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SPECIAL ISSUE

THE CATHEDRAL of St. SOPHIA in KIEV

BY
OLEXA POWSTENKO

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ΟΛΕΚΟΑ ΠΟΒΟΤΕΗΚΟ



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TO THE MEMORY OF YAROSLAV
THE WISE, FOUNDER OF THE
CATHEDRAL OF ST. SOPHIA

ПАМ'ЯТІ ЯРОСЛАВА МУДРОГО, ФУНДАТОРА КАТЕДРИ СВЯТОЇ СОФІЇ Українська Вільна Академія Наук у Сполучених Штатах присвячує цю монографію 900-літтю смерти фундатора катедри св. Софії у Києві — великого князя України-Руси Ярослава Мудрого (1054-1954).

Первісна архітектура катедри св. Софії відбиває візантійський архітектурний стиль, на якому позначились мистецькі українські впливи.

В додаток до ілюстрацій, в цій праці вміщено дані з історії катедри св. Софії, матеріяли з дотеперішніх досліджень і опис змін в її архітектурі, виконаних у пізніші часи.

В роботі подано також матеріяли про археологічні розкопи на території катедри, порівняння плянів св. Софії з раніше побудованою Десятинною церквою, досліди архітектурних пропорцій первісної будівлі катедри, опис архітектурної композиції та оздоби її інтер'єру.

Сподіваємось, що ця праця послужить важливим джерелом для пізнання катедри св. Софії у Києві, цієї архітектурної пам'ятки української та світової культури.

Михайло Ветухів Президент The Ukrainian Academy of Arts and Sciences in the United States dedicates this publication to the memory of Yaroslav The Wise, Grand Prince of Ukraine-Rus' and founder of the Cathedral of St. Sophia in Kiev, on the 900th Anniversary of his death (1054-1954).

The original architecture of the Cathedral of St. Sophia reflects Byzantine architectural style with Ukrainian artistic influences.

In addition to the photographs and illustrations the publication treats the history of the Cathedral of St. Sophia and includes materials derived from previous research, as well as a description of the architectural changes which occurred during later periods.

The publication also contains archeological data on excavations in and near the Cathedral, a comparison of the plans of St. Sophia with the older Tithe Church in Kiev, research on the Cathedral's original proportions, and a description of its architecture and decoration.

It is hoped that this work will serve as an important source of knowledge concerning the Cathedral of St. Sophia, an architectural monument of Ukrainian and world culture.

> Michael Vetukhiv President





St. Sophia. A general view from St. Sophia Square. Катедра св. Софії. Загальний вид з Софійської площі.

THE HISTORICAL BACKGROUND

The Cathedral of St. Sophia in Kiev was founded by Grand Prince Yaroslav the Wise on the site of his victory over the Pechenegs, in the "field outside the city," to quote the words of a contemporary chronicler. On this emplacement the Grand Prince built a new part of the city of Kiev, broadening considerably the area encompassed by the citadel in the time of Grand Prince Volodymyr. He enclosed it with additional earthworks and walls pierced by three gates. Almost simultaneously with

¹ Povest' Vremennykh Let, p. ex., PSRL, I, 1 (2nd ed., Leningrad 1926), p. 150f. The event, recorded under the year 1036, is described as follows (here and in subsequent quotations the translation by S. H. Cross, *The Russian Primary Chronicle* [1930], has been used):

While Yaroslav was still at Novgorod, news came to him that the Pechenegs were besieging Kiev. He then collected a large army of Varangians and Slavs, returned to Kiev, and entered his city. The Pechenegs were innumerable. Yaroslav made a sally from the city and marshaled his forces, placing the Varangians in the centre, the men of Kiev on the right flank, and the men of Novgorod on the left. When they had taken position before the city, the Pechenegs advanced, and they met on the spot where the metropolitan Church of St. Sophia now stands. At that time, as a matter of fact, there were fields outside city. The combat was fierce, but toward evening Yaroslav with difficulty won the upper hand.

the construction of the St. Sophia Cathedral, Yaroslav had built the Monastery of St. George and the Convent of St. Irene, the Church of the Annunciation on the Golden Gate, and other buildings within this enclosure.

