SOME NOTES ON THE BYZANTINE HOUSES OF CAPPADOCIA

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ABSTRACT

This study reviews the remnants of the rock-cut Byzantine elite houses of Cappadocia, unique examples of residential buildings of that period, which are still preserved in fairly good condition. The aim of the following study is to discuss issues of building planning, typology, and, secondarily, morphology concerning Byzantine residence complexes in Cappadocia. The study is based on the relevant scientific research and on the reexamination of examples of houses known from the literature. It presents the spaces that make up the houses of Cappadocia and notes their primary characteristics and function to the extent possible. Particular attention is paid to ceremonial and transitional spaces: courtyards, porticos, vestibules, and main halls. It outlines the common design principles of the complexes and attempts a typological classification of the elite houses based on the organization of their nucleus, namely the courtyard, transitional space, and hall. Considering the elite houses of Cappadocia not only as a regionally independent group of buildings but also as part of Byzantine residences in general allows us to examine the issue of the origin and evolution of the Byzantine house. Possible morphological influences from the capital and other building examples are pointed out, as well as the distinctive features of the houses as a result of particular local conditions. In terms of chronological order and the evolution through time of house architecture of Cappadocia, current research shows that the main elements of the elite houses of the area can be traced back to the sixth century. The elite houses of Cappadocia must be considered as an architectural exploration, which, based on the architectural prototypes of the era and on local conditions, attempted to produce an optimal house model for this remote outpost of the Byzantine Empire.

KEYWORDS

Cappadocia, Byzantine house, rock-cut architecture, courtyard complexes, elite houses

PREFACE

The architecture of Byzantine houses is, undoubtedly, still far from being sufficiently studied. The problem and difficulties of research on Byzantine houses have already been pointed out.[1] One of these difficulties is related to the fact that Byzantine houses have left few remnants behind.[2] Another difficulty is related to the inability to identify the object of research: in Byzantium, depending on the specific historical period and location, there were many different types of dwellings, which cannot be studied as a whole. For these reasons, Byzantine dwellings are expected to be studied "within a particular topographic or chronological context, or even from a special viewpoint."[3]

The remnants of the Byzantine houses of Cappadocia are an interesting field of study, not only as a regionally independent group of buildings, but also as part of Byzantine residences in general. Due to the fact that much of the architecture of the region was rock-cut, a large percentage of houses, especially those of the upper class, are still preserved in very good condition.[4] It seems that they are unique examples of residential buildings of that period and a valuable indirect source of knowledge for Byzantine houses in general.

The aim of the following study is to discuss issues of building planning, typology, and, secondarily, morphology concerning Byzantine residences in Cappadocia. The study is based on the relevant scientific research and on the reexamination of examples of houses in the area of Cappadocia known from the literature. At this point, it should be noted that the Byzantine houses of Cappadocia have not, so far, been the subject of systematic archaeological research and exhaustive documentation of their architectural history in order to represent their original form and to specify their exact dating; hence, the present, as well as previous studies, cannot possibly reach absolutely certain conclusions.

The large number of Early and Middle Byzantine buildings in Cappadocia, most of them rock-cut, has attracted the interest of many scholars. In the beginning, research focused on religious-ecclesiastical buildings, but from the nineteenth century onwards, the secular complexes of the area started to attract some attention from researchers. The remarks of these early scholars, despite possible errors in the interpretation of architectural remnants, are of great value for subsequent research. Lyn Rodley's[5] work is of the utmost importance, as it was the first attempt at systematic recording and typological classification of the courtyard complexes of Cappadocia,[6] despite the fact that she considered them to be monasteries. In the last three decades, research related to the Byzantine remnants in Cappadocia has made great progress, revealing unknown aspects of the architecture of Byzantine houses. Several scholars, with R. Ousterhout first and foremost, have, through systematic fieldwork, documented a large number of individual buildings and complexes, as well as entire settlements, and have dealt with general issues of ecclesiastical and secular architecture, as well as spatial and social organization.[7] Regarding the study

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[1] Charalampos Bouras, "Houses in Byzantium," *Deltion Tēs Christianikēs Archaiologikēs Etaireias* 4, no. 11 (1983): 1–2; Slobodan Ćurčić, "Ē Oikia Sto Vyzantino Kosmo (Houses in the Byzantine World)," in *Everyday Life in Byzantium*, ed. Tamara Talbot Rice (Athens: Hippocrene Books, 2002), 229.

[2] Bouras, "Houses," 1–2; Robert Ousterhout, *Eastern Medieval Architecture. The Building Traditions of Byzantium and Neighboring Lands* (New York: Oxford University Press, 2019), 341.

[3] Bouras, "Houses," 3.

[4] Ousterhout, *Eastern Medieval Architecture*, 342.

[5] Lyn Rodley, *Cave Monasteries of Byzantine Cappadocia* (New York: Cambridge University Press, 1985).

[6] Robert Ousterhout, *Visualizing Community. Art, Material Culture, and Settlement in Byzantine Cappadocia*, Dumbarton Oaks Studies 46 (Washington: Harvard University Press, 2017), 8.

of Byzantine residences, it should be noted that, despite the great progress that has been made, several research questions still remain unanswered.

RESEARCH ISSUES

As can be seen from the preserved architectural remains, the elite residences of Cappadocia were built in prominent locations, visible from great distances[8], at strategic points near fortresses, military roads, or along valleys with fertile land.[9] In any case, "the courtyard had the river and surrounding farmland as its focal point."[10] It has been also argued that the complexes were suitable for accommodating travelers, due to their location at the intersection of busy travel routes.[11]

7 Robert Ousterhout, "The 1994 Survey at Akhisar-Çanlı Kilise," *Araştırma Sonuçları Toplantısı* 13, no. 2 (1996); Robert Ousterhout, "The 1995 Survey at Akhisar-Çanlı Kilise," *Araştırma Sonuçları Toplantısı* 14, no. 1 (1997); Robert Ousterhout, "The 1996 Survey at Akhisar-Çanlı Kilise," *Araştırma Sonuçları Toplantısı* 15, no. 1 (1998); Robert Ousterhout, "Çanlı Kilise Settlement," in *The Archaeology of Byzantine Anatolia: From the End of Late Antiquity until the Coming of the Turks*, ed. Philipp Niewöhner (Oxford: Oxford University Press, 2017); Robert Ousterhout, "Secular Architecture," in *The Glory of Byzantium: Art and Culture of the Middle Byzantine Era, A.D. 843–1261*, eds. Helen C. Evans and William D. Wixom (New York: Metropolitan Museum of Art, 1997); Robert Ousterhout, "Questioning the Archaeological Evidence: Cappadocian Monasteries," in *Work and Worship at the Theotokos Evergetis 1050–1200 (Papers of the Fourth Belfast Byzantine International Colloquium,14–17 September 1995)*, eds. Margaret Mullett and Anthony Kirby, Belfast Byzantine Texts and Translations 6.2 (Belfast: Belfast Byzantine Enterprises, School of Greek, Roman and Semetic Studies, the Queen's University of Belfast, 1997); Thomas F. Mathews and Annie Christine Daskalakis-Mathews, "Islamic-Style Mansions in Byzantine Cappadocia and the Development of the Inverted T-Plan," *The Journal of the Society of Architectural Historians* 56, no. 3 (1997); Robert Ousterhout, "The 1997 Survey at Akhisar-Çanli Kilise," *Araştırma Sonuçları Toplantısı* 16, no. 1 (1999); Robert Ousterhout, "Cave-Dwellers: Cappadocia's Rock-Cut Architecture," *Archaeology Odyssey* 1, no. 4 (1998); Robert Ousterhout, "A Byzantine Church and Town in Cappadocia/Kapadokya'da Bir Bizans Kilisesi ve Yerleşimi," *Arkeoloji ve Sanat* 86 (1998); Veronica Kalas, "Rock-Cut Architecture of the Peristrema Valley: Society and Settlement in Byzantine Cappadocia" (PhD diss., New York University, 2000); Veronica Kalas, "Early Explorations of Cappadocia and the Monastic Myth," *Byzantine and Modern Greek Studies* 28 (2004); Veronica Kalas, "The 2003 Survey at Selime-Yapraklıhisar in the Peristrema Valley, Cappadocia," *Araştırma Sonuçları Toplantısı* 22, no. 2 (2004); Robert Ousterhout, "The Ecumentical Character of Byzantine Architecture: The View from Cappadocia," in *To Vizantio Ōs Oikoumenē = Byzantium as Oecumene*, ed. Evangelos Chrysos (Athens: National Hellenic Research Foundation, Institute of Historical Research, Section of Byzantine Research, 2005); Robert Ousterhout, *A Byzantine Settlement in Cappadocia*, Dumbarton Oaks Studies 42 (Washington: Dumbarton Oaks Research Library and Collection, 2005); Veronica Kalas, "The 2004 Survey of the Byzantine Settlement at Selime-Yarakhisar in the Peristrema Valley, Cappadocia," *Dumbarton Oaks Papers* 60 (2006); Veronica Kalas, "Cappadocia's Rock-Cut Courtyard Complexes: A Case Study for Domestic Architecture in Byzantium," in *Housing in Late Antiquity*, eds. Luke Lavan, Lale Özgenel, and Alexander Sarantis, (Leiden-Boston: Brill, 2007); Veronica Kalas, "Middle Byzantine Art and Architecture in Cappadocia: The Ala Kilise in the Peristrema Valley," in *Eortika: Studies in Honor of Thomas F. Mathews*, eds. Joseph Alchermes, Helen Evans, and Thelma Thomas (Mainz: Philipp von Zabern, 2009); Veronica Kalas, "Sacred Boundaries and Protective Borders: Outlying Chapels of Middle Byzantine Settlements in Cappadocia," in *Sacred Landscapes in Anatolia and Neighboring Regions*, eds. Charles Gates, Jacques Morin, and Thomas Zimmermann (Oxford: British Archaeological Reports, 2009); Veronica Kalas, "Challenging the Sacred Landscape of Byzantine Cappadocia," in *Negotiating Secular and Sacred in Medieval Art: Christianity, Islam, and Buddhism*, eds. Alicia Walker and Amanda Luyster (Aldershot: Ashgate, 2009); Veronica Kalas, "Byzantine Kitchen in the Domestic Complexes of Cappadocia," in *Archaeology of the Countryside in Medieval Anatolia*, eds. Tasha Vorderstrasse and Jacob J. Roodenberg, Uitgaven van Het Nederlands Instituut Voor Het Nabije Oosten Te Leiden 113 (Leiden: Nederlands Instituut voor het Nabije Oosten, 2009); Fatma Gül Öztürk, *Kapadokya'da Dünden Bugüne Kaya Oymacılığı (Rock Carving in Cappadocia From Past to Present)* (Istanbul: Arkeoloji ve Sanat Yayınları, 2009); Fatma Gül Öztürk, "A Comparative Architectural Investigation of the Middle Byzantine Courtyard Complexes in Açıksaray-Cappadocia: Questions of Monastic and Secular Settlement" (PhD diss., Middle East Technical University, 2010); Fatma Gül Öztürk, "The Unusual Separation of Cappadocian Refectories and Kitchens: An Enigma of Architectural History," *Metu Journal of the Faculty of Architecture* 29, no. 1 (2012); J. Eric Cooper and Michael J. Decker, *Life and Society in Byzantine Cappadocia* (London: Palgrave Macmillan, 2012); Catherine Jolivet-Lévy, "Byzantine Settlements and Monuments of Cappadocia: A Historiographic Review," *Eastern Christian Art (ECA)* 9 (2012–2013); Fatma Gül Öztürk, "Negotiating between the Independent and Groups of Courtyard Complexes in Cappadocia," in *Proceedings of the Society of Architectural Historians, Australia and New Zealand: OPEN 30*, eds. Alexandra Brown and Andrew Leach (Gold Coast, Queensland: Society of Architectural Historians Australia & New Zealand, 2013); Fatma Gül Öztürk, "Açıksaray 'Open Palace': A Byzantine Rock-Cut Settlement in Cappadocia," *Byzantinische Zeitschrift* 107, no. 2 (2014); Fatma Gül Öztürk, "Açıksaray ve Çevresinde Bizans Dönemi Yerleşimleri Yüzey Araştırması—2013," *Araştırma Sonuçları Toplantısı* 32, no. 1 (2015); Fatma Gül Öztürk, "Açıksaray ve Çevresinde Bizans Dönemi Yerleşimleri Yüzey Araştırması—2015," *Araştırma Sonuçları Toplantısı* 34, no. 2 (2017); Veronica Kalas, "Rock Cut Facades from Byzantine Cappadocia," in *Hypogea*, eds. Mario Parise, Carla Galeazzi, Roberto Bixio, and Ali Yamac (Turkey, Cappadocia: International Congress of Speleology in Artificial Cavities, 2017); Robert Ousterhout, "Survey of the Byzantine Settlement at Çanli Kilise in Cappadocia: Results of the 1995 and 1996 Seasons," *Dumbarton Oaks Papers* 51 (1997); Ousterhout, *Visualizing Community*; Fatma Gül Öztürk, "Transformation of the 'Sacred' Image of a Byzantine Cappadocian Settlement," in *Architecture and Landscape in Medieval Anatolia, 1100–1500*, eds. Patricia Blessing and Rachel Goshgarian (Edinburgh: Edinburgh University Press, 2017); Fatma Gül Öztürk, "Rock-Cut Architecture," in *The Archaeology of Byzantine Anatolia. From the End of Late Antiquity until the Coming of the Turks*, ed. Philipp Niewöhner (New York: Oxford University Press, 2017); Ousterhout, *Eastern Medieval Architecture*; Spiro Kostof, *Caves of God: The Monastic Environment of Byzantine Cappadocia* (Cambridge, Massachusetts, London: MIT Press, 1972).

