It is necessary to reexamine the way we see and think about the Sultanate architecture of South Asia. Across the subcontinent, different regional traditions of Islamic religious architecture incorporated “small models of large buildings” into their structure and decoration. This phenomenon sprang directly from fundamental Indic principles of architectural design, and constituted an important component in the making and reception of Indic architecture. In spite of this, current scholarship largely overlooks or underplays the interpretation of these principles in Sultanate architecture. This study identifies two of the main regional traditions in which this architectural aesthetic is present and suggests a preliminary typological classification for the different applications of “small models of large buildings” in Sultanate South Asia; the final section reflects on future avenues of research into the making and reception of micro-architecture in Islamicate contexts. I also propose that the word “micro-architecture” be adopted from European scholarship as an umbrella term to unite the terminological diversity that currently marks South Asian research in this area and prevents it from engaging in broader dialogues. While this term offers a useful way of analyzing and reinterpreting many regional traditions of Islamic architecture in various time periods, I focus on Gujarat and the Deccan between the late thirteenth and the seventeenth centuries, when these two areas developed individual micro-architectural traditions (fig. 1).

MICRO-ARCHITECTURE IN THE INDIC TRADITION

Many architectural traditions are interested in their own forms and cover architecture with architecture, from the aedicules of classical temples to Gothic’s prolific use of “small models” and the treatment of mihrab niches in Islamic religious architecture. In such traditions, architects have turned to monumental buildings to generate both form and decoration. This interest in micro-architecture varies widely by region and by period, and a vast, though arguably diffuse, literature now exists on the topic. This said, Indic architecture surely occupies a particularly prominent place in the story of micro-architecture. In a comparative survey of architectural ornament across the world, Stuart Durant draws attention to Indic religious architecture’s uniquely sustained interest in covering architecture with architecture and generating architecture from the aggregation of smaller architectural elements. As eloquently expressed by Durant, Indian temples are “totalities composed of a multiplicity of subsidiary forms—themselves sometimes miniature versions of the temple structure itself.” Indic traditions of micro-architectural composition and decoration, as applied in the context of temple architecture, have received a substantial amount of scholarly attention in recent years, and it is this body of work that provides the foundations of the present study.

Western scholars of Indic temple architecture quickly noticed its propensity for employing “small models of large buildings”—a phrase coined in 1876 by James Fergusson in his pioneering History of Indian and Eastern Architecture. However, focused study of the phenomenon only began in the 1980s and one of the most detailed studies of its type remains that of Adam Hardy, a practicing architect and architectural historian. In Indian Temple Architecture: Form and Transformation, Hardy deconstructed Indic temple types to reveal how they were built according to the principle of “the combination and interrelation of images of
shrines,” with small shrines literally embedded within the core of the central temple. Figure 2 shows Hardy’s deconstruction of a typical Shekhari temple—one of the many formal types found in north India—illustrating how it can be understood as the embedding of four smaller shrines into the faces of a larger, identical central shrine, with the centers of each of the four external walls further marked by a miniature wall-shrine, and the four corners adorned with yet another miniature shrine form. Upon this basic substructure, the external surfaces of the temple and even its internal doorways and columns could then be richly encrusted with multiple small shrine images. In extreme cases, microarchitecture was the principal mode of decoration and a number of temples designed and built during the eleventh to fourteenth centuries as part of the
so-called Vesara tradition, in what is now Karnataka in the Deccan region of peninsular India, dispense almost entirely with both figural iconographies and vegetal or floral decoration. In one eleventh-century temple, the lower wall is covered with a micro-architecture of small temples and temple superstructures (śikharas) displayed on pillars. With its multiple, small, horseshoe-shaped windows and barrel vaults, the temple’s superstructure recreates the appearance of a multistoried palace (fig. 3). In some examples, as here, human faces are carved at the windows, as if the palatial superstructure were actually inhabited.

In many regional traditions of Indian architecture, micro-architectural principles were used extensively in internal decoration and for the design of elements such as columns. As seen in the central mandapa, or columned hall, of the early thirteenth-century Luna Vasahi temple on Mount Abu in Rajasthan, just across the border of Gujarat in western India, the lintel of the far doorway is surmounted by a “templescape” of miniature, multi-tiered mandapas, while the columns in the foreground are composed of multiple miniature shrines embedded into the body of the column (fig. 4).

These design principles thrived across South Asia from the sixth century A.D. and underpin the majority of temple-building traditions across the subcontinent. In fact, we can argue that they go back well before the sixth century. Hardy’s focus on temple composition through the embedding of architectural components distracts him from a more generalized and much older interest in architectural representation and the simple covering of architecture with architecture. Earlier Buddhist architecture in the subcontinent already shows an interest in its own forms: stupas (mound-like structures containing a relic) bear images of stupas and are often surrounded by votive stupas, small-scale copies of large stupas, themselves covered with stupa images. The Buddhist reliquaries entombed at the heart of most stupas were also frequently micro-architectural in form, leading to a “Russian nesting doll”-style succession of

Fig. 2. Deconstruction of a typical Shekhari temple into its constituent micro-architectural elements. (After Adam Hardy, Indian Temple Architecture: Form and Transformation [New Delhi, 1995], 431, fig. 34)
stupas and stupa representations. Thus, while the sixth century may mark a distinct change in the principles of temple composition, many of the elements used to carry out this idea—the micro-architectural components that are often miniature representations of the main monument itself—build upon a much older architectural awareness. It is of little surprise then that such a fundamental principle of Indic architectural design should also be translated into South Asia’s Islamic religious architecture, part of the long dialogue between the ritual needs of Muslims and regional traditions of architectural design.

SULTANATE MICRO-ARCHITECTURES

Across Gujarat and the Deccan, it is possible to see two broad applications of micro-architecture. In Gujarat, micro-architectural elements are principally located on, or around, openings such as gateways, doorways, and mihrab niches along the main axes of mosques. By contrast, in the Deccan, micro-architecture appeared mainly at roof level, either at the corners and main axes of the building or wrapped around the entire perimeter of the roof as a continuous micro-architectural parapet. This survey excludes mihrab niches unless they feature actual micro-architectural elements. The idea of the mihrab niche as micro-architecture is not new, even if the term “micro-architecture” has not been specifically...
The terminology of micro-architecture

Before continuing, I would like to clarify a point about terminology. As noted earlier, in this article I use the term “micro-architecture” to refer to what Fergusson calls the “small models of large buildings” found in Indic architecture. The term is borrowed from western medieval architectural scholarship and has not hitherto been used in South Asian architectural history. Why propose this change? Currently, South Asianists use a wide variety of words and phrases to refer to this phenomenon. In addition to Fergusson’s phrase, Durant refers to “miniature versions” and “architectural elements,” while Hardy continues the vocabulary of Classical architectural analysis, using the terms employed. Nevertheless, the question merits separate and extended study and I leave this task to others.

Fig. 4. The vestibule (triqa) and closed hall (gudhamandapa) of the Luna Vasahi temple. Mount Abu, Rajasthan, ca. 1232. (Photo: courtesy of the American Institute for Indian Studies)
“aedicularity” and even “multi-aedicularity.” Sinha and other scholars have preferred the Sanskrit term kūṭastambha, literally “pillar shrine,” taken from the śāstra literature. This lack of terminological agreement has arguably contributed to the fragmentation of scholarship on Indic micro-architecture. The term “micro-architecture” was introduced in the 1970s by scholars of medieval European and especially Gothic material culture to refer to the representation and use of small buildings in architecture and architectural decoration and furnishings, as well as in precious metalwork and architectural model making. Although micro-architecture has, to the best of my knowledge, never been formally defined, essential to it is the idea that it should depict or evoke recognizable structural types, or involve the organization of several components according to recognized architectural sequences. The term is clearer than any of those currently in use in Indian architectural history and sufficiently general to encompass the wide range of micro-architectural applications seen in the subcontinent. I suggest here that it should be adapted more widely.

In the following discussion, I identify as micro-architecture any element designed to replicate known monumental architectural types. Thus, a simple dome on four pillars, or a simple dome on an arched base, is not micro-architecture. However, if the dome, drum, base, and pillars are designed, articulated, and decorated with deliberate reference to monumental architecture, this is defined as micro-architecture. Essentially, if they are “small models of large buildings,” I have classified them as micro-architecture. To my mind, micro-architecture tends to retain a strong link to the three-dimensional character of architecture, and includes truly three-dimensional miniature buildings, as well as buildings rendered in varying depths of relief. But we should always bear in mind that this differentiation between three- and two-dimensional representations is in many ways artificial, since architects simultaneously worked with both modes. As the following examples will show, the category of micro-architecture includes small models of generic building types, copies of specific buildings, and forms generated from the very building that they decorate (referred to as self-imaging). A wide variety of micro-architectural experiments permeate the architecture of the Tughluq sultans (1320–1412) in Gujarat and that of the dynasty that succeeded them after the disintegration of their empire, the so-called Ahmad Shahi sultans (1407–1543). Yet the micro-architecture of western India is noticeably focused on or around openings, along the principal axes of individual mosques and tombs, and even along major city axes in certain cases.

Translating mandapas and shrines

Across Gujarat, the lintels of numerous doorways and the mihrabs of fourteenth- and early fifteenth-century mosques bear miniature mandapa forms, representations of the single or multistoried pavilions that form an essential component of the local temple architecture, characterized by some scholars as the Maru-Gurjara style. In the 1325 Friday mosque at Cambay, the lintels of the three mihrabs each have their own architectural landscape of miniature pavilions, interspersed with trees (fig. 5[a–c]). The idea clearly builds upon established regional architectural conventions, as seen in the micro-architectural lintel in the thirteenth-century Luna Vasahi temple at Mount Abu (fig. 4), which bears miniature temples as well as multistoried mandapas. Alka Patel has perceptively pointed out how, from the fourteenth century, the Gujarati mihrab was “conceived of as a doorway into the sanctum of a temple.” The mandapa types on the mosque at Cambay are indeed identical with those seen in Maru-Gurjara temple decoration and it is likely that these lintels are composed of spoliated material. Micro-architecturally treated serpentine brackets, which are certainly spolia, are prominent in the small pavilion at the center of the mosque’s courtyard. Whether spoliated or purposefully carved, these adornments had a long life in Gujarat, as the mihrabs of various Ahmad Shahi mosques from the early fifteenth century feature similar, miniature multistoried mandapas.

