Istanbul, Topkapı Sarayı Arşivi, E.3152; see Necipoğlu, "From International Timurid to Ottoman," 137.
- 65. Bernard O'Kane has already remarked that the Çinili Kösk seems closer to Tabrizi than Herati traditions: "Its foreignness to the traditions of Ottoman architecture is not in dispute, but although tileworkers from Khurasan are known to have completed a pavilion in the Topkapi Palace, the decoration of the Tiled Kiosk is closer to Tabriz than to Herat, indicating Aqqoyunlu as much as Timurid links": see Bernard O'Kane, "From Tents to Pavilions: Royal Mobility and Persian Palace Design," in "Pre-Modern Islamic Palaces," ed. Gülru Necipoğlu, special issue, *Ars Orientalis* 23 (1993): 249–68, at 252. Moreover, we know from the historian Mu'ali that designers from Khurasan worked on the Mehmet Fatih Camii in Istanbul (ca. 1463–1470): regarding this architectural decoration, see Necipoğlu, "From International Timurid to Ottoman," 137; Nurhan Atasoy and Julian Raby,

Iznik: La poterie en Turquie ottomane (Paris, 1994), 88; and Carswell, Iznik Pottery, 27. This decoration is stylistically close to ceramic tiles displayed at the Üç Şerefeli Camii in Edirne (rebuilt or completed in 1437–48). Perhaps, then, these two ceramic tile decorations on structures built for Sultan Mehmet II might be connected to the Khurasani petitioners.

- 66. About Turkmen architectural decorations, see Aube, "La céramique architecturale en Iran sous les Turkmènes," 1:272–308. About the arts of the book, see, among others, Brend, Perspectives on Persian Painting, 105–6 (on exchanges between Herat and Turkmen courts); David J. Roxburgh, ed., Turks: A Journey of Thousand Years, 600–1600 (London, 2005), 200; and Rettig, "La production manuscrite à Chiraz."
- 67. In his study of Aq Qoyunlu metalworks from southeast Anatolia, James Allan demonstrates how this production was characterized by local legacies as well as Mamluk and Timurid influences: James W. Allan, "Metalwork of the Turcoman Dynasties of Eastern Anatolia and Iran," *Iran* 29 (1991): 153–59. See also Sylvia Auld's interesting contributions on the metalwork productions of Mahmud al-Kurdi in
- the fifteenth century and its hypothetical links with western Iran and Tabriz: Sylvia Auld, "Master Mahmud: Objects Fit for a Prince," in *Arte veneziana e arte islamica: Atti del primo Simposio internazionale sull'arte veneziana e l'arte islamica*, ed. Ernst J. Grube, Stefano Carboni, and Giovanni Curatola (Venice, 1989), 185–201; Sylvia Auld, "Maître Mahmûd et les métaux inscrustés au XVe siècle," in *Venise et l'Orient, 828–1797*, ed. Stefano Carboni (Paris, 2006), 212–25. See the discussion of "western *nasta lia*" in Rettic. "La pro-
- 68. See the discussion of "western *nasta'liq*" in Rettig, "La production manuscrite à Chiraz," 1:144–55, and in the three following articles by Priscilla Soucek in *Encyclopaedia Iranica* 1/2 (1982), s.vv., "'Abd-al-Raḥmān Kvārazmī,"; "Abd-al-Raḥm Kvārazmī,"; "Abd-al-Raḥmān Kvārazmī."
- 69. Aube, "La Mosquée bleue," 266-69, and fig. 9.
- 70. For recent research on the "Masters of Tabriz," see Mahi, "Tile Revetments from the 15th Century in Eastern Anatolia"; Blair, "Tabriz: International Entrepôt"; Aube, "La céramique architecturale en Iran sous les Turkmènes"; and Aube, *La céramique dans l'architecture en Iran*, chap. 7 (forthcoming). See also Mahi, "La céramique architecturale des 'Maîtres de Tabriz."