The exact date of the construction of the cathedral has to be deduced by reconciling the contradictory data of the chronicles. Whereas the Sofiys'ky, Voskresens'ky and the Nykonovs'ky chronicles and the so-called Rus'ky Vremennyk date the Pecheneg invasion and the foundation of the St. Sophia Cathedral in 1017, the author of the Primary Chronicle registers the attack of the Pecheneg nomads under the year 1036 and attributes the construction of the city walls, the Golden Gate, St. Sophia and the Monastery of St. George and the Convent of St. Irene to 1037. The same construction date is given by such recensions as the Laurentian, the Koenigsberg, the Hypatian, the Arkhangel, and other chronicles.

The *Primary Chronicle* gives the following information on the building activities of Grand Prince Yaroslav under the year 1037:

Yaroslav founded the great citadel of Kiev, by which citadel is the Golden Gate. He founded there also the Church of St. Sophia, the metropolitan church, and afterward the Church of the Annunciation of the Holy Virgin on the Golden Gate, then the Monastery of St. George and [the Convent of] St. Irene.

Archpresbyter P. Lebedintsev, in his work on the St. Sophia of Kiev,² expressed the opinion that the year 1037 should be accepted as a plausible date for the foundation of the cathedral. It is true that the *Novgorod Chronicle* relates under the year 1017 that "Yaroslav went to Berest'e and St. Sophia was founded in Kiev" and, according to Thietmar, Bishop of Merseburg, the Polish King Boleslaw the Bold and Prince Svyatopolk the Accursed³ visited the Church of St. Sophia in 1018. Lebedintsev thinks, however, that these references may be to a wooden church of St. Sophia erected by Grand Prince Yaroslav on the site of a St. Sophia Church supposedly built by the Princess St. Olga in the fifties of the 10th century. This construction, also a wooden one, burned some time between 1017 and 1018. As for the duration of the construction of St. Sophia, Lebedintsev thinks that it took no less than five and no more than fourteen years.

If we admit the evidence of chronicle sources which assign the first consecration of the St. Sophia Cathedral by Metropolitan Theopemptus to sometime between 1042 and 1049, the hypothesis of Lebedintsev might carry a certain amount of weight. However, some modern scholars (D. Aynalov, V. Zavitnevych, N. Sychov, and others) believe

² P. Lebedintsev, "O sv. Sofii kievskoi," *Trudy 3-go arkheologicheskogo S'ezda* (Kiev, 1875); also as a separate reprint.

³ Thietmari Merseburgensis episcopi Chronicon, ed. R. Holtzmann, *MGH*, SS. rer. Germ., NS IX (1935), p. 530.

⁴ D. Aynalov, "K stroitel'noi deyatel'nosti knyazya Vladimira," Sbornik v pamyat' kn. Vladimira (Petrograd 1917); V. Zavitnevych, "K voprosu o vremeni sooruzheniya khrama sv. Sofii v Kieve," K 300-letnemu yubileyu (1615-1915) Kievskoi Dukhovnoi Akademii; Sbornik statei, I (Kiev, 1917); N. Sychov, "Iskusstvo Kievskoi Rusi," Istoriya iskusstv vsekh vremen i narodov, (Leningrad 1929).

that St. Sophia was built between 1017 and 1037 and the first additions made in the twelfth century.

Sophia — God's Wisdom — the name of this temple of the capital city, was borrowed from the name of the principal church of Constantinople, Hagia Sophia. The Hypatian Chronicle mentions and explains the name of the church in the following passage: "He founded the Church of St. Sophia, God's Wisdom, as a metropolitan cathedral." It was built by masters thoroughly familiar with the achievements of Byzantine art. In fulfilling the great task assigned them by the Grand Prince, they incorporated national art forms into the design and construction, erecting this impressive edifice in the Ukrainian-Byzantine style of their time.

