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## **Mamluk metalwork fittings in their artistic and architectural context**

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### **Citation**

Mols, L. E. M. (2006, October 24). *Mamluk metalwork fittings in their artistic and architectural context*. Retrieved from <https://hdl.handle.net/1887/4954>

Version: Not Applicable (or Unknown)

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**Note:** To cite this publication please use the final published version (if applicable).

## CHAPTER 1

# The Artistic Scene: Fittings in the Muslim East and West

### INTRODUCTION

Mamluk metalwork fittings have survived in more than 50 buildings.<sup>1</sup> The number of fittings that are found in these constructions today ranges from one to more than 20. To this body of material can be added a group of Mamluk fittings that were at some stage detached from their original context. The uniqueness of this survival rate will perhaps dawn upon us only if we compare this situation to that of other traditions within the Islamic context that were contemporary to, or that slightly preceded, the Mamluks, in the Muslim East and West alike. In order to trace the scope of the craft elsewhere, the extant doors, doorknockers, and window grilles in three regions, i.e. Spain and Morocco, Iran, and the Jazīra, will be inventoried and classified according to their design. This overview should be regarded as preliminary, as this study is based on a discussion of objects that have been published. A systematic search for metalwork fittings in these areas might yield more information and objects from which a different picture of this craft might emerge. While such a search is beyond the scope of the current study, the material presented below nevertheless suggests a likely order of magnitude for the medieval production of metal fittings in these areas.

### 1.1 SPAIN AND MOROCCO

In contrast to the situation in the Jazīra and in Iran, it is striking that most metalwork fittings that have survived in the Muslim West are still fixed in their original surroundings. The number of metalwork fittings that have survived is, however, limited as are the categories of the objects that are extant.<sup>2</sup> Indeed, doors and doorknockers are the only two groups of fittings of which specimens are extant, whereas no window shutters or ornamental metalwork grilles are recorded in any of the sources consulted for this section.<sup>3</sup>

One feature that all extant medieval metalwork doors in Muslim Spain and Morocco share is that metal covers the entire surface of the wooden support, hiding the latter from view. Two different designs were applied on these metalwork doors, one consisting of a geometric design composed of small plaques and another, much simpler, design built up of metal bands only. The latter type features overlapping oblong metal bands which are attached to the wooden support with horizontal rows of nails. The surface of these bands is left undecorated. Multiple examples of this are found in the Alhambra in Granada, such as the metal

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<sup>1</sup> If undecorated grilles and plain metal bands attached to wooden doors had been included in this study as well, the number of extant constructions with Mamluk metalwork fittings would easily be tripled.

<sup>2</sup> It is not entirely surprising that the number of extant metalwork fittings is limited for the metalwork tradition in the medieval period in the Maghrib in general is feeble when compared with the huge output – of portable metalwork objects especially – in the Mashriq.

<sup>3</sup> The preferred materials for grilles in this period in the Muslim West were marble, stucco, and wood. Geometric motifs, among which star patterns were common, were preferred for grilles, as is illustrated for example by the marble window screens based on stars or hexagons in the *qibla* wall of the Great Mosque of Cordoba, published by Brisch (1966), 7–12, pls. 4–5, 7–8, 43b–44. For stucco windows with different star patterns found in the Bu 'Ināniya *madrassa* (1355) in Fez and – in a coloured variety – in the arch of the *mihrāb* of the Qarawiyyīn mosque in Fez (531/1136), see Landau (1967), 130 and 88, respectively.

doors positioned in the Puerta de la Explanada, the Puerta de las Albercas, the Puerta de las Armas and the Puerta del Arzabal, where their simplicity contrasts surprisingly with the decorative excess of the rest of the Alhambra.<sup>4</sup> The absence of adornment does, however, emphasize their protective and defensive qualities. The type had been established before, as attested by the door in a portal in the Great Mosque of Cordoba, added by al-Hakam II in 351/962.<sup>5</sup>

The ornamentation of doors embellished with a geometric pattern is more elaborate. There, the wooden surface is covered with a multitude of small plaques nailed closely together; the design has no centralised focus. Two sub-types may be distinguished: geometric design composed of star patterns and another built up of hexagons. Three doors belong to the latter sub-type. Two of these, i.e. the Puerta del Perdón in the Great Mosque in Seville (568–72/1172–76)<sup>6</sup> and the Puerta del Perdón in the Great Mosque of Cordoba (1377 AD),<sup>7</sup> are identical in layout and in the chosen technique of casting. Both consist of horizontally and vertically positioned hexagonal plaques surrounded by framing strips that alternate with plaques in the shape of 4-pointed stars. The hexagons on both doors are decorated with kufic inscriptions and foliate motifs; in Cordoba, Latin is added to the decorative repertoire, for the vertically placed hexagons contain a cross flanked by the letters *d e u s* adorning the centre of the vertically placed hexagons. An inscription band in Latin edges the doorleaves in Cordoba, while in Seville a narrow band with Arabic inscriptions surrounds the sides of the two leaves in Seville. Irrespective of the use of different scripts, the correspondences between the doors are such that the door in the Great Mosque in Cordoba, made 200 years after that in Seville, is either a deliberate revival of an appreciated model or is part of a continuous tradition whose intervening specimens have vanished. The design of the third specimen belonging to this sub-type, i.e. the entrance door of the Qarawiyyīn mosque in Fez (531/1136), differs from the other two doors not only in that its geometric pattern is more varied, composed as it is of hexagons and squares embracing a rosette, but its distribution differs considerably from the other two as the small plaques are confined between clearly demarcated horizontal tiers.<sup>8</sup> These differences between the Spanish and Moroccan examples suggest that they represent separate traditions.

