

The Arch-gabled Church of Kyivan Rus: Byzantine Prototypes and the Formation of the Original Composition*

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Abstract: The article examines the origins of the formation of the arch-gabled church, which is one of the first original innovations of the architectural tradition of Kyivan Rus, formed on the basis of transplanted Byzantine architectural forms. The analysis of Byzantine architecture revealed several variants of the placement of the arched gables on the church facades, but there was no compositional model of the arch-gabled church there. In Byzantine churches, the arched gables in the wall completions of the naos compartments or narthex are associated with the existence of galleries, except the cross-arm ends. The hypothesis is put forward that the impetus for the development of the arch-gabled church of Kyivan Rus was given by Byzantine church narthex, which had arched gables both on the western facade and at the ends. However, in Byzantine architecture, the arch-gabled completion of the narthex is the consequence of the structure, while in Kyivan Rus it becomes a compositional principle. Based on the analysis of Kyivan Rus architecture from the late 10th to early 12th century, the stages of formation of the arch-gabled completion in the churches are proposed.

Keywords: architecture, Byzantium, Kyivan Rus, arch-gabled church, arched gable, horizontal cornice.

Introduction

The arch-gabled church is the most widespread type of church architecture in Kyivan Rus. The defining feature of the arch-gabled church is the continuous arch-gabled wall completion on all facades, because each

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facade bay is to have a semicircular arched gable, regardless of the nature of their vaults. Therefore, in such churches, not all of the arched gables are constructive, that is, those that fill the ends of the barrel vaults facing the facade, and some of the arched gables are decorative, as their semicircles are located next to the slopes of the vaults (Fig. 1). Thus, the continuous arch-gabled completion of the facades is a decorative form that does not depend on the structural solution of the vaults.

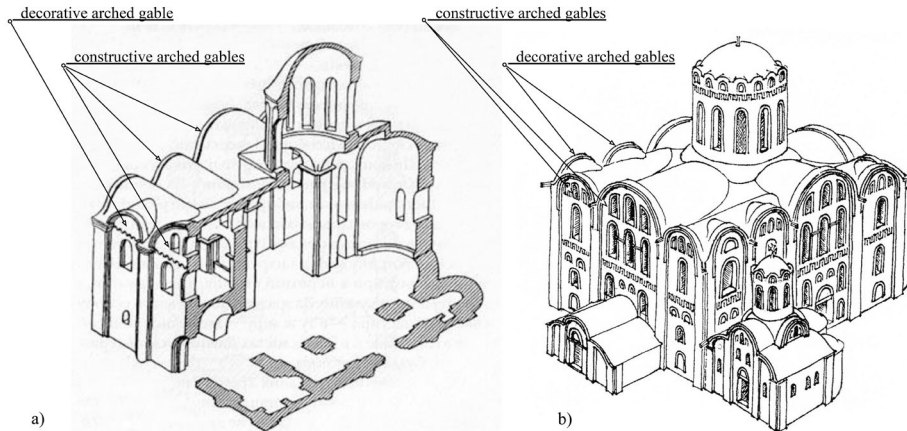


Fig. 1. The arch-gabled church of Kyivan Rus: a) St. Cyril's Church in Kyiv. Section in the axonometry, b) St. Michael's Golden-Domed Cathedral in Kyiv. Reconstruction of the general view.

In the Russian Empire, the first book on the history of Kyivan Rus architecture was published at the end of the 19th century, and it expressed the idea that the arch-gabled church had been borrowed by Kyivan Rus architecture from Byzantium in the completed forms¹. The historians of architecture in the Soviet Union emphasised independence of Kyivan Rus architecture and distinguished it from the Byzantine one, so no one spoke of the connection between the arch-gabled churches and the Byzantine architectural tradition, as in the late 19th – early 20th century. However, this connection was not fundamentally denied, because Soviet researchers focused on the churches of pillar-shaped compositions that acquired their completed forms in the late 12th century and from that time began to replace the arch-gabled churches. In the Soviet Union, pillar-shaped churches were considered to be the initial stage in the development of Moscow tent churches

¹ Andrei Pavlinov, *Istoriia russkoi arkhitektury* (Moskva: Tipo-litogr. T-va I.N. Kushnerev K^o, 1894). Similar thoughts were expressed in the Russian publications of the early 20th century, in particular: Aleksei Novitskii, *Istoriia russkogo iskusstva s drevneishikh vremen*, Tom I (Moskva: Izd. V. N. Lind, 1903); Igor Grabar, *Istoriia Russkogo Iskusstva*, Tom I, *Arkhitektura. Istoriia arkhitektury. Do-Petrovskaia epokha* (Moskva: Izd. I. Knebel, 1910).

of the 16th – 17th centuries², and the arch-gabled churches fell out of that line of development, so their origin was not studied in detail, and they were not in the focus of scientific interest for a long time³.

It was only in the 1970s – 1980s that Aleksei Komech paid due attention to the arch-gabled church, noting the lack of continuous arch-gabled completion on all facades in Byzantine architecture. According to him, the arch-gabled church was one of the first innovations in the church architecture of Kyivan Rus. However, Aleksei Komech's study is chronologically limited to the beginning of the 12th century and does not cover the further development of this church type⁴. In recent years, my work has been focused on the study of the preserved 12th-century arch-gabled churches, as well as those known from archaeological excavations. This made it possible to identify regional variants of the arch-gabled church of the 12th century⁵. But the issue of the origins of the compositional model of the arch-gabled church as well as the stages of its formation remains unsolved. In this article, the

² Nikolai Brunov, "K voprosu o samostoiatelnykh chertakh russkoi arkhitektury X–XII vv.," in *Russkaia arkhitektura. Doklady, pročitannye v sviazi s dekadnikom po russkoi arkhitektуре v Moskve v aprele 1939 g.*, ed. Viacheslav Shkvarikov (Moskva: Gos. arkhitektur. izd-vo Akad. arkhitekturi SSSR, 1940), pp. 106–126. Nikolai Voronin, "U istokov russkogo natsionalnogo zodchestva (Iz istorii zodchestva perioda feodalnoi razdroblennosti XI–XV vv.)," in *Yezhegodnik Instituta istorii iskusstv: Zhivopis. Arkhitektura*, ed. Viktor Lazarev, Mark Neiman and Olga Podobedova (Moskva: Izd-vo Akademii nauk SSSR, 1952), pp. 257–316. Igor Grabar et al., eds., *Istoriia russkogo iskusstva*, Tom I, ed. Igor Grabar and Viktor Lazarev (Moskva: Izd-vo Akad. nauk SSSR, 1953), 95–154, 298–395. Igor Grabar et al., eds., *Istoriia russkogo iskusstva*, Tom II, ed. Igor Grabar and Viktor Lazarev (Moskva: Izd-vo Akad. nauk SSSR, 1954), pp. 7–71, 307–339, 379–385. Aleksandr Vlasov, ed., *Vseobshchaya istoriya arkhitekturi*, Tom 3, *Arkhitektura Vostochnoi Yevropy. Srednie veka*, ed. Yurii Yaralov (Leningrad-Moskva: Izd-vo literaturi po stroitelstvu, 1966), pp. 516–656. Yurii Asieiev, *Zodchestvo Pridneprovskoi Rusi kontsa XII – pervoi poloviny XIII vekov, avtoref. dis. na soisk. uch. step. doktora arkhitektury* (Moskva, 1971).

³ The point of view on the development of Kyivan Rus architecture, formulated in Soviet works in the 1950s – 1960s, has become common in European and American publications. This was facilitated by German translations of some Soviet books (*Geschichte der Kultur der alten Rus'. Die vormongolische Periode*, eds. Boris Grekov and Mikhail Artamonov, 2 Bde. (Berlin: Akademie-Verlag, 1959–1962)). Later, European and American researchers on Byzantine architecture (from the 1970s to the present day) briefly discussed Kyivan Rus architecture and mainly presented the point of view put forward in Soviet publications of the middle of the 20th century, with minor additions sticking to its main provisions, in particular, Cyril Mango, *Byzantine architecture* (New York, 1976); Robert Ousterhout, *Eastern Medieval Architecture: The Building Traditions of Byzantium and Neighboring Lands* (Oxford University Press, 2019).

⁴ Aleksei Komech, *Drevnerusskoe zodchestvo kontsa X – nachala XII v. Vizantiiskoe nasledie i stanovlenie samostoyatelnoi traditsii* (Moskva: Nauka, 1987), pp. 133–318.