The Church of St. Sophia was the most imposing building of Kiev and the glory of the architectural ensemble of the capital of Grand Princely Ukraine. Towering proudly above the surrounding buildings, it crowned the mountain over the banks of the Dnieper on which were situated the administrative center, the citadel of old Kiev and the residence of the Grand Prince of Ukraine-Rus'. The *Chronicles* have this to say on the adornments and treasures which Prince Yaroslav lavished upon his metropolitan church:

Yaroslav, as we have said, was a lover of books, and as he wrote many, he deposited them in the Church of St. Sophia which he himself had founded. He adorned it with gold and silver and churchly vessels... 5

Thus we learn that Yaroslav not only had the church adorned with gold and silver and precious icons but also had founded a library in it. In his eulogy on Grand Prince Volodymyr, Metropolitan Hilarion gives the following testimony of Prince Yaroslav's activities:

He (i.e. Yaroslav) accomplished what you (i.e. Volodymyr) left unaccomplished, as Solomon with David's endeavors. In his wisdom, he erected God's dwelling, a large and holy one, for the sanctification of your city, and enriched it with all kinds of adornments: silver, gold, gems and venerable vessels. Therefore this church became famous and admired in all neighboring lands for in the whole northern region, neither westward nor eastward, is there a shrine to equal it.⁶

The Church of St. Sophia in Kiev was the see of the metropolitans "of Kiev and all Ukraine-Rus"." Here took place the ordination of the higher priestly hierarchy. It was here also that in 1051 the first metropolitan of Ukrainian nationality, Hilarion, performed divine service. Religious ceremonies connected with the accession of the Ukrainian grand princes to the throne were celebrated in the cathedral. And here, according to later tradition, Grand Prince Volodymyr Monomakh was said to have been crowned with the diadem and adorned with the shoulder cape (barma) of the Byzantine emperors. The chronicles contain direct

 $^{^5}$ Povest' Vremennykh Let, PSRL I, 1 (2nd ed., 1926), p. 153. S. H. Cross, Russian $Primary\ Chronicle,$ p. 226.

c p. ex., A. I. Ponomarev, Pamyatniki drevne-russkoi tserkovno-uchitel'noi literatury, I (1894), p. 74.

⁷ P. Lebedintsev, "O sv. Sofii kievskoi...," p. 11.

evidence of the ecclesiastical ritual performed in St. Sophia on the ascension of a grand prince to the throne. "Vyacheslav Volodymyrovych entered Kiev, rode to St. Sophia and assumed the throne of his father and grandfather." In another passage we read: "Ryuryk (Rostyslavovych) entered St. Sophia and having made adoration to the Saviour and the Mother of God, assumed the throne of his grandfather with great glory and honor." s

The Church of St. Sophia also served as a burial place for the grand princes and metropolitans of Ukraine. The founder of the cathedral, Grand Prince Yaroslav the Wise (d. 1054), his son Grand Prince Vsevolod (d. 1093), his grandsons, Grand Prince Volodymyr Monomakh (d. 1125) and Prince Rostyslav Vsevolodovych (d. 1093) and his grandson, Vyacheslav Volodymyrovych (d. 1154) are buried here. In the southern lateral nave rest the remains of the Kievan metropolitans from the period of the Grand Princes. In the same nave are the tombs of the metropolitans of the epoch of the Cossack hetmans and of later periods—Sylvester Kosov (1647-1657), Raphael Zaborovs'ky (1731-1747), Arsenius Mohylyans'ky (1758-1770), Gabriel Kremenets'ky (1779-1783), Samuel Myslavs'ky (1783-1796), Hierotheus Malyts'ky (1796-1799), and Serapion Oleksandrivs'ky (1802-1824). Gedeon Chetvertyns'ky (1685-1690) is buried near the St. Volodymyr altar and Metropolitan Eugene Bolkhovitinov (1822-1837) in the Nave of the Presentation.

St. Sophia — the palladium of the Ukraine, was yearly visited by a vast multitude of pious pilgrims from all parts of the Ukraine and from foreign lands, who spread abroad the tale of its dazzling beauty and enormous riches.