The elite house was the center of a neighborhood composed of utilitarian spaces, smaller houses, and buildings of agricultural facilities.[12] The relationship between the large elite houses and the small houses of the peasants seems to reflect the social organization of Cappadocia during the mid-Byzantine period. An extreme example of social stratification is illustrated in the well-known Erdemli-Saray complex, a multi-storied complex with a sophisticated design that was located on the slope of the valley, opposite to and in visual contact with the peasant settlement that consisted of small, irregular houses.[13]

The elite houses of Cappadocia were either isolated or incorporated into settlements, sparsely or densely built, depending on the shape of the terrain and the texture of the volcanic soil.[14] In Çanlı Kilise and Açıksaray, there were large settlements with 25 and 9 houses, respectively, with similar spatial organizations. In Çanlı Kilise, elite houses and smaller buildings were densely arranged, forming a settlement with a length of more than one kilometer[15] and an urban character.[16] In Açıksaray, houses were more sparsely arranged in two groups on either side of a valley. In both settlements, houses were of similar size and planning, with evidence of minimal social stratification and of a homogeneous population in the upper social class.[17] In another settlement, Selime-Yaprakhisar, there were more than 13 large houses, loosely arranged, creating, where the terrain allowed, more dense units-neighborhoods. In Selime-Yaprakishar, the social hierarchy is more obvious.[18] Selime Kale was by far the largest house in the settlement and one of the largest in Cappadocia, with an elaborate construction and located in the

most prominent position.[19] It was probably the residence of the local lord and the administrative center of the entire settlement.

Current research has shown that peasants were settled in simpler houses around the elite complexes or in nearby settlements. In Çanlı Kilise, for example, apart from the 25 large houses, dozens of smaller and simpler ones have been identified,[20] as well as a small settlement to the east, with spaces arranged along a road.[21] Near the Şahinefendi complex, there were scattered rooms, probably single-room houses, which seemed to create a small neighborhood for farmers.[22] Around the large Selime Kale complex, there was an irregular settlement of small houses.[23] Finally, a small settlement has been documented around the Eski Gümüş complex.[24]

In terms of building planning, the elite houses of Cappadocia are composed of a number of spaces which exhibit common features. The fragmentary nature of the house remnants and our lack of knowledge of the initial function of many spaces, however, make interpreting the overall functional organization of house remains highly problematic. In the following paragraphs, we shall attempt to succinctly present the spaces that make up the houses of Cappadocia and note their primary characteristics and function, to the extent possible, of course.

The primary feature of the houses of Cappadocia was central courtyards, around which the various spaces of the house were arranged. The arrangement of spaces around such a central courtyard produced a certain kind of introversion, typical in peristyle complexes, as well, while—in most cases, at least—it also

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[8] Ousterhout, *Visualizing Community*, 283.

[9] Öztürk, "Cappadocian Refectories and Kitchens," 156–57.

[10] Kalas, "Rock-Cut Architecture of Cappadocia," 126–27; Ousterhout, *Visualizing Community*, 313.

[11] Kalas, "Rock-Cut Architecture of Cappadocia," 65.

[12] Ousterhout, *Eastern Medieval Architecture*, 342.

[13] Ousterhout, *Visualizing Community*, 313.

[14] Öztürk, "Açiksaray 'Open Palace,'" 789.

[15] Ousterhout, "Çanli Kilise," 302.

[16] Kalas, "Rock-Cut Architecture of Cappadocia," 75–76.

[17] Ousterhout, *Visualizing Community*, 317.

[18] Ousterhout, *Visualizing Community*, 341.

[19] Kalas, "Rock-Cut Architecture of Cappadocia," 59–62.

[20] Ousterhout, "Çanli Kilise," 302.

[21] Ousterhout, *Byzantine Settlement*, 121.

[22] Cooper and Decker, *Life and Society in Cappadocia*, 196.

[23] Ousterhout, *Visualizing Community*, 336.

[24] Ousterhout, *Visualizing Community*, 288.

allowed the main façade of the house to both look out onto, and to be prominently visible from, a great distance from the exterior of the complex. It is safe to assume that courtyards, aside from providing the needed natural lighting and ventilation to peripheral spaces, also played a central role in the daily life of the residents. The courtyards were formed by cutting into the natural rock and had a mostly flat floor and vertical lateral faces, on which the façades of the house spaces were carved.[25] It is not clear, though we consider it very likely, whether these courtyards were delimited by masonry wall fences around their perimeter. (Fig. 1).

The shape and size of a courtyard depended on the shape of the terrain but also on the level of monumentality that the complex was intended to project. Courtyards had a rectangular, and in rare cases an irregular, floor plan. In most cases, courtyards were surrounded by the vertical faces of the cut bedrock on three sides. The height of the two lateral sides increased following the rising terrain, and the central side, which formed the main façade of the house, was the highest. In places where the natural terrain was not adequately inclined, the lateral sides were lengthened in order to allow the central façade to reach the desired height. In some cases, courtyards were framed by the cut rock on only two sides.[26] In rare cases, as in Eski Gümüş,[27] for example, where the natural terrain was flat or minimally inclined, courtyards were cut vertically into the bedrock and had the form of an enclosed open-air space with four interior façades.[28] In other cases where the terrain was steeply inclined, and hence impossible to create an enclosed courtyard, house spaces were arranged linearly, as in the case of Erdemli Saray (Fig. 2).[29]

FIG. 1.

General view of Han at Soğanli valley (Ousterhout, Visualizing Community, *fig. 3.28).*

FIG. 2.

Courtyard. Eski Gümüş complex (Ousterhout, Visualizing Community, *fig. 3.18).*

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25 Kalas, "Rock-Cut Architecture of Cappadocia," 76.

26 Kalas, "Rock-Cut Architecture of Cappadocia," 49; Öztürk, "Açiksaray 'Open Palace,'" 793.

27 Ousterhout, *Visualizing Community*, 288–93.

28 Kalas, "Rock-Cut Architecture of Cappadocia," 131.

29 Ousterhout, *Visualizing Community*, 313.

Certain elite houses in Cappadocia were arranged around two courtyards. This bipartite organization of larger complexes betrays a wish to upgrade daily life and separate house spaces into formal and informal ones. The segregation of house spaces into private, domestic ones and public, religious, and ceremonial ones is evident since the fourth century CE[30] and even earlier, particularly in late Classical houses at Pella and Eretria.[31] An example of such a house with two courtyards is Güllükkaya complex 07, which possessed a second courtyard disconnected from the main courtyard, where all sorts of ancillary activities would take place.[32] Moreover, in the so-called Açıksaray area 03, there were two courtyards, one of which opened up into a large, formal reception hall, while the other was adjacent to a smaller hall and the kitchen.[33] The large Selime Kale house complex also possessed two courtyards.[34] Lastly, the Çanlı Kilise 12 complex, in its last building phase, consisted of two sections, each with its own courtyard.[35]

Another distinctive feature of the house organization in Cappadocia is transitional spaces between the courtyard and the central hall. These spaces are referred to as "portico"s and "vestibule"s in the relevant sources. "Portico" is an architectural term that refers to an arcade, namely a colonnade projecting from the main façade of a building, a building with arcades, or a colonnade in front of a blind wall,[36] while the term "vestibule" pertains to function and indicates a transitional space before the central hall (Figs. 3 and 4).[37]

Despite the fact that no arcade has survived intact in the houses of Cappadocia, their existence and, to a certain degree, their form is attested by their remnants. Özkonak Saray[38] and Çanlı Kilise area 01, 04 και 05[39] (Fig. 5.1) are typical examples of such arcades. In other cases, as in Karanlık Kale at Peristrema (Ihlara Valley)[40] for example, the transitional space had a completely different nature (Fig. 5.2): an entrance hall was deeply cut in a recess in the bedrock, at a distance from the exterior façade, and possessed a single entrance towards the courtyard, without any other openings. In this case, the transitional space had the form of a vestibule and not an arcade, i.e. a large room, isolated from the courtyard. The examples discussed above illustrate that the main element that differentiates "portico"-type

FIG. 3.

Barrel vaulted vestibule. Açıksaray-area 05 (Ousterhout, Visualizing Community, *fig. 3.62).*

[30] Cooper and Decker, *Life and Society in Cappadocia*, 204.

[31] Wolfram Hoepfner, ed., *Istoria Tēs Katoikías 5000 p. Kh.°500 m. Kh.: Proïstoria, Prōimē Istoria, Archaiotēta*, trans. Ēlias Tsirinkakēs (Thessaloniki: University Studio Press, 2005), 344.

[32] Kalas, "Rock-Cut Architecture of Cappadocia," 100.

[33] Öztürk, "Açıksaray 'Open Palace,'" fig. 12.

[34] Kalas, "Rock-Cut Architecture of Cappadocia," 131; Rodley, *Cave Monasteries*, 63–65.

[35] Ousterhout, *Byzantine Settlement*, 98.

[36] James Stevens Curl, *A Dictionary of Architecture* (Oxford: Oxford University Press, 1999), 513; Euangelia Chatzētryphōnos, *To Peristōo Stēn Ysterobyzantinē Ekklēsiastikē Architektonikē. Schediasmos-Leitourgia* (Thessaloniki: Europaiko Kentro Byzantinōn kai Metabyzantinōn Mnēmeiōn, 2004), 65.

[37] Curl, *Dictionary of Architecture*, 708.

[38] Cooper and Decker, *Life and Society in Cappadocia*, 188; Ousterhout, "Çanli Kilise," 275.

[39] Ousterhout, *Visualizing Community*, fig. 3.69; Ousterhout, *Byzantine Settlement*, figs. 95 and 114.

[40] Rodley, *Cave Monasteries*, fig. 16.

FIG. 4.

Façade and two-story vestibule with flat ceiling. Açiksaray-area 07 (Ousterhout, Visualizing Community, *fig. 3.59).*

2.

FIG. 5.2

Examples of transitional spaces. 2. Vestibule. Karanlik Kale (redrawn after Rodley, Cave Monasteries, *plan 16).*

from "vestibule"-type transitional spaces, apart from their shape and floor-plan proportions, is their relationship to the courtyard. Porticos result in multiple openings on the façade, interspersed with narrow sections of wall that allowed a direct connection between the portico and the courtyard.[41]

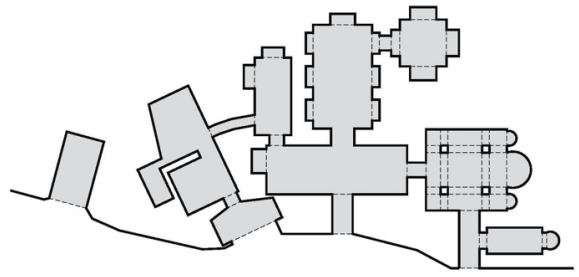Vestibules produce a more closed-off spatial organization with few openings, or even just a single

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FIG. 5.1

Examples of transitional spaces. 1. Π-shape portico. Çanlı Kilise area 4 (redrawn after Ousterhout, Byzantine Settlement, *fig. 95)*

one, to the courtyard.[42] In certain vestibule cases, however, there were also side openings next to the central entrance opening, usually arranged symmetrically around it, thus allowing better lighting and ventilation.[43] When these side openings took the form of doors, the façade of the vestibule would be articulated with superimposed openings and intermediate supports; as the number of these elements increased, its articulation would approximate that of an arcade. Hence, the distinction between a portico and a vestibule transitional space is not always straightforward. A distinctive feature of vestibules in the house complexes of Cappadocia was the rectangular niche often found on one of its narrow sides.[44] This feature possibly indicated that the vestibule was in use throughout the day.