⁵ Kateryna Mikheienko, "Formuvannia khramu zakomarnoho typu ta etapy yoho rozvytku u XII st.," *Opus mixtum*, no. 4 (2016): 36–45. Kateryna Mikheienko, "Uspenskyi sobor u Volodymyri-Volynskomu v konteksti rozvytku zakomarnoho khramu," *Arkhitekturna spadshchyna Volyni: zb. nauk. prats*, no. 5 (2016): pp. 67–77. Kateryna Mikheienko, "Zakomarnyi khram. Rehionalni tradytsii," *Ukrainska akademiia mystetstva. Doslidnytski ta naukovo-metodychni pratsi*, no. 27 (2018): pp. 33–43.

elements of Byzantine church architecture⁶, that could serve as examples for the arch-gabled completion in the churches of Kyivan Rus, have been focused on. Kyivan Rus architecture of the late 10th – early 12th century is also being examined in order to trace the formation process of the continuous arch-gabled completion in the churches.

In the Middle Byzantine architecture, there were several variants of the arched gables on the church facades:

- 1) arched gables at the vault ends of the cross arms;
- 2) continuous arch-gabled completion of the narthex walls if narthex has galleries;
- 3) small arched gables being formed with semicircular window arches, partially protruding the horizontal cornice of the corner compartments, with the chapels located on their gallery level;
- 4) completion of the dome drums with a continuous row of arched gables being formed with semicircular arches of windows;
- 5) completion of the dome drums with a continuous row of arched gables, part of which or all of them are decorative (not connected to the arches of the windows);
- 6) decorative arched gables at the wall completion of the naos in octagon-domed church (on Chios).

It should be noted that in the mentioned variants, except the last two ones, the arched gables are constructive. It is worthwhile taking a closer look at all these variants.

1. Arched gables at the vault ends of the cross arms

In Byzantium, the facade walls of the naos of cross-in-square churches of the Middle Byzantine period usually had semicircular arched gables only at the ends of the cross arms. Those arched gables were always constructive, as they filled the ends of the barrel vaults⁷. The walls of other compartments were usually completed with horizontal cornices, often located no higher than the springers of the cross-arm vaults. Examples are the Myrelaion (Bodrum Camii), about 920)⁸ (Fig. 2) and Hiram Ahmet Pasa

⁶ The analysis of Byzantine monuments was based primarily on fundamental publications on Byzantine architecture, in particular, Richard Krautheimer, *Early Christian and Byzantine Architecture* (The Pelican History of Art, 1975); Cyril Mango, *Byzantine architecture* (New York, 1976); Slobodan Ćurčić, *Architecture in the Balkans from Diocletian to Süleyman the Magnificent* (Yale University Press, New Haven, 2010); Robert Ousterhout, *Eastern Medieval Architecture: The Building Traditions of Byzantium and Neighboring Lands* (Oxford University Press, 2019).

⁷ Cross vaults were used less often.

⁸ Cecil Striker, *The Myrelaion (Bodrum Camii) in Istanbul* (Princeton, 1981), figs. 21, 28, 29, 38. Thomas Mathews, *The Byzantine Churches of Istanbul. A Photographic Survey* (Pennsylvania State University Press, 1976), pp. 211–213.

Camii (the 9th – early 10th century)⁹ in Constantinople, the Theotokos Kosmosoteira (1152) in Ferai.

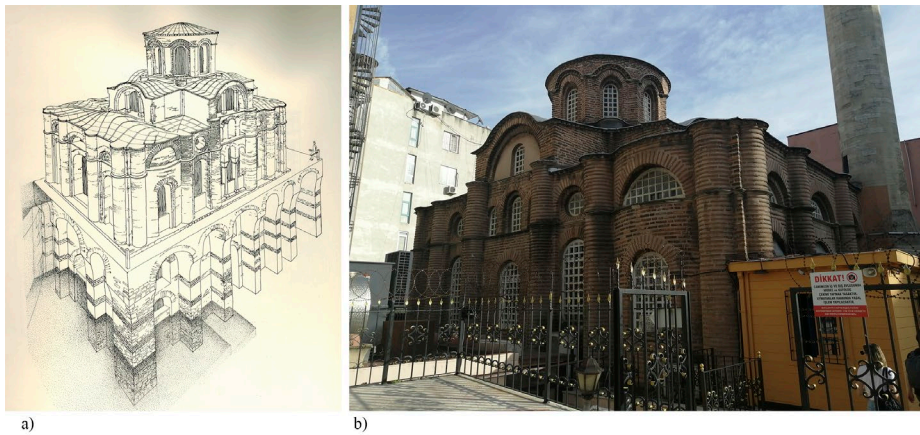


Fig. 2. Constantinople. Myrelaion (Bodrum Camii): a) reconstruction of the general view from southwest (C. Bozkurt), b) view from the northwest.

Variants, in which pitched roofs located above the vaults of the cross arms, were common. Then, the arched gables corresponding to the internal vaults on the facades looked like semicircular niches inscribed in triangular gables as in the Church of Theotokos (between 946 and 955) of Hosios Loukas Monastery in Phocis, the Church of Panagia Chalkeon (1028) in Thessaloniki (the arched gables of the narthex remain semicircular)¹⁰ (Fig. 3b).

⁹ The Byzantine dedication of the church is unknown, previously identified exclusively with the Church of St. John en tou Troullo (the 12th century) (Matthew Savage, “Dome “Typology” in Byzantine Constantinople?,” in *Architecture of Byzantium and Kievan Rus from the 9th to the 12th centuries*, ed. Denis Jolshin (St. Petersburg: The state hermitage Publishers, 2010), 138, 140; Marinis Vasileios, *Architecture and Ritual in the Churches of Constantinople. Ninth to Fifteenth Centuries* (Cambridge University Press, 2014), 158–159), nowadays, an opinion is expressed regarding the dating of the church to the late 9th or early 10th century (Savage, “Dome “Typology” in Byzantine Constantinople?,” 140). Probably, the arched gables of the arm ends were not originally inscribed in triangular gables, because the cross arms did not have pitched roofs over them (Savage, “Dome “Typology” in Byzantine Constantinople?,” pp. 140–144).

¹⁰ It should be noted that the completion of the facade walls, which combine semicircular arched gables at the ends of the cross arms (inscribed in triangular gables) with horizontal cornices of the other compartments, is also typical of octagon-domed churches. Examples are the Katholikon (1011 or 1022) of Hosios Loukas Monastery in Phocis and the Katholikon (the late 11th century, about 1080) in Daphni Monastery near Athens.

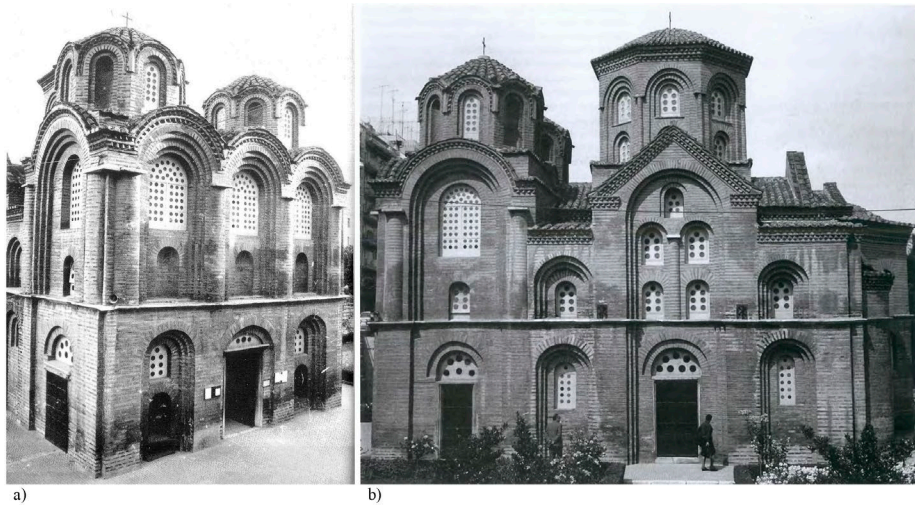


Fig. 3. Thessaloniki. Church of Panagia Chalkeon: a) view from the west (Anna Tsitouridou, *The Church of the Panagia Chalkeon*, b) view from the south.

In Byzantine churches, in the arched gables, no matter whether they were inscribed in triangular gables or not, there was located a large window with a semicircular end (it could take almost the entire plane of the arched gable). Such a window could be divided by marble columns or pillars into three parts (the Theotokos Church (907) of Constantine Lips Monastery (Fenari Isa Camii) and Vefa Kilise Camii (about 1100)¹¹ in Constantinople), or there could exist a derivative composition of three windows, where the middle window had an arched end and the side ones had half arched ends (the Theotokos Kosmosoteira (1152) in Ferai). The other variant was with three arched windows, the middle window being taller than the side ones (the Eski Imaret Camii (the Church of Christ Pantepoptes?), the late 11th century)¹² and the Theotokos Kyriotissa (Kalenderhane) between 1197 and 1204¹³ in Constantinople). A less common variant was with one single window (the Church of Panagia Chalkeon (1028) in Thessaloniki). In the churches situated in Greece, double windows with a marble column between them at vault ends of cross arms¹⁴ are often found (the Church of Theotokos (between 946 and

¹¹ Komech, *Drevnerusskoe zodchestvo kontsa X – nachala XII v.*, 103–104. Vladimir Sedov, *Kilise Dzhami: Stolichnaia arkhitektura Vizantii* (Moskva: Indrik, 2008), p. 16.