But perhaps the most interesting aspect of this micro-architecture is the care taken in the translation of the lintels to an Islamic context and the filtering out of certain architectural forms. As demonstrated by the
Fig. 5, a, b, and c. Lintels from the principal mihrabs of the Friday mosque in Cambay, featuring micro-architectural mandapas and trees. Cambay, Gujarat, 1325. (Photo: Elizabeth A. Lambourn)
interior of the Luna Vasahi temple, the regional micro-architectural vocabulary was extremely broad, but Islamic structures display a clear and apparently deliberate avoidance of certain forms, such as complete temples and even miniature shrine towers (śikhāras). This absence suggests an understanding by the architects, and perhaps their Muslim patrons, of the iconographic significance of these particular elements. Miniature temples clearly represented non-Islamic religious architecture, and even a partial temple element such as the śikhara, which rose above the garba griha (womb chamber), appears to have signalled the very heart of the temple and the deity it housed. George Michell has also noted that in the process of temple spoliation in western India the śikhara was frequently specifically targeted, while the remainder of the temple was left intact.16 Mandapas, by contrast, were multipurpose structures, used across the temple complex as entrance pavilions, dance halls, and places of congregation, and may have been seen as less symbolically charged. In his work on Karnataka temples, Ajay Sinha has argued that micro-architecture was “iconographically potent” and that images of shrines conveyed “the manifesting divinity into the worshipper’s space.”17 The selective use of mandapas in Gujarat would certainly appear to bolster Sinha’s argument. Recent work on spolia in South Asia has sought to counterbalance the frequently negative connotations of the term by underlining the creative processes often involved in the reuse of material, and the material from the Friday mosque at Cambay undoubtedly contributes to this fresh perspective.18

What mandapas connoted in this new Islamic religious context is difficult to ascertain. Mandapas certainly served as gateways to mosques, and the prayer halls of mosques can also be seen as having been formed from multiple adjoining mandapas. Even so, it is difficult to see how these associations would enrich the meaning of micro-architectural mandapas in an Islamic context.
It is possible that mandapas carried a diffuse association with the sacred that was felt to be appropriate to an Islamic religious context.

In contrast to this are attempts to generate a distinctively Islamic micro-architecture from, and for, Islamic religious architecture. If śikhara forms are noticeably absent from the Islamic micro-architectural vocabulary, a number of early fourteenth-century mihrabs show experimentation with generic shrine forms and their appropriate translation to an Islamic environment. While śikhara s are the tower-like superstructures that frequently mark the central shrine and garba griha in large temples, smaller temples could consist of quite modest shrines with lower superstructures. A number of mihrabs from Cambay feature miniature shrines, whose distinctively staggered exteriors (known as bhadra projections), miniature string courses, and domes with bulbous finials (sing. amalaka) all refer to generic shrine forms (fig. 6). In this instance, the front of the shrine features a small lamp set within a cusped arch, whose shape identifies it as a specifically Middle Eastern type of mosque lamp. While the cusped arch is also distinctive of Sultanate Islamic architecture, both elements in fact relate to the large, sculptural mihrabs then under production at Cambay. A similar adaptation of the shrine form can be seen on the lintel of the mihrab in the Kazaruni tomb complex at Cambay, which was built as a later addition to the Friday mosque, sometime after al-Kazaruni’s death in 1333 (fig. 7). The lintel is composed of alternating vegetal and architectural elements, just like the adjoining Friday mosque. Here, however, the mandapas are replaced by five basic shrine forms; those at the sides are marked by a neutral diamond pattern, while the one in the middle bears a simple flat niche with a cusped arch. Although the mihrab allusion is less overt than in the first example, some reference to the focal point of the mosque seems intended, thus transforming a generic shrine into a specifically Islamic micro-architecture.20

Making an Islamic micro-architecture: The Hilal Maliki mosque at Dholka

Nowhere is the idea of creating an Islamic micro-architecture explored more consistently and thoroughly than in the Friday mosque built by Hilal Maliki at Dholka in 1333 (fig. 8). The main axis of the structure is woven through with a series of micro-architectural cross-references. However, rather than selectively transposing and adapting micro-architectural elements from the existing Maru-Gurjara vocabulary, the designers of the Friday mosque sought to produce an example of micro-architecture both suitable to a specifically Islamic religious context and actually generated from it. A row of seven micro-architectural mihrabs is placed above the main

Fig. 7. Lintel of the mihrab at the Kazaruni tomb complex, featuring micro-architectural shrines and trees. Cambay, Gujarat, 1333. (Photo: courtesy of the American Institute of Indian Studies)
entrance doorway and micro-architectural minarets are placed on the lintels of four of its five side mihrabs. At Dholka, micro-architectural decoration has not only been translated to suit its new context, but also appears to have been created from the very building it covers. If we look at the lintel of micro-architectural mihrabs above the entrance door (fig. 9), they are almost exact miniature copies of the mosque’s central mihrab, the lower part of which has the same combination of central niche, rosette, inset pilasters, and heavier, outer pillars (fig. 10). Although the superstructure of the central mihrab is now lost, it is still possible to make out clear traces of the original serpentine arch seen in the miniature mihrabs. The principle is clearly an extension of the self-imaging commonly seen in temple architecture and we are reminded of Durant’s description of Indian temples as having sometimes been composed of “miniature versions of the temple structure itself.”

Similarly, might the rather strange finials seen atop the mihrabs in the seating area for the ruler and his courtiers (mulūk khāna) (fig. 11) and at the centers of the two side mihrabs in the prayer hall be read as attempts to represent the distinctive minarets that mark the center of the mosque’s prayer hall façade (fig. 12)? The minarets stand about four and a half meters (fifteen feet) above the roof of the mosque. Their solid shafts, which are carved with vertical flutes, are divided up into various registers by horizontal moldings and have two “eaves” supported by serpentine corbels, a wider one positioned about halfway up the shaft and the second almost at its summit. Surely the best way to account for the strange canopied shafts seen above the mihrabs is to interpret them as renderings of the minarets as viewed from ground level, where it is precisely the corbelling of the first set of eaves that strikes the viewer most (fig. 12).

Seeing micro-architecture is not only contagious, but almost inevitably generates webs of associations and cross-references. The representation of architecture, in any number of dimensions, raises issues of mimesis—of the relationship between originals and copies, between specific examples and generic prototypes, between real and represented architecture. The rooftop minarets of the Dholka mosque may themselves be seen as micro-architectural elements, since they are solid shafts that mimic the real tower minarets of the much earlier Friday mosque at Ajmer in Rajasthan built between 1199 and circa 1230. To date, the Dholka mosque is unique among surviving mosques in western India for its elaboration of a coherent, self-referencing micro-architectural decoration across a single building.

Cross-referencing and trompe l’oeil in the mihrabs of Cambay

The example of the Hilal Maliki mosque in Dholka demonstrates how quickly micro-architecture is able to beget complex networks of cross-references and allusions that operate both inside and outside the structure. A remarkable series of fourteenth-century marble mihrabs that survive from the port of Cambay opens a window into the other types of micro-architectural
cross-referencing that were being generated in western India in the same period. Although the brick and timber mosques and mausolea to which the mihrabs originally belonged are long gone, depriving us of their relationship to the decorative program as a whole, even in isolation they weave remarkably complex associations. As the Cambay mihrabs have already been studied in some detail, this section will merely summarize the main aspects of their micro-architectural elements.Each of the Cambay mihrabs comprised a deeply sculpted central niche in which a marble lamp was “suspended” by marble chains from the top of a corbelled semi-dome with a cusped arch front. The intention was clearly illusionistic, and from a distance it might have been easy to mistake the marble lamp “hanging” at the heart of the niche for a real glass lamp suspended by a metal chain, particularly if the whole mihrab was originally painted; yet architecture, glass, and metal are actually sculpted and painted marble. This central niche was framed by a conventional lintel on engaged pilasters and the entire piece was topped by an elaborate and deeply carved arch featuring micro-architectural mihrabs. One of the most complete surviving mihrabs of this type from Cambay is the Lar mihrab, so called because it was found at the city of Lar in Fars, from which it had in all probability been exported in the fourteenth century (fig. 13). Photographs of the Lar mihrab indicate that the upper arch was originally framed by two shrine-shaped finials carved with lamps.
Fig. 11. Lintel with micro-architectural minarets, from the mihrabs in the mulūk khānas in the Hilal Maliki mosque. Dholka, Gujarat, 1333. (Photo: Elizabeth A. Lambourn)

Fig. 12. View of the prayer hall façade of the Hilal Maliki mosque, showing the pair of pseudo-minarets over the central arch. Dholka, Gujarat, 1333. (Photo: courtesy of the American Institute of Indian Studies)
within cusped arches. The Cambay mihrabs clearly engage with similar processes of self-imaging as seen at Dholka, and the representation in miniature of a largely similar mihrab type at the top of the mihrab itself sets in motion the suggestion of infinite repetition.

The mihrab represented in the upper niche (fig. 13) is not, however, an exact micro-architectural copy of the larger mihrab that bears it: although the central niche with cusped arch and suspended lamp are directly related, the upper mihrab has no lintel and superstructure and, most surprisingly of all, it is flanked by representations of halved banana plants (see also fig. 6).

Research into the development of mihrab representations at Cambay indicates that the plantain motif appears to have been introduced around the 1290s, apparently from images of chawris (a type of small temporary structure built from the trunks, stems, and leaves of trees and plants) in contemporary Jain iconography (fig. 14). In the Jain examples, the split plantains are added to pavilions in reference to the common Indian practice of using the split trunks of those trees to flank doorways of houses and shrines or to build small pavilions for marriage ceremonies. It is this type of ephemeral vegetal structure that is represented in the Jain miniatures and that became conflated with micro-architectural representations of mihrab niches. It seems clear that, in their Islamic context, the split plantains do not represent a marriage pavilion; rather, they seem to have been adopted as part of a visual tradition for representing pavilions, perhaps in an attempt to underline the ceremonial function and importance of the mihrabs. The representation of miniature umbrellas, traditionally symbols of status, on certain mihrab images makes a similar point. Thus, in micro-architecture, direct observation and knowledge of real mosque furnishings...
were supplemented with elements borrowed from existing visual conventions. The source of these motifs introduces yet another layer of cross-reference—to ephemeral architectural constructions—into the already complex interplay generated by micro-architecture. The comparison usefully highlights the extent to which the relationships between “real” architecture, micro-architecture, and even ephemeral architecture are always complex and multidirectional processes.