Of the second sub-type, which is characterised by an overall star pattern, only two examples are extant, i.e. an entrance door to the Qarawiyyīn mosque in Fez (531/1136)<sup>9</sup> and an entrance door to the mosque and mausoleum of Abū Madyān Shu‘ayb in Tlemcen (731–49/1331–48).<sup>10</sup> Although they share some characteristics, such as the absence of inscriptions, their differences indicate that the latter door is not modelled upon the older door in Fez. This is shown by the layout of the field which, in the case of the door in the Qarawiyyīn mosque in Fez, is subdivided into horizontal tiers that are filled with a repetitive pattern of a 6-pointed star adjoining six hexagons.<sup>11</sup> On the 14<sup>th</sup>-century door in Tlemcen, the star pattern is not interrupted by horizontal tiers but instead is spread out over the entire surface. Moreover, the pattern is more diverse as 16-pointed stars alternate with 8-pointed stars.

<sup>4</sup> For the first two doors, see Fernández-Puertas (1997), 294, 30. For the last two doors, see Dodds (1992), 156, pl. 2 and 157, pl. 4.

<sup>5</sup> Dodds (1992), 19, pl. 9.

<sup>6</sup> Goodwin (1990), 29; Ewert (1997), 173–74, pl. 107.

<sup>7</sup> Kühnel (1924), 69, pls. 80–82; Torres Balbás (1949), 407, pl. 480.

<sup>8</sup> For the door *in situ*, see Landau (1967), 66, and, for some detached plaques that belonged to this door, see Ettinghausen (2001), 283. These plaques are now in Fez, in the Dār Batha Museum.

<sup>9</sup> Marçais (1903), pl. 18, fig. 58; Marçais (1950), 72, pl. 32; Hutt (1977), 124, pl. 68; Blair & Bloom (1994), 119–20, pl. 154.

<sup>10</sup> Landau (1967), 86. Here, only part of the door is depicted. Details of the surface decoration are difficult to perceive.

<sup>11</sup> The tiers are separated from one another by horizontal rows of pointed fluted nails in relief, a subdivision also found on the overall hexagon door in the same mosque.

With respect to doorknockers, two different types can be distinguished in the Muslim West, although the extant examples are, again, limited. One group is characterised by hangers with an interior openwork foliate motif and an enclosing inscription band written in a cursive script. The pair attached to the Puerta del Perdón in the Great Mosque of Seville (568–72/1172–76) is certainly the best known.<sup>12</sup> Each of the cast hangers is round, slightly elongated in shape, and ends in a trefoil finial. Its foliate interior consists of openwork palmettes and half-palmettes whose surface is engraved with curvy hatched lines that accentuate the vegetal motif. This openwork pattern is surrounded by a closed cusped band decorated with an inscription in *naskh* surrounded by foliate stems.<sup>13</sup> The pair of doorknockers in the Puerta del Perdón in the Great Mosque of Cordoba (1377 AD) resembles closely the main characteristics of the doorknocker in Seville which, again, poses the question whether they were a conscious revival of the hangers in Seville or rather adhered to a tradition of which no specimens survive to bridge the gap between Seville and Cordoba. The pair differs, however, from its forerunner in the details, not least in that the cusped band surrounding the central foliage is decorated with a Latin inscription, not surprisingly as this was probably a Christian artefact.<sup>14</sup> Besides these seemingly related doorknockers, there is another piece that conforms to this design, i.e. a knocker formerly attached to one of the doors in the Qarawiyyīn mosque in Fez (531/1136).<sup>15</sup> It consists of a round hanger whose rim contains an inscription in *naskh* interrupted by roundels enclosing a leaf motif. It has a multi-foil opening at its core. From each lobe emanates a protruding trefoil that points towards the centre.<sup>16</sup> As its openwork foliate motif differs considerably from the two other doorknockers that were dominated by palmettes, a connection between them seems unlikely.

The second type of doorknockers – represented by one pair of hangers only, attached to the overall star pattern door in the mosque and mausoleum of Abū Madyān Shu‘ayb in Tlemcen (731–49/1331–48) – is characterised by an openwork star design.<sup>17</sup> The cast hanger is round in shape with a cusped edge and has a trefoil finial at its base that protrudes downwards. At the centre of its openwork interior is an 8-pointed star that adjoins eight kite-shaped figures and eight hexagons. At the centre of each hexagon is a trefoil that points outwards. This design was, in all probability, chosen deliberately in order to create a visual relationship between the hanger and the star pattern of the door to which it was attached.

All in all, the number of extant objects is so small that it actually hampers the study of the evolution of the designs for metalwork doors and doorknockers in Muslim Spain and Morocco.

<sup>12</sup> For a description of the knocker, see Ewert (1997), 174, pl. 107 and Dodds (1992), 79, pl. 6.

<sup>13</sup> The inscription is religious in content and contains the *bismillah*, a blessing on the Prophet, and Qur’ān 15:46–48 that speaks of the resting place of the believers in paradise.