¹² It is traditionally considered to be the church of the Monastery of Christ Pantepoptes (about 1087), but some researchers have expressed doubts about this identification. Regardless of this, the Eski Imaret Camii belongs to Constantinople architecture of the middle of the 11th – beginning of the 12th century in terms of its stylistic features (Marinis, *Architecture and Ritual in the Churches of Constantinople*, 138).

¹³ The church, built between 1197 and 1204, included parts of buildings from earlier periods (Marinis, *Architecture and Ritual in the Churches of Constantinople*, 163).

¹⁴ The ends of the cross-arm vaults are usually not visible on the facades, because they are inscribed in the triangular gables formed by the pitched roof above them.

955) of Hosios Loukas Monastery in Phocis, the Hagioi Theodoroi (1049 p.) and Kapnikarea (the third quarter of the 11th century) in Athens).

2. Continuous arch-gabled completion of the narthex walls if narthex has galleries

In the Middle Byzantine period, the most common type of church was complex cross-in-square, in which four columns supported the dome drum. The corner western compartments of the naos could not have the galleries connected with it, because their level would have cut through the column trunks. Therefore, in the most cases, in such churches, the galleries were placed only in the narthex¹⁵.

In Byzantine churches, the narthex walls, if the narthex had no galleries, were usually completed with horizontal cornices, which were located approximately at the same level as the cornices of the corner naos compartments¹⁶ (for example, the Myrelaion (Bodrum Camii), about 920)¹⁷ and Hiramî Ahmet Pasa Camii (the 9th – early 10th century)¹⁸ in Constantinople, the Church of the Hagioi Theodoroi (1049) and Kapnikarea (the third quarter of the 11th century) in Athens).

When there were galleries in the narthex, its vaults were raised and, accordingly, located at the level of the cross arms. As a result, the walls of the western façade of the narthex and both its ends were completed with semicircular arched gables. Those arched gables were always constructive, because they filled the ends of cross vaults, or lunettes of arches under dome drums. A typical example of the arch-gabled completion of the narthex is the Church of Panagia Chalkeon (1028) in Thessaloniki (Fig. 3). In this church, in the interior the arched gables correspond to cross vault end at the centre and the lunettes of the arches under the dome drums in the south and north. The narthex of the Eski Imaret Camii (the Church of Christ Pantepoptes?, the late 11th century) in Constantinople had an arch-gabled completion, in which all the arched gables were also constructive and filled the ends of the domed or cross vaults¹⁹. The narthex walls of the Church of San Marco (the second

¹⁵ In the corner compartments of the naos, at the gallery level, the isolated chapels could be located (Komech, *Drevnerusskoe zodchestvo kontsa X – nachala XII v.*, 45).

¹⁶ The narthex could have a lean-to or pitched roof, then its wall ends had sloping lines of completion or triangular gables, but the principal peculiarity is that the narthex remained lowered and did not have an arch-gabled completion (a compartment corresponding to the western cross arm could only be higher).

¹⁷ Striker, *Myrelaion (Bodrum Camii) in Istanbul*, figs. 21, 28, 38.

¹⁸ Alexander Van Millingen, *Byzantine Churches in Constantinople: their History and Architecture* (London: Macmillan and Co., 1912), p. 206.

¹⁹ Robert Ousterhout, "Some Notes on the Construction of Christos ho Pantepoptes (Eski Imaret Camii) in Istanbul," *Deltion tis Christianikis Archaïologikis Etaireias*, no. 16 (1992): p. 48.

half of the 11th century, consecrated in 1094²⁰) in Venice were completed with a continuous row of arched gables²¹.

The western facade of the Monastery of Christ Pantokrator (Zeyrek Camii, (1118–1136) in Constantinople also had a continuous arch-gabled completion. The monastery complex consisted of three churches. The southern church, dedicated to Christ Pantokrator, was the first to have been built, and later the construction of the northern church of Theotokos Eleousa was started. Both churches were complex cross-in-square with a narthex, which had galleries. The construction of the chapel of Archangel Michael, situated between the two churches, was started after the church of Theotokos Eleousa, but both were completed at the same time. The exonarthex was added to the narthex of the southern church at the final stage of the complex construction²². The narthex of the southern and northern churches formed the western façade, which had a continuous arch-gabled completion²³. All arched gables were constructive there, as they filled the ends of the cross vaults²⁴. On the other facades of the complex, semicircular arched gables were combined with horizontal cornices²⁵.

²⁰ The history of the construction of the Church of San Marco in Venice in details see Otto Demus and Ferdinando Forlati, *The Church of San Marco in Venice: history, architecture, structure* (Washington: Dumbarton Oaks Research Library and Collection, 1960), pp. 63–105.

²¹ Originally, the narthex was located only along the western wall of the church (Demus and Forlati, *Church of San Marco in Venice*, 81–82; Krautheimer, *Early Christian and Byzantine Architecture*, 432). The reconstruction of the original western façade, see Ettore Vio, ed., *The Basilica of St. Mark in Venice* (Scala, 1999), 56; Elena Ene D-Vasilescu, “The church of San Marco in the eleventh century,” *Mirabilia Journal* 2, no. 31 (2020): p. 722.

²² Robert Ousterhout et al., “Study and Restoration of the Zeyrek Camii in Istanbul: Second Report, 2001–2005,” *Dumbarton Oaks Papers*, no. 63 (2009): pp. 253–254. Marinis, *Architecture and Ritual in the Churches of Constantinople*, p. 143.

²³ Ousterhout, *Eastern Medieval Architecture*, 374. Robert Ousterhout et al., “Study and Restoration of the Zeyrek Camii in Istanbul: First Report, 1997–98,” *Dumbarton Oaks Papers*, no. 54 (2000): p. 266. Ousterhout et al., “Second Report, 2001–2005,” 244, figs. 9, 10.

²⁴ After the construction of the exonarthex of the southern church, above the central compartment of the galleries, the cross vault was replaced with a dome on the drum, which was necessary to illuminate the narthex (Arthur H. S. Megaw, “Notes on the Recent Work of the Byzantine Institute in Istanbul,” *Dumbarton Oaks Papers*, no. 17 (1963): p. 343. Ousterhout et al., “Second Report, 2001–2005,” 255).

²⁵ The arched gables probably completed the western façade of the exonarthex (Ousterhout et al., “Second Report, 2001–2005,” 246, fig. 13. Ousterhout, *Eastern Medieval Architecture*, 374). However, it should be noted that the exonarthex was originally planned to be lower (corresponding to the level of the vaults under the galleries of the narthex) and had a wooden sloping roof adjacent to the western façade of the narthex of the southern church directly under the windows of the galleries level. The original roof is evidenced by the sloping brickwork of the wall of the northern end of the exonarthex (the sloping brickwork line was located directly above the arch of the triple window). However, during the construction of the exonarthex, the masters decided to increase its height and build vaults. The reasons for this change are unclear, as the result is that the exonarthex space is tall but dark, with windows located only in the lower parts of the walls (Robert Ousterhout, “Contextualizing the Later

3. Small arched gables being formed with semicircular window arches, partially protruding the horizontal cornice of the corner compartments, with the chapels located on their gallery level

While placing isolated chapels at the gallery level at the naos corner compartments²⁶, the window arches of the second level partially protruded the horizontal cornice of the wall completion of those compartments and formed small arched gables. Nevertheless, there was no continuous arch-gabled completion, as the horizontal cornice remained dominant on the facades. Such chapels could be located both above the western and eastern corner compartments of the naos.

An example is the Theotokos Church (907) of Constantine Lips Monastery (Fenari Isa Camii) in Constantinople. In this church, the galleries are located above the narthex and the vaults of the corner compartments between the cross arms, where there were isolated chapels not connected to the naos²⁷. On the northern façade, there are arched gables, formed by the window arches, that interrupted the horizontal cornice²⁸ (Fig. 4). It can be assumed that the Eski Imaret Camii (the Church of Christ Pantepoptes?, the late 11th century) in Constantinople had similar arched gables at the wall completion of the western corner compartments of the naos²⁹ (the chapels are located on their galleries level).

Churches of Constantinople: Suggested Methodologies and a Few Examples,” *Dumbarton Oaks Papers*, no. 54 (2000): 248–249. Ousterhout et al., “Second Report, 2001–2005,” 255).

²⁶ Komech, *Drevnerusskoe zodchestvo kontsa X – nachala XII v.*, p. 45.