Micro-architectural façades in the Ahmad Shahi architecture of Ahmedabad

Micro-architectural experiments continued in western India in the later architecture of the independent Ahmad Shahi sultans of Gujarat from the early fifteenth century onwards, but in such a radically different manner that the deeper continuities have hardly been noticed. In contrast to the largely internal mihrab- and doorway-focused experimentation of earlier centuries in Gujarat, in the later Islamic architecture of the region micro-architecture played a major role in the development of façade design.

The architecture of the Ahmad Shahis is famous for its development of extremely tall and slender pairs of tower minarets, which marked the façades of the mosque prayer hall. Whereas at Dholka the pseudo-minarets sit directly on top of a plain prayer hall façade, in many of the earliest Ahmad Shahi mosques of Ahmedabad the façade of the prayer hall features elaborate bases that “support” the roof-level minarets, rendered in high relief. One of the earliest examples of this is Ahmad Shah’s 1414 Bhadra mosque, where a pair of massive engaged pillars neatly unites the prayer hall façade with the two tower minarets at roof level in a way that had previously not been achieved, for example, in the façade of the Dholka mosque (fig. 15). Although there is no structural unity between the two parts, the reliefs establish an imagined one, as if the two tower minarets were literally embedded within the prayer hall façade. The
phenomenon has so far been discussed mainly in formal terms. However, later executions of these minaret bases are overtly micro-architectural and can be seen as multi-balconied towers metaphorically embedded in the prayer hall façade. One of the earliest micro-architectural treatments of the minaret base is seen on the circa 1420 Sayyid Alam mosque in Ahmedabad (fig. 16), where the central arch of the prayer hall is flanked by deep reliefs depicting a sequence of columned balconies “opening” onto the mosque courtyard. This idea was not exclusive to religious architecture and can also be found in secular structures, notably the façades of the mid-fifteenth-century Tin Darwaza in Ahmedabad, part of Ahmad Shah’s great city plan (fig. 17). Although seen here outside a religious context, it is noticeable that micro-architectural elements are still positioned around the openings and gateways that emphasize the principal axial street of the urban plan. However, instead of connecting with a tower-minaret as on the mosque façades, in the Tin Darwaza micro-architecture serves to visually frame and even buttress the openings. We cannot but notice the resemblance of these “towers” to the three multi-storied towers carved over the lintel in the early thirteenth-century Luna Vasahi temple (fig. 4). But the form also appears to refer to contemporary monumental architecture and the type of tall, multi-balconied tower known from Chittorgarh in southeastern Rajasthan: the Manastambha (variously dated between the thirteenth and fifteenth centuries) and the Kirttisambha, which was consecrated in 1448 (fig. 18).

The chronology and diffusion of this tower type, and particularly its relationship to contemporary tower minarets in Gujarat, clearly remain to be clarified but already suggest complex webs of allusion and perhaps even citation between contemporary polities in western India. Nevertheless, the idea of the false balcony or vantage point has a long history in Indic temple design and, in a Gujarati context, the “faux” structures seen on the Tin Darwaza and Ahmedabad mosques also immediately recall the inhabited trompe l’oeil balconies that constituted a noticeable element of the decoration and design of Dabhoi, the thirteenth-century capital of the Vaghela rulers of central Gujarat (fig. 19). At Dabhoi, the city walls and the walls of a nearby water pavilion are carved in high relief, with balconies inhabited by courtiers. The trompe l’oeil balconies are juxtaposed with real structural balconies, from which actual viewers would have looked out, thereby engaging both the viewer and the user of the structures in complex visual and functional puns. Translated here to an Islamic religious context, the balconies are now uninhabited, the balcony space marked by a lotus rosette. However, the allusion to real, balconied towers remains clearly expressed. The balconied tower continued to be explored formally in Ahmad Shahi architecture, leading, over the course of the fifteenth century, to ever more developed minaret bases—the façades of mosques such as the 1472 Achyut Kuki mosque seem almost to have two freestanding tower minarets attached to them. This façade type was relatively successful in Ahmad Shahi architecture across

Fig. 16. Micro-architectural balconied tower serving as a minaret base on the façade of the Sayyid Alam mosque. Ahmedabad, Gujarat, 1420s. (Photo: courtesy of the American Institute of Indian Studies)
Gujarat, only fading in the mid-sixteenth century. As with all such principles, they set in motion a complex play of references and cross-references, as architecture carries architecture.

THE DECCAN

If it can be said that in Gujarat there was a sustained interest in micro-architecture over the fourteenth and fifteenth centuries, the volume of surviving material there is dwarfed by that found in the Deccan from the mid-sixteenth century onwards. Again, this micro-architecture is hardly “seen” in the majority of writing about Deccani Islamic architecture, and probably most interest has focused on the examples from the Adil Shahi dynasty (1490–1686) of Bijapur, where it has been regarded as part of a general trend toward intense, almost jewel-like, carved decoration.29 While this article cannot engage in an exhaustive cataloguing of examples, it is clear that the Deccani material requires far more research. Nevertheless, key patterns and ideas can be clearly discerned even at this early stage of research.

Early experiments in Bidar, Ahmednagar, and Bijapur

The earliest micro-architectural experimentation in Deccani Islamic architecture began cautiously. One of the very first intimations appears to come from the mausoleum of Ahmad Shah Wali Bahmani (d. 1436) at Ashtur, outside Bidar in Karnataka. The plaster exteriors of the domed corner finials are treated as two tiers of blind niches, which were meant to evoke the contemporary exterior articulation of Bahmani tombs and so generate a micro-architectural allusion.30 This earliest Deccani example already displays many of the features seen in later Deccani micro-architecture: it is placed at roof level and appears to have been grafted onto generic Sultanate roof elements such as finials, chhatris (elevated, dome-shaped pavilions), and parapets. Other tentative experiments can be cited but we have to wait until the sixteenth century and the fragmentation of the Bahmani territories into the Deccani sultanates to see the first definitive micro-architectural experiments.31

The prosperity of the Deccani sultanates after the defeat in 1565 of Vijayanagara, the seat of Hindu power since the fourteenth century, and the supposed, but not proven, movement of craftsmen to the sites of their new
permanent capitals undoubtedly spurred on micro-architectural experimentation. From the late 1560s onwards, the inclusion of micro-architectural elements in Islamic religious architecture expands exponentially across the Deccan, and a vast range of micro-architectural types were employed, featuring domed squares or octagons of either one or several stories, octagonal towers, and many other forms.

The small jewel-like Damri mosque, built in the Nizam Shahi capital of Ahmednagar in Maharashtra in 1568, represents an early example of Deccani micro-architectural experimentation (fig. 20). The corners of the roof of the Damri mosque are marked by four elaborate domed finials, while the center of the prayer hall façade is distinguished by a freestanding “flying” arch, flanked by a pair of domed finials. Cleverly spaced out to provide maximum legibility from ground level, the six finials all follow the same design of a domed octagonal pavilion (fig. 21). The ribbed dome, with a delicate band of lotus petals around its base, sits on a heightened drum, marked by a ribbed molding, the whole piece resting on a minutely rendered octagonal structure with arched openings and rounded corner bastions. Even the base of the parapet with its drainage openings receives a micro-architectural treatment: interpreted as a long arcade that encircles the mosque, the drainage openings are delicately inserted into the framework. The overall effect is of a “cityscape,” as seen later at the mausoleum of Ibrahim ‘Adil Shah (r. 1580–1627) in Bijapur—the celebrated Ibrahim Rawza, built between 1626 and 1633 (figs. 22 and 23). Once again, architecture carries architecture. The Damri mosque’s domed octagons do not directly refer to any known architectural model and thus may be read as generic qubba (domed structure) types. Domed octagons were used in both religious and secular architecture, for shrines and mausolea as well as for garden pavilions, and thus the precise charge of this micro-architecture is difficult to assess. The comparatively poor preservation of the architecture of the Nizam Shahi capital also makes it difficult to gauge how unusual this design was.32

Another early example is the Shahpur Darwaza at Bijapur, a gate built between 1565 and 1568 that formed part of the great urban development plan initiated by ‘Ali ‘Adil Shah (r. 1558–80) after the conquest of Vijayanagara. Its façade is marked by a pair of miniature gateways topped by domed finials that evoke the very structure and organization of the gateway they adorn—an example of the self-imaging frequently seen in temple design.33 The gateway is a rare example of micro-architecture outside an Islamic religious context but would appear to be a unique experiment, since no other surviving Bijapuri gateway follows this design.

The diversity of early micro-architectural experiments in the Deccan is further illustrated at the funerary
mosque of ‘Ali Barid Shah (d. 1580) at Bidar. The roof of the mosque is distinguished by two tall and slender minarets decorated with circular balconies (fig. 24). Much as at Dholka, these are in fact pseudo-minarets with pseudo-balconies, but in profile they bear a remarkable resemblance to the minarets of the madrasa of Mahmud Gawan (d. 1472) in the same city (fig. 25). If a connection between the two structures were proven, ‘Ali Barid Shah’s pseudo-minarets would be a significant early example in the Deccan of the direct referencing of an iconic Islamic monument within Islamic microarchitecture, just as the Dholka mosque’s pseudo-minarets appear to allude to those at the Ajmer mosque.

These early Deccani examples already constitute an interesting contrast to western India. The lintels of doorways and, with a few notable exceptions, mihrabs, do not appear to have been loci of microarchitectural additions. Instead, micro-architecture is overwhelmingly focused at roof level and engages a number of typical practices, such as the use of generic elements such as finials, self-imaging, and allusions to iconic buildings.