Porticos (P) can be classified into three types based on their relationship to the courtyards—linear (P1), L-shaped (P2), and Π-shaped (P3)—while vestibules (V) can be classified into two types—those with a central entrance (V1) and those with multiple open-

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41 As in the cases of Çanlı Kilise areas 13 and 16 (see Ousterhout, *Byzantine Settlement*, figs. 155 and 170.)

42 As in the cases of Aleydinbaşi complex 09 and the Karanlık Kale και Şahinefendi complex (see Rodley, *Cave Monasteries*, figs. 6, 15, 16; Cooper and Decker, *Life and Society in Cappadocia*, fig. 6.2.)

43 As in the cases of Çanlı Kilise areas 5, 7, 13, and 16 (see Ousterhout, *Byzantine Settlement*, figs. 114, 130, 155, 170.)

44 As in the cases of Aleydinbaşi complex 09 and the Karanlık Kale και Şahinefendi complex (see Rodley, *Cave Monasteries*, figs. 6, 15, 16; Cooper and Decker, *Life and Society in Cappadocia*, fig. 6.2.)

ings (V2). A subcategory of vestibules (V1.b and V2.b) exists in which we also find a recess on the narrow side of the space (Fig. 6). The façades of the upper level above the porticos were usually articulated with a series of blind arches and one or more openings. A common practice was the inclusion of hidden dovecots behind the façades,[45] as for example at Çanlı Kilise areas 06, 07, and 13[46] and at Açıksaray areas 01, 05, and 07; these dovecots would be accessible only by ladder and never from the interior of the complex.[47] Açıksaray area 08 was a unique case; here, there was an upstairs vestibule with large openings.[48] The roofing of transitional spaces varied considerably, even between houses in the same settlement. Regarding the vestibules of houses at Çanlı Kilise, for example,

flat roofs,[49] cross-vaults,[50] and barrel vaults[51] have been documented (Figs. 7 and 8).

Porticos and vestibules are found in both public and private elite buildings since Late Antiquity. In certain cases, in fact, both types of spaces are found next to each other in the same building, as in the episcopal palace of Miletus[52] and the Roman villa at Piazza Armerina.[53]

It must be noted, lastly, that the transitional spaces of the houses of Cappadocia exhibit similarities with comparable transitional spaces in ecclesiastical architecture. Porticos in particular, and sometimes even vestibules as well, may be correlated with church add-on buildings which are referred to as "enclosed
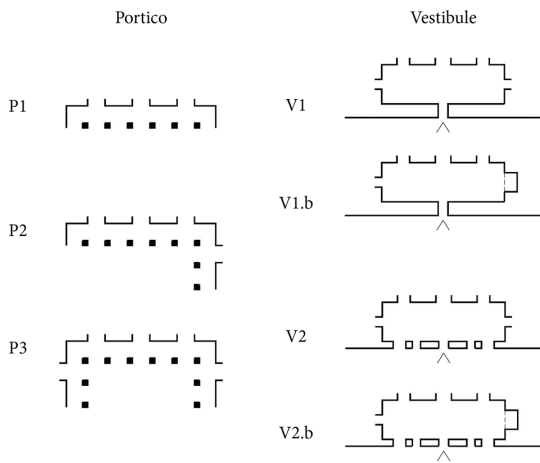
FIG. 6.

Typological classification of transitional spaces (authors).

FIG. 7.

Façade with blind arches organized in rows and columns. Selime-Yaprakhisar-area 02 (Ousterhout, Visualizing Community, fig. 3.95).

[45] Ousterhout, *Byzantine Settlement*, 142–43.

[46] See Ousterhout, *Byzantine Settlement*, 92, 94, 102.

[47] Öztürk, "Açıksaray 'Open Palace,'" 802–3.

[48] Öztürk, "Açıksaray 'Open Palace,'" 794.

[49] As in the cases of Çanlı Kilise areas 7, 13, 14, and 14α: Ousterhout, *Byzantine Settlement*, 143.

[50] As in the cases of Çanlı Kilise areas 5 and 6: Ousterhout, *Byzantine Settlement*, 92, 143.

[51] As in the case of Çanlı Kilise area 16, Ousterhout, *Byzantine Settlement*, 107.

[52] Philipp Niewöhner, "Houses," in *The Archaeology of Byzantine Anatolia: From the End of Late Antiquity until the Coming of the Turks*, ed. Philipp Niewöhner (Oxford: Oxford University Press, 2017), fig. 8.1.

[53] Ousterhout, *Eastern Medieval Architecture*, fig. 40.

exonarthexes"[54] in the literature, commonly found in numerous Middle and Late Byzantine churches.[55] The main feature of these spaces is the large number of complex openings whose lower parts are sealed with panels, over which lie windows with marble frames and opening blinds, and fixed plaster frameworks higher up.[56] Some of these openings had doors with marble frames. Thanks to these large openings, exonarthexes resembled semi-outdoor porches.[57] C. Mango, upon examining mostly post-Byzantine specimens of such spaces, reluctantly expressed the assumption that exonarthexes that resembled open or enclosed porticos betrayed western influences.[58] Later on however, R. Ousterhout, and then S. Mamaloukos, convincingly argued that such spaces already existed in Early Byzantine times.[59]

The main hall, which was undoubtedly the most important and formal space of the house, held a central

position in the elite house of Cappadocia. In terms of function, this hall appears to have been the primary space for the daily activities of the residents, since, quite possibly, everyday private family functions, such as dining, took place there.[60] It is, however, highly probable that this space functioned as a hall for audiences, ceremonies, and the reception of guests, following the established practice of Late Antiquity, according to which public functions were incorporated inside the houses of persons of power.[61] Main halls were usually arranged along the main axis of symmetry of the house, perpendicular to the main façade. A typical example of such an arrangement is the so-called Özkonak Saray[62] complex dated from the sixth century. Access to these halls was via an axially placed doorway in the middle of the main façade.[63] A common feature of these halls was a recessed conch in the center of the narrow side, usually right across from the entrance. A basic variation of this arrangement is the so-called transverse hall, where the reception hall was arranged parallel to the main façade of the house, adjacent to the courtyard.[64] One essential advantage of the transverse halls compared to the typical arrangement was that it could allow much more natural light and ventilation to enter the hall, aside from also maximizing the number of access points.[65] Entry into these transverse halls was usually via the longer side, through an axially placed doorway. A rectangular niche was also opened on one of the narrow sides of the hall. In Çanlı Kilise areas 05 and 07,[66] between the transverse hall and the courtyard, stood a portico, while in Çanlı Kilise area 16,[67] the transverse hall was accessed from the courtyard through multiple openings, and the two spaces, portico and hall, were thus joined together.[68] The main halls of the houses of Cappadocia usual-

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5 4   See Cyril A. Mango, *Byzantine Architecture* (New York: Rizzoli, 1976), 271–77; Robert Ousterhout, "The Byzantine Church at Enez: Problems in Twelfth-Century Architecture," *Jahrbuch Der Österreichischen Byzantinistik* 35 (1985): 272–76; Robert Ousterhout, *The Architecture of the Kariye Camii in Istanbul*, Dumbarton Oaks Studies 25 (Washington, D.C.: Dumbarton Oaks Research Library and Collection, 1987), 101–6; Stauros Mamaloukos, "To Katholiko Tēs Monēs Vatopediou: Istoria Kai Architektonikē" (PhD diss., National Technical University of Athens, 2001), 157–59; Chatzētryphōnos, *Peristōo*, 91–130; Stauros Mamaloukos, "Middle and Late Byzantine Church Architecture in the Periphery of Constantinople," in *Ērōs Ktistēs. Mnēmē Charalampou Boura*, eds. Kikḗ Birtacha Birtacha, Manolēs Korres, Stauros Mamaloukos, Kōstas Zampas, and Phanē Mallouchou-Tufano (Athens: Melissa, 2018), 111; Stavros Mamaloukos, "Notes on Athonite Byzantine Church Architecture," in *Proceedings of the International Symposium in Honour of Emeritus Professor George Velenis*, eds. Angeliki G. Voskakis and E. Mermengas (Athens: Ministry of Culture, 2021), 638; Nebojša Stanković, "At the Threshold of the Heavens: The Narthex and Adjacent Spaces in Middle Byzantine Churches of Mount Athos (10th–11th Centuries)—Architecture, Function, and Meaning" (PhD diss., Princeton University, 2017), 386–407.

FIG. 10.

*Flat-ceiling main hall. Çanli Kilise-area 12
(Ousterhout,* Visualizing Community, *fig. 3.77).*

FIG. 9.

*Three-aisled main hall with recessed conch in the
center of the narrow side. Hallaç complex (Ousterhout,*
Visualizing Community, *fig. 3.8).*

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FIG. 11.

*Interior of a carved cross-in-square chapel. Çanlı Kilise-
area 06 (Ousterhout,* Byzantine Settlement, *fig. 126).*

55 For examples, see Mamaloukos, "To Katholiko Tēs Monēs Vatopediou," 157.

56 Stavros Mamaloukos, "Observations on the Doors and Windows in Byzantine Architecture," in *Masons at Work: Architecture and Construction in the Pre-Modern World*, eds. Robert Ousterhout, Renata Holod, Lothar Haselberger, and Arthur Thourson Jones (Philadephia: University of Pennsylvania, Center for Ancient Studies, 2012), 29–32, figs. 36, 38.

57 Mamaloukos, "To Katholiko Tēs Monēs Vatopediou," 158.

58 Mango, *Byzantine Architecture*, 275.

59 Ousterhout, "Enez," 272–76; Ousterhout, *Kariye Camii*, 101–6; Mamaloukos, "To Katholiko Tēs Monēs Vatopediou," 159.

60 Kalas, "Rock-Cut Architecture of Cappadocia," 97.

61 Ousterhout, *Byzantine Settlement*, 147.

62 Cooper and Decker, *Life and Society in Cappadocia*, 188; Ousterhout, "Çanli Kilise," 275.

63 As in the cases of Çanlı Kilise areas 01, 04, 06, 12, 13, 14, and 15 (Ousterhout, *Byzantine Settlement*, figs. 79, 95, 122, 143, 155, 156, 163), Açiksaray area 9 (Öztürk, "Açiksaray 'Open Palace,'" fig. 10), the Eski Gümüş complex (Ousterhout, *Visualizing Community*, fig. 3.19), the Hallaç complex (Ousterhout, *Visualizing Community*, fig. 3.7), Karanlık Kale (Rodley, *Cave Monasteries*, fig. 16), Selime complex 02 (Kale complex) (Kalas, "Byzantine Settlement at Selime-Yarakhisar," fig. 9), and the Şahinefendi complex (Rodley, *Cave Monasteries*, fig. 6).

64 As in the cases of Çanlı Kilise area 16 (Ousterhout, *Byzantine Settlement*, fig. 170), Açiksaray area 01 (Öztürk, "Açiksaray 'Open Palace,'" fig. 11), Aynali kilise (Ousterhout, *Visualizing Community*, fig. 3.16), and Karabas kilise (Ousterhout, *Visualizing Community*, fig. 3.39).