<sup>14</sup> Kühnel (1924), 81–82. It differs from the Seville doorknocker in its openwork decoration as well, which consists of a large central palmette surrounded by trefoils that point outwards. Its surface is decorated with curvy lines.

<sup>15</sup> Landau (1967), 86–87. The hanger is now in Fez, the Dār Batha Museum. According to Ewert (1997), 174, the inscription on a non-specified doorknocker in this mosque mentions Fez as its place of manufacture. It is unclear, however, whether he refers to this particular doorknocker.

<sup>16</sup> Through a hole at its top, the hanger is suspended to a suspension hoop that is crowned by an upright dome-like shape. Of the three hangers, it is the only one with a suspension disk. The circular suspension disk has a large double tiered boss at its centre. It is surrounded by a flat circular band with openwork foliate motifs.

<sup>17</sup> For a depiction of one of the hangers, see Hutt (1977), 124, pl. 68; for a drawing, see Marçais (1903), fig. 58c.

## 1.2 MONGOL AND TIMURID METALWORK FITTINGS

Extant metalwork fittings from the Mongol and Timurid era are scarce; those studies that concentrate on the architecture of these dynasties have recorded almost no metalwork objects that still survive *in situ*.<sup>18</sup> Of those metal fittings that are still extant, a proper study is hampered by the fact that many are either detached so that their original provenance and context are lost to us or they are preserved only in part. This scarcity of fittings does not, in all probability, represent the actual situation. Firstly, the huge quantities of extant Khurasani metalwork objects, portable on the whole, imply the existence of a well-established craft and the presence of skilled craftsmen who would have been able, if needed, to apply the same techniques for fittings as well.<sup>19</sup> In addition, the deployment of huge numbers of metalworkers manufacturing fittings is, actually, described by al-Nuwayrī who, recording the construction of the Mongol city of Sultaniyya between 705/1305 and 713/1314, mentions a staggering number of 3000 smiths working on parts of fittings such as sheets of metal, windows, and nails.<sup>20</sup> To this can be added the presence of metalwork fittings in palaces and city gates depicted in miniature paintings, from which information can be extracted to form a more varied picture of Mongol and Timurid fittings than that which would appear from the surviving objects alone.

Irrespective of these disadvantageous circumstances, several studies have focused on grilles and doors from the Mongol to the Safavid period.<sup>21</sup> In the following section, evidence from these studies will be combined with extant objects and depictions in miniature paintings in order to present an overview of the tradition of doors, doorknockers, and window grilles in the Muslim East during Mongol and Timurid times.

The only type of Mongol or Timurid metalwork door for which evidence is available in the form of extant specimens and pictorial information alike is the door featuring (oblong) metal bands. Two epigraphic plaques of iron still exist which formerly adorned one of the city gates of Baghdad, as their Arabic inscription specify.<sup>22</sup> The style of the script points to a date in the early 14<sup>th</sup> century.<sup>23</sup> Moreover, the presence of doors with metal bands – either containing epigraphy or left undecorated – is attested in miniature paintings of the Mongol period as exemplified in the *Jāmiʿ al-Tawārīkh* of Rashīd al-Dīn dated 714/1314<sup>24</sup> and in the Demotte *Shahnāma*, circa 1335–40 AD.<sup>25</sup> When epigraphy occurs in these drawings, the oblong bands seem to be engraved instead of being in openwork. In addition, a door entirely covered with oblong bands with large-headed nails belonging to a castle is depicted in the *Jāmiʿ al-Tawārīkh* of Rashīd al-Dīn.<sup>26</sup> The practice of attaching either a limited number of metal bands to doors or covering them

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<sup>18</sup> For the Mongol period, see Wilber (1955), who recorded and described 119 monuments but makes no mention of any metalwork fitting. He also recorded the names of 21 craftsmen that left their signatures in these buildings, some self-described as tile-cutters, builders, or masons, but again none are metalworkers: Wilber (1955), 45–46. For the Timurid period, see O’Kane (1987), who lists 61 monuments but no metalwork fittings. Golombek & Wilber (1988) recorded 285 Timurid monuments but the only metalwork fitting to which they refer are the two pairs of doorknockers in the mausoleum of Ahmad Yasavī in Turkestan (799–801/1397–99).

<sup>19</sup> For an analysis of Khurasani metalwork artefacts, see Melikian-Chirvani (1974); (1975), (1975a), (1976), (1977), and (1982), pp. 23–135.

<sup>20</sup> Little (1978), 173.

<sup>21</sup> For doors and grilles made of iron and steel, see Allan and Gilmour (2000), 283–303; For the steel doors and grilles of the mausoleum of Sultan Uljaytu, see Allan (forthcoming); For silver door-facings from the Safavid period, see Allan (1995).

<sup>22</sup> Allan (2002), 96–98. The inscription on one plaque consists of Qurʾān 57:25, which reads “We sent down iron, in which is great strength and profitable use for men”. The inscription on the other says “This is one of the Gates of Dār al-Salām [Baghdad] and the place where men dismount”.

<sup>23</sup> Allan (2002), 98.

<sup>24</sup> Talbot Rice (1976), 41, no. 1 and 157, no. 59.

<sup>25</sup> Welch (1985), 55, no. 23. Here, two such doors are depicted with a gold coloured epigraphic band near the top and a band filled with foliate motifs in identical colour near the base of the door.