‘Adil Shahi micro-architecture in Bijapur

From the later sixteenth century onwards, ‘Adil Shahi architecture shows a keen interest in micro-architectural forms, both in the capital of Bijapur and across its provinces. Micro-architectural elements are placed not only on façades, to emphasize main axes, but also around the entire roof perimeter. We generally find variations on generic, multistoried, domed pavilions, although specific instances of architectural self-imaging appear later.

The chronology of ‘Adil Shahi architecture is relatively poorly understood. However, one structure often held to be among the finest examples of the new vogue for exquisite carved detail is the Malika Jahan Begum mosque, which is believed to have been built by Ibrahim II sometime between 1586 and 1605. The front parapet of the mosque is marked by two micro-architectural qubbas. Represented here in almost perfect architectural detail is a pair of two-storied qubbas, their large, arched entrance gates visible on the ground floor. Projecting eaves supported by ornate brackets separate these from...
the first floors, and the onion domes with their petal-adorned drums are flanked by domed finials (fig. 26). It is impossible not to compare these two-storied qubbas to the circa 1620 gateway of the later Mihtar Mahal mosque in the city (fig. 27), although it is clear that they cannot be copies of a later structure. Underlining the axial role of this micro-architecture in a mosque context, one can note that the façade of the Mihtar Mahal mosque was itself marked by a pair of two-storied octagonal domed pavilions, while the rear corners had square qubbas.37

By the first quarter of the seventeenth century, increasingly developed micro-architectural rooflines can be seen. The Naw Gumbad mosque at Bijapur (ca. first quarter of the seventeenth century) featured a pair of multistoried towers at the center of its façade and micro-architectural domed squares at its four corners.38 The potential of micro-architectural elements to encircle a building’s entire roofline, as explored in the Damri mosque, finds full expression in the Ibrahim Rawza (fig. 22). Two-storied domed squares are placed around the entire parapet of Ibrahim ‘Adil Shah II’s mausoleum and around the base of its central dome (fig. 23). As in the Damri mosque, each individual qubba is linked by a continuous arcaded parapet, creating the effect of a miniature urban landscape above the mausoleum itself. In contrast to the competing axes of

the Naw Gumbad mosque, on the mosque that faces Ibrahim’s mausoleum, micro-architectural qubbas are restricted to the front parapet, where they highlight the main axis of the building.

Although ‘Adil Shahi micro-architecture tends towards generic types, the interest in self-imaging is apparent in a small number of micro-architectural elements. The Shahpur Darwaza at Bijapur has already been mentioned, and other clearer examples belong to the last third of the seventeenth century, during the period of Mughal rule in the Deccan. For example, the parapets of the octagonal mausolea of Amin al-Din (d. 1664–65) and Khan Muhammad Khan Khanan
Fig. 22. View of the mosque and tomb of Ibrahim ‘Adil Shah II, the so-called Ibrahim Rawza. Bijapur, Karnataka, 1626–33. (Photo: Elizabeth A. Lambourn)

Fig. 23. Detail of the micro-architectural qubbas around the dome of the mausoleum of Ibrahim ‘Adil Shah II. Bijapur, Karnataka, 1626–33. (Photo: Elizabeth A. Lambourn)
(d. 1686) at Bijapur each carry eight miniature domed octagons. The articulation of the façades of these miniature qubbas, the shape of the domes, and the fringed lotus leaves that surround the drum of the domes suggest that the qubbas are meant to be miniature representations of the very mausoleum that supports them (fig. 28). The rooftop of each micro-architectural mausoleum is itself set with eight miniature mausolea, creating a seemingly infinite succession of miniature copies.

In one exceptional instance, micro-architecture was freed from its rooftop location and brought into the Bijapur palace grounds. The so-called Jal Mandir is a small, jewel-like structure set at the center of a pool in the area between the Sat Manzil palace and the Gagan Mahal, built by ‘Ali ‘Adil Shah around 1561 as an audience hall and royal residence (fig. 29). The structure has always fascinated visitors and yet has proved remarkably resistant to explanation: too small to actually serve as a garden pavilion and, without easy access, lacking any other obvious evidence of its original function. It is proposed here that it might therefore be regarded as another example of micro-architecture. In important new research on the topography and state apparatus of Bijapur, Mark Brand has suggested that the Jal Mandir may have been intended as a reliquary to house two hairs of the Prophet that were brought to Bijapur during the reign of Ibrahim ‘Adil Shah II (r. 1580–1627), probably before 1591. Discussions of the housing of this relic have previously focused on its eventual placement in the Athar Mahal, believed to have been built around 1646 under his successor, Muhammad (r. 1627–56), and on the ceremonies that surrounded it at this location, particularly the celebration of the birth of the Prophet. The creation of a stone building housing such a significant relic might, at the very least, have stimulated an interest in micro-architectural forms, while, at the other
end of the spectrum, it might also have engendered a multitude of micro-architectural homages. 43

This interest in represented architecture appears to have even affected mihrab design at Bijapur. The central mihrab of the Friday mosque was painted and gilded in 1636 with an architectural surround showing a complex “landscape” of domed buildings topped by minarets and finials. The buildings feature multiple arched openings that contain suspended lamps; elsewhere on the wall, painted niches feature trompe l’oeil vases and books (fig. 30). 44

Qutb Shahi micro-architecture at Golconda and Hyderabad

A more ambiguous micro-architecture pervades structures built for the Qutb Shahis (1518–1687). The monuments of the Qutb Shahi capitals of Golconda and Hyderabad have not yet received the meticulous attention that Henry Cousens devoted to Bijapur, and the discussion of their architecture is complicated by this dearth. 45 This is a task that I will leave to other researchers, though I would like to take the opportunity to signal some of the key ideas seen in Qutb Shahi micro-architecture, in so far as it is accessible at present.

As on the Damri mosque in Ahmednagar, many Qutb Shahi finials receive a micro-architectural treatment and are developed into distinctively Qutb Shahi domed octagons. 46 The feature appears as early as the 1591 Char Minar in Hyderabad, where one such qubba finial marks the roof of the mosque situated at the upper level of the structure. Magnificent domed qubbas are also found on the prayer hall façade of the 1597 Friday mosque in Hyderabad. The feature can be seen particularly clearly on the mausolea of Muhammad Qutb Shah (d. ca. 1626)
architectural façade above the first. Although the idea of developing the parapet in an architectural fashion goes back to the earliest micro-architectural examples from the Deccan, such as the Damri mosque, no other region in this period appears to have developed this feature as boldly as the Qutb Shahis. The parapet-façade seen in Qutb Shahi architecture is probably the most successful micro-architectural experiment in South Asia, finding success across the Deccan long after the disappearance of the Qutb Shahis and even their Mughal successors.

Micro-architecture and mi’rdhana in the Shi’i Deccan

The focus on the roof level seen in Deccani Islamic religious architecture might be related to the importance of the roof for the call to prayer in Shi’i Islam. At different times and places, many of the Deccani sultanates either openly adhered to Shi’i Islam or tolerated and promoted Shi’ism. From the eighth century onwards, the emergent Shi’i branches of Islam opposed the use of tower minarets for the call to prayer as innovations and impure departures from the earliest, correct Islamic practice. This stance was supported by various versions of a hadith attributed to ‘Ali, the Prophet’s son-in-law and spiritual successor, as well as the figurehead of all branches of Shi’i Islam. According to different versions of the hadith, ‘Ali had either ordered a tall mi’dhana...
This broader context of Shi'i ritual practice is important to bear in mind when looking at the Deccani material. The paucity of tower minarets in the architecture of the Deccani sultanates on the whole suggests that this most characteristic of Shi'i practices may have continued, and we may wish to revise accordingly our interpretation and nomenclature of the many prominent mosque gateways and rooftop kiosks seen in the Deccan. There is no reason to dismiss these structures from the corpus of micro-architecture if they reveal themselves to have a real use, since micro-architecture is not necessarily non-functional. Indeed in medieval European studies, the term encompasses church furniture and urban monuments such as fountains, crosses,
and even pillories. Many of the rooftop elements in the Deccan noticeably attempt to replicate the elevations and decoration of far larger monuments in a manner that is quite different from the simpler rooftop chhatris found in Gujarat.

More significantly, we might regard these rooftop elements as belonging to a larger discussion within Shi’i Islam regarding the locations deemed suitable for the call to prayer. In spite of what I have just said, there was never a strict and clear divide between Sunni and Shi’i practice in this matter; what developed was a more complex and nuanced dialogue between the new idea of a tower minaret and other architectural forms for the adhān (call to prayer). Jonathan Bloom argues that the visual and symbolic power of the tower minaret was such that Shi’i mosques eventually did include them, thereby benefitting from their visual and symbolic impact, while making alternative provisions for the actual call to prayer. Thus, later Safavid architecture incorporates at roof level both fine, paired tower minarets and small pavilions, known as guldastas, from which the call to prayer was actually given. We might also look at the Deccan’s many finials and micro-architectural elements as another formal compromise between the urge to mark the mosque with a tower minaret, versus the prohibition on this within Shi’i Islam. Technical and financial considerations may also have played a part, as it was undoubtedly cheaper and quicker to erect a mi’dhana or pseudo-minarets than real tower minarets. Where monumental tower minarets do exist, as for example in the Char Minar in Hyderabad, it is largely for their symbolic impact. We have good evidence that alternative provisions were made for the actual call to prayer. Thus, the mosque that occupies the roof level of the monument has its own separate kiosk (mi’dhana) for this purpose. Against this background, the grafting of micro-architecture onto standard roof-level elements such as the chhatri or finial might be seen as another unique architectural response to the question of the adhān in Shi’i Islam. However, micro-architectural qubbas and other structures do not appear only on mosque roofs and it is clear that they do not have a single, easily definable role.

**Portable micro-architecture in the Deccan: The ta’ziyeh**

As with the relationship between Gothic religious architecture and the portable shrines or reliquaries it often housed, it is impossible to look at the examples of Deccani micro-architecture without being aware of the presence of more ephemeral micro-architectural traditions in their midst. The development of micro-architecture in the Islamic Deccan cannot be considered without also taking into account the development of ta’ziyehs—micro-architectural models of the mausolea of venerated Shi’i martyrs that are borne in procession during Muharram commemorations. The phenomenon has principally been known and studied through an anthropological lens, with the result that the best-documented examples are relatively recent. Work on the deeper history of Muharram practices in India is very scant at present, although the body of research into practices and architecture in the Awadh region of northern India during the nineteenth century is growing. The much-repeated claim that Muharram celebrations were first introduced to South Asia by Timur (d. 1405) are largely unsubstantiated, and it is likely that such events were introduced at different times and in different locations by multiple Shi’i communities.