²⁷ Vasileios Marinis, “The original form of the Theotokos tou Libos reconsidered,” in *DASKALA. APODOSI TIMIS STIN OMOTIMI KATHIGITRIA MAIRI PANAGIOTIDI-KESISOGLOU*, ed. Platon Petridis and Viky Foskolou (Athina, 2015), 270, 277. The vaulting of the chapels has not been preserved, and its reconstruction is debatable (Arhtur H. S. Megaw, “The Original Form of the Theotokos Church of Constantine Lips,” *Dumbarton Oaks Papers*, no. 18 (1964): pp. 292–294. Marinis, “Original form of the Theotokos tou Libos,” pp. 278–284, 287–290, 295–299, 302–303).

²⁸ Megaw, “Original Form of the Theotokos Church,” 293. Marinis, “Original form of the Theotokos tou Libos,” 302, fig. 23. Probably, some of the windows of the upper level on the northern façade were doorways that provided access to the eastern chapel through the balcony (Megaw, “Original Form of the Theotokos Church,” pp. 290–291, 293. Marinis, “Original form of the Theotokos tou Libos,” 282, 300, 302).

²⁹ The existing horizontal roof line of these compartments looks rather strange and seems modern (Robert Ousterhout, “Some Notes on the Construction of Christos ho Pantepoptes,” pp. 48–49).

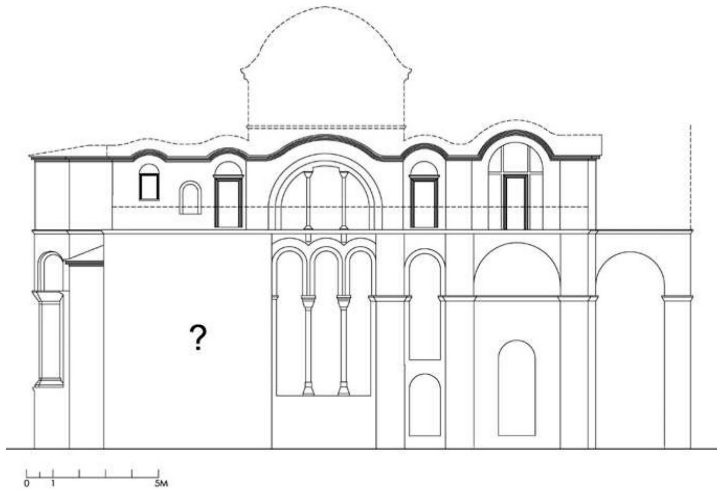


Fig. 4. Constantinople. Theotokos Church of Constantine Lips Monastery (Fenari Isa Camii). Reconstruction of the northern facade (Mamaloukos).

4. Completion of the dome drums with a continuous row of arched gables being formed with semicircular arches of windows

Continuous arch-gabled completion of the dome drum was formed with each window arch. Such arched gables should be considered constructive, as they are created by structural element that is by window arches. For example, the dome of Vefa Kilise Camii (about 1100), the domes of Athenian churches, in particular Kapnikarea (the third quarter of the 11th century) (Fig. 5a) and Metamorphosis tou Soterou (around 1100).



Fig. 5. Completion of the dome drums with a continuous row of arched gables: a) Athens. Kapnikarea, b) Plataniti. Church of Metamorphosis, c) Athens. Hagioi Theodoroi.

5. Completion of the dome drums with a continuous row of arched gables, part of which or all of them are decorative (not connected to the arches of the windows)

There are two variants of the completion of the dome drums with a continuous row of arched gables, part of which or all of them are decorative. The first one is a continuous row of the arched gables, being formed by the arch of each window or niche, which alternate on the dome drum. In this case, the arched gables created by niche arches can be considered decorative, because the niches themselves are already a decoration. Examples are the narthex domes of the Church of Panagia Chalkeon (1028) in Thessaloniki (Fig. 3), the Church of Zoodochos Pigi (the 12th century) in Samarina, the Church of Metamorphosis (the first quarter of the 12th century) at Plataniti in Argolid (Fig. 5b), and the Church of Hagia Varvara (the third quarter of the 12th century) at Eremos.

In the second variant, the arched gables are formed by arches with two windows inscribed in each of them. These arches are not connected with structure. The examples are the Church of the Holy Apostles (circa 1000) and Hagioi Theodoroi (1049) in Athens (Fig. 5c).

6. Decorative arched gables at the wall completion of the naos in octagon-domed church (on Chios)

The naos of the Katholikon (1042–1049) of Nea Moni Monastery on Chios is octagon-domed. The transition from the square naos to the circle of the dome drum base is made with eight conchs. Narthex and exonarthex are adjacent to the naos from the west. The completion of the naos walls has not been preserved, but based on the researches, it has been established that the naos wall on each side had three semicircular arched gables adjacent to the pedestal of the dome drum³⁰ (Fig. 6). The central arched gable of each façade more or less corresponds to the conch situated in the interior (although it is still decorative, as it does not fill the end of the vault), and the side arched gables are not connected to the structures at all, as the conchs are oriented diagonally and arched gables located at the corner of adjacent façades correspond to one conch.

A similar arch-gabled completion has been preserved in the Church of Panagia Krena (the end of the 12th century) on Chios. Its naos was also octagon-domed and narthex and exonarthex adjoined to it, so it is considered that the prototype for this church was the Katholikon of Nea Moni Monastery³¹. In the Church of Panagia Krena, the southern and northern

³⁰ Charalambos Bouras, *Nea Moni on Chios. History and Architecture* (Athens, 1982), 130–132; Sotiris Voyadjis, “The Katholikon of Nea Moni in Chios Unveiled,” *Jahrbuch der Österreichischen Byzantinistik*, no. 59 (2009): pp. 231–233, pl. 8b, 9a.

³¹ Bouras, *Nea Moni on Chios*, p. 52.

walls of the naos are completed by three semicircular arched gables, similar to the Katholikon of Nea Moni, with the only difference that the diagonally oriented conchs correspond to one arched gable of the southern or northern façade. There the arched gables are unrelated to the structure, as well as in the Katholikon of Nea Moni Monastery.

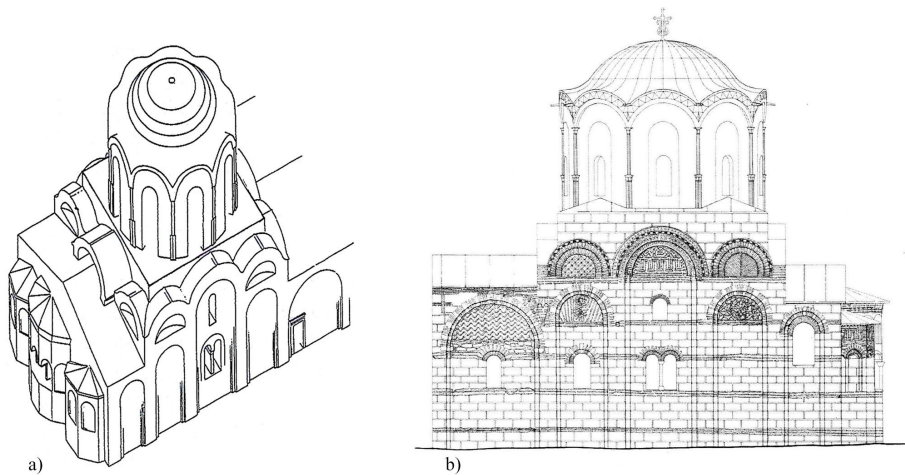


Fig. 6. Chios. Katholikon of Nea Moni Monastery: a) sketch showing the original roof form, b) southern façade, graphic representation.

As it can be seen, a continuous arch-gabled completion is unknown in Byzantine churches. This confirms Aleksei Komech's conclusion that the arch-gabled church is an innovation of the architectural tradition of Kyivan Rus. He believed that the period of formation of the arch-gabled church was the second half of the 11th century³², but he did not consider Kyivan Rus architecture of the late 10th – first half of the 11th century from this point of view. It is worthwhile analysing the churches of that time in terms of the formation of the arch-gabled church type.

The first stone church in Kyivan Rus, the Tithe Church (989–996, almost completely destroyed during the Mongol invasion of 1240) in Kyiv, is known from the material of archaeological excavations. During the archaeological excavations in 1948 (Mikhail Karger), a masonry block with a fragment of the arched gables with the remains of a dog-tooth cornice along its semicircle was found out. The cornice was covered with plaster and painted with a decorative fresco. The remains of a 60x30 cm tile covering have been preserved on the arched gable, which attests that it belonged to the

³² Komech, *Drevnerusskoe zodchestvo kontsa X – nachala XII v.*, p. 261.

initial period of the church construction on Rus territory, because from the 11th century to Mongol invasion Kyiv churches were covered with lead sheets³³. The location of the arched gable indicates that it was a wall fragment of the western façade of the gallery level, its side bay adjacent to the central one from the north. It could be assumed, that the western façade of the Tithe Church (the western portico) had a continuous arch-gabled completion, similar to the narthex with galleries in Byzantine churches. However, this arched gable does not provide information if all the facades of the Tithe Church could have a continuous arch-gabled completion.