65 Kalas, "Rock-Cut Architecture of Cappadocia," 86.

66 Ousterhout, *Byzantine Settlement*, figs. 114, 130.

67 Ousterhout, *Byzantine Settlement*, fig. 170.

68 Ousterhout, *Byzantine Settlement*, fig. 142.

ly had a long, rectangular floor plan. In rare cases, however, there were also halls with more complex shapes, such as three-aisled and cross-shaped ones (Figs. 9 and 10).[69]

In some cases, two main halls are found in some of the larger house complexes. In the Han complex at Soğanlı Valley,[70] the two halls were identical and were accessed from the same courtyard, while in the Selime Kale complex,[71] the two halls had different floor plans and opened up into different courtyards. At Erdemli-Saray,[72] there were two large halls arranged one after the other. The eastern hall with the large vestibule was the formal reception hall, and the kitchen was located next to it, indicating that it was also used as a dining hall, as well.[73] Similar to the case of two courtyards in a single house, discussed above, the existence of two halls can be thought of as an indication of the adherence to the Late Antique practice according to which private houses incorporated public functions, thus making a second hall necessary in order to serve the strictly private functions of the family.[74] The division between public and private functions inside houses can be traced back to the fourth century BCE at Eretria, where we find houses with two separate courtyards, one for the

andron (men's quarters) and one for the *oikos* (household).[75] The *andron* and the *oikos* of Antiquity, in turn, gave way to the public and private halls of Late Antiquity and the Byzantine era.

A common feature of the residential complexes of Cappadocia is the existence of private chapels (Fig. 11). The existence of chapels for private worship inside houses is documented since the fourth century.[76] This practice was prevalent throughout Byzantine times, both in palaces and large residences in Constantinople[77] and the urban and rural houses of powerful persons in the provinces.[78] Indeed, from the eighth–tenth century, it was quite common even for devout peasants to build private chapels.[79] This practice is encountered in numerous house complexes in Cappadocia. Approximately 30 chapels have been documented inside houses at Çanlı Kilise; at Selime-Yarakhisar, almost every single house complex possesses a chapel;[80] and at Açıksaray, three out of nine complexes included a private chapel.[81]

There was no standard position for the chapels inside the general layout of house complexes (Figs. 5.2, 12.2–3, 12.6, 15.3, 16.1, and 16.4–6). They were usually not placed in a central location but rather off to one side of the courtyard. An exception to that rule

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[69] Öztürk, "Açıksaray 'Open Palace,'" 793. As in the cases of Çanlı Kilise area 14 (Ousterhout, *Byzantine Settlement*, fig. 156), Bezirhane (Ousterhout, *Visualizing Community*, fig. 3.12), Açıksaray areas 4 and 6 (Öztürk, "Açıksaray 'Open Palace,'" figs. 6, 7), and the Hallaç complex (Rodley, *Cave Monasteries*, fig. 2).

[70] Ousterhout, *Visualizing Community*, fig. 3.30.

[71] Kalas, "Byzantine Settlement at Selime-Yarakhisar," fig. 9.

[72] Ousterhout, *Visualizing Community*, fig. 3.49.

[73] Cooper and Decker, *Life and Society in Cappadocia*, 204.

[74] Kalas, "Rock-Cut Architecture of Cappadocia," 161.

[75] Hoepfner, *Istoria Tēs Katoikías*, 339; Vasilikē Kokkorē, "To Katoikein Kai o Emphylos Diachōrismos Kata Tēn Archaia Kai Vyzantinē Period: Andrōnes Kai Gynaikōnites," in *Ekphrasis: Aphierōma Ston Kathēgētē Vasilē Katsaro*, eds. Paschalēs Androudēs and Dēmētrēs Drakoulēs (Thessaloniki: K.&M. Stamoulē, 2022), 391–4.

[76] Ćurčić, "Houses," 230.

[77] Cecil L. Striker, *The Myrelaion (Bodrum Camii) in Istanbul* (Princeton: Princeton University Press, 1981), 6–9.

[78] Kalas, "Rock-Cut Architecture of Cappadocia," 44.

[79] Cooper and Decker, *Life and Society in Cappadocia*, 156; Ćurčić, "Houses," 233.

[80] Öztürk, "Açıksaray 'Open Palace,'" 786.

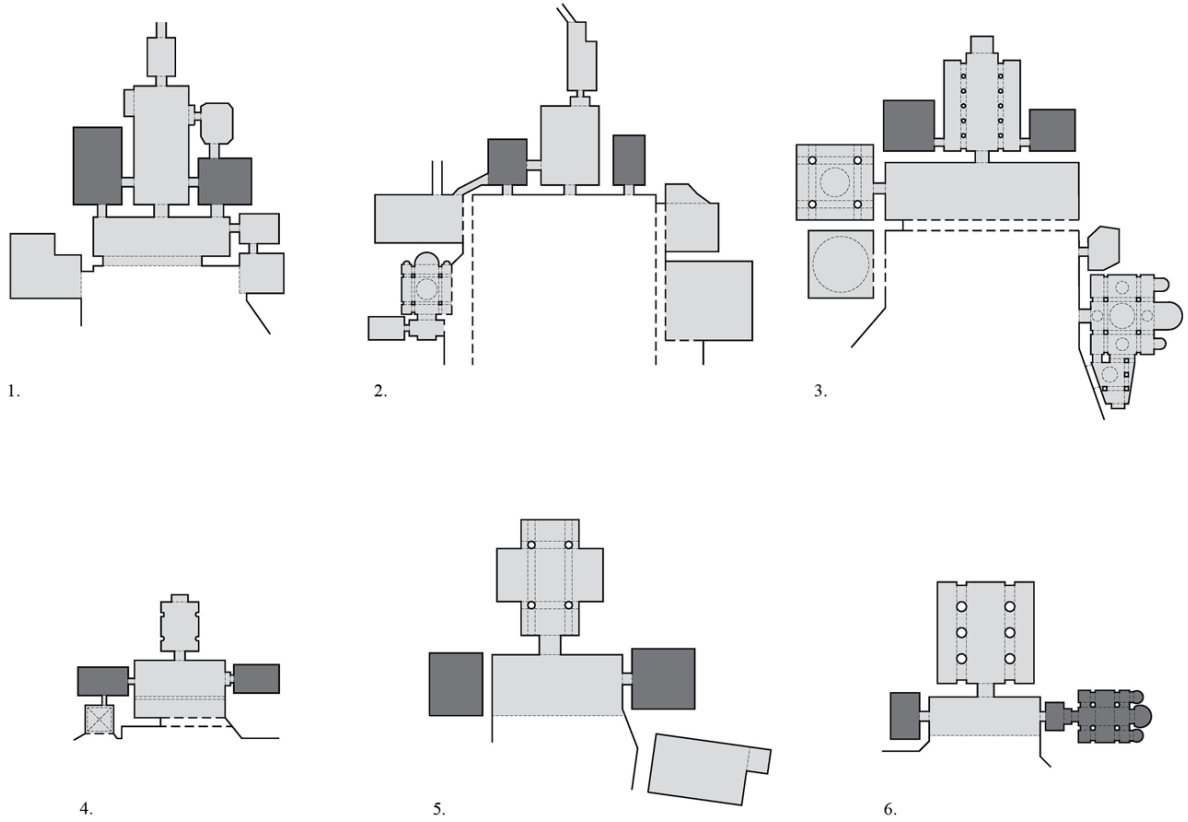[81] Öztürk, "Açıksaray 'Open Palace,'" 786.

FIG. 12

Examples of symmetrical arrangement of side spaces. 1. Açiksaray area 07 (redrawn after Öztürk, "Açıksaray 'Open Palace,'" fig. 8), 2. Açiksaray area 08 (redrawn after Öztürk, "Açıksaray 'Open Palace,'" fig. 9), 3. Hallaç complex (redrawn after Rodley, Cave Monasteries, plan 2), 4. Şahinefendi complex (redrawn after Rodley, Cave Monasteries, plan 6), 5. Açiksaray area 04 (redrawn after Öztürk, "Açıksaray 'Open Palace,'" fig. 6), 6. Bezirhane (redrawn after Rodley, Cave Monasteries, plan 5).

is the Eski Gümüş complex, which developed around a closed interior courtyard where the chapel and its narthex was found along the entry axis of the complex.[82] In certain cases, the chapel was placed on the upper level.[83] Access to the chapel was usually directly from the courtyard, though there are also cases where it was accessed from the vestibule. Despite the limitations imposed by the terrain, the chapel was aligned properly along the east-west axis, often affecting the layout of the entire house complex.[84]

The size, typology, and even the morphology of chapels varied considerably.[85] There are single-nave churches covered with a barrel vault, or even a transverse barrel vault, double-nave churches,[86] cross-in-square type churches, free cross-plan type churches, etc.[87] Chapels were generally small, as seen in the specimens found at Açıksaray[88] and Çanlı Kilise, where all house chapels were smaller than the central church of the settlement.[89]

In terms of function, the chapels of the house of Cappadocia appear to have been used not only as private places of worship[90] but as funerary chapels, as well. This is confirmed by the discovery of tombs, which often cover a large part of the chapel floor,[91] and even extend into burial chambers in certain cases.[92]

Apart from spaces whose use can be safely identified, and have been discussed so far in this paper, the house complexes of Cappadocia also included various other spaces whose use remains unclear due to lack of evidence. A group of secondary, cross-shaped or even cross-in-square shaped spaces discovered at the Çanlı Kilise settlement is of particular interest (Figs. 5.1 and 12.3).[93] The use of these spaces, which were usually located close to the reception hall and the vestibule, remains unknown. R. Ousterhout posits with some reluctance that they served for daily living, dining, and even sleep.[94] It is important, though, to note here that these spaces bear an uncanny resemblance to the monastic warming houses (calefactories/*photanamata*).[95]

Among the rest of the primary spaces of the houses, there are two that must have been particularly important; these two spaces are found in a number of houses, arranged on either side of the main hall[96] or the vestibule[97] (Fig. 12) in a manner that is reminiscent of the—also widespread since Early Byzantine times both in religious and in secular architecture—layout which consisted of a central reception hall with two pairs of smaller spaces at either end.[98] The exact function of these spaces remains unknown; they may have been either living or sleeping quarters.

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82 Ousterhout, Visualizing Community, 288–93.

83 As in the cases of Çanlı Kilise area 12 (Ousterhout, *Byzantine Settlement*, fig. 143) and Erdemli Saray (Ousterhout, *Visualizing Community*, fig. 3.49).

84 Kalas, "Rock-Cut Architecture of Cappadocia," 117.

85 Ousterhout, *Byzantine Settlement*, 156; Kalas, "Rock-Cut Architecture of Cappadocia," 113.

86 Öztürk, "Açıksaray 'Open Palace,'" 798.

87 Ousterhout, *Byzantine Settlement*, 156–66.

88 Öztürk, "Açıksaray 'Open Palace,'" 999.

89 Ousterhout, *Byzantine Settlement*, 156

90 Ćurčić, "Houses," 230.

91 Kalas, "Rock-Cut Architecture of Cappadocia," 118.

92 Kalas, "Rock-Cut Architecture of Cappadocia," 118.

93 Ousterhout, *Byzantine Settlement*, 149–50.

94 Ousterhout, *Byzantine Settlement*, 149–50.

95 Anastasios Orlandos, *Monastēriakē Architektonikē (Monastic Architecture)*, Epetēris Etaireías Vyzantinōn Spoudōn 50 (Athens: Hē en Athēnais Archaiologikḗ Hetaireía, 1958), 68–70.

96 As in the cases of Açıksaray areas 07 and 08 and the Hallaç complex (see Öztürk, "Açıksaray 'Open Palace,'" fig. 8; Rodley, *Cave Monasteries*, fig. 21; Ousterhout, *Visualizing Community*, fig. 3.7).

97 As in the cases of Açıksaray areas 04 and 06, the Bezirhane and Şahinefendi complex (see Öztürk, "Açıksaray 'Open Palace,'" figs. 6, 7; Rodley, *Cave Monasteries*, figs. 4, 6).

98 Ćurčić, "Houses," figs. 3, 5.