As explained by Muhammad Ayyoub, “quite early in the development of the Muharram cultus, people felt the need for some concrete symbol or representation of the events of Karbala.” A horse carrying a bloodied shroud, biers, and later cenotaphs (tābūts) were paraded through the streets in a recreation of the Imam Husayn’s death and burial. Largely similar processions are described by foreign travellers to Iran in the Safavid period. What is significant in South Asia is the conceptual leap from simply parading a bier or coffin in commemoration of the martyr to processing a micro-architectural shrine. The difference is perhaps subtle but results in a clearly different outcome. The term ta’ziyeh derives from the Arabic ta’ziya, meaning “lamentation.” However, in South Asia in particular it came to designate a micro-architectural representation of the shrine of one of the Shi’i martyrs or imams. The key question is when and where this change occurred. The earliest references to Muharram celebrations in the Deccan go back only to the reign of ‘Abdullah Qutb Shah (r. 1626–72), who apparently revived the practices of the reign of his grandfather, Muhammad Quli (r. 1580–1611), but it is unclear whether micro-architectural ta’ziyehs existed in the Deccan in this period.

Even if we cannot locate ta’ziyehs and micro-architectural elements as contemporary features, it is clear that they later co-existed, creating a seamless continuity between permanent and ephemeral micro-architecture. The manufacture and procession of micro-architectural ta’ziyehs in the Deccan are well documented from at least the late eighteenth century, and we should think of these micro-architectural models as processing through an urban landscape itself filled with micro-architectural representations and cross-references.
THE MEANINGS OF MICRO-ARCHITECTURE

Micro-architecture offers a fresh and highly productive way of looking at, and thinking about, Islamic religious architecture in South Asia, both at the level of individual buildings and in terms of regional styles and other groupings. Explorations of what I have proposed to call “micro-architecture” are now relatively advanced in relation to the subcontinent’s temple architecture and the present article has begun to sketch out some of the principal regional traditions of Islamic religious architecture in which micro-architecture also plays a role. Having opened this perceptual box, this article will hopefully stimulate future research into what is certainly a widespread and complex phenomenon.

Many regional micro-architectures still require in-depth documentation and analysis, and early Ghurid architecture and Islamic religious architecture in the sultanates of Bengal and Jawnpur (late twelfth to late fifteenth centuries) might benefit from a fresh analysis in this light. In many cases, too, this work would be well served by a parallel examination of temple architecture and Islamic religious structures, since the dialogue is complex and by no means unidirectional. It seems clear that the Deccan and the Tamil region further south will be especially important areas of research, as they have multiple, permanent micro-architectural clusters and are also documented as early centers of experimentation with ephemeral micro-architectural forms (e.g., ta’ziyeh). Just as important is the question of the distribution of Islamic micro-architecture across South Asia. The apparent density of examples in western India and the Deccan will also require further attention.

However, the truly stimulating questions that remain to be answered lie in untangling the making and reception of micro-architecture. The representation of architecture—in any number of dimensions and whether as a complete “small building” or through a significant part of one—prompts us to question and reflect upon a wide range of phenomena such as mimesis and the relation between originals and copies, generic types and individual renditions. Micro-architecture plays with scale and often coexists with other illusionistic interests. The concluding sections of this article begin this process, although pinning meanings to micro-architecture remains a difficult task, complicated by the paucity of sources for the period under study, as well as by the limited nature of personal commentary about architecture found in contemporary sources in this period.

Meaning and micro-architecture

Work on micro-architecture in Indic temples has naturally addressed the question of its significance and iconography. What did micro-architecture mean and what did it do?

Much of the existing discussion of micro-architecture in a temple context has focused on its place in architectural practice, as evidence for a largely internal dialogue among and between architects and sculptors. For M. A. Dhaky, the great scholar of Indic temple architecture, micro-architecture is physical evidence of architects’ awareness of, and interest in, the larger tradition of Indic architecture within which they worked. For Gerard Foekema, these examples were manifestations of an intergenerational dialogue among architects. For Ajay Sinha, represented architecture is evidence of the “architect’s process of seeing and knowing.” Textual support for these ideas, in śastraic literature for example, is scant and we have no documents that reveal the intentions of individual architects or carvers. However, the idea that architects and carvers communicated through architecture remains persuasive. Communication does not have to be textual, or even verbal: contemporary designers explore and develop ideas through models and sketches, without necessarily leaving written evidence for their creative process, and it seems only fitting that several of the scholars who have responded to this phenomenon in Indic architecture, notably Adam Hardy, should be architects by training. We will return to this idea shortly in relation to Islamic religious architecture.

Religious architecture and abode

In terms of specific micro-architectural iconographies, many interpretations have been explored, although all struggle to find support in śastraic literature, foundation inscriptions, and other sources. The one idea that is consistently expressed by contemporary inscriptions and other sources is that the temple superstructure should resemble or recall the Himalayas or Mounts Meru or Kailasha, the abodes of the Hindu gods. In these sources, the massing of temple superstructures has been likened to foothills rising towards a central
mountain peak.\textsuperscript{61} This notion does not immediately seem to aid our interpretation of Islamic micro-architecture. However, the key idea to single out here is that of the temple as the abode of the deity, likened here to the Himalayas, an idea that seems to open up other interpretative possibilities. The metaphor of the temple as abode is reinforced by the daily rituals performed around the waking, washing, and entertainment of the deity’s image. Temples are quite literally the deity’s home. Perhaps, then, the idea of temple as abode might also serve to explain the evocations of physical shelter that micro-architectural elements elicit in a temple context. It has been noted that in Southern Indian temple design, the temple superstructure explicitly adopts the forms of palatial architecture to create a palace abode for the deity.\textsuperscript{62}

The very different conception of the space of the mosque in Islam and the very different practices of worship in Islam mean that these ideas do not necessarily translate smoothly to the context of Islamic religious architecture. Nevertheless, we are exceptionally fortunate to have at least some evidence for the fact that architects and craftsmen in western India continued to understand the mosques they built in terms of abodes for the deity. A unique fifteenth-century Gujarati text, the \textit{Vṛksārṇava}, actually includes a chapter on the construction of the \textit{Rehmana-Surālaya} (Abode of the God Rehmana),” i.e., Allah.\textsuperscript{63} The chapter sets out general specifications for mosque design—regarding direction and decoration, for example—but the very fact that a mosque is described as the abode or dwelling place of Allah only underlines the extent to which, at least for the non-Muslim architects and craftsmen of fifteenth-century Gujarat, the space of the mosque was understood, in decidedly Indic terms, as the place where the divinity Allah resided and was made manifest. It is difficult to gauge the degree to which Muslim patrons and worshippers in western India also read mosque architecture in these terms. Clearly, however, the large numbers of converts from Hinduism would have been aware of the notion of the temple as the home of the deity and sensitive to the ideas of divine manifestation implicit in temple architecture. As Muslims never formed a majority of the population in Gujarat and processes of conversion were ongoing, this very fundamental aspect of Indic religious architecture may have enjoyed a long lifespan. This understanding of mosque space cannot have been unique to western India, although to date we have no written evidence as compelling as this for other regions.

\textbf{Potent micro-architectures}

If the idea of abode perhaps offers a general interpretative context for Indic micro-architectures, the diversity of types and their applications still raise the question of specific iconographies. In his study of the medieval temples of Karnataka in the Deccan, where micro-architecture sometimes forms the primary decorative mode, Ajay Sinha has suggested that micro-architectural temple forms represented the divinity. He writes that, as in all Indian architecture, Vesara’s \textit{bhadra} [central projecting wall-offset] shrines convey the manifesting divinity into the worshipper’s space…[T]he iconic unit is the \textit{garbha} [womb chamber], not the figural image. The pavilion, \textit{kūṭastambha} and cell become iconographically potent.\textsuperscript{64}

Unfortunately, the chapter on the \textit{Rehmana-Surâlaya} gives no specifications about the use of micro-architectural elements in mosque construction; it simply specifies that vegetal designs are preferable and that the abode of Allah has no statue of the deity. However, Sinha’s thesis suggests interesting angles for interpreting micro-architecture in an Islamic context. Although the texts are quite clear that Allah could not be represented, could “iconographically potent” elements of his religious architecture be used instead to represent his presence? Should we read the miniature mihrabs and minarets at Dholka in this way? The architectural quotations spread across the building’s main axis might be seen as attempts to represent the force of \textit{al-Rahman} (the compassionate one) expanding into the worshipper’s space. The selective transfer of micro-architectural elements in western India during the fourteenth century, which has been examined earlier, appears to support this idea. We also see a preference for more neutral architectural forms such as \textit{mandapas} and, eventually, the development of a distinct Islamic micro-architecture generated from Islamic religious architecture. The diversity of solutions indicates just how complex the translation of micro-architecture to an Islamic context was in Gujarat in the fourteenth century.
However, by the time of the first Islamic micro-architectures in the Deccan, apparently from the early to mid-sixteenth century onwards, temple-specific forms appear to have been long forgotten. Indeed, it is unclear whether the generic micro-architectural forms found there—domed squares, domed octagonal towers, and so on—carry any “faith charge” at all. By this period, Islamicate forms such as domes and pointed arches had permeated the architecture of all the Deccani polities, as has been well studied, for example, in the palace architecture of Vijayanagara. It may be that what we see in the Deccan in this period should be read as a generically palatial micro-architecture, rather than an Islamic one. The nature of this shift appears to be confirmed later, in the seventeenth and eighteenth centuries, in Maratha temple architecture, where domed squares were found on the śikhara, in preference to by then old-fashioned trabeate temple forms. A similar shift is possibly also visible in the later, fifteenth-century architecture of the Ahmad Shahis in Gujarat, where the micro-architectural minaret bases appear to refer to less charged forms such as towers and to a more overtly trompe l’œil tradition.