The earliest preserved churches of Kyivan Rus are the Transfiguration Cathedral (founded before 1036) in Chernihiv and St. Sophia Cathedral (chronicles give two dates of its foundation: 1017 and 1037) in Kyiv.

The Transfiguration Cathedral is complex cross-in-square with a narthex. The galleries were located above the narthex and side aisles. Above the narthex, the galleries were supported by masonry vaults, barrel in the centre and domed at the sides. And above the side aisles, the galleries were wooden and supported by wooden beams (these parts of the galleries have not been preserved).

The cross arms were covered with barrel vaults that overlooked the facades with semicircular arched gables. The compartments of the naos between the cross arms were crowned with domes on the drums. In the side parts of the galleries in the narthex, the remains of pendentives were found out, which Mykola Kholostenko interpreted as parts of the domed vaults³⁴. At the same time, all the small façade bays, including the narthex ones, were completed with horizontal cornices³⁵. The horizontal cornices of the façade bays, corresponding to the corner compartments of the naos, were located at the level of the arched gable springers of the cross arms. The cornices of façade bays of the bema were lowered in comparison with the cornices of the naos corner compartments, which distinguished the naos and the lowered altar in volume³⁶.

The northern, southern and western facades of the Transfiguration Cathedral are decorated with large flat niches in each bay with semicircular ends (Fig. 7). In the central bays, the semicircular niche ends are inscribed in the semicircles of the arched gables, corresponding to the cross-arm ends. The semicircular niche ends of the other bays do not reach their horizontal

³³ Mikhail Karger, *Drevnii Kiev. Ocherki po istorii materialnoi kul'tury drevnerusskogo goroda*, Tom II, *Pamyatniki kievskogo zodchestva X–XIII vv.* (Moskva-Leningrad: Izd-vo akademii nauk SSSR, 1961), pp. 51–54.

³⁴ Mykola Kholostenko, "Issledovaniia Spasskogo sobora v Chernigove," in *Restavratsiia i issledovaniia pamiatnikov kul'tury*, Vypusk 3, ed. Boris Altshuller (Moskva: Stroiizdat, 1990), p. 8.

³⁵ *Ibid.*, pp. 8–9, 16.

³⁶ *Ibid.*, p. 8, fig. 6.

cornices. The ends of the side niches on the western façade of the narthex coincide with the arch lunettes of the vaults above the galleries in the interior. And on the northern and southern facades, the arches of the ends of these niches rise slightly above the arches under the dome drums located in the interior above the corner compartments of the naos³⁷.

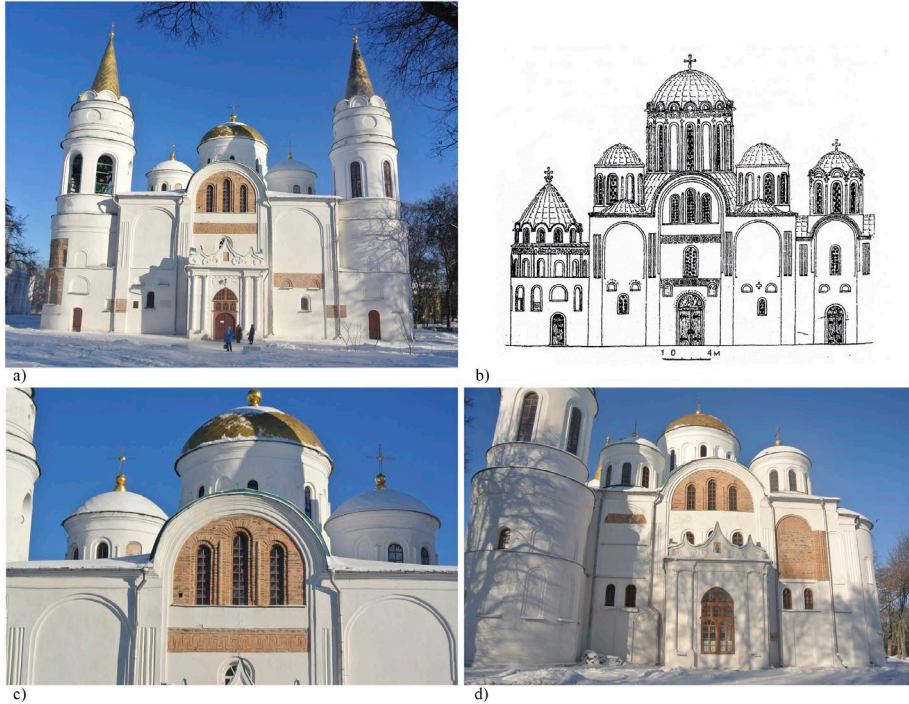


Fig. 7. Chernihiv. Transfiguration Cathedral: a), c) view from the west, b) western façade, reconstruction, d) view from the south.

The profiles of all the niches on the façades are two-staged, but not to the full height: the inner ledge in all the niches breaks off approximately at the level of the galleries, and the outer one goes down on the side façades below the galleries by about 2 m. Below the flat niches on the side facades there is a row of smaller niches that descend to the ground. These niches also have semicircular ends, but their dimensions and placement do not coincide with the modulus of division of the upper parts of the walls, which is determined by the lesenes between the large upper niches³⁸. On the western

³⁷ Komech, *Drevnerusskoe zodchestvo kontsa X – nachala XII v.*, p. 156.

³⁸ Mykola Kholostenko attributed the discrepancy between the divisions of the lower and upper parts of the facades of the Transfiguration Cathedral to changes in the conception during its construction. The church was originally laid out as a domed basilica, and later during the

façade, the inner ledges, just like on the side façades, only go down to the level of the galleries, while the outer ones reach the ground. Accordingly, the lesenes on the western façade traditionally descend to the ground.

Aleksei Komech believed that the niche decoration of all the small façade bays in upper level of the Transfiguration Cathedral in Chernihiv is a decorative system, although it follows the structure of the building in its basic idea³⁹. This observation is important for considering the formation of the arch-gabled church. In the context of this, in my point of view, another characteristic of the Chernihiv cathedral is of great importance. This is a copy of the design with large niches of the western facade to the northern and southern ones. I consider, there are grounds to assume that same design on the Transfiguration Cathedral facades was due to the fact that the galleries were located not only above the narthex, but also above the side aisles.

Thus, Chernihiv Transfiguration Cathedral, combining semicircular arched gables and horizontal cornices at the wall completion, typical of Byzantine architecture, has large niches decoration, which creates a facade composition similar to that of the arch-gabled church. The niches in the small bays could be interpreted as arched gables still inscribed in the walls with horizontal cornices. These niches can be considered as the first stage in the formation of decorative arched gables, a kind of artistic image of an architectural structure.

St. Sophia Cathedral in Kyiv is five-naved simple cross-in-square, surrounded by two rows of porticoes from the west, south and north: two-storey inner porticoes and one-storey outer ones. The form of small bay completion of facades is unknown, because none of the inner porticoes that formed the facades have saved neither the vaulting or the walls of the second floor. Therefore, the reconstructions of the original look of St. Sophia of Kyiv proposed in the 20th century differ from one another primarily in the construction of the vaulting of the second floors of the inner porticoes. After architectural field studies in the middle of the 20th century, Yurii Asieiev, Mykola Kresalniyi, and Viktor Volkov proposed a reconstruction that was long considered to be classical. In it, the compartments of the second floors of the inner porticoes are covered with barrel vaults that overlook the facades with semicircular arched gables⁴⁰. However, such a reconstruction cannot be taken as real, since the springers of barrel vaults are not of sufficient height to accommodate the passage arches under them. Moreover, these arches would

construction process it was transformed into a cross-in-square church (Kholostenko, "Issledovaniia Spasskogo sobora v Chernigove," 7–8).

³⁹ Komech, *Drevnerusskoe zodchestvo kontsa X – nachala XII v.*, p.156.

⁴⁰ Mykola Kresalniyi, *Sofiiskyi zapovidnyk u Kyievi. Arkhitekturno-arkheolohichni narys* (Kyiv: Derzhavne vydavnytstvo literatury z budivnytstva i arkhitektury URSR, 1960), 85–86, figs. 68–71.

cover the lesenes preserved *in situ* in the interior of the porticoes⁴¹. Therefore, Yurii Asieiev, Irma Totska and Grigoriy Shtender conducted the architectural field studies of St. Sophia of Kyiv in 1978 and put forward a new reconstruction, in which barrel vaults were left only above the compartments corresponding to the cross arms, and all other parts of the porticoes were covered with cross vaults. But even in this reconstruction, the facades remained with an arch-gabled completion, which does not look different from the previous variant⁴². Another interpretation of the 1978-research results was put forward by Grygorii Logvin. In his reconstruction, only the compartments corresponding to the central nave and transept were covered with barrel vaults, the ends of which overlooked the façade with the semicircular arched gables. The other compartments of the inner porticoes were covered with domed vaults (similar to those preserved in the first level) and the façade bays corresponding them were completed with horizontal cornices⁴³, as in Byzantium.