<sup>26</sup> Idem, 48, 18 fol.3r.

entirely with metal was already an established tradition before Mongol times that continues even up to the present day in Iran.<sup>27</sup>

Scant evidence points to the existence of three other designs for doors executed in metal, namely doors divided up by panels, doors decorated with star patterns, and doors the main ornament of which is a medallion. A 14<sup>th</sup>-century panelled door, consisting of numerous identical recessed square panels filled with simple geometric ornament, is still extant in the Imamzadeh-yi Darb-i Ahanin near Nurabad in Fars.<sup>28</sup> The panels are formed where horizontal and vertical iron bands overlap. Although doors divided into square or rectangular panels do occur in miniature paintings as well, the choice of colour – a dark-brown support with details set in light-brown and black – suggests the material depicted is wood instead of metalwork.<sup>29</sup> Evidence supporting the existence of doors decorated with star or hexagon patterns is also scarce, as this type is represented by only one extant plaque in the shape of a hexagon that is inlaid with gold, silver, and copper.<sup>30</sup> It is decorated with a central inscription, namely the word ‘Allāh’ executed in knotted kufic, embedded in a lobed medallion and surrounded by foliate scrolls. Holes in the plaque indicate the position where nails could be inserted to attach it to a support. The third design for metalwork doors, those with a central medallion, is known only from the Safavid period when they were executed in silver.<sup>31</sup> Their existence in the Mongol period is attested by their presence in miniature paintings such as those in the Demotte *Shahnāma*.<sup>32</sup> Their depiction and colouring suggests, however, that these were wooden doors with a carved or painted surface instead of a metal-faced one.

So far, only two pairs of doorknockers from the Mongol and Timurid era have received attention, but they have figured in numerous studies. They are of cast bronze inlaid with gold and are attached to the mausoleum of Aḥmad Yasavī in Turkistan, which was erected between 799/1396 and 801/1399.<sup>33</sup> The two pairs are characterised by hangers with an interior openwork foliate motif and an enclosing inscription band written in a cursive script. The round hangers have a cusped edge from which emanate four bifurcated leaves, two near the top and two near the base of the hanger. At its base the hanger has a trefoil finial that protrudes downwards. Its interior is filled with two palmettes in mirror image surrounded by foliate scrolls while the cusped edge has an engraved inscription in *naskh*, a design also used on the knockers in Seville and Cordoba.<sup>34</sup> At its upper side the hanger is crowned by two small protruding lion heads which are located

<sup>27</sup> For the tradition of iron doors preceding that of the Mongols, see Allan (1979), 99, 140. For pre-Mongol examples of the type with a restricted number of bands, see Allan & Gilmour (2000), 292.

<sup>28</sup> Allan & Gilmour (2000), 293.

<sup>29</sup> For depictions of this type of door depicted in the Demotte *Shahnāma*, ca. 1335–40, see Lowry & Nemazee (1988), 81, 83. For an example in the *Khamṣa* of Khwāja Kirmānī, dated 841/1437, see eidem (1988), 142.

<sup>30</sup> This plaque is in the Kuwait National Museum, inv. no. LNS 5M. See Jenkins (1983), 92.

<sup>31</sup> Allan (1995), 127–35, pls. XVI–XXII.

<sup>32</sup> Grabar & Blair (1980), 75, no. 9; Welch (1985), 54, no. 22.

<sup>33</sup> One pair is nailed to the main entrance door of the complex while the other is attached on the entrance door to the mausoleum proper. Only Deniké (1935), 79, pl. 13 presents a photograph of the door inclusive of the pair of doorknockers that leads to the mausoleum. For an overview of the entrance door and its doorknockers in the entire complex, see Pope & Ackerman (1938–67) VI, no. 1467 and Blair & Bloom (1994), 55, pl. 72. For a more detailed photograph of the knocker, see Lentz & Lowry (1989), 208, pl. 68. For the translated inscriptions, see Blair & Bloom (1994), 55–56; Golombek & Wilber (1988), 287; Komaroff (1992), 28–29. Unfortunately, none of the latter three studies give a transcript of the original inscription. Moreover, they omit any reference to the inscription positioned on the rectangular suspension plaque.

<sup>34</sup> The inscription contains a verse from Sa’dī’s *Gūlistān*, the date 799/1396–97, and the name of the metalworker. His signature reads: “Work of the slave ‘Izz al-Dīn b. Tāj al-Dīn al-(sākī?)”. The doorknocker attached to the mausoleum carries a slightly different signature, and includes the *nisba* Isfahānī: “work of the slave ‘Izz al-Dīn b. Tāj al-Dīn al-Isfahānī”. Timūr is known for his forced transfer of craftsmen to work for him. Among them were two goldsmiths bearing the *nisba* al-Shīrāzī. For more information on the forcible movement of craftsmen, see Golombek & Wilber (1988), 35–36.

at the base of two upright suspension devices. A suspension pin in the shape of a large lion's head is set between them.<sup>35</sup>