More specifically, Islamic iconographies do appear to operate in the development of micro-architectural citation of known Islamic structures, such as the evocation of the Ajmer minarets in Hilal Maliki’s mosque at Dholka and, in the Deccan, through the citation of the minarets of Mahmud Gawan in ‘Ali Barid Shah’s funerary mosque at Bidar. These South Asian micro-architectural copies contrast markedly with the notion of the prototype developed and explored by Richard Krautheimer in his now-famous article, “Introduction to an ‘Iconography of Medieval Architecture.’” Krautheimer’s article focused on the pars pro toto evocation or referencing of a particular building, in this case the Holy Sepulcher, through the repetition of a significant architectural feature of the prototype. Krautheimer identified a phenomenon in which representations of buildings in architecture and painting “show the disintegration of the prototype into its single elements, the selective transfer of these parts and their re-shuffling in the copy.” The idea has subsequently been explored in a South Asian context by Ebba Koch in her article “The Copies of the Qutb Minar,” in which she proposes that a number of structures “cite” the Qutb through the inclusion of stellate elements recalling the mīnār’s distinctive falanged exterior. These “quotes” from the Qutb, she proposed, were made by rulers wishing to “transfer the significance of the prototype, which had become the landmark of the establishment of Muslim rule in India, onto their own constructions.” I would differentiate the micro-architectural citations discussed here from this type of copying precisely because significantly more than one feature is repeated and the constituent elements retain their original architectural sequence. Although Ebba Koch’s proposed “citations” of the Qutb Minar have been excluded from the present discussion, they might well benefit from fresh investigation as a micro-architectural subtype.

Nevertheless, generic micro-architectural forms may have served as useful canvases on which to overlay more specific connotations, as and when desired. It is perhaps one of the singularities of Islamic art that although the Koran vividly evokes the architecture of Paradise—its pavilions and gardens—and in spite of a large body of related hadith literature, representations of paradisiacal architecture never found a prominent place here, certainly nothing comparable to the focus on the representation of the Heavenly Jerusalem in Christian art. Still, in a number of cases in South Asia, inscriptional programs appear to act as catalysts for the interpretation of micro-architectural decoration. The foundation inscription on the Friday mosque at Cambay carries a well-known hadith to the effect that “Whoever builds a mosque for the sake of God, even in the size of a bird’s nest for her eggs, God will build a home for him in Paradise.” This hadith is relatively common in mosque inscriptions in Gujarat but, in this particular context, it suggests that the mandapas above the mosque’s mihrabs and those around the central chhatri in the courtyard might have been intended to be read with a specifically paradisiacal meaning. Although this was perhaps unintended, the metaphor chosen to illustrate the idea that the foundation of any mosque, no matter how small (“even in the size of a bird’s nest for her eggs”), brings spiritual rewards, also neatly reinforces the micro-scale of the micro-architecture represented.

The extraordinary “architectural landscape” on the main mihrab of the Friday mosque in Bijapur is also complemented by an extensive program of inscriptions. A calligraphic grille positioned in the upper center of
the wall bears the Āyat al-Nūr (Koran 24:35), in which the light of God is famously described as being “like a niche (mishkāt) within which is a lamp (miḥbah), the lamp enclosed in glass, the glass as if it were a pearly star (kawkab durri).” Across the rest of the wall, historical inscriptions record the patronage of the work, while numerous smaller cartouches contain, among others, hadith about the mosque of the Prophet in Medina. The whole program clearly deserves a study of its own, but even at this stage it is sufficiently clear that these references to the mosque of the Prophet and to the light of God within its niche set up multiple interpretative frameworks for the reading of the entire architectural composition. Mark Brand goes further and suggests that the micro-structures on the mihrab relate again to the cult of the Prophet and so represent his mausoleum and the reliquary of the hairs.

Bounding, focusing, and framing

The task of pinning specific iconographies on Islamic micro-architecture in South Asia is in its early stages and we should not overlook the role micro-architecture plays in the general reinforcement of the main structural axes. In almost all the mosques examined here, micro-architectural elements, whether placed at roof level or around gateways and above mihrabs, emphasize the qibla axis. By contrast, in most mausolea their placement around the whole perimeter of the structure reinforces the central plan and the use of these spaces for circumambulation. This important signalling role of micro-architecture ties in with a similar phenomenon observed in late antique and early Islamic architectural representations. In The Mediation of Ornament, Oleg Grabar introduces “Architecture” as a category of Islamic ornament alongside the more conventional categories of “Calligraphy,” “Nature,” and “Geometry.” Entitled “The Mediation of Architecture,” the fourth chapter opens with a meditation on the different interpretative viewpoints and contexts through which to read the two magnificent and justly famous architectural compositions on parchment discovered in the Great Mosque of San’a in the late 1970s, which are believed to have been frontispieces to a large Koran, possibly of the eighth century. Grabar suggests that “represented architecture used as ornament” served two functions: to bound, that is, to separate, space and to focus and frame the main subject. “In all these cases, I want to argue,” he says, “separating and wrapping for announcing are the central function of the architectural decoration” and serve to amplify the main subject. In contrast to late antique and medieval Christian art’s clear interest in the representation of the Heavenly Jerusalem or the Holy Sepulcher, Grabar’s Islamic micro-architecture defiantly resists single and easy interpretations, and he is forced to conclude that, in ways that belong to yet uncharted aspects of perceptual intelligence, the intimation of building or of a building provides a force of presence and a solidity of power or of authority that is transmitted to whatever is connected to it.

Such a description seems also to apply to micro-architecture in South Asia.

The viewer and micro-architecture

Grabar’s observation brings this discussion squarely back to the role of the viewer and user of architecture in the experience of micro-architecture. Here more than anywhere, we lack sources that reveal the premodern viewer’s perspective and the following remarks are necessarily conjectural in the extreme.

Grabar underlines micro-architecture’s role in amplifying the authority and presence of the main subject, but we should also not forget its recurrent playfulness and deliberate appeal to the viewer’s imagination. In the Damri mosque or at the mausoleum of Ibrahim Adil Shah, a simple change in scale allows architects to evoke entire walled cities or palace complexes in the space of a single rooftop, in a manner very close to trompe l’oeil. In the Cambay mihrabs, micro-architecture is found side by side with overtly illusionistic niches containing “suspended” marble lamps, which appear to have been designed to fool and quite simply dazzle the viewer. In Hilal Maliki’s mosque at Dholka, micro-architecture weaves cross-references across the building’s main axis. With self-imaging, viewers find themselves caught up in a seemingly infinite tunnel of increasingly smaller representations of the main monument or mihrab. The experience and enjoyment of these aspects of micro-architecture are open to even the most untrained eye and appear to function at a level different from that of the architects’ learned citation
of styles and types, as suggested by Foekema, Dhaky, and Sinha. Perhaps at its most basic, micro-architecture was there to provoke amazement and wonder in the viewer. The power of the miniature to elicit pleasure and delight has certainly been noted in the writings of modern theorists such as Gaston Bachelard and Claude Lévi-Strauss, both of whom see these emotions as deriving from the greater ease with which the small can be apprehended and the feelings of dominance or possession this creates. It remains to be seen whether these ideas can be directly transposed to medieval South Asia. Further research into aesthetics in the different regions of South Asia where micro-architecture is found—for example, courtly interests in literary punning and allusion and in the adornment of the human body in court dress and jewellery—may perhaps help to unlock our understanding of contemporary responses to micro-architecture.

For the Deccan, the undeniable ambiguity, trompe l’œil, and visual pun seen in much of this micro-architecture seem to fit, at least generally, with what we know to have been a sophisticated court audience. There can be no doubt that micro-architectural elements responded to the expectations of a refined court milieu, where connoisseurship was de rigueur and visual and verbal wit was prized. The very elusiveness of meaning in this micro-architecture reminds us of the ‘Adil Shahi concept of nauras, a term of multiple meanings including “nine flavors,” “nine rasas (moods [with respect to traditional Indian music]),” and “new arrival,” that inspired artistic circles under Ibrahim ‘Adil Shah precisely because of its elasticity. As always, the problem is in finding written evidence to correlate these interpretative frameworks to specific architectural features; the rich area of Deccani courtly culture and aesthetics will hopefully yield results.

No doubt the ability to puzzle and amaze also reflected favorably on the architect and carver. In several regional traditions, micro-architecture is seen alongside other designs that aim to showcase technical virtuosity and this association suggests that micro-architectural forms might also have become loci for overt technical display. Cambay’s mihrabs are justly famous for their sculpturally carved and highly illusionistic niches featuring lamps apparently suspended from stone chains. As at Cambay, micro-architecture in Bijapur is also part of a wider culture of conspicuous technical display within architecture. Micro-architectural parapets are accompanied by eaves that bear intricately carved stone chains, which are extremely complex to carve in any medium and, even today, remain virtuoso feats. Although the genre has not been studied in detail, an early example illustrating the importance of the motif is the single stone chain hanging within the throne apse of the eighth-century Umayyad palace of Khirbat al-Mafjar in Palestine. Together with the stone chains and intense, jewel-like carving that characterize later ‘Adil Shahi architecture, micro-architecture allows the carver to showcase his art.

**Micro-architecture in architectural training and the process of design**

We opened this discussion with a brief reference to architectural historians’ interest in regarding micro-architecture as a medium for commenting on the architectural profession. As Ajay Sinha expressed it, represented architecture is evidence for the “architect’s process of seeing and knowing.” In this final section, it is worth developing the implications of this interpretation of micro-architecture in more detail.

Indic micro-architecture does appear to be a phenomenon found largely in architecture; micro-architectural elements and represented architecture are only minimally present in other media such as metalwork or textiles, although there was undoubtedly some overlap with traditions of two-dimensional architectural representation in mural and miniature painting. The architectural focus of micro-architecture in South Asia certainly contrasts with the profusion of micro-architecture across media in late antique and Gothic material culture, and this perhaps provides further support for the idea of micro-architecture as part of an internal dialogue among architects and stone carvers.