St. Sophia Square for hundreds of years has been the scene of numerous lay and ecclesiastical festivals. In front of the cathedral the clergy and people of Kiev organized a solemn reception for Hetman Bohdan Khmelnyts'ky, who entered the capital after his victorious campaign of 1648. Also before the cathedral the independence of the Ukraine was declared by the Fourth Decree ("Universal") of the Ukrainian Central *Rada* on January 22, 1918. From the same place on January 22, 1919 the unification of all Ukrainian lands into one all-embracing Ukrainian State was proclaimed.

The ancient Church of St. Sophia has not remained in its original form. As a result of frequent wars the church was repeatedly sacked and damaged, because the wealth of the Kievan State and the opulence of its churches attracted numerous invaders. In 1169 Kiev was plundered and razed by the Prince of Suzdal', Andrei Bogolyubski. The prince robbed its inhabitants, monasteries and churches, including St. Sophia, and carried away all precious objects, ecclesiastical vessels, icons, crosses, service books and even bells. In 1180 the church was damaged by fire. In

⁸ Letopis' po Ipatskomu spisku (The Hypatian Chronicle), ed. of the Archeographic Commission (St. Petersburg, 1871), pp. 290 and 457f. Cf. also, Sbornik materialov po istoricheskoi topografii Kieva i ego okrestnostei (Kiev 1874).

1203 Kiev suffered another pillaging attack under the siege of Prince Ryuryk Rostyslavovych. In the *Laurentian Chronicle* there is the following description of this event:

On the second of January, Kiev was taken by Ryuryk and the descendents of Oleg and by (the troops of) the whole Cuman land, and they did such evil in the Rus' land as had not befallen Kiev from the time of its baptism...not only did they take and burn Podol'e, (the lower city), but they also took the mountain (the upper city) [Hora], and they ransacked the metropolitan Church of St. Sophia and they did the same to the Tithe Church of the Holy Virgin and to all the monasteries, and they stripped some icons while others they took with them, along with venerable crosses and holy vessels and books and the vestments of the first princes of blessed memory which had been hung in holy churches in memory of them. (PSRL 1, 2, 2nd ed., Leningrad 1926, p. 418).

In 1240 Kiev suffered its first Mongol invasion. Hordes of Khan Batu destroyed, among the buildings of the city, the Tithe Church and severely damaged St. Sophia whose exterior and interior richness impressed them greatly. Inside the church they sought treasures in the walls, in the vaults, in the tombs of the princes; and they carried away all that fell into their hands. After this invasion the Church of St. Sophia began to decay. So diminished was the population that for a long time no services were held there. Furthermore, there was a long vacancy on the metropolitan throne following the disappearance of Metropolitan Joseph I after the Mongol invasion. Not until ten years after the sack of Kiev did Metropolitan Cyril III (1250-1280) have the church restored. Again in 1375 more repairs on the church were made by Metropolitan Kyprian.

In 1416 Kiev was ruined and ransacked by the Khan of the Crimean Tartars, Edigai, and in 1482, by Khan Mengli-Girai. Having robbed St. Sophia, Mengli-Girai sent a golden chalice with paten to the Muscovite Prince Ivan III as a token of respectful friendship. In the same year, when it came to a final partition of the metropolitan see of Rus' into the metropole of Moscow and that of Kiev and Lithuania, Grand Duke Withold of Lithuania decreed that "the Kievan Metropolitan should occupy the throne in St. Sophia." But the Metropolitan did not obey the duke's injunction for a long time and lived in the Lithuanian city of Novgorodok or in Vilna. One of the metropolitans, Macarius, decided to visit devastated Kiev and the Church of St. Sophia in 1497 but before reaching the city he was killed by the Tartars. Eighty years passed after this event before a metropolitan dared live permanently in Kiev, and the Church of St. Sophia remained in neglect. In a report submitted towards the end of the 16th century by a Kievan official to the Polish king it is written that "the church has become a den for wild beasts and weeds grow on its naked vaults."