Apart from primary spaces, several secondary spaces were arranged on the perimeter of the courtyard in the houses of Cappadocia. Kitchens and stables are the only such spaces that can safely be identified.[99]

Kitchens were usually located close to the reception hall but never in a central position.[100] They also usually tended to be far from the chapels. Particularly when the size of the house complex allowed, kitchens would be placed on the opposite side of the courtyard.[101] Kitchens were accessed either directly from the courtyard or through the vestibule. In some cases, the kitchens were directly connected to the central reception hall.[102]

In many cases, the size of the kitchen was considerable and comparable, in fact, to that of the chapels.[103] In terms of their overall form and spatial arrangement, the kitchens of the houses of Cappadocia are no different from other documented Byzantine kitchens, such as monastic kitchens, for example.[104] Kitchen spaces were very often square or almost square and covered with a distinctive conical or cloister vault which terminated in an opening that functioned as a chimney.[105] The hearth was cut into one of the side walls,[106] and a small pit, the so-called tandır, was cut into the rock floor and served to cook or reheat food.[107] A cut-out section of the floor for a loom, discovered in some kitchens, indicates that these were indeed multi-use spaces,[108] where various female activities would take place (Fig. 13).[109]

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FIG. 13

Kitchen with conical vault. Şahinefendi complex (Ousterhout, Visualizing Community, fig. 3.100).

[99] Öztürk, "Cappadocian Refectories and Kitchens," 160.
[100] Öztürk, "Açiksaray 'Open Palace,'" 796; Ousterhout, *Byzantine Settlement*, 152.
[101] Kalas, "Rock-Cut Architecture of Cappadocia," 87.
[102] As in the case of Açiksaray area 09, where the kitchen was integrated with the main hall (Öztürk, "Açiksaray 'Open Palace,'" fig. 10).
[103] Kalas, "Rock-Cut Architecture of Cappadocia," 88.
[104] Orlandos, *Monastic Architecture*, 61–68.
[105] Öztürk, "Cappadocian Refectories and Kitchens," 159; Ousterhout, *Byzantine Settlement*, 152.
[106] Öztürk, "Açiksaray 'Open Palace,'" 794.
[107] Kalas, "Rock-Cut Architecture of Cappadocia," 139–40; Kalas, "Kitchen in Cappadocia," 116.
[108] Öztürk, "Cappadocian Refectories and Kitchens," 162–63.
[109] Öztürk, "Açiksaray 'Open Palace,'" 794.
[110] Öztürk, "Açiksaray 'Open Palace,'" 796; Öztürk, "Cappadocian Refectories and Kitchens," 163.
[111] Öztürk, "Açiksaray 'Open Palace,'" 796.
[112] Kalas, "Rock-Cut Architecture of Cappadocia," 94.

FIG. 14

Barrel-vaulted stable with feeders cut into the side walls. Açıksaray-area 02 (Öztürk, "Açıksaray 'Open Palace'" fig. 9).

Stables are also often found in the building complexes of the houses of Cappadocia. A typical example is the houses at Açıksaray, where at least five large, well-made stables were discovered.[110] he stables were usually located off to one side of the courtyard, somewhat removed from the nucleus of the house. It is not rare to find stables placed next to the entrance to the complex. Stables were rectangular, vaulted spaces, often diligently constructed, and appear to have been part of the initial design of the complexes. Typical features were animal feeders cut into the side walls.[111] The size of the spaces, the height of the entrances, and the shape of the feeders indicate that the stables of Cappadocia housed large animals, such as horses,[112] systematically bred by the inhabitants of the area (Fig. 14).[113]

The houses of Cappadocia also possessed several smaller and simpler spaces, though it is not always possible to safely ascertain their exact use. They may have been spaces reserved for specific everyday or agricultural activities. In many cases, these spaces extended beyond the boundaries of the courtyard.[114] Ask has already been pointed out, the elite house complexes of Cappadocia exhibit common design principles. These are the arrangement of spaces around a central courtyard, the emphasis on formal spaces, and the linear arrangement of courtyard-vestibule-hall[115] (Fig. 15). This arrangement is undoubtedly the most distinctive design element of these houses. However, as the position, shape, size, and form of these primary spaces vary, they produce a unique architectural synthesis each time.
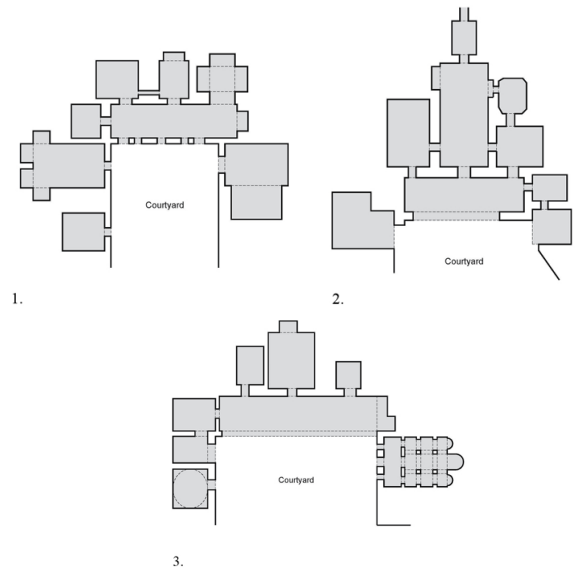
FIG. 15

Design principles of the residential complexes. 1. Residential areas around the courtyard. Çanlı Kilise area 13 (redrawn after Ousterhout, Byzantine Settlement, fig. 155), 2. Large hall. Açıksaray area 7 (redrawn after Rodley, Cave Monasteries, plan 21), 3. Large vestibule. Çanlı Kilise area 6 (redrawn after Ousterhout, Byzantine Settlement, fig. 122).

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113 Kalas, "Rock-Cut Architecture of Cappadocia," 1; Ousterhout, *Byzantine Settlement*, 153; Öztürk, "Açıksaray 'Open Palace,'" 808.

114 Öztürk, "Açıksaray 'Open Palace,'" 797.

115 Ousterhout, "Çanli Kilise," 302; Ousterhout, *Eastern Medieval Architecture*, 342.

Depending on the shape of the natural terrain, house spaces developed along one or more sides of the courtyard. Almost all the spaces were accessible from the courtyard, which was the point of reference for the entire complex, and its design focus. Transitional spaces of the house, porticos, or vestibules that extended along the entire length of the main façade were all connected to the courtyard. Immediately after these transitional spaces, and deeper into the natural rock, we find the primary formal space of the house, namely the hall, which often had monumental proportions, was richly decorated, and in some cases even had a more complex floor plan. Its placement right across from the entrance to the complex also signified it as the conclusion of the formal passage into the house interior. The remaining spaces of the complex, chapels, kitchens, stables, and other secondary spaces were arranged around the courtyard in a more arbitrary manner (Fig. 15).

An essential feature of the elite houses of Cappadocia was their organization around a central design axis, an element that imbued the entire creation with an air of monumentality. As has already been mentioned, the courtyard, the transitional space, and the main hall aligned along this axis. The axis also marked the formal passage from the countryside to the most formal space of the house: namely, the hall. An axial design composition is encountered in almost all house complexes, even though it is discernible as the primary design principle only in certain complexes, while in others, it appears as a more implicit design intention that could not be fully realized. In larger complexes with numerous spaces, this axial organization would be confined to the area of the central hall. The more remote a space was from the hall, the more freely it would follow the natural terrain (Fig. 16).
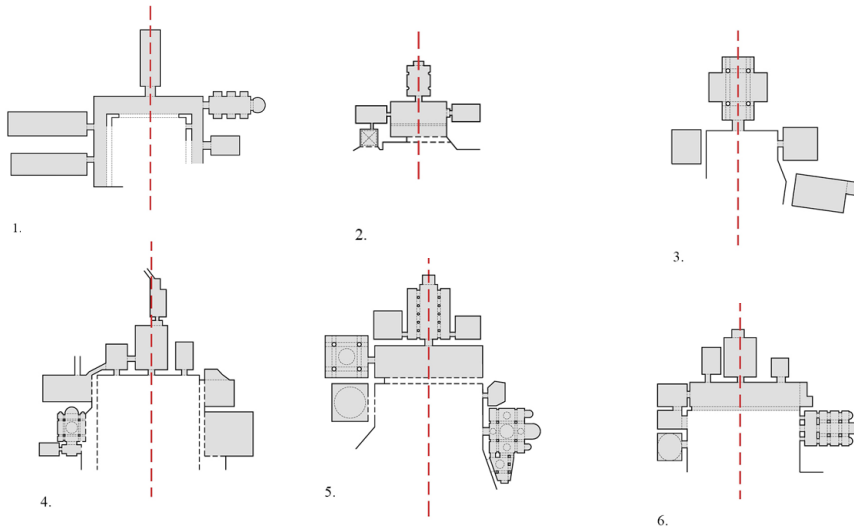
FIG. 16

Examples of axial arrangement. 1. Özkonak-Saray (redrawn after Ousterhout, Visualizing Community, fig. 3.3), 2. Şahinefendi complex (redrawn after Rodley, Cave Monasteries, plan 6), 3. Açıksaray area 4 (redrawn after Öztürk, "Açıksaray 'Open Palace,'" fig. 6), 4. Açıksaray area 8 (redrawn after Rodley, Cave Monasteries, plan 21), 5. Hallaç complex (redrawn after Rodley, Cave Monasteries, plan 2), 6. Çanlı Kilise area 6 (redrawn after Ousterhout, Byzantine Settlement, fig. 122).

Some of the design tools that produced and emphasized the axis of symmetry were: A) the entrance point to the complex, which would usually be right across from the main façade and the central hall, B) the regular, often rectangular outline of the courtyard, C) the symmetrical articulation of the main façade and the central placement of the vestibule, D) the symmetrically arranged rooms on either side of the vestibule, E) the central, almost axial placement of the reception hall, the shape of its outline, and the position of the niche that emphasized the longitudinal axis, F) the symmetrically arranged rooms on the side of the reception hall accessible from the vestibule or directly from the hall itself, and G) the placement of secondary rooms behind the two side walls of the courtyard in the most symmetrical manner possible. In the case of complexes with two courtyards or two reception halls, the two separate entities would be arranged along separate design axes, as in the case in Çanlı Kilise 12, for example.[116]

Apart from this organization in the design of the layout of house complexes of Cappadocia, another equally striking element is the design of the façades (Figs. 1–2, 4, 7–8, and 19). The intricate, monumental façades of the houses demonstrated the status of the owner and made the house stand out from a great distance. Superimposed rows of arcades with openings or blind arches usually formed a multi-storied composition which often had little to do with the internal organization of the complex.[117] he symmetrical arrangement of the façade was further emphasized by the centrally placed entrance to the vestibule or the hall. An equally lofty and conspicuous intent is also evident in the cases where the ground floor of houses was adorned with open porticos with a wide variety in the proportions between open and blind areas: these would often also be combined with successively arranged arches on the blind façade of the upper level, as well.[118]

The large number and good state of preservation of the houses of Cappadocia appear reassuring when one attempts to study their typology, despite the fact that they, in the end, present quite a wide variety, even though their design is dictated by some common principles. This wide variety, though, which is mostly due to the complex building program of the houses and the need to adapt to the natural morphology of the terrain, actually proves an almost insurmountable impediment to any attempt to classify them into distinct categories. The most systematic typological classification of the houses of Cappadocia thus far was attempted by V. Kalas. She studied the Selime-Yaprakhisar settlement and identified the common spaces that constitute the complexes in order to graphically reconstruct them in a more unified and simplified manner, thus allowing comparisons between them.[119] Nevertheless, for the exact reasons enumerated above, even this typological classification attempt did not manage to produce a conclusive verdict.

A typological classification attempt of the elite houses of Cappadocia based on the organization of their nucleus (namely, the courtyard), transitional space, and hall, can produce three basic types, each of which also has a number of variations. The first type includes the houses with a hall arranged longitudinally along the primary axis (Fig. 17, Type A). In the

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	without transitional space	with Portico	with Vestibule
A longitudinal hall	A.1	A.2	A.3
B transverse hall	B.1	B.2	B.3

FIG. 17

Typological classification of main halls (authors).

116 Ousterhout, *Byzantine Settlement*, 98.

117 Öztürk, "Açiksaray 'Open Palace,'" 793; Ousterhout, *Visualizing Community*, 285.