Other evidence of doorknockers is provided by a 19<sup>th</sup>-century photograph of a wooden door with carved panels in Samarqand.<sup>36</sup> This Timurid door in the Shah-i Zindah complex in Samarqand contains a staggering total of nine doorknockers, consisting of simple hangers in the shape of rings and teardrop-shaped hangers with trefoil finials filled with openwork foliate motifs.<sup>37</sup> Depictions of doorknockers in miniature paintings provide further ground for suggesting a wider variety in the design of doorknockers than is suggested by the extant objects. The designs vary from simple ring-shaped hangers<sup>38</sup> such as those mentioned above, some of which are inclusive of a trefoil finial that points downwards,<sup>39</sup> to a triangular hanger with a trefoil finial attached to a suspension ring.<sup>40</sup> In addition, doorknockers composed of suspension disks in the form of large lion heads with a ring through the mouth recur several times.<sup>41</sup>

The third category of Mongol and Timurid metalwork fittings of which both extant objects and miniature paintings give evidence are grilles, which served various purposes. Besides being positioned into window frames, they also functioned as part of doors where they were inserted into the wooden or steel support. From the 15<sup>th</sup> century onwards at least, they were positioned around the cenotaph in mausoleums to protect it from physical harm while simultaneously allowing the visitor a proper view of it.

Besides the extant grilles themselves, pictorial and textual evidence also point to the existence of one design only for metalwork grilles: that which is composed of bosses and bars.<sup>42</sup> A number of individual bosses, separated from their original context, have been identified as Mongol.<sup>43</sup> Three of them are made of bronze inlaid with gold and silver. One of these has a front subdivided into circular bands: geometric fretwork fills the roundel in the centre. This is surrounded by a lobed medallion filled with foliate motifs, followed again by a band with fretwork. The outer band contains the titles of Sultan Uljaytu. According to European travellers, this type of inlaid boss adorned the gates of the mausoleum of Sultan Uljaytu.<sup>44</sup> These loose components cannot, however, be attributed to this particular building, as the material described for the grilles that were inserted in the gates of the mausoleum was steel, which was decorated with gold and silver instead of the bronze base of which these bosses were made.

The decorative repertoire of this type of boss ranged even further, as is exemplified by the figural imagery on another surviving boss.<sup>45</sup> A mounted falconer, inlaid with silver, gold, and a black organic

<sup>35</sup> On the door giving entrance to the entire complex, the hanger and pin are attached to a large rectangular plaque which is crowned with an openwork border of enclosed trefoils. Just below this is an oblong band with small foliate motifs. The rectangular plaque is further subdivided into two fields: a small oblong band with an inscription in gold *thulth* and a large rectangular panel filled with foliate motifs inlaid with gold. There are four large round-headed nails, two at the base and two near the top of the plaque.

<sup>36</sup> Naumkin (1992), 34, pl. 14. Two of the teardrop-shaped knockers are also depicted in Deniké (1935), 76, pl. 12.

<sup>37</sup> Their erratic distribution on the door, combined with their sheer number suggests that most of them were not part of the original layout but were attached later. From the vague impression of the doorknockers on the photograph it is impossible to deduce which could be original. They present, however, a glimpse of the existence of a variety of types of doorknockers.

<sup>38</sup> Examples of this are to be found in the *Jāmi' al-Tawārīkh* of Rashīd al-Dīn, dated 714/1314, published in Talbot Rice (1976), 157, no. 59, and in a copy of the *Khamsa* of Khwāju Kirmānī, dated 841/1437, published in Lowry & Nemazee (1988), 143, no. 40.

<sup>39</sup> Examples of this are in the *Khamsa* of Nizāmī, Herat 1431, fol. 251r, published in Sims (2002), 173, no. 89 and in a copy of the *Kalīla wa Dimna*, copied in Tabriz between 813/1410 and 830/1425, fol. 169r, and published in eadem (2002), 291.

<sup>40</sup> For its depiction in the Demotte *Shahnāma*, 1335–40, see Welch (1985), 55, no. 23.

<sup>41</sup> Examples of a lion-headed suspension disk are found in the Demotte *Shahnāma*, 1335–40, published in Lowry & Nemazee (1988), 91, and in a copy of al-Bīrūnī's *al-Āthār al-Bāqīya*, Tabriz 1306–7AD, folia 93v, published in Sims (2002), 44, no. 60.

<sup>42</sup> There is no evidence found so far that points to a tradition of geometric or star pattern grilles executed in metalwork in this period. These were, however, present in the Timurid period in other materials, such as marble. See the carved grille from the Gur-i Amir in Samarqand, circa 1404 AD, published in Lentz & Lowry (1989), 211, pl. 73. Orazi (1976) shows that in the Safavid period, woodwork gratings with star pattern designs abound in many structures, and their variety and degree of complexity is astounding.

<sup>43</sup> Pope & Ackerman (1938–67) II, 1361; III, 2505; VI, pl. 1357A.

<sup>44</sup> For a concise description, see Allan & Gilmour (2000), 285.

<sup>45</sup> Komaroff & Carboni (2002), 125, pl. 145, cat. no. 171. It is dated to the beginning of the 14<sup>th</sup> century.

material, is represented in the central roundel surrounded by foliate scrolls. The image suggests that the grille was used in a palatial or worldly context. Several scenes in the Demotte *Shahnāma* show the common use of the bosses-and-bars type as window grilles in palatial or castle-like structures.<sup>46</sup> The bosses depicted are either square or cuboid, but further details as to surface decoration are absent.