During the rule of the 16th century Metropolitan Eliah Kucha (1577-1578), Bohush Hul'kevych-Hlibovs'ky, the vicar of the church undertook some repairs. In the words of a contemporary document, he "helped and assisted considerably in the repairing of the great Church of St. Sophia, covering it with a roof and shingles, which he payed for out of his own

purse." Nevertheless, a new period of decay began. In 1595, only one year after Metropolitan Michael Rohoza had accepted union with the Catholic Church, the Galician nobles were calling the attention of the Kievan Metropolitan Onesyphor Divochka to the fact that the "Archepiscopal Church of Kiev (i. e. St. Sophia) has been given to some heretic." They also pointed out that, under the administration of this "heretic," the cathedral of Kiev lacked roofing, its ceiling and vaults were in need of repair, the building had settled and threatened to collapse — for which reasons services in the church had been discontinued.

The Catholic Bishop of Kiev, Wereszczynski, has left the following description of St. Sophia in 1595:

This priceless shrine was of elaborate construction, not only were its walls faced with stone resembling chalcedony but within, instead of paintings, it was adorned with holy images in multicolor, gold, enameled stones. So skillfully were these icons made that the saints represented upon them might appear to be alive... The church is crowned by twelve cupolas and over the middle, in lantern form, rises the thirteenth, the dome. Inside, this dome is embellished with exquisite mosaics of the four Evangelists and the other Apostles and admits sufficient light into almost all the church. Many are those who agree that in all Europe no church could be found which would outshine those of Constantinople and of Kiev by the richness of their adornment... Unfortunately at the present time this shrine has become a shelter for cattle, horses, dogs and swine and its rich adornments are washed away by rain trickling down through the holes in the roof. In some places its walls have begun to collapse... Half of the cause of all this lies with the negligence of the Kievan metropolitans and the indifference of the nobles of the Greek faith.11

Detailed as is this description it hardly attests to the Catholic bishop's objectivity, since it is difficult to place the blame for reducing the church to this state on the Ukrainian metropolitans.

In 1596, Heidenstein, secretary to the Polish King Sigismund III, described the church as follows:

The Church of St. Sophia is in such a deplorable state that services have been discontinued there... Even today one can distinguish traces of its past greatness and opulence. The whole shrine is covered with mosaics and frescoes after the model of Constantinopolitan and Venetian churches. It is second to none with respect to its structure and the skill of its workmanship. The narthex and the columns are of porphyry, marble and alabaster. Still this most beautiful edifice is in such a state of neglect that it lacks a roof and every day brings it nearer to complete ruin.¹²

The description of the St. Sophia Cathedral which we owe to another observer of the end of the 16th century is not devoid of interest:

⁹ Akty zap. Rossii, III, no. 83; S. Golubev, "Materialy dlya istorii zapadno-rus-skoi tserkvi," Chteniya obshchestva Nestora letopistsa, V, (Kiev 1891), p. 197.

¹⁰ Akty zap. Rossii, III, no. 146.

¹¹ Josef Wereszczynski, Bishop of Kiev, "Sposób osady nowego Kijowa..." in: Pisma Polityczne, ed. K. J. Turowski, *Biblioteka Polska*, fasc. CXXIV-CXXVI, (Kraków, 1858), pp. 35-57, esp. 36f.

¹² Sbornik materialov po istoricheskoi topografii Kieva, II (1874); P. Lebedintsev, "O sv. Sofii kievskoi..." p. 14.

Among the ruins there towers the Church of St. Sophia, built long ago after a Greek model with a great expenditure of money and labor. Its floor is covered with mosaics, and gold and azure are still shining in its vaults and chapels. In the edifice itself the columns are of porphyry and alabaster.¹³

Between 1610 and 1633, the Church of St. Sophia was in the possession of the Uniates. But even before that time a certain Priest Philip gave a silver ark belonging to the church to the Archpriest (protopope) Ivan Ostrovets'ky who took the reliquary and "sold to various persons stones hewn from the pillars and steps." In 1605 the Church of St. Sophia was taken away from Priest Philip and again became the cathedral of the metropolitan and the church for all clergy and faithful of Kiev. However this did not last long for, as a contemporary document records, "in 1609 there were no services in St. Sophia and priests stopped coming with crosses to celebrate there." 15