Without reliable information about the completion and design of the upper parts of the facades of the inner porticoes of St. Sophia of Kyiv, attention should be paid to the preserved facade design of the northern outer portico (Fig. 8a). It was one-storey, its walls were finished with horizontal cornices. The portico was an open arcade with the exception of the eastern compartment, which was a closed space⁴⁴. Each façade bay had a large arched opening, and the bays corresponding to the western corner had two similar ones. All the arched openings (except for the one corresponding to the end of the transept) were inscribed in large niches, the best part of which had semicircular ends and some had triangular ends. It is difficult to talk about the correspondence of these niche ends to the vaults located inside, because they have not been preserved. However, it is believed that the compartments (excluding the one corresponding to the transept end and the corner western one⁴⁵) had barrel vaults oriented perpendicular to the walls of the cathedral naos⁴⁶. In this case, the arched ends of the niches could be a reflection of the ends of the inner barrel vaults. Such niches are similar to those of the

⁴¹ Yurii Asieiev et al., "Novoe o kompozitsionnom zamysle Sofiiskogo sobora v Kieve," in *Drevnerusskoe iskusstvo: Khudozhestvennaia kultura X – pervoi poloviny XIII vv.*, ed. Aleksei Komech and Olga Podobedova (Moskva: Nauka, 1988), p. 21.

⁴² *Ibid.*, pp. 18–27.

⁴³ Grigoriy Logvin, "Novye issledovaniia drevnerusskoi arkhitektury," *Stroitelstvo i arkhitektura* (Kiev), no. 8 (1978): pp. 33–34.

⁴⁴ Komech, *Drevnerusskoe zodchestvo kontsa X – nachala XII v.*, 206.

⁴⁵ There is no definite variant of roof reconstruction of the large corner compartment of the northern portico (near the northern tower). One variant presupposes a large cross vault without intermediate piers (Kresalniyi, *Sofiiskyi zapovidnyk u Kyievi*, 60), the other is four vaults supported by a pillar located in the centre of the compartment (Komech, *Drevnerusskoe zodchestvo kontsa X – nachala XII v.*, 206).

⁴⁶ Karger, *Drevnii Kiev*, 160, 165. Komech, *Drevnerusskoe zodchestvo kontsa X – nachala XII v.*, p. 206.

Transfiguration Cathedral in Chernihiv. At the same time, the triangular ends of the niches were not connected to the structure. The design of the bay, corresponding to the transept, was different, where almost the entire plane is occupied by a large niche with a semicircular end. In the niche, a large arched opening with two small ones on either side is inscribed. This niche is also similar to those of the Transfiguration Cathedral in Chernihiv, but unlike them, it does not reflect the structures inside, because in this compartment only flat roof on wooden beams could exist⁴⁷. Thus, in St. Sophia of Kyiv, the walls of the northern portico have a decoration, imitating the non-existent ends of barrel vaults. So, this decoration is not connected with the structure.

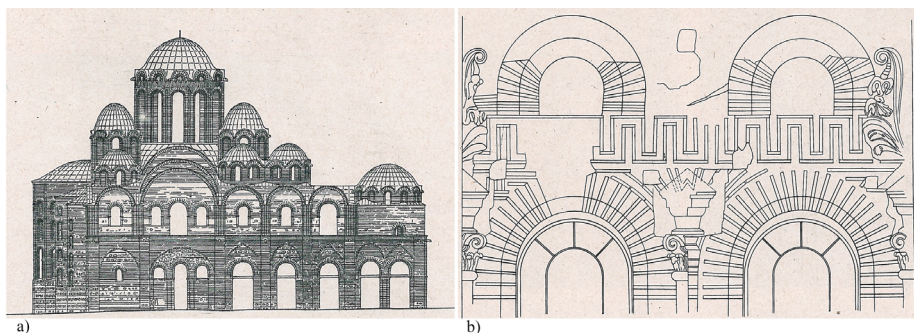


Fig. 8. Kyiv. St. Sophia Cathedral: a) northern façade, reconstruction, b) drum of the central dome, arched gables over meander frieze, measurement drawing.

In addition to the porticoes of St. Sophia of Kyiv, it is worthwhile considering the completion of its dome drums. The drums of the small domes are completed with a continuous row of arched gables formed with the window arches⁴⁸. These arched gables are constructive, just like in Byzantine churches (for example, Kapnikarea (the third quarter of the 11th century) in Athens). In the central dome of St. Sophia of Kyiv, the arch-gabled completion of the dome drum is fully decorative, because a meander frieze runs above the windows, separating the semicircles of the arched gables from them⁴⁹ (Fig. 8b). In addition, it should be noted that the radius of the arched gables is smaller than that one of the arches of the drum windows. This variant of the arch-gabled completion of the dome drums with decorative arched gables is different from variants in Byzantine monuments.

To conclude, it can be stated that the preserved Kyivan Rus monuments of the first half of the 11th century do not have a continuous arch-gabled completion of the façade walls. Nevertheless, both the Transfiguration

⁴⁷ Karger, *Drevnii Kiev*, 161. Komech, *Drevnerusskoe zodchestvo kontsa X – nachala XII v.*, p. 206.

⁴⁸ Kresalnyi, *Sofiiskyi zapovidnyk u Kyievi*, pp. 60–62, 64–65.

⁴⁹ *Ibid.*, pp. 61–63.

Cathedral in Chernihiv and St. Sophia of Kyiv demonstrate a tendency to use decorative elements on the façades that are not connected to the structure to achieve a certain look of the building.

The history of the arch-gabled church should begin at the time of the first decorative arched gable emergence. In St. Sophia Cathedral (1045–1050/52) in Novgorod, the earliest known arched gables in the completion of the small façade bays of the main core have been preserved, including one decorative. In addition, the western portico of this cathedral ends with constructive arched gables (similar to the narthex of Byzantine churches). Analysing the composition of St. Sophia in Novgorod, Aleksei Komech noted that a consistent system of arch-gabled completion had not been developed yet there, as arched gables were combined with horizontal cornices, triangular gables, and half arched forms⁵⁰. Nevertheless, the process of forming the arch-gabled completion had already begun in St. Sophia of Novgorod, so this cathedral may be considered a proto-arch-gabled church.

It is possible that the process of the occurrence of arched gables in completion of the small bays, similar to those in St. Sophia of Novgorod, also took place in Kyiv in the middle of the 11th century in St. George's Church, St. Iryna's Church and the Church in the Manor of the Metropolitan House, but these monuments are known only from archaeological excavations, so we have no idea about the nature of the completion of their façade walls.

The Dormition Cathedral (1073–1087) of Pechersk Monastery in Kyiv is considered the first arch-gabled church. Its main volume is a parallelepiped elongated along the west-east direction, topped with a single dome on the drum. During the dismantling of the ruins of the cathedral after the explosion in 1941⁵¹, a fragment of the composition of a window and two niches from the plane of the arched gable was found out, which became the basis for the reconstruction of the arch-gabled completion (Mykola Kholostenko)⁵². The volumetric composition of the Dormition Cathedral is characterised by the lowering of the side apses and vaults of the eastern corner compartments of the naos, the arched gables corresponding to these compartments were lowered too (Aleksei Komech)⁵³ (Fig. 9a).

⁵⁰ Komech, *Drevnerusskoe zodchestvo kontsa X – nachala XII v.*, 248

⁵¹ Before the destruction by an explosion in 1941, the Dormition Cathedral of Pechersk Monastery was not studied in detail.

⁵² Mykola Kholostenko, "Uspenskyi sobor Pecherskoho monastyria," in *Starodavnyi Kyiv*, ed. Petro Tolochko (Kyiv: Naukova dumka, 1975), 151–153.