118 Ousterhout, *Byzantine Settlement*, 142.

simplest variation of this type, the hall is found right behind the main façade of the complex and directly communicates with the courtyard through an axially placed doorway (Fig. 17, Type A.1). In some cases, a linear portico is inserted between the courtyard and the hall and functions as a transitional space (Fig. 17, Type A.2). In other cases, a vestibule replaces the portico (Fig. 17, Type A.3). This last arrangement appears the most prevalent one in Byzantine Cappadocia (Fig. 18, Type A). The second type includes the houses whose halls are arranged transversely to the primary axis (Fig. 17, Type B). In these houses, the hall is found behind the main façade and extends along its entire length, has an axially placed entrance doorway, and, additionally, receives more natural lighting and ventilation through multiple openings towards the courtyard (Figs. 17 and 18, Type B.1). In a variation of this type, a portico is inserted between the hall and the courtyard (Figs. 17 and 18, Type B.2; Fig. 19).

The issue of the origin and evolution of the Byzantine house in general is undoubtedly problematic. In the past, several researchers have posited a correlation between the house in Byzantium and the houses in Classical, Hellenistic, and Roman Antiquity, as well as between the Middle and Late Byzantine periods and Late Antiquity, namely the Early Byzantine era.[120] hese researchers have quite astutely noted that

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there was never one, unique type of Byzantine house, but rather that the form of the Byzantine house varied according to the historical milieu and among the various regions of the empire.[121] In view of this fact, we thus should also treat the houses of Cappadocia accordingly. In view of this fact, we thus should also treat the houses of Cappadocia accordingly.

More recently, researchers who have studied the houses of Cappadocia concur that these can, in fact, be correlated with the houses of Late Antiquity.[122] The structure and organization of estates or fortified country-houses of Late Antiquity, designed around axes of symmetry and possessing peristyle courtyards and large audience halls, appear to have provided a prototype for the houses of Cappadocia. Such a house, namely the Villa Romana del Casale at Piazza Armerina in Sicily, is mentioned by many researchers as a typical specimen of an elite fourth-century house, and its functional organization is actually quite similar to that of the elite houses of Cappadocia.[123] It is noteworthy that the characteristic features of the houses of Cappadocia, both in terms of typology as well as design—namely, the central courtyard that is surrounded by porticos, the organization of house spaces in two separate sections, one for public and another for private activities, the large reception hall, which appears to have evolved from the *andron* f

119 Kalas, "Rock-Cut Architecture of Cappadocia," 60–61.

120 For Byzantine houses in general, see: Phaidōn Koukoules, "Perē Tēn Vyzantinēn Oikian (About the Byzantine House)," *Epetēris Etaireias Vyzantinōn Spoudōn* 12 (1936); Anastasios Orlandos, *Ta Palatia Kai Ta Spitia Tou Mystra*, Vol. 1, Archeion Tōn Vyzantinōn Mnēmeiōn Tēs Ellados, Γ. (Athens: Estia, 1937); Anastasios Orlandos, "Quelques Notes Commenétaires Sur Les Maisons Paléoloquiennes de Mistra," in *Technē Kai Koinōnia En Vyzantiō Epi Tōn Palaiologōn. Praktika Tou En Venetia Symposiou Tou Organōthentos Ypo Tēs Diethnous Enōseōs Vyzantinōn Spoudōn. Septemvrios 1968, Venetía*, ed. Manoussos Manoussacas (Venice: Institut Hellénique d'Études Byzantines et Postbyzantines de Venice, 1971); Mango, *Byzantine Architecture*, 290–1; Bouras, "Houses;" Ćurčić, "Houses;" Lephterēs Sigalos, "Middle and Late Byzantine Houses in Greece (Tenth to Fifteenth Centuries)," in *Secular Buildings and the Archaeology of Everyday Life in the Byzantine Empire*, ed. Ken Dark (Oxford: Oxbow, 2004); Slobodan Ćurčić, *Architecture in the Balkans. From Dioccletian to Süleyman the Magnificent* (New Haven, London: Yale University Press, 2010); Robert Ousterhout, "Houses, Markets, and Baths: Secular Architecture in Byzantium," in *Heaven et Earth: Art of Byzantium from Greek Collections*, eds. Anastasia Drandakē, Dēmētra Papanikola-Mpakirtzē, and Anastasia G Turta (Athens: Hellenic Republic. Ministry of Vulture ans Sports, 2013); Niewöhner, "Houses;" Ousterhout, *Eastern Medieval Architecture*, 168–72, 341–44, 597–600, 633–39, 644.

121 Bouras, "Houses," 23.

122 Kalas, "Rock-Cut Architecture of Cappadocia," 159; Ousterhout, *Visualizing Community*, 280; Niewöhner, "Houses," 111; Cooper and Decker, *Life and Society in Cappadocia*, 212.

123 Cooper and Decker, *Life and Society in Cappadocia*, 187; Ousterhout, *Visualizing Community*, 280.
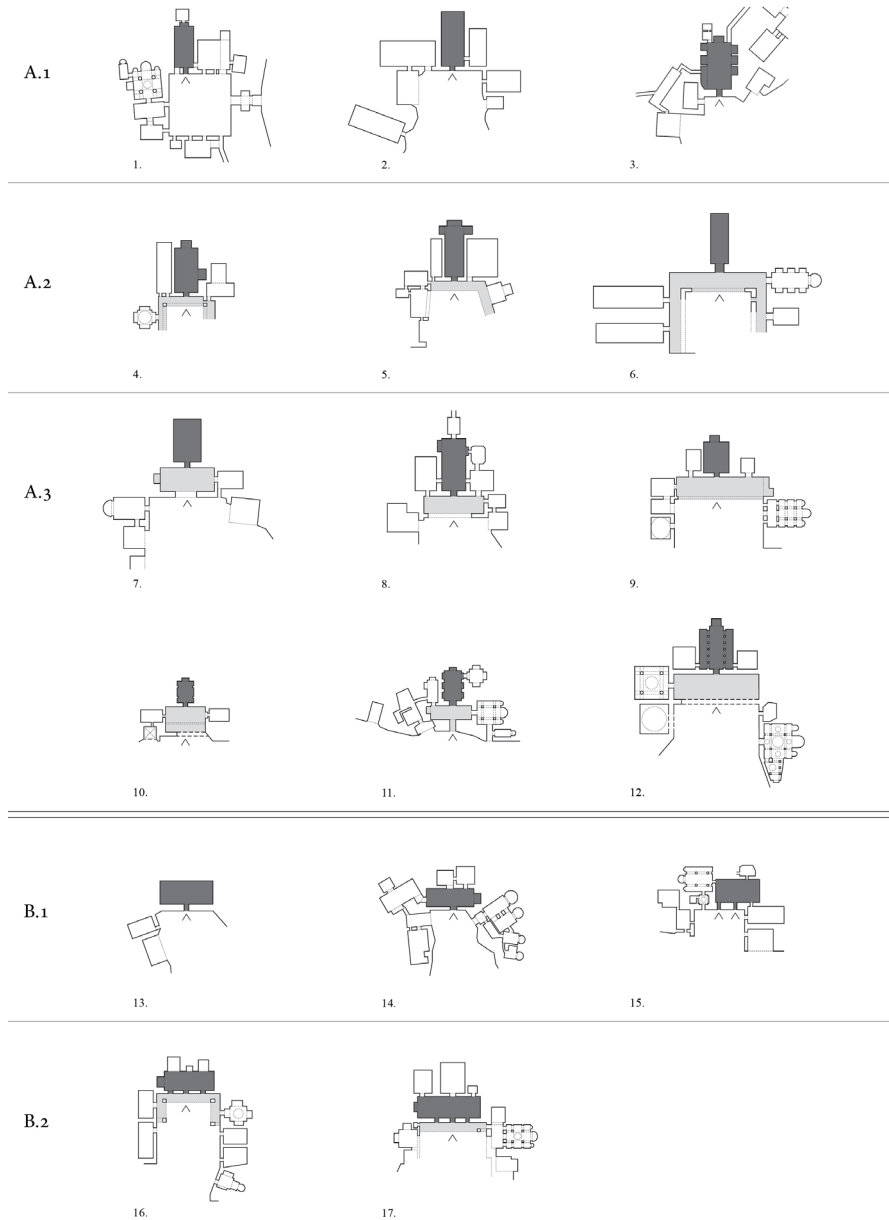
A.1 — 1. 2. 3.

A.2 — 4. 5. 6.

A.3 — 7. 8. 9.

10. 11. 12.

B.1 — 13. 14. 15.

B.2 — 16. 17.

FIG. 18

Typological classification of houses. 1. Eski Gümüş complex (redrawn after Rodley, Cave Monasteries, *plan 17), 2. Açiksaray area 2 (redrawn after Öztürk, "Açıksaray 'Open Palace,'" fig. 5), 3. Selime Kale (redrawn after Kalas,"Survey of the Byzantine Settlement," fig. 9), 4. Çanlı Kilise area 4 (redrawn after Ousterhout,* Byzantine Settlement, *fig. 95), 5. Çanlı Kilise area 15 (redrawn after Ousterhout,* Byzantine Settlement, *fig. 163), 6. Özkonak-Saray (redrawn after Ousterhout,* Visualizing Community, *fig. 3.3), 7. Açiksaray area 5 (redrawn after Rodley,* Cave Monasteries, *plan 21), 8. Açiksaray area 7 (redrawn after Rodley,* Cave Monasteries, *plan 24), 9. Çanlı Kilise area 6 (redrawn after Ousterhout,* Byzantine Settlement, *fig. 122), 10. Şahinefendi complex (redrawn after Rodley,* Cave Monasteries, *plan 6), 11. Karanlik Kale (redrawn after Rodley,* Cave Monasteries, *plan 16), 12. Hallaç complex (redrawn after Rodley,* Cave Monasteries, *plan 2),13. Açiksaray area 1 (redrawn after Öztürk, "Açıksaray 'Open Palace,'" fig. 11), 14. Karabaş Kilise (redrawn after Ousterhout,* Visualizing Community, *fig. 3.39), 15. Aynali Kilise (redrawn after Rodley,* Cave Monasteries, *plan 11), 16. Çanlı Kilise area 5 (redrawn after Ousterhout,* Byzantine Settlement, *fig. 114), 17. Çanlı Kilise area 7 (redrawn after Ousterhout,* Byzantine Settlement, *fig. 130).*

FIG. 19

Partly destroyed façade and two-story vestibule with the central entrance to the main hall. Kılıçlar complex (Ousterhout,
Visualizing Community, *fig. 3.15).*

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the Classical period, the vestibule of the main hall in the form that it took towards Late Antiquity, and the symmetrical arrangement of spaces around a central axis, which is reminiscent of the house complexes of Late Antiquity[124] —all gradually appear beginning in Antiquity and evolve according to changing social structures and norms. Thus, the elite houses of Cappadocia appear to be one more part of this long evolutionary progress.

The study of the house architecture of Cappadocia has sometimes been preoccupied with the question of whether there was any Islamic influence on the houses of the area, either in terms of typology or morphology. This hypothesis was first expressed in 1997 by T. Mathews and A. C. Daskalakis-Mathews[125] and was based on the similarities that, according to

the two researchers, the floor plans of the houses of Cappadocia exhibited with early Islamic houses,[126] as well as on some morphological features encountered in the former that are also found in early Islamic architecture.[127] This hypothesis was refuted initially by R. Ousterhout and more recently by Ph. Niewohner. These two researchers convincingly argued that the house architecture of Cappadocia originated and evolved within the milieu of Byzantine architecture, which in turn evolved independently, following upon the architecture of Late Antiquity and with only minor, superficial influences from the East or the West; on the contrary, it appears, in fact, that Byzantine architecture influenced them at times.[128]

Hence, the "inverted T" arrangement encountered in the houses of Cappadocia, namely the arrangement that includes a large hall and a transversely oriented vestibule, cannot be considered to be borrowed from Islamic architecture but rather a timeless element of Byzantine architecture.[129] As R. Ousterhout aptly points out, the dissemination of this arrangement throughout the wider Mediterranean region is due to the fact that it reflects a common "architectural language of power," regardless of geographical borders, which imposes the power of local lords and underscores their relations with the central administration and the citizens.[130] As for the presence of the "inverted T" arrangement in Islamic architecture, it is noteworthy that early Islamic palaces, with their formal spaces organized in an arrangement with a long vestibule terminating at an iwan between two rooms, are radically different in layout from the

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[124] As in the case of "Complex with three houses" on the island of Rhodes of the early Hellenistic period (Hoepfner, *Istoria Tēs Katoikías*, 321, 340).

[125] Mathews and Daskalakis-Mathews, "Islamic-Style Mansions in Cappadocia."