In 1621, the inhabitants of Kiev complained that a certain pan Sadkowski "stripped the Church of St. Sophia, took the lead away (i.e. pulled off the lead layer from the roofs of the cathedral) and deliberately covered the roof with slats so that the building's remaining parts might fall down as other walls had already done." The petitioners asked that the church at least be thatched "in order that it may not rot away." ¹⁶

Athanasius Kal'nofoys'ky, a monk of the Kievan Pechers'ka Lavra Monastery describes the state of St. Sophia in a passage of his *Teraturgima* (1638): "on the 6th of September, 1625, when Thomas Zamoiski was voivode, the entrance of the cathedral was blocked by a piece of a wall which had fallen and by a heap of rubble. Fissures could be seen in many places in the walls." ¹⁷

The Ukrainian clergy made every effort to reclaim their church from the Uniates, even approaching the Polish king on this matter. In 1632, King Wladyslaw finally granted that the church be returned to the Orthodox, but it was not until the next year that the Metropolitan of Kiev, Peter Mohyla, took over the cathedral from Joseph Velyamyn Ruts'ky, the vicar of the Uniate metropolitan. The church, however, "had no roof and lacked adornments within and without." It is probable therefore that the mosaic floor of the church was destroyed some time between 1497 and 1633. P. Lebedintsev places this loss in the years 1610-1633. The L'viv (Lemberg) printer M. Sl'ozka informs us in his edition of a collec-

¹³ Severny arkhiv, (1822, no. 1); N. Zakrevski, Opisanie Kieva II, p. 782.

¹⁴ O. Levitski, "K istorii vodvoreniya v Kieve unii," *Chteniya obshchestva Nestora letopistsa* V (Kiev 1891), p. 142.

¹⁵ Trudy 3-go arkheologicheskogo S'ezda v Kieve, I, p. 67 and III, p. 137.

¹⁶ S. Golubev, Kievski mitropolit Petr Mogila i ego Spodvizhniki, II (Kiev 1898), p. 415.

¹⁷ Teratourgima lubo cuda... Athanasiusza Kalnofoyskiego, (Kiev, 1638), p. 196. Cf., also, F. Ernst, "Kyyivs'ka arkhitektura XVII viku," Kyyiv ta yoho okolytsya v istoriyi i pamyatkakh, (Kiev, 1926), pp. 141-145.

¹⁸ Akty Yugo-zapadnoi Rossii III, no. 18.

¹⁹ P. Lebedintsev, "O sv. Sofii Kievskoi..." p. 14f.

tion of liturgical texts called The Flower Triodion (1642) that the Metropolitan P. Mohyla had ordered services in St. Sophia resumed and started restoration of the church. In order to rebuild the half-ruined and devastated cathedral, time and great sums were needed, but the metropolitan was not deterred by such difficulties. The expenses of the restoration were covered by contributions of the metropolitan and various patriotic donors. Mohyla covered the church with a new roof, filled the cracks in the walls and the domes, and added four small apses in the external galleries, which he provided with new altars. He buttressed the main altar apse; he restored the more important parts of the interior and the main altar table. With respect to this latter, only the marble slab of the original is preserved, the rest having been destroyed under the Soviet regime. The floor was covered by multicolored tile. The metropolitan also ordered a new iconostasis which, according to Paul of Aleppo, the archdeacon of Macarius, Patriarch of Antioch, "defied all description for the beauty and variation of its carvings and gilding." Moreover, Metropolitan Peter Mohyla provided the church with liturgical books, vestments, vessels, and other ecclesiastical objects. He died in 1647 before the completion of the restoration. A great deal of the work must have been left undone, for Paul of Aleppo, a member of Patriarch Macarius' party which visited Kiev in 1654 on its way to Moscow, describes St. Sophia in the following terms: "Unfortunately, one half of it, from the western nave, is in ruins. . . at present, on the right hand as you enter the western gate are two ruined and abandoned tabernacles."20

Two years before (1651), the army of the Hetman of the Duchy of Lithuania, Janusz Radziwill, had entered Kiev. The Dutch painter Abraham van Westervelt, who was among those in the hetman's retinue, made a series of drawings of contemporary Kiev among which are several of St. Sophia. The church, especially its exterior galleries, appears to be in utter ruin in Westervelt's sketches.

The restoration begun by Peter Mohyla was continued by Metropolitan S. Kosov between 1647 and 1657. He finished the rebuilding of two chapels. Under the rule of these two metropolitans the external appearance of the church differed but little from the original. The years between 1657 and 1685 are known as the period of "Ruin." During this time the Ukraine was torn by internal struggles which followed Hetman Bohdan Khmel'nytsky's death and the country's union with Muscovy. In this period the higher clergy seldom lived in Kiev and as a result the Church of St. Sophia stood neglected. In 1685 Prince Gedeon Svyatopolk-Chetvertyns'ky ascended the metropolitan throne. He allowed the Kievan metropole to become dependent upon the Patriarch of Moscow. In so doing he disregarded the stubborn resistance of the Ukrainian clergy and the faithful who wished to maintain the autocephalic character of their own church.

²⁰ For the most recent edition of the account of Paul of Aleppo, cf. "Voyage du Patriarche Macaire d'Antioche," texte arabe et traduction française par Basile Radu, *Patrologia Orientalis*, XXVI, fasc. 5, (Paris 1949). The English quotation has been taken from F. C. Belfour, *The Travels of Macarius*... I (1836), p. 225.

Gedeon Chetvertyns'ky ordered the western part of the church to be cleared and the western wall restored. Probably at this time the central composition of the fresco depicting the family of Grand Prince Yaroslav was destroyed. The two chapels next to the western main portal which led to the St. George and St. John the Baptist naves were restored at this same time. The removal of the rubble from the St. George Chapel led to the discovery of the sarcophagus of Grand Prince Yaroslav. The sarcophagus was moved to the altar of St. Volodymyr nave in the northeastern part of the church where it stands today.

Under the rule of Metropolitan Barlaam Yasyns'ky (1690-1707), a final restoration of the church was made possible by the liberality of Hetman Ivan Mazeppa. It was in the Mazeppa period, which saw the rise of so many buildings constructed in the so-called Ukrainian Baroque style under the auspices of the Hetman and of the Cossack nobility, that the reconstruction of the Church of St. Sophia was completed. Except for the western part, we still see the church as it was restored in the Mazeppa period.

During the repair of the southern and northern lateral galleries a story topped with two cupolas was added over each and new naves and altars in these new additions were installed. The restoration made necessary certain changes in the roof. The ruined spires of the towers were covered by new cupolas. The southwestern cupola was completely dismantled and built anew over the baptistry so as to obtain a symmetry with the northwestern tower. Naves with the Ascension and Transfiguration altars were constructed under these towers. The exterior entrances to the towers were walled up and new openings cut from the interior of the church. The walls of the church were made flush with a cornice and adorned with baroque pediments; the western wall was outfitted with a beautiful baroque fronton (removed, along with some of the pediments, in 1887). All the cupolas, which were originally hemispherical, were given the pear-shaped baroque form characteristic of the Ukraine. The warped walls of the southern and northern lateral galleries were buttressed to support both the first story and the western exterior wall which were being erected above them. Two of the buttresses supporting the altar apses had been built as early as the time of Peter Mohyla, as may be ascertained from the sketches of Westervelt. The construction of the three-story brick bell tower belongs to the same period. The tower replaced a previous wooden one probably built under Mohyla. The successors of Metropolitan Barlaam Yasyns'ky introduced an ever-increasing number of oil paintings in the interior of the church, thus covering the original frescoes. In the thirties and forties of the 18th century, the Church of St. Sophia was enriched by Metropolitan Raphael Zaborovs'ky, who equalled Hetman Mazeppa in his love of the arts, and who restored and introduced necessary architectural changes in most of the churches of Kiev. Since the walls of the Mazeppa bell tower had begun to warp, Zaborovs'ky instructed the architect J. Schädel to rebuild its two upper stories. He had two large bells cast for the tower and enclosed the precinct of St. Sophia with a brick wall. In the interior, he had a new three-story



St. Sophia. A drawing of the eighteen-forties. Катедра св. Софії. З малюнка 1840-их рр.

iconostasis built, with a royal gate of silver and gold, to replace that from time of Metropolitan Mohyla. Zaborovs'ky also adorned the church with silver chandeliers.