⁵³ Komech, *Drevnerusskoe zodchestvo kontsa X – nachala XII v.*, 272. According to Mykola Kholostenko's reconstruction, all the vaults between the cross arms of the Dormition Cathedral were lowered, all the small arched gables were lowered accordingly, their crowns were located at the level of the springers of the large arched gables at the cross-arm ends (Kholostenko, "Uspenskyi sobor Pecherskoho monastyria," 153; Mykola Kholostenko, "Novi doslidzhennia Ioanno-Predtechenskoï tserkvy ta rekonstruktsiia Uspenskoho soboru Kyievo-Pecherskoï lavry," in *Arkheolohichni doslidzhennia starodavnoho Kyieva*, ed. Petro Tolochko (Kyiv: Naukova dumka, 1976), 144). However, in reality, such a lowering of the vaults was fixed

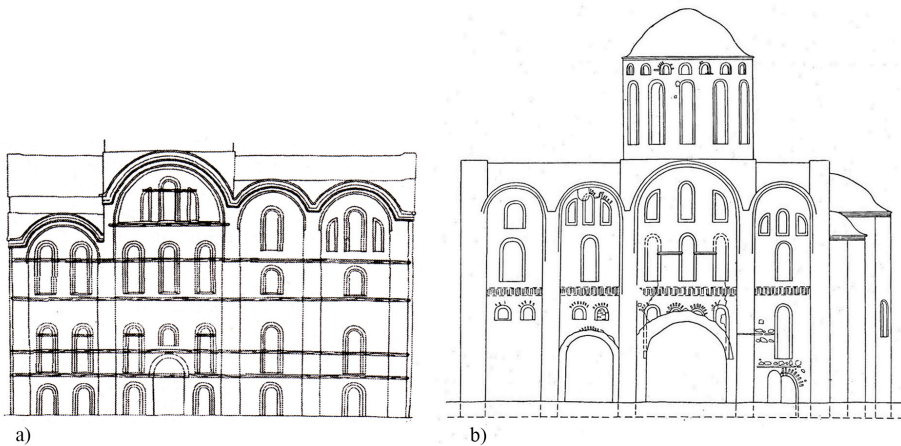


Fig. 9. First arch-gabled churches in Kyiv: a) Dormition Cathedral of Pechersk Monastery. Scheme of the northern wall, reconstruction, b) St. Michael's Golden-Domed Cathedral. Drawing of the southern façade.

Built almost simultaneously with the Dormition Cathedral of Pechersk Monastery, St. Michael's Church (1070–1088) of Vydubitskyi Monastery in Kyiv has been only the western part preserved. The narthex of St. Michael's Church had arched gables, as proved by the remains of the lower parts of windows or niches in their semicircles that were supposed to complete the southern bay of its western wall and the southern end wall. The existence of the arched gables of the small naos bays is testified by the preserved remains of double ledges on the lesenes. Those ledges were the lower parts of the profiling of the arched gable semicircles⁵⁴.

The first church to represent the completed forms of the arch-gabled church type is St. Michael's Golden-Domed Cathedral (1108–1113) in Kyiv⁵⁵. Its volume is the same as that of Dormition Cathedral of Pechersk

only in the eastern part of the church (Kholostenko, "Uspenskyi sobor Pecherskoho monastyrnia," 151–154).

⁵⁴ Komech, *Drevnerusskoe zodchestvo kontsa X – nachala XII v.*, 265.

⁵⁵ St. Michael's Golden-Domed Cathedral was destroyed in 1937 by order of the Soviet authorities. Before and during its destruction, Ipolyt Morhylevskiy made some photos and measurements (the materials are kept in the National Conservation Area "St. Sophia of Kyiv", part of which were published by Mikhail Karger (Karger, *Drevnii Kiev*, 276–277, 279, 281–282, tables XLVII–L). The archaeological excavations of St. Michael's Golden-Domed Cathedral were carried out in the 1990s (1992–1994 under the direction of Viktor Kharlamov, 1996–1997 under the direction of Hlib Ivakin), the materials of which are kept in the Institute of Archeology of the National Academy of Sciences of Ukraine (Kyiv, Ukraine). Some of them were published: Hlib Ivakin, "Arkheolohichne vyvchennia Mykhailivskoho Zolotoverkhoho monastyrnia v 1996–1998 rokakh," *Pamiatky Ukrainy: istoriia ta kultura*, no. 1 (1999): 52–59; Hlib Ivakin et al., *Mykhailivskiy Zolotoverkhyi monastyr u Kyievi (za arkheolohichnyimi doslidzhenniamy 1996–1999 rokiv)* (Kyiv: IA NAN Ukrainy, 2023), 73–99).

Monastery, an elongated parallelepiped topped with one dome on the drum. However, in St. Michael's Golden-Domed Cathedral, according to measurements and photos made by Ipolyt Morhylevskiy, though the side apses were lowered, the springers of all the arched gables were on the same level⁵⁶ (Fig. 9b), whereas the Dormition Cathedral had lowered eastern arched gables. Nevertheless, the niches of the eastern arched gables of St. Michael's Golden-Domed Cathedral were noticeably lower than those of the other small arched gables and roughly corresponded to the ends of the lowered eastern corner vaults. Thus, the elevation of the eastern compartments by the addition of decorative arched gables was due to the emergence of a completed compositional model of the arch-gabled church, and the preservation of lowered niches was in line with the old tradition. Emphasising this, Aleksei Komech considered the niches in the eastern arched gables of the southern and northern facades of St. Michael's Golden-Domed Cathedral a double decoration⁵⁷.

In St. Michael's Golden-Domed Cathedral, there can be seen the widespread scheme of filling the plane of the arched gables, which was common in the arch-gabled churches of Kyivan Rus in the 12th century. The Byzantine tradition of window placement is preserved in the constructive arched gables, in St. Michael's Golden-Domed Cathedral, a composition of three windows. There were niches in the decorative arched gables, as windows were impossible to place because of the vault slopes behind those arched gables. In St. Michael's Golden-Domed Cathedral, there was a composition of three niches imitating the similar one of windows.

At the same time as St. Michael's Golden-Domed Cathedral, a reduced type of the arch-gabled church emerged, without a narthex. It is represented by the Trinity Gate Church (after 1106) of Pechersk Monastery in Kyiv. This church has a square plan, and all its facades are identical, including the eastern one, which has no protruding apses that are recessed into the wall. Because of the lack of horizontal divisions, vertical lesenes with tiers of windows between them dominate at all the facades of the Trinity Gate Church. As a result, it is created a new composition with a vertical orientation of the church volume, in contrast to the elongated parallelepiped of the arch-gabled churches with narthex. In the volumetric and spatial solution of the Trinity Gate Church, the composition of the newly formed arch-gabled church undergoes certain transformations that can be interpreted as the initial stage of the development of churches with vertical composition. This stage is limited to increasing the height of the main volume of the church and the vertical orientation of the facade decorative elements.

On the basis of the compositional model of the arch-gabled church formed in Kyiv in the early 12th century, regional variants of the arch-gabled

⁵⁶ Karger, *Drevnii Kiev*, 279, fig. 91.

⁵⁷ Komech, *Drevnerusskoe zodchestvo kontsa X – nachala XII v.*, 280.

church occurred during that century, which differ from one another in their volumetric and spatial solution, building materials and masonry techniques, structural and decorative elements. It should be noted that already in the earliest regional variants (Novgorod and Chernihiv), as well as in Kyiv in the early 12th century, the springers of all the arched gables were located at the same level, but there was no lowering of the eastern corner vaults.

As defined above, in the Byzantine architecture of the Middle Byzantine period, both in the 10th – 11th centuries, which preceded and was synchronous with the period of formation of the compositional model of the arch-gabled church in Kyivan Rus, and in the 12th century, which was synchronous with the widespread construction of arch-gabled churches in Rus, only church narthex had a continuous arch-gabled completion, if narthex had galleries. In Byzantine churches, the arch-gabled completion of the narthex was formed by ends of cross vaults or the lunettes of the arches under dome drums, that is all the arched gables were constructive. Thus, the arch-gabled completion was a consequence of the structure. There was no continuous arch-gabled completion of the naos walls in Byzantine churches, but the façade walls of the corner compartments were sometimes interrupted by the window arches when isolated chapels were placed at the gallery level of the naos corner compartments. It can be seen that in Byzantine architecture, the connection between the arch-gabled completion of the façade walls and the existence of galleries can be traced. In addition, it should be noted that sometimes the dome drums had a continuous arch-gabled completion. However, I suppose, such a completion might serve as a motive that could influence the formation of a continuous arch-gabled completion in Kyivan Rus churches, but is not decisive for its emergence.

In my opinion, the impetus for the development of a continuous arch-gabled completion in Kyivan Rus churches was given by the arch-gabled one of narthex of the Byzantine churches. This is likely to be due to the fact that in Kyivan Rus churches, the galleries above the western corner compartments were a continuation of the narthex ones, and not, as in the Middle Byzantine churches, isolated chapels located above the corner compartments. The mentioned similarity of the gallery arrangement contributed to the fact that the arch-gabled completion in Kyivan Rus churches was transferred to the western corner compartments similar to the narthex one of the Byzantine churches. At the same time, the arch-gabled completion of the wall bays corresponding to the eastern corner compartments of the naos in Kyivan Rus churches immediately acquired an exclusively aesthetic significance, because the churches did not have the second level above those compartments. Thus, in Kyivan Rus, regardless of the existence of galleries, the walls of all façade

bays were completed with semicircular arched gables. Another proof in favour of the primary aesthetic significance of the compositional model of the arch-gabled church is the emergence of decorative arched gables in the first churches of this type in Kyivan Rus. Without decorative arched gables it was impossible to create an arch-gabled completion in two adjacent facades of the church corner compartments, in the lack of using cross vaults⁵⁸. It should be noted that decorative arched gables can also be seen in the octagon-domed churches on Chios. But on the other hand, it is necessary to mention the fundamental difference between the decorative arched gables in Kyivan Rus and Chios churches. In Kyivan Rus, decorative arched gables imitated the ends of the vaults, while on Chios, there were the apse conches behind the decorative arched gables. In my point of view, the Chios churches were unlikely to have influenced the formation of the arch-gabled completion in Kyiv, since octagon-domed churches were unknown in Rus before the beginning of the 12th century and did not become widespread⁵⁹.