[126] Mathews and Daskalakis-Mathews, "Islamic-Style Mansions in Cappadocia," 304–9.

[127] Mathews and Daskalakis-Mathews, "Islamic-Style Mansions in Cappadocia," 304–9.

[128] Ousterhout, *Byzantine Settlement*, 148; Philipp Niewöhner, "The Late Late Antique Origins of Byzantine Palace Architecture," in *The Emperor's House. Palaces from Augustus to the Age of Absolutism*, eds. Michael Featherstone, Jean-Michel Spieser, Gülru Tanman, and Ulrike Wulf-Rheidt, Urban Spaces 4 (Berlin/Boston: Walter de Gruyter, 2015), 32.

[129] Cooper and Decker, *Life and Society in Cappadocia*, 192.

[130] Ousterhout, *Byzantine Settlement*, 148–49.

houses of Cappadocia. The essential difference lies in the fact that while in the houses of Cappadocia the transitional space had the characteristics of an independent room with the remaining spaces of the house arranged around it, the vestibule of Islamic palaces is functionally joined with the hall through the omission of the intermediate wall, so that the iwan practically extends all the way to the courtyard, subdividing the vestibule into three parts. Hence, in contrast to the halls of Byzantine houses, which appear to have evolved from the Classical *andron* Islamic iwans are closer to the *"exedrae,"* i.e. spaces that open up onto the porticos that surrounded the courtyards, which start to appear in house architecture after the late Classical period.[131] The reasons that led to this radical difference in the choice of architectural prototype are not clear; however, it is very probable that it may be linked to different functional requirements, as well as climatic conditions.[132] In any case, it seems highly unlikely that the spatial organization of early Islamic palaces directly influenced the house architecture of Cappadocia. Any similarities in the arrangement of spaces can probably be attributed to the fact that both of them shared a common point of reference, namely the architecture of Late Antique palaces, that was already widespread throughout the Mediterranean region.

The elite houses of Cappadocia appear to have been inspired by the palaces of Constantinople and the urban residences of the Byzantine aristocracy.[133] The similarity between the houses of Cappadocia and the tenth century Myrelaion palace at Constantinople has been repeatedly noted.[134] The organization of the palace around a rectangular courtyard, the presence of transitional portico spaces, and the central placement of a large rectangular reception hall along the entrance axis are all elements that both this palace and the elite houses of Cappadocia share.

Morphological influences from the capital can also be found in the articulation of façades. The presence of superimposed arcades with arched openings and blind arches, which bear no correlation with the interior spaces, appears to be a very common design both in Cappadocia and the capital, as can be seen, for example, in the façades of the late thirteenth century so-called Tekfur Saray palace.[135] This manner of façade articulation was not an element exclusive to the architecture of the Palaiologan period, as has previously been claimed, but can be found throughout Byzantine times.[136] The decorative use of blind arches on the façades of Byzantine houses is more probably linked with similar examples from Late Antiquity,[137] rather than any Islamic influences.[138] Both the façade articulation with arcades of blind arches and the horseshoe-shaped arches that are encountered in Cappadocia did not appear for the first time in early Islamic architecture but are common architectural elements of Late Antiquity.[139]

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[131] As in the case of the "House of Dionysus" in fourth century BCE Pella (Hoepfner, *Istoria Tēs Katoikías*, 346).

[132] Mathews and Daskalakis-Mathews, "Islamic-Style Mansions in Cappadocia," 306.

[133] Ousterhout, *Byzantine Settlement*, 142.

[134] Ousterhout, *Visualizing Community*, 351.

[135] Ousterhout, *Byzantine Settlement*, 143; Ousterhout, *Eastern Medieval Architecture*, 597–600.

[136] Ousterhout, *Byzantine Settlement*, 143.

[137] As in the cases of Gamzigrad-Romuliana of the third–fourth century and as in Philippi-Basilica A of the fourth–fifth century (Ćurčić, *Architecture in the Balkans*, figs. 12, 115).

[138] Mathews and Daskalakis-Mathews, "Islamic-Style Mansions in Cappadocia."

[139] Niewöhner, "Byzantine Palace Architecture," 34; Charles Antony Stewart, "Domes of Heaven. The Domed Basilicas of Cyprus" (PhD diss., Indiana University, 2008), 45–46, 49–50; Charles Antony Stewart, "The First Vaulted Churches in Cyprus," *Journal of the Society of Architectural Historians* 69, no. 2 (2010): 167–69, 174–76.

CONCLUSION

In terms of the chronological order and the evolution through time of the house architecture of Cappadocia, current research shows that the main elements of the elite house of the area can be traced back to the sixth century. The so-called Özkonak Saray complex, which for the first time exhibits an arrangement with a courtyard, a perimeter portico, and a hall—namely, the typical layout of an elite house of Cappadocia—has been dated to this period.

The rock-cut houses carved into the natural rock of Cappadocia apparently had as their prototypes masonry houses, which they attempted to emulate both in terms of building program and morphology, to the extent possible. The transfer of elements of built architecture to rock-cut architecture naturally imposed certain changes not just to the general layout and the relation between house spaces but also to other vital features, such as means of access, lighting, and ventilation, as well as to the morphological articulation of their interior and exterior surfaces. Many of the rock-cut houses of Cappadocia possessed rather narrow porticos along their façades that faced into the courtyard. The portico façades were articulated either as arcades, the arches of which rested on simple or complex pseudo-pillars, or as walls with openings as large as possible.

The reduction of the number and size of the openings of the portico facades, due to construction factors, often makes the distinction between porticos and vestibules quite difficult. Vestibules were usually wider than porticos, and their façades had fewer openings, as well. An inescapable consequence of the use of porticos and vestibules as transitional spaces before the primary house spaces was that the latter were placed deeper into the rock and thus received limited natural lighting and ventilation. This limitation may have led to the introduction of a variation of the arrangement, where the central reception hall is flanked by two pairs of smaller rooms,[140] as already discussed above in this paper. The variation of the aforementioned arrangement most often found in Cappadocia included a single side space on either side of the central hall.[141] Another consequence of the constraints placed on natural lighting and ventilation was that in some cases the vestibule acquired a more important role in daily life than the central hall, which became subordinate to it. This appears to be the case in numerous examples in Cappadocia where houses possessed large vestibules and rather small halls.[142] The presence of a conch in the center of one of the narrow sides of some vestibules, a feature normally associated with reception halls, may also indicate that the vestibule and not the hall ended up being the central multifunctional space of the house.[143]

The evolutionary course described above does not necessarily follow a linear chronological progression towards a model house prototype. It can rather be thought of as an architectural exploration, which, based on the architectural prototypes of the era and on local conditions, attempted to produce an optimal house model for this remote outpost of the Byzantine Empire.

[140] Ćurčić, "Houses," fig. 3.5.
[141] As in the case of the Hallaç complex (Ousterhout, *Visualizing Community*, fig. 3.7).
[142] As in the cases of Çanlı Kilise areas 06, 13, and 16 (Ousterhout, *Byzantine Settlement*, figs. 122, 155, 170), the Eastern complex of Erdemli Saray (Ousterhout, *Visualizing Community*, fig. 3.49), Açıksaray areas 01 and 08 (Öztürk, "Açıksaray 'Open Palace,'" fig. 11; Rodley, *Cave Monasteries*, fig 21), and the Şahinefendi complex (Rodley, *Cave Monasteries*, fig. 6).
[143] Ousterhout, *Byzantine Settlement*, 142.

BIBLIOGRAPHY

Bouras, Charalampos. "Houses in Byzantium." *Deltion Tēs Christianikēs Archaiologikēs Etaireias* 4, no. 11 (1983): 1–26.

Chatzētryphōnos, Euangelia. *To Peristōo Stēn Ysterobyzantinē Ekklēsiastikē Architektonikē. Schediasmos-Leitourgia.* Thessaloniki: Europaiko Kentro Byzantinōn kai Metabyzantinōn Mnēmeiōn, 2004.

Cooper, J. Eric, and Michael J. Decker. *Life and Society in Byzantine Cappadocia.* London: Palgrave Macmillan, 2012.

Ćurčić, Slobodan. *Architecture in the Balkans. From Dioccletian to Süleyman the Magnificent.* New Haven, London: Yale University Press, 2010.

———. "Ē Oikia Sto Vyzantino Kosmo (Houses in the Byzantine World)." In *Everyday Life in Byzantium*, edited by Tamara Talbot Rice, 229–38. Athens: Hippocrene Books, 2002.

Curl, James Stevens. *A Dictionary of Architecture.* Oxford: Oxford University Press, 1999.

Hoepfner, Wolfram, ed. *Istoria Tēs Katoikías 5000 p. Kh.–500 m. Kh.: Proïstoria, Prōimē Istoria, Archaiotēta.* Translated by Ēlias Tsirinkakēs. Thessaloniki: University Studio Press, 2005.

Jolivet-Lévy, Catherine. "Byzantine Settlements and Monuments of Cappadocia: A Historiographic Review." *Eastern Christian Art (ECA)* 9 (2012–2013): 53–62.

Kalas, Veronica. "Byzantine Kitchen in the Domestic Complexes of Cappadocia." In *Archaeology of the Countryside in Medieval Anatolia*, edited by Tasha Vorderstrasse and Jacob J. Roodenberg, 109–27. Uitgaven van Het Nederlands Instituut Voor Het Nabije Oosten Te Leiden 113. Leiden: Nederlands Instituut voor het Nabije Oosten, 2009.

———. "Cappadocia's Rock-Cut Courtyard Complexes: A Case Study for Domestic Architecture in Byzantium." In *Housing in Late Antiquity*, edited by Luke Lavan, Lale Ozgenel, and Alexander Sarantis, 393–414. Leiden-Boston: Brill, 2007.

———. "Challenging the Sacred Landscape of Byzantine Cappadocia." In *Negotiating Secular and Sacred in Medieval Art: Christianity, Islam, and Buddhism*, edited by Alicia Walker and Amanda Luyster, 147–73. Aldershot: Ashgate, 2009.

———. "Early Explorations of Cappadocia and the Monastic Myth." *Byzantine and Modern Greek Studies* 28 (2004): 101–19.

———. "Middle Byzantine Art and Architecture in Cappadocia: The Ala Kilise in the Peristrema Valley." In *Eortika: Studies in Honor of Thomas F. Mathews*, edited by Joseph Alchermes, Helen Evans, and Thelma Thomas, 181–90. Mainz: Philipp von Zabern, 2009.

———. "Rock Cut Facades from Byzantine Cappadocia." In *Hypogea*, edited by Mario Parise, Carla Galeazzi, Roberto Bixio, and Ali Yamac, 40–45. Turkey, Cappadocia: International Congress of Speleology in Artificial Cavities, 2017.

———. "Rock-Cut Architecture of the Peristrema Valley: Society and Settlement in Byzantine Cappadocia." PhD diss., New York University, 2000.

———. "Sacred Boundaries and Protective Borders: Outlying Chapels of Middle Byzantine Settlements in Cappadocia." In *Sacred Landscapes in Anatolia and Neighboring Regions*, edited by Charles Gates, Jacques Morin, and Thomas Zimmermann, 79–91. Oxford: British Archaeological Reports, 2009.

———. "The 2003 Survey at Selime-Yapraklıhisar in the Peristrema Valley, Cappadocia." *Araştırma Sonuçları Toplantısı* 22, no. 2 (2004): 59–70.

———. "The 2004 Surney of the Byzantine Settlement at Selime-Yarakhisar in the Peristrema Valley, Cappadocia." *Dumbarton Oaks Papers* 60 (2006): 271–93.

Kokkorē, Vasilikē. "To Katoikein Kai o Emphylos Diachōrismos Kata Tēn Archaia Kai Vyzantinē Period: Andrōnes Kai Gynaikōnites." In *Ekphrasis: Aphierōma Ston Kathēgētē Vasilē Katsaro*, edited by Paschalēs Androudēs and Dēmētrēs Drakoulēs, 385–409. Thessaloniki: K.&M. Stamoulē, 2022.

Kostof, Spiro. *Caves of God: The Monastic Environment of Byzantine Cappadocia.* Cambridge, Massachusetts, London: MIT Press, 1972

Koukoules, Phaidōn. "Perē Tēn Vyzantinēn Oikian (About the Byzantine House)." *Epetēris Etaireias Vyzantinōn Spoudōn* 12 (1936): 76–138.