In the Imām Rīza Museum in Mashhad two complete steel grilles that functioned as the two leaves of a door remain from the Timurid period.<sup>47</sup> They were ordered by Shāh Rūkh for this mausoleum in 1414 AD. Two long inscriptions crown the top of the grille.<sup>48</sup> Besides this complete grille, three faceted bosses with their cylindrical shafts still attached give evidence of the existence of brass grilles with gold inlay in the 15<sup>th</sup> century.<sup>49</sup> Their lozenge-shaped fronts are engraved with part of an Arabic inscription between foliate motifs, while the reverse is decorated with a palmette and arabesques on a cross-hatched ground.

Both the extant fittings and the available pictorial information indicate that the makers of fittings did apply a wide variety of designs for doors and doorknockers in the Mongol and Timurid period. With respect to grilles, the variation in the repertoire of decorative motifs and the high level of craftsmanship are apparent. The scarcity of surviving specimens still fixed in their original surroundings makes it difficult, however, to trace their development throughout the Mongol and Timurid period.

### 1.3 THE JAZĪRA

Both doors and doorknockers testify to a lively tradition of embellished metalwork fittings in Islamic architecture in the Jazīra between the late 12<sup>th</sup> and first half of the 13<sup>th</sup> century. With respect to metal-faced doors, the only design that is represented in the Jazīra is that which features an elaborate star pattern as the main ornament. In addition to this star design, an inscription band and a border frame complement the layout of such doors. These characteristics occur in three doors: that made for the palace of Nūr al-Dīn Muḥammad b. Qarā Arslān in Āmid, datable between 578/1183 and 581/1185, that for the Ulu mosque in Cizre, manufactured between 604/1208 and 638/1241, and that in the mausoleum of ‘Awn al-Dīn in Mosul, built between 631/1233 and 657/1259.<sup>50</sup>

To what extent do the designs and techniques used on these doors overlap? All three doors share the central star pattern, but a standardized location for inscriptions is absent, as is a consistent notion of the elaborateness of the border bands. Moreover, if one compares the composition of the star pattern and the technique used for the geometric design and inscriptions, there are some marked differences. The earliest door, that made for the palace in Āmid, gives evidence of the wide technical skills of its maker who employed two different casting techniques, i.e. the lost-wax technique and sand-casting, in addition to engraving, inlaying, and perforating. The later door in Mosul is far more simple, for the maker cut the star pattern from strips – instead of adding cast openwork plaques as on the other two doors – which he then

<sup>46</sup> Grabar & Blair (1980), 61, no.2; 73, no. 8; 77, no. 10; and 143, no. 43.

<sup>47</sup> Arts (1976), no. 245.

<sup>48</sup> Besides the titles of the patron, a pious invocation and the date (i.e. *Muḥarram* 817/1 to 30 April 1414), the inscription mentions four craftsmen in total, making a distinction between the ‘master’ and the ‘master-inlayers’.

<sup>49</sup> Bonhams (14 October 1998), 19, 27, lot. 110.

<sup>50</sup> Descriptions of these three doors are given in the appendix to the catalogue, i.e. cat. nos. III/1: Plate 273, VI/1: Plate 280 and VII/1: Plate 282, respectively. The door made for the palace in Āmid has not survived, but its description is handed down by its maker, al-Jazarī, who included details of its manufacture in a technical treatise. For the latter, see Jazarī (1990), 327–36.



nailed onto the wooden support. Moreover, there is a clear contrast between the fine execution of the engraved inscription on the palace door in Āmid, and the thick cast letters on the other two doors.<sup>51</sup>

The differences in execution and design strongly suggest that the two later doors were not directly modelled upon the palace door in Āmid. The exuberance of the early palace door is in all probability related to the input of money directly from the court, which enabled the maker to employ time-consuming techniques and to apply precious metals. Moreover, the high quality of this door may well have been intimately linked with the individual technical skills of al-Jazarī, the craftsman responsible for the palace door. The three doors do show, however, that the practice of combining star patterns with inscription bands and a border frame had taken root in the Jazīra in the 13<sup>th</sup> century. The actual geographical distance between the doors, in addition to other factors such as the available money and technical skills, may explain the individual approach in the execution of these doors.

In comparison with doors, doorknockers originating from the Jazīra form a larger body of material. Among them, two main designs can be distinguished, namely doorknockers featuring dragon-handles and those with an interlace hanger. Those with dragon-handles appear in two different designs. The one represented by four different specimens consists of a pair of full-bodied dragons, either with facing or averted heads, whose bodies touch at the lower level where their tails intertwine.<sup>52</sup> Often the head of a lion or feline, crowning the suspension pin, is set between the dragon heads. The hangers can be attributed with certainty to the Jazīra as the provenance of two of these hangers is known: one pair was made by al-Jazarī for the palace doors at Āmid, manufactured between 578/1183 and 581/1185, while the other pair was made for the entrance door to the Ulu mosque in Cizre, which was restored between 604/1208 and 638/1241. What remains uncertain, however, is when the fashion for dragon-handles began and whether al-Jazarī was actually responsible for introducing this design for metalwork hangers. Different scenarios may be developed to explain the dissemination of this particular design, ranging from the involvement of itinerant metalworkers to patrons ordering such hangers in workshops specialising in, or renowned for, this particular type of design.

Besides these full-bodied dragon-handles, there is another extant specimen attributed to the Jazīra that uses the dragon as its starting point, but in a different design. It is round in shape, and composed of six paired dragon heads, which are linked to each other by their beaks, ears and necks.<sup>53</sup> The head of a lion crowns the suspension pin that is set between the two dragons at the top of the hanger. The use of the dragon motif on doorknockers in the Jazīra is not coincidental. It seems closely connected to the practice in Seljuq architecture of having carved lions and dragons on the façades and entrance portals of secular and religious

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<sup>51</sup> These thick cast letters are identical in technique to that of the inscriptions on the citadel doors in Aleppo (for a description, see the appendix of the catalogue, cat. nos. IV/1: Plate 276 and IV/3: Plate 278), dated 608/1211–12 and 606/1209–10. Moreover, it is remarkable that the position of the inscriptions on the door in Mosul is identical to that on these selfsame citadel doors, i.e. embedded within the central design, a location otherwise not found on metalwork doors.

<sup>52</sup> Four different hangers can be distinguished: 1: The doorknocker (cat. no. III/2: Plate 274) on the door of the palace at Āmid, manufactured in between 578/1183 and 581/1185 and described and drawn by its maker al-Jazarī, see Jazarī (1990), 334–35 and cat. no. III/2; 2: a pair (cat. no. VI/2; 281), formerly attached to the Ulu mosque at Cizre (the former Jazīrat b. ‘Umar), one of which is housed in Istanbul, the Museum of Turkish and Islamic Art, inv. no. 3749 and the other in Copenhagen, The David Collection, inv. no. 38/1973, see cat. no. VI/2; 3: a single knocker, provenance unknown but acquired in Tiflis, Georgia, now in Berlin, Museum für Islamische Kunst, inv. no. I.2242, and published in Brisch (1980), 60–61; 4: a pair with unknown provenance in London, the Khalili Collection, inv. nos. MTW1407 and MTW1408, and published in Piotrovski & Vrieze (1999), 68–69. Nos. 2, 3 and 4 have averted heads; their dragons are also linked at the centre, where the paws touch each other. Attached to the tip of each tail are two birds’ heads. These attributes are missing on the object originating in Āmid, no. 1, where the dragon heads are facing each other.

<sup>53</sup> This bronze doorknocker is housed in Paris, the Louvre, inv. no. MAO 97 and published in Bernus-Taylor (2001), 232, no. 160. For a drawing of the object, see Fig. 10 in Section 2.3.1.

constructions.<sup>54</sup> Gateways in Iraq and the Jazīra also combine the two animals, as is shown by the presence of a pair of dragons stretched out along the spandrels of the arches while a lion is set below their interlacing tails on the 'Urfa or Aleppo gate in Diyarbakr (589/1183–84) and the Talisman Gate (618/1221) in Baghdad.<sup>55</sup> This use of dragons and lions on city gates has an apotropaic function to protect the threshold from enemies, a practice that goes back to antiquity.<sup>56</sup> The association of dragons with entrances might well be connected to the relationship in Islamic astrology between pairs of dragons and the eclipse.<sup>57</sup> They were believed not only to devour the moon and the sun but to give birth to them as well, thus symbolising eternity and prosperity. The opening and shutting of a gate might suggest a metaphorical connection with such ideas.

None of the five specimens that belong to the other, second, type of doorknockers can, with certainty, be attributed to any of the locations in the Jazīra as all of them are detached, their provenance and date of manufacture lost.<sup>58</sup> Moreover, the absence of any form of epigraphy on them does not help in locating these objects. This second group of hangers are characterized by an elongated lobed or cusped oval shape that ends in a pointed, mostly foliate, finial below. Most of them have an internal openwork design of interlaced stems or arabesques. Although the five objects clearly form a group on the basis of the above-mentioned characteristics, they differ in the way that the metalworker expressed their visual impact. In three cases, it is the broad curved frame that delineates the actual shape of the hanger and that simultaneously acts to encompass and confine the interlaced arabesques in the centre.<sup>59</sup> A different aesthetic is visible in another pair of hangers in which the undulating pattern of wavering arabesques set onto different planes not only creates the internal pattern but also serves to define the actual shape of the hanger.<sup>60</sup> These different expressions either suggests a stylistic change through time or the existence of two or more craftsmen or workshops, each following their own taste.

These two different aesthetics are also used on two openwork suspension brackets that in style and technique are connected closely to the group of hangers. One such bracket, defined by its broad cusped frame that delineates a maze of agile bifurcated stems, is signed by Shākir b. Aḥmad.<sup>61</sup> The other, in which the arabesque pattern itself defines the actual shape of the bracket, carries the signature of Muḥammad b. Khutlukh al-Mawṣilī.<sup>62</sup> The presence of the *nisba* al-Mawṣilī provides us with a clue as to a possible provenance for this kind of interlace casting, for Mosul was a city renowned for its metalwork production in the first half of the 13<sup>th</sup> century.<sup>63</sup> In addition to this, stylistic correspondences between these interlaced arabesque executed in metalwork, on the one hand, and stucco-work found in the architecture of Mosul, on the other hand, corroborate the theory that Mosul is the provenance of this type of cast metalwork. Examples

<sup>54</sup> In Öney (1969), an overview of dragons situated mostly on entrance portals is given while the presence of lions in Seljuq buildings is dealt with by the same author in Öney (1971).