To sum it up, it could be put forward the stages of the formation of a continuous arch-gabled completion in Kyivan Rus churches as a compositional principle:

The first half of the 11th century

In the small façade bays, the flat niches, which can be interpreted as a kind of arched gables inscribed in the walls ending with horizontal cornices, emerged (the Transfiguration Cathedral in Chernihiv, the northern portico of St. Sophia Cathedral in Kyiv). Such niches originally reflected the vault ends, situated in the interior, and later completely lost their connection with the structure and turned into a decoration (the northern outer portico of St. Sophia Cathedral in Kyiv). In addition, it is important to copy the design of the western façade to the southern and northern ones, as can be seen in the Transfiguration Cathedral in Chernihiv.

The middle of the 11th century

The arched gables at the completion of the small façade bays of naos, including the decorative arched gable, occurred. There was no arch-gabled completion as a compositional principle, because those arched gables were combined with other forms of the façade wall completion (St. Sophia Cathedral in Novgorod).

⁵⁸ The earliest known use of cross vaults in Kyivan Rus architecture was fixed in Chernihiv churches of the first quarter of the 12th century (the vaults under the corner compartments of the galleries).

⁵⁹ The cross-in-square type was dominant in church architecture of Kyivan Rus. The exceptions are the small churches in Pereiaslav-Ruskyi of the late 11th – early 12th centuries, in Volodymyr-Volynskyi and Halych of the 12th century, rotundas in Kyiv and Smolensk, and the octagon-domed church (1108) of Klovisky Monastery in Kyiv.

The last quarter of the 11th century

The continuous arch-gabled completion of all façade bays with the lowering of arched gables corresponding eastern corner compartments emerged (the Dormition Cathedral of Pechersk Monastery in Kyiv).

The beginning of the 12th century

The completed compositional model of the arch-gabled church with springers of all the arched gables on the same level was formed, but the lowering of the vaults of the eastern corner compartments was preserved (St. Michael's Golden-Domed Cathedral in Kyiv).

During the 12th century

Based on the compositional model of the arch-gabled church formed in Kyiv, regional variants of the arch-gabled church with all the arched gable springers on the same level without lowering the eastern corner vaults emerged.

In conclusion, it is necessary to emphasise once again that in Byzantine architecture, the continuous arch-gabled completion of all the walls of church facades was unknown. The arch-gabled completion of the narthex was consequence of the structure, in contrast to the compositional model of the arch-gabled church of Kyivan Rus. That model was primary of aesthetic significance, whereas the structures were to serve for its implementation, and decorative elements played an important role. This confirms Aleksei Komech's conclusion that the arch-gabled church was an achievement of Kyivan Rus architecture. In addition, the fact that late Byzantine monuments did not have a continuous arch-gabled completion, also testifies in favour of the local Kyivan Rus origin of the arch-gabled church. It refutes the established in science point of view of the Byzantine origin of the compositional model of the arch-gabled church.

List and sources of illustrations:

Fig. 1. The arch-gabled church of Kyivan Rus: a) St. Cyril's Church in Kyiv. Section in the axonometry (Yurii Asieiev) (Yurii Asieiev, "Arkhitektura Kyrylivskoho zapovidnyka," in *Arkhitekturni pamiatnyky: zbirnyk naukovykh prats*, ed. Sydir Hrabovskyi (Kyiv: Akademiia arkhitektury URSR, 1950), 80, fig. 88); b) St. Michael's Golden-Domed Cathedral in Kyiv. Reconstruction of the general view (Andrii Reutov) (Hlib Ivakin et al., *Mykhailivskiy Zolotoverkhyi monastyr u Kyievi (za arkhеолоhichnymy doslidzhenniamy 1996–1999 rokiv* (Kyiv: IA NAN Ukrainy, 2023), 97, fig. 102)

Fig. 2. Constantinople. Myrelaion (Bodrum Camii): a) reconstruction of the general view from southwest (C. Bozkurt) (Cecil Striker, *The Myrelaion (Bodrum Camii) in Istanbul* (Princeton, 1981), fig. 28); b) view from the northwest (author, photo of 2024)

Fig. 3. Thessaloniki. Church of Panagia Chalkeon: a) view from the west (Anna Tsitouridou, *The Church of the Panagia Chalkeon* (Thessaloniki: Institute for Balkan Studies, 1985), pl. 4); b) view from the south (Slobodan Ćurčić, *Architecture in the Balkans from Diocletian to Süleyman the Magnificent* (Yale University Press, New Haven, 2010), 371, fig. 396)

Fig. 4. Constantinople. Theotokos Church of Constantine Lips Monastery (Fenari Isa Camii). Reconstruction of the northern facade (Mamaloukos) (Vasileios Marinis, “The original form of the Theotokos tou Libos reconsidered,” in *DASKALA. APODOSI TIMIS STIN OMOTIMI KATHIGITRIA MAIRI PANAGIOTIDI-KESISOGLOU*, ed. Platon Petridis and Viky Foskolou (Athina, 2015), 302, fig. 23)

Fig. 5. Completion of the dome drums with a continuous row of arched gables: a) Athens. Kapnikarea (author, photo of 2024); b) Plataniti. Church of Metamorphosis (Slobodan Ćurčić, *Architecture in the Balkans from Diocletian to Süleyman the Magnificent* (Yale University Press, New Haven, 2010), 417, fig. 458); c) Athens. Hagioi Theodoroi (author, photo of 2024)

Fig. 6. Chios. Katholikon of Nea Moni Monastery: a) sketch showing the original roof form (Charalambos Bouras, *Nea Moni on Chios. History and Architecture* (Athens, 1982), 131, fig. 135a); b) southern façade, graphic representation (Sotiris Voyadjis, “The Katholikon of Nea Moni in Chios Unveiled,” *Jahrbuch der Österreichischen Byzantinistik*, no. 59 (2009): pl. 8b)

Fig. 7. Chernihiv. Transfiguration Cathedral: a), c) view from the west (author, photo of 2015); b) western façade, reconstruction (Mykola Kholostenko) (Mykola Kholostenko, “Issledovaniia Spasskogo sobora v Chernigove,” in *Restavratsiia i issledovaniia pamiatnikov kultury*, Vypusk 3, ed. Boris Altshuller (Moskva: Stroiizdat, 1990), 16, fig. 21); d) view from the south (author, photo of 2015)

Fig. 8. Kyiv. St. Sophia Cathedral: a) northern façade, reconstruction (Yurii Asieiev, Mykola Kresalnyi, and Viktor Volkov) (Mykola Kresalnyi, *Sofiiskyi zapovidnyk u Kyievi. Arkhitekturno-arkheolohichni narys* (Kyiv: Derzhavne vydavnytstvo literatury z budivnytstva i arkhitektury URSR), 1960), 83, fig. 67); b) drum of the central dome, arched gables over meander frieze, measurement drawing (Mykola Kresalnyi) (Mykola Kresalnyi, *Sofiiskyi zapovidnyk u Kyievi. Arkhitekturno-arkheolohichni narys* (Kyiv: Derzhavne vydavnytstvo literatury z budivnytstva i arkhitektury URSR), 1960), 61, fig. 43)

Fig. 9. First arch-gabled churches in Kyiv: a) Dormition Cathedral of Pechersk Monastery. Scheme of the northern wall, reconstruction (Ihor Anisimov, after Mykola Kholostenko taking into account the remarks of Aleksei Komech) (Ihor Anisimov, “Deiaki osoblyvosti pervisnoi arkhitektury Uspenskoho soboru Kyievo-Pecherskoi lavry (avtorska versiiia),” *Lavrskiy almanakh: Kyievo-Pecherska lavra v konteksti ukrainskoi istorii ta kultury: zb. nauk. prats*, no. 12 (2004): 24, fig. 2); b) St. Michael’s Golden-Domed Cathedral. Drawing of the southern facade (Ipolyt Morhylevskiy) (Mikhail Karger, *Drevnii Kiev. Ocherki po istorii materialnoi kultury drevnerusskogo goroda*, Tom II, *Pamyatniki kievskogo zodchestva X–XIII vv.* (Moskva-Leningrad: Izd-vo akademii nauk SSSR, 1961), 279, fig. 91)

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