Mamaloukos, Stauros. "Middle and Late Byzantine Church Architecture in the Periphery of Constantinople." In *Ērōs Ktistēs. Mnēmē Charalampou Boura*, edited by Kikē Birtacha Birtacha, Manolēs Korres, Stauros Mamaloukos, Kōstas Zampas, and Phanē Mallouchou-Tufano, 2:97–124. Athens: Melissa, 2018.

———. "To Katholiko Tēs Monēs Vatopediou: Istoria Kai Architektonikē." PhD diss., National Technical University of Athens, 2001.

Mamaloukos, Stavros. "Notes on Athonite Byzantine Church Architecture." In *Proceedings of the International Symposium in Honour of Emeritus Professor George Velenis*, edited by Angeliki G. Voskakis and E. Mermengas, 611–44. Athens: Ministry of Culture, 2021.

———. "Observations on the Doors and Windows in Byzantine Architecture." In *Masons at Work: Architecture and Construction in the Pre-Modern World*, edited by Robert Ousterhout, Renata Holod, Lothar Haselberger, and Arthur Thourson Jones, 29–32. Philadelphia: University of Pennsylvania, Center for Ancient Studies, 2012.

Mango, Cyril A. *Byzantine Architecture.* New York: Rizzoli, 1976.

Mathews, Thomas F., and Annie Christine Daskalakis-Mathews. "Islamic-Style Mansions in Byzantine Cappadocia and the Development of the Inverted T-Plan." *The Journal of the Society of Architectural Historians* 56, no. 3 (1997): 294–319.

Niewöhner, Philipp. "Houses." In *The Archaeology of Byzantine Anatolia: From the End of Late Antiquity until the Coming of the Turks*, edited by Philipp Niewöhner, 109–18. Oxford: Oxford University Press, 2017.

———. "The Late Late Antique Origins of Byzantine Palace Architecture." In *The Emperor's House. Palaces from Augustus to the Age of Absolutism*, edited by Michael Featherstone, Jean-Michel Spieser, Gülru Tanman, and Ulrike Wulf-Rheidt, 31–52. Urban Spaces 4. Berlin/Boston: Walter de Gruyter, 2015.

Orlandos, Anastasios. *Monastēriakē Architektonikē (Monastic Architecture).* Epetēris Etaireías Vyzantinōn Spoudōn 50. Athens: Hē en Athēnais Archaiologik Hetaireia, 1958.

———. "Quelques Notes Commenétaires Sur Les Maisons Paléoloquiennes de Mistra." In *Technē Kai Koinōnia En Vyzantiō Epi Tōn Palaiologōn. Praktika Tou En Venetia Symposiou Tou Organōthentos Ypo Tēs Diethnous Enōseōs Vyzantinōn Spoudōn. Septemvrios 1968, Venetía*, edited by Manoussos Manoussacas, 73–82. Venice: Institut Hellénique d'Études Byzantines et Postbyzantines de Venice, 1971.

———. T*a Palatia Kai Ta Spitia Tou Mystra. Vol. 1. Archeion Tōn Vyzantinōn Mnēmeiōn Tēs Ellados*, Γ. Athens: Estia, 1937.

Ousterhout, Robert. "A Byzantine Church and Town in Cappadocia/Kapadokya'da Bir Bizans Kilisesi ve Yerleşimi." *Arkeoloji ve Sanat* 86 (1998): 2–11.

———. *A Byzantine Settlement in Cappadocia.* Dumbarton Oaks Studies 42. Washington: Dumbarton Oaks Research Library and Collection, 2005.

———. "Çanlı Kilise Settlement." In *The Archaeology of Byzantine Anatolia: From the End of Late Antiquity until the Coming of the Turks*, edited by Philipp Niewöhner, 321–26. Oxford: Oxford University Press, 2017.

———. "Cave-Dwellers: Cappadocia's Rock-Cut Architecture." *Archaeology Odyssey* 1, no. 4 (1998): 22–27.

———. *Eastern Medieval Architecture. The Building Traditions of Byzantium and Neighboring Lands.* New York: Oxford University Press, 2019.

———. "Houses, Markets, and Baths: Secular Architecture in Byzantium." In *Heaven et Earth: Art of Byzantium from Greek Collections*, edited by Anastasia Drandakē, Dēmētra Papanikola-Mpakirtzē, and Anastasia G Turta, 211–13. Athens: Hellenic Republic. Ministry of Culture and Sports, 2013.

———. "Questioning the Archaeological Evidence: Cappadocian Monasteries." In *Work and Worship at the Theotokos Evergetis 1050–1200 (Papers of the Fourth Belfast Byzantine International Colloquium, 14–17 September 1995)*, edited by Margaret Mullett and Anthony Kirby, 420–31. Belfast Byzantine Texts and Translations 6.2. Belfast: Belfast Byzantine Enterprises, School of Greek, Roman and Semetic Studies, the Queen's University of Belfast, 1997.

———. "Secular Architecture." In *The Glory of Byzantium: Art and Culture of the Middle Byzantine Era, A.D. 843–1261*, edited by Helen C. Evans and William D. Wixom, 193–99. New York: Metropolitan Museum of Art, 1997.

———. "Survey of the Byzantine Settlement at Çanli Kilise in Cappadocia: Results of the 1995 and 1996 Seasons." *Dumbarton Oaks Papers* 51 (1997): 301–6.

———. "The 1994 Survey at Akhisar-Çanli Kilise." *Araştırma Sonuçları Toplantısı* 13, no. 2 (1996): 165–80.

———. "The 1995 Survey at Akhisar-Çanlı Kilise." *Araştırma Sonuçları Toplantısı* 14, no. 1 (1997): 435–52.

———. "The 1996 Survey at Akhisar-Çanli Kilise." *Araştırma Sonuçları Toplantısı* 15, no. 1 (1998): 45–58.

———. "The 1997 Survey at Akhisar-Çanlı Kilise." *Araştrma Sonuçları Toplantısı* 16, no. 1 (1999): 49–60.

———. *The Architecture of the Kariye Camii in Istanbul.* Dumbarton Oaks Studies 25. Washington, D.C.: Dumbarton Oaks Research Library and Collection, 1987.

———. "The Byzantine Church at Enez: Problems in Twelfth-Century Architecture." *Jahrbuch Der Österreichischen Byzantinistik* 35 (1985): 261–80.

———. "The Ecumentical Character of Byzantine Architecture: The View from Cappadocia." In *To Vizantio Ōs Oikoumenē = Byzantium as Oecumene*, edited by Evangelos Chrysos, 211–32. Athens: National Hellenic Research Foundation, Institute of Historical Research, Section of Byzantine Research, 2005.

———. *Visualizing Community. Art, Material Culture, and Settlement in Byzantine Cappadocia.* Dumbarton Oaks Studies 46. Washington: Harvard University Press, 2017.

Öztürk, Fatma Gül. "A Comparative Architectural Investigation of the Middle Byzantine Courtyard Complexes in Açıksaray-Cappadocia: Questions of Monastic and Secular Settlement." PhD diss., Middle East Technical University, 2010.

———. "Açıksaray 'Open Palace': A Byzantine Rock-Cut Settlement in Cappadocia." *Byzantinische Zeitschrift* 107, no. 2 (2014): 785–810.

———. "Açıksaray ve Çevresinde Bizans Dönemi Yerleşimleri Yüzey Araştırması—2013." *Araştırma Sonuçları Toplantısı* 32, no. 1 (2015): 535–52.

———. *Kapadokya'da Dünden Bugüne Kaya Oymacılığı (Rock Carving in Cappadocia From Past to Present).* Istanbul: Arkeoloji ve Sanat Yayınları, 2009.

———. "Negotiating between the Independent and Groups of Courtyard Complexes in Cappadocia." In *Proceedings of the Society of Architectural Historians, Australia and New Zealand: OPEN 30*, edited by Alexandra Brown and Andrew Leach, 2:837–49. Gold Coast, Queensland: Society of Architectural Historians Australia & New Zealand, 2013.

———. "Rock-Cut Architecture." In *The Archaeology of Byzantine Anatolia. From the End of Late Antiquity until the Coming of the Turks*, edited by Philipp Niewöhner, 148–59. New York: Oxford University Press, 2017.

———. "The Unusual Separation of Cappadocian Refectories and Kitchens: An Enigma of Architectural History." *Metu Journal of the Faculty of Architecture* 29, no. 1 (2012): 153–69.

———. "Transformation of the 'Sacred' Image of a Byzantine Cappadocian Settlement." In *Architecture and Landscape in Medieval Anatolia, 1100–1500*, edited by Patricia Blessing and Rachel Goshgarian, 135–54. Edinburgh: Edinburgh University Press, 2017.

———. "Açıksaray ve Çevresinde Bizans Dönemi Yerleşimleri Yüzey Araştırması—2015." *Araştırma Sonuçları Toplantısı* 34, no. 2 (2017): 491–504.

Rodley, Lyn. *Cave Monasteries of Byzantine Cappadocia*. New York: Cambridge University Press, 1985.

Sigalos, Lephterēs. "Middle and Late Byzantine Houses in Greece (Tenth to Fifteenth Centuries)." In *Secular Buildings and the Archaeology of Everyday Life in the Byzantine Empire*, edited by Ken Dark, 53–81. Oxford: Oxbow, 2004.

Stanković, Nebojša. "At the Threshold of the Heavens: The Narthex and Adjacent Spaces in Middle Byzantine Churches of Mount Athos (10th–11th Centuries)—Architecture, Function, and Meaning." PhD diss., Princeton University, 2017.

Stewart, Charles Antony. "Domes of Heaven. The Domed Basilicas of Cyprus." PhD diss., Indiana University, 2008.

———. "The First Vaulted Churches in Cyprus." *Journal of the Society of Architectural Historians* 69, no. 2 (2010): 162–89.

Striker, Cecil L. *The Myrelaion (Bodrum Camii) in Istanbul*. Princeton: Princeton University Press, 1981.

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ÖZET

Bu çalışma, Kapadokya'da bulunan konut yapılarının benzersiz bir örneğini teşkil eden ve hâlâ oldukça iyi durumda olan Bizans seçkinlerine ait kaya evlerin kalıntılarını ele alır. Amaç, Kapadokya'daki Bizans konut komplekslerine ilişkin yapı planlama, tipoloji ve morfolojiye yönelik meseleleri tartışmaktır. Konuyla ilgili bilimsel araştırmalar ve literatürden bilinen ev örneklerinin yeniden incelenmesi bu çalışmanın temelini oluşturur. Çalışma kapsamında Kapadokya evlerini oluşturan mekânlar ve bunların temel özellikleri ve olası işlevlerine dair bilgiler verilmiştir. Avlular, portikolar, vestibüller ve ana salonlar gibi tören ve geçiş alanları üzerinde özellikle durulmuştur. Komplekslerin ortak tasarım ilkeleri ortaya konmuş ve seçkin evleri, merkezlerinin, yani avlu, geçiş alanı ve salonun düzeninden hareketle tipolojik olarak sınıflandırılmaya çalışılmıştır. Kapadokya'nın seçkin evlerinin yalnızca bölgesel nitelikte bir bağımsız yapı grubu olarak değil, genel anlamda Bizans konutlarının bir parçası olarak ele alınması, Bizans evinin kökeni ve evrimi meselesinin çalışılmasına olanak tanır. Başkentten ve diğer yapı örneklerinden gelmiş olması muhtemel morfolojik etkiler ve yerel koşulların bir sonucu olarak evlerin kazandığı farklı özelliklere de dikkat çekilmiştir. Mevcut araştırmalar, Kapadokya mimarisinin kronolojisi ve zaman içindeki gelişimi bakımından bölgedeki seçkinlere ait evlerin ana unsurlarının altıncı yüzyıla kadar takip edilebildiğini göstermektedir. Kapadokya'daki seçkin evleri, dönemin mimari prototiplerine ve yerel koşullarına bağlı kalarak Bizans İmparatorluğu'nun bu uzak karakolu için en uygun ev modelini üretmeye çalışan bir mimari keşif olarak değerlendirilmelidir.

ANAHTAR KELİMELER

Kapadokya, Bizans evi, kaya mimarisi, avlu kompleksleri, seçkin evleri