By "Her Majesty's Ukase," dated 1786, the Cathedral of St. Sophia was shorn of all its estates, the major part of its lands and its fishing tithe. The same ukase ordered discontinued the payment of a treasury subsidy to the cathedral. At the same time the monks were expelled from the cathedral monastery, and the church itself was renamed the Sophia Cathedral Church of Kiev (Kievo-Sofiiski Kafedral'ny Sobor).

Between 1742 and 1757 the Kievan Metropolitan Timothey Shcherbats'ky had the roofs of St. Sophia covered with tin and the bulbs of the cupolas gilded. In 1843 a piece of plaster unexpectedly fell down in the Theodosius altar next to the archpresbyter's sacristy, laying bare ancient frescoes. When the painter F. Solntsev, a member of the Academy of Arts, was notified of this disclosure, he expressed the opinion that the walls of the whole church might be covered with similar frescoes. A report on this important discovery was submitted to Emperor Nicholas I who "deigned direct the Holy Synod" to "find the means for the uncover-



St. Sophia's western façade before the alterations of the 19th century. A drawing by F. Solntsev.

Західня фасада св. Софії до її перебудови в 19 ст. Малюнок Ф. Солнцева.

ing and restoring of ancient frescoes on all the walls and pillars of the Cathedral." Following this directive, a special committee was appointed which consisted of Metropolitan Philaret, Governor-General D. Bibikov, Academician F. Solntsev and several architects. The year 1843 opened a rather gloomy period in the history of St. Sophia, ironically enough spoken of as a period "of complete restoration of its magnificence and order without and within." In reality, the main frescoes and part of the mosaics of the time of Grand Prince Yaroslav, which had withstood the impact of more than eight centuries, were painted over with oils.21 A certain Fogt, "master of housepainting," was entrusted with the removal of the plaster covering the frescoes. The restoration of uncovered frescoes began in the same year (1843). First, Peshekhonov was given the task and Academician Solntsev was to supervise the painter's work. Two years latter Peshekhonov was dismissed for incompetence and his task taken over by an old monk of the Lavra Monastery, Irenarchus, whom the historian of Kiev, N. Sementovsky described as "a man completely unacquainted with the style of ancient icon painting."22 By 1862

²¹ V. Chagovets, "Kievskaya Sofiya," Chteniya obschestva Nestora letopistsa.

²² N. Sementovski, Kiev, ego svyatyni i drevnosti, (Kiev 1871), pp. 69-103.

we find still another, a priest by the name of Joseph Zheltonozhsky, working at the restoration of the frescoes.

In this period almost all the frescoes of St. Sophia were thus "restored," the only exceptions being those of the Michael altar. Between 1843 and 1853 a total of 2,487 entire fresco compositions, individual figures and ornaments, were either re-touched or painted over completely. It is true that Academician Solntsev cannot alone bear the responsibility for this "restoration." In the first place, he was not the only member of the committee and, in the second, he was too busy a man to be able to supervise the work or to convince other member to employ the proper restoration methods known at that time.

Academician Solntsev made a very important contribution to the subsequent scholarly investigations of the church by his exact survey of the building. His reconstructions and detailed sketches of mosaic and fresco compositions later appeared in two luxurious atlases.23 A series of other works were carried out in the interior of the church. The dome, the vault of the main nave and the background between the figures of the saints were gilded. To open a view upon the altar mosaic, the upper story of the main iconostasis was removed and the remaining part gilded once more. In 1864 the floors of the church in all the naves, galleries and even the steps of the towers were covered with cast-iron plates patterned in relief. In the same period a new story was added to the bell tower and its cupola covered with copper and gilded.24 In 1882 an exonarthex was built on the site of the collapsed western part of the gallery between the baptistry and the northwestern tower. Under it a furnace room was