<sup>55</sup> For the gate in Diyarbakr, see Gabriel & Sauvaget (1940) II, pl. 53. For the Talisman gate in Baghdad, see Sarre & Herzfeld (1911–20) I, 34–42; III, pl. 11; Van Berchem (1910), 82–83, pl. 31.

<sup>56</sup> Sarre & Herzfeld (1911–20) I, 38.

<sup>57</sup> Hartner (1938), 131.

<sup>58</sup> These five hangers, or pairs of hangers, are: 1: a pair of hangers, Qatar collection, published by Allan (2002), 14–17; 2: a handle from the David Collection, Copenhagen, inv. no. 2/1993 and published in Folsach (2001), 316, no. 505; 3: a pair from the same collection, inv. nos. 21/1993 and 1/1994, published in Folsach (1996), 109, no. 72; 4: a pair from a private collection in Kuwait, inv. no. I/523,1 and 2, published by Allan (1987), 87, no. 95; 5: a hanger from a private collection in Kuwait, inv. no. I/535, and published in idem, 87, no. 94.

<sup>59</sup> These are nos. 2, 3 and 5, following the division in the previous note.

<sup>60</sup> This is the pair of hangers, Qatar collection, published by Allan (2002), 14–17.

<sup>61</sup> This bracket is part of the Khalili Collection, London, inv. no. MTW 825 and is published in Maddison & Savage-Smith (1997), 207–9, no. 120.

<sup>62</sup> This specimen, still attached to a geomantic plate, is dated 639/1241–42 and is housed in London, the British Museum, inv. no. 1888.5–26.1. It is published in Roxburgh (2005), 100–1, 391–92, no. 57.

<sup>63</sup> Rice (1953); (1953a), 229–32; (1957). Rice (1953a), 231 lists 11 Mawṣilī craftsmen. In his later article, idem (1957), 287, lists five craftsmen, three of whom he did not mention before. Wiet (1932), 18–22 lists eighteen objects with Mawṣilī signatures, 11 of which do not overlap with Rice's two lists. They are nos. 15, 21, 22, 26, 27, 29, 30 or 31, 34, 35, 38, and 39.

of this are not only found in Islamic constructions such as the *miḥrāb* of the al-Nūrī mosque, the *miḥrāb* of the al-Juwaytāshī mosque, and the doorway of the mausoleum of Imam Bāhīr,<sup>64</sup> but also in the church of Khidr Elyās.<sup>65</sup>

It is quite possible that more than one workshop or centre was capable of this high technical level of casting. One of the above-mentioned artists, Muḥammad b. Khutlukh, is known to have worked in Damascus at least in the year 639/1241–42, where he included the city's name on an inlaid incense burner together with the date, his name and his *nisba* al-Mawṣilī.<sup>66</sup> He might well have moved from Mosul to the Syrian capital where he applied his distinctive style of interlacing without a framing band.

## CONCLUSION

If one compares the number of surviving doors, doorknockers, and window grilles in the Muslim East and West with that of the Mamluk period, it is apparent that the survival rate is very skewed. A large quantity survives especially in Mamluk Egypt, whereas the surviving evidence related to contemporary traditions of metalwork fittings elsewhere is much more moderate. This small quantity of extant fittings in Iran, Iraq and the Muslim West hampers the attempt to trace their stylistic and technical development throughout the period. In addition, the goal of establishing the visual relationship of a fitting to the building to which it once belonged is often impossible as so many objects have been taken out of their original context. Irrespective of this relatively small group of surviving objects, the extant fittings made during, or slightly before, the Mamluk era do give evidence of a diversified craft in terms of design and of a high level of technical skill.

How can this skewed survival rate be explained? In part, the difference can be accounted for by the loss of objects and traditions in these areas owing to the decline of cities when the seat of government moved elsewhere. The gradual decline of a dynasty, such as that of Badr al-Dīn Lu'lu' in Mosul, and the ensuing sack of that city by the Mongols in 1259 AD, was another cause not only for the loss of objects but also of the transfer of skills of the craftsmen who found employment in cities such as Cairo and Damascus, as is attested by the presence of the *nisba* al-Mawṣilī in combination with the name of one of the mentioned cities on a number of extant objects.<sup>67</sup> This cannot, however, explain the situation *in toto*, as Damascus and Aleppo took their share of raids and sacks as well. Another explanation for this dichotomy lies in the continuity of political and religious centres such as Cairo, Damascus, and Jerusalem, in which the ruling elite invested continuously. The vast building activity in the Mamluk period really concentrated itself within these centres, stimulating not only the production of metalwork but also the continuous presence of sedentary craftsmen who transferred their own knowledge and experience of the craft to their pupils.

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<sup>64</sup> Janabi (1982), nos. 160a–b, 163, 170b, 171a. Allan (1987), 87 presents other examples of the same style found in Islamic constructions in Mosul. Besides referring to stucco-work, Folsach (1996), 108–9, includes the evidence of a wooden chest with carved panels with interlaced arabesques that is connected to Mosul.

<sup>65</sup> Preusser (1911) II, 14.

<sup>66</sup> Allan (1986), 66–67, no. 1. The incense-burner is part of the Aron collection.

<sup>67</sup> For these objects, see Wiet (1932), 9, no. 5; 20, nos. 32 and 34; 21, no. 39; 47–49; 179, no. 73 and Allan (1986) 50.