The relative importance of Indic micro-architecture within the architectural profession raises obvious questions about the significance of micro-architecture in the training of craftsmen, the transmission of designs, and ultimately the development of architecture itself. In spite of the vast śastric literature on architecture, we know very little about the training of architects and craftsmen in South Asia, although it seems probable that various forms of copying, including
possibly model making, must have constituted an essential part of learning. If self-imaging encouraged skills of direct observation and copying, generic micro-architectural forms would have allowed craftsmen to practice designing key architectural types. The interest in direct observation and copying seen in much Indic micro-architecture, be it through “self-imaging” or the representation of other iconic structures, emerges clearly when contrasted with late antique practice, where prototypical architectural types predominated and relied on written labels to make them specific. As Oleg Grabar states in his analysis of late antique represented architecture, “the building is only very rarely identifiable, and when it is, the mechanism of identification is an inscription.”

The phenomenon of architectural citation requires further examination but several Islamic micro-architectures appear to make reference to known buildings and so provide evidence for what M. A. Dhaky has called architects’ awareness of, and interest in, the larger tradition of Indic architecture. The question of how much viewers also participated in this architectural citation is also important but possibly even more difficult to answer.

We might even ask whether micro-architecture presented craftsmen with unique opportunities for formal experimentation, freed from real-life structural constraints. In his 1976 article on “Micro-Architecture as the ‘Idea’ of Gothic Theory and Style,” François Bucher suggested exactly such a role for micro-architecture in the development of openwork spires during the Gothic period. The finials of the Damri mosque at Ahmadnagar can be read not only as slightly elongated domed octagons, but also as micro-architectural minarets with suspended balconies, an early experiment with the type of monumental tower minaret with a suspended encircling balcony seen barely twenty years later in Hyderabad. Further research is needed to explore these aspects of micro-architectural practice but the richness of this viewpoint needs no further elaboration.

This study has only begun to open what I see to be a complex and exciting perceptual window into the Islamic architecture of South Asia. Many ideas presented here are preliminary in the extreme and now await refinement. Much material remains to be discovered and many new approaches undoubtedly require exploration. The volume and complexity of micro-architecture in Islamic South Asia make this a task for scholars across many fields and I hope this study will stimulate crossdisciplinary collaborations. Micro-architecture’s versatility is a fundamental part of its fascination, but just as interesting is its continued ability to command attention and fire the imagination. This study has been a long time in the writing and yet I still do not tire of gazing at these “small models of large buildings.” I can only conclude with a quote from Gaston Bachelard that captures something of this power: “Miniature is an exercise that has metaphysical freshness; it allows us to be world conscious at slight risk. And how restful this exercise on a dominated world can be! For miniature rests us without ever putting us to sleep. Here the imagination is both vigilant and content.”

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NOTES

Author’s note: I would like to thank the many people who have discussed these ideas with me and proofed the present article over the course of its production. Crispin Branfoot provided early criticism and encouragement, and, more recently, I have benefited from the comments of the two readers at Muqarnas. Other contributors are too numerous to cite but I would like to express particular thanks to George Michell for his invaluable feedback and insights. All errors are, of course, my own.

1. The phrase comes from James Fergusson’s History of Indian and Eastern Architecture and is one of the first references in Western architectural history writing to this phenomenon. While discussing the Martand temple in Kashmir, he refers to the fact that both at Ajanta and “everywhere else in India, architectural decoration is made up of small models of large buildings applied as decorative features wherever required.” James Fergusson, History of Indian and Eastern Architecture (London, 1876), 285.


In the medieval European literature on micro-architecture, the category also includes architecturally shaped artifacts and architectural models, this inclusivity perhaps opening new perspectives on other Islamic arts. Thus, Seljuk and Mamluk decorative arts appear to show a particular interest in architecturally shaped objects such as Koran boxes and tables. On architectural models in the Islamic world, see Gülru Necipoğlu-Kafadar, “Plans and Models in 15th- and 16th-Century Ottoman Architectural Practice,” The Journal of the Society of Architectural Historians 45, 3 (1986): 224–43.


4. Ibid., 324.


7. Karnatakā’s particular focus on micro-architectural forms, sometimes to the total exclusion of other forms of decoration or iconography, explains its important place within the studies of Hardy, Foekema, and Sinha (see n. 5 above).


10. Technically, kātastambha refers to only one type of micro-architectural element, but in many cases it is used to refer to micro-architecture as a class of decoration.


15. The earliest example is at the 1414 Bhadra mosque of Ahmad Shah I: see James Burgess, The Muhammadan Architecture of Ahmadabad, 2 vols., Archaeological Survey of Western India 7 (Bombay, 1900–1910), vol. 1, pl. XIV.

16. George Michell, personal communication (27 August 2009). This modus operandi is seen at Mount Abu, where the two most important temple complexes survive intact but lack their original shrine towers.

17. Sinha, Imagining Architects, 179, 181.


19. Early photographs of another Cambay mihrab, the Lar mihrab, also show that its top arch was originally framed by two rectangular lanterns, similar to those represented on the mihrab image: see photograph in R. Howard, “The Lar Mihrab,” Art and Archaeology Research Papers 9 (1976): 24–25.

20. Similar, though simpler shrines can be seen on some of the subsidiary mihrabs in the 1333 Friday mosque founded by the Tughluq noble Hilal Malik in the nearby town of Dholka.


22. At Ajmer, the main mosque was completed in 1199, but it was another thirty years before the prayer hall was given a façade screen by Sultan Iltutmish (r. 1211–36), in around 1229–30: J. Horovitz, “The Inscriptions of Muhammad ibn Sâm, Qutbuddin Aibeg and Iltutmish,” Epigraphia Indo Moslemica (1911–12): inscr. XXXII, 30. M. A. Dhaky has suggested that Ajmer provided the model for the Dholka micro-minarets: M. A. Dhaky, “The Minarets of the Hilal Khan Qazi Mosque. Dholka,” Journal of the Asiatic Society of Calcutta (1972): 19–24.

23. For a discussion of this aspect of Cambay marble carving, see Elizabeth Lambourn, “Carving and Communities: Marble Carving for Muslim Communities at Kambhat and around
the Indian Ocean Rim (Late Thirteenth–Mid-Fifteenth Centuries CE),” *Ars Orientalis* (2004): 101–35.

24. There are certainly well-established precedents for painted sculpture in western India in this period: see a longer discussion in ibid., 113 n. 61.

25. On Cambay’s marble export market, see ibid., 122–26. Fragments of similar mihrabs have been identified at Cambay and in Mogadishu, confirming that such mihrabs were manufactured as a standard type, no doubt during the first half of the fourteenth century, based on stylistic evidence and a few foundation inscriptions.

26. See the photograph in Howard, “Lar Mihrab.”

27. For a full discussion of the genesis of this motif, see Lambourn, “Carving and Communities,” 113–14.


29. The phenomenon was observed by Henry Cousens and is repeated in the work of Ziauddin Desai and, most recently, Deborah Hutton. See Henry Cousens, Bijapur and Its Architectural Remains, with an Historical Outline of the ‘Adil Shahi Dynasty, Archaeological Survey of India, Imperial Series 37 (Bombay, 1916); Z. A. Desai, “Architecture,” in *History of Medieval Deccan*, 1295–1724, ed. H. K. Sherwani and P. M. Joshi, 2 vols. (Hyderabad, 1974), 2:279; Deborah Hutton, *Art of the Court of Bijapur* (Bloomington, 2006), 120–46. John Burton-Page was uniquely sensitive to this aspect of Deccani architecture, although he never wrote about micro-architecture as a phenomenon, or even referred to it as such: see John Burton-Page, *Indian Islamic Architecture: Forms and Typologies, Sites and Monuments*, ed. George Michell (Leiden, 2008), esp. s.v. “Minarets” and “Bijapur.” The period during which micro-architecture appears in the architecture of the Deccani sultanates may be linked to the defeat in 1565 of Vijayanagara, the seat of Hindu power since the fourteenth century, by a coalition of Deccani sultanates. The defeat of Vijayanagara not only provided the Deccani sultanates with the booty and new territory to fund extensive architectural campaigns, but also mobilized architects and groups of craftsmen, both of which substantially reconfigured the architecture of the Deccan.


31. A similar idea was continued in the tombs of some of Ahmad Shah Bahmani’s successors and courtiers, and occasionally in mosque architecture; see Yazdani, *Bidar*, 130–32, for the tomb of ‘Ali’ al-Din Bahmani, which is illustrated in the same volume. Similar tentative explorations can be seen in early ‘Adil Shahi architecture. In the Asen Beg mosque at Bijapur, also known as Yusuf’s old Friday mosque and believed to date to 1512, the four corner *chhatris* are almost perfect miniature domed *qubbas*; their elongated drums and domes perfectly reproduce the form and proportions of the mosque’s own central dome: Cousens, *Bijapur*, fig. 9; Elizabeth Merklinger, *Indian Islamic Architecture: The Deccan*, 1347–1686 (Warminster, 1981), fig. 71. In several other cases, rooftops are marked by architecturally inspired kiosks (*chhatris*), as well as finials, but the brick and plaster of these early constructions do not doubt hampered the size and amount of detail these rooftop elements could bear and thus their relationship to architectural prototypes. Almost contemporary with the Bijapuri examples are a number of early experiments in the architecture of the Nizam Shahis of Ahmednagar. Early architecturally-shaped finials can be seen on the parapet of the mausoleum of Ahmad Bahri Nizam Shah (ca. 1509): see Gordon Johnson, C. A. Bayly, and John F. Richards, eds., *The New Cambridge History of India* (Cambridge, 1987–2006), pt. 1, vol. 7, *Architectural and Art of the Deccan Sultanates*, ed. George Michell and Mark Zebrowski, fig. 50.

32. The Mecca mosque at Ahmednagar, traditionally dated to 1525 and attributed to the patronage of Rumi Khan, bears traces of badly damaged micro-architectural elements on its façade, although these could be subsequent additions. Much later examples come from the mausoleum and mosque of Malik Ambar (ca. 1626), a vizier of the ruler of Ahmednagar, at Khuldabad in the northern Deccan, which features micro-architectural *qubbas*: Michell and Zebrowski, *Architectural and Art of the Deccan Sultanates*, fig. 53; for the mosque, see an 1860 photograph by J. Johnston in the British Library, Photo 303/1 (112), Item no. 112.

33. Hutton, *Art of the Court of Bijapur*, fig. 2.3.

34. Ghulam Yazdani remarks that the minarets resemble “in certain features the minarets of the Madrasa of Mahmud Gawan”: Yazdani, *Bidar*, 159, pl. XCVIII.

35. Other examples of ‘Adil Shahi micro-architecture are found at Bijapur; the Gol Gumbad, the mausoleum of Ibrahim’s successor Muhammad (d. 1656), also incorporates similar elements at roof level: Cousens, *Bijapur*, pls. XC, XCII. Other examples include the Afzal Khan mosque, constructed before 1659, as well as the tombs of Ikhas Khan (d. 1597), Yaqut Dabuli, Amin al-Din (ca. 1664–65), and Khan Muhammad Khan Khanan (d. 1686): see Merklinger, *Indian Islamic Architecture*, figs. 99, 29, 81, 31, and 30, respectively. See also the late seventeenth-century Mecca mosque in Michell and Zebrowski, *Architectural and Art of the Deccan Sultanates*, fig. 64. The façade of the so-called mosque of Kowars Khan is also marked by a pair of micro-architectural elements: see the sketch by Alexander Nash executed in 1844 and preserved at the British Library, WD2095, Item no. 8.

Micro-architectural experimentation was by no means confined to the ‘Adil Shahi capital, and an early and significant example appears to be the Sampaonu mosque, dated on epigraphic grounds to the third quarter of the sixteenth century, which has domed micro-architectural *qubbas* at the center of its façade: Merklinger, *Indian Islamic Architecture*, p. 120, cat. 104, fig. 87. The 1617 Kalí mosque and gateway at Lakhmeshwar make an interesting distinction between two- and multistoried domed *qubbas*, placing twinned multistoried *qubbas*, which almost resemble towers, at the center of the gateway façade and a pair of two-storied domed *qubbas* at the center of the mosque façade: Cousens, *Bijapur*, 69, and pls. XLI, XLI; see also Merklinger, *Indian Islamic Architecture*, figs. 69, 158. Other examples can be seen on the Afzal Khan mosque at Afzalpur (before 1659) and the mid-seventeenth-century Afzal Khan mosque at the dargah of
Gisu Daraz in Gulbarga: Merklinger, Indian Islamic Architecture, figs. 33, 107, and 97.


37. These details can be seen in an old nineteenth-century photograph preserved in the British Library. Photograph by H. H. Cole, dated 1885, Photo 1003/(1856), Item no. 10031856.

38. Merklinger, Indian Islamic Architecture, fig. 115.

39. See Merklinger, Indian Islamic Architecture, cat. 163, figs. 30 and 31. On the Mecca mosque at Bijapur, the two sides of the façade are marked by two micro-architectural motifs showing an arced ground floor with five openings, topped by a ribbed dome on a high drum and corner domed finials, which recall essential features of the mosque itself: Michell and Zebrowski, Architecture and Art of the Deccan Sultanates, fig. 64.

40. In studies of medieval European micro-architecture, large pieces of church furniture such as pulpits, as well as urban elements such as fountains and crosses, are all classed as micro-architecture when they have micro-architectural forms. See, for example, Timmerman, "Poor Sinners' Cross and the Pillory," where the Jal Mandir might thus be seen as a micro-architectural reliquary rather than as a building.


42. Accounts of the arrival of the relic at Bijapur are given in Firishta’s Ta’rikh-i Firishta, written for Ibrahim ‘Adil Shah II (r. 1580–1626) and presented at court in 1606 (though updated afterwards, since events up until 1626 are included). For the Athar Mahal, see Cousens, Bijāpur, 89–95.

43. Mark Brand also showed a number of simple carved stone lamps housed in various buildings at Bijapur (e.g., the mausoleum of Muhammad ‘Adil Shah [r. 1627–55], the Ibrahim Rawza, the Friday mosque, and the Athar Mahal) that are micro-architectural in form. Although none of these lamps can be precisely dated at present, Brand considers the majority to be of ‘Adil Shahi date. They represent a rare example in India of lamps being given an explicitly architectural form. See Brand, “Re-Creating Islam in the Seventeenth Century” and personal communication, 25 March 2010.

44. The mosque itself was built in 1576 during the reign of ‘Ali I (r. 1558–80). The historical inscriptions are published in M. Nazim, Bijapur Inscriptions, Memoirs of the Archaeological Survey of India 49 (Delhi, 1936), 29–30. The mihrab of the Mecca Masjid, also at Bijapur, reprises this idea in carved stone: see Cousens, Bijāpur, pl. CII.

45. Marika Sardar’s doctoral dissertation on Golconda is an important new contribution to Qutb Shahi architecture, and I would like to thank her for making it available to me, as well as for taking time to answer my questions: see Marika Sardar, “Golconda through Time: A Mirror of the Evolving Deccan” (PhD diss., Institute of Fine Arts, New York University, 2007). Omar Khaldi’s work on Hyderabad indicates the paucity of existing studies of the city’s Islamic monuments: see Omar Khaldi, A Guide to Architecture in Hyderabad, Deccan, India (Cambridge, Mass., 2009).

46. Others qubbas appear on the four corners of the baradari (a type of large single-storied pavilion) in the Inner Fort of the Bala Hisar at Golconda, and on the 1671 Toli mosque at Hyderabad: see Michell and Zebrowski, Architecture and Art of the Deccan Sultanates, fig. 70.

47. I am grateful to Marika Sardar for highlighting the problems with early structures such as the Taramati mosque in the Bala Qila at Golconda, an early example of Qutb Shahi religious architecture attributed to the reign of Ibrahim Qutb Shah (r. 1550–80), which displays in its present state a developed micro-architectural parapet (personal communication, n.d.); see also Desai, “Architecture," 296. The earliest micro-architectural elements in Qutb Shahi architecture may be the four pillars that mark the ends of the 1518 Friday mosque built by Sultan Quli at Golconda.

48. Large micro-architectural parapets are a prominent feature of the later eighteenth- and nineteenth-century Islamic religious architecture of several parts of southern India. With the extension of ‘Adil Shahi and Qutb Shahi control to the ports of the Coromandel coast and subsequent Mughal and Maratha conquests in these areas, prominent parapet façades can be traced in the architecture of the Sultans of Mysore in what is now southern Karnataka, as well as in the architecture of the Nawabs of Arcot, or Walajahis, in northern and eastern Tamil Nadu.

49. Jonathan Bloom, Minaret: Symbol of Islam, Oxford Studies in Islamic Art 7 (Oxford, 1989), 99. The two examples cited by Bloom come from a Zaydi and a Fatimid source. It would be interesting to see whether these hadith are included in Deccani hadith collections and, if so, how they are discussed.

50. For a discussion of Fatimid responses to this tradition, see ibid., 99–124, and 125–44.

51. For a detailed overview of locations used for the call to prayer and particularly the history of the early Islamic use and development of types of staircase minarets, see ibid., 28–35. Well into the modern period, Sunni congregations used the roofs of mosques for the call to prayer, sometimes with mi’dhanas to shelter the muezzin, in places where there was no structural or financial capability to construct tower minarets or where this was not a strong regional tradition. The Hilal Khan mosque at Dholka in Gujarat, which was discussed earlier, is a perfect example of this type of arrangement and typical of many pre-Ahmad Shahi mosques in western India.

52. See ibid., 179, figs. 120 and 129.


54. The story of Timur’s introduction of Muharram practices to India in 1398 is widely repeated, based on the early nineteenth-century source by Ja’far Shari‘, Islam in India, or the Qānūn-i-Islām: The Customs of the Musulmāns of India,
Eng. trans. G. A. Herklot (reprint New Delhi, 1972), 164. The later editors of the text appear to have added a source for this statement, linking it to an entry in the 1874–1904 Gazetteer of the Bombay Presidency. However, the South Asian history of Muharram remains far from clear at present and two recent articles that attempt to broaden our understanding of it are found in Knut A. Jacobsen, ed., South Asian Religions on Display: Religious Processions in South Asia and in the Diaspora (London, 2008): see the brief historical summaries by Mariam Abou Zahab, “Yeh matam kayse ruk jae?” (‘How Could This Matam Ever Cease?’); Muharram Processions in Pakistani Punjab, esp. 106 no. 6, and Hugh van Skyhawk, “Muharram Processions and the Ethnicization of Hero Cults in the Pre-Modern Deccan,” 127–28.


57. Dhaky alludes to a “healthy curiosity concerning knowing about architectural forms other than their native [ones]”: M. A. Dhaky, The Indian Temple Forms in Kārnāṭa Inscriptions and Architecture (New Delhi, 1977), 41.

58. Foekema, Architecture Decorated with Architecture, 10.

59. Sinha, Imagining Architects, 27.


64. Sinha, Imagining Architects, 179, 181.


66. Ibid., 14.


68. Ibid., 101.

69. See Flood, Great Mosque of Damascus, for the most recent bibliography on this iconographic program and related material.


71. The historical inscriptions are published in Nazim, Bijapur Inscriptions, 29–30.


73. Oleg Grabar, Mediation of Ornament, 155–94.

74. Ibid., 186.

75. Ibid., 189.

76. Ibid., 190.


79. Hutton, Art of the Court of Bijapur, 110–11. For a particularly successful study of literary and visual metaphor in Spanish courtly culture during the Ta’ifa period, see Cynthia Robinson, “Seeing Paradise: Metaphor and Vision in Ta’ifa Palace Architecture,” Gesta 36, 2 (1997): 145–55. Robinson’s description of the third category of metaphor, known as isti’aʿara, recalls some of the processes hinted at in the creation and reception of micro-architecture in Islamic South Asia. She describes it as “much more subtle, and comprehensible only to possessors of superior powers of perception. This category of metaphor entails the poet’s discovery, and the listener’s comprehension, of hidden similarities” or involves the viewer in active “participation in the unraveling of the visual puzzle or metaphor”. Robinson, “Seeing Paradise,” 153, 154. One is tempted to substitute “architect” and “viewer” for “poet” and “listener” so that the passage reads: “this category of metaphor entails the architect’s discovery, and the viewer’s comprehension, of hidden similarities.” Indeed, Robinson argues that such metaphors also operated in the reading of palace architecture as a visual equivalent of Paradise.


81. Sinha, Imagining Architects, 27.

82. Grabar, Mediation of Ornament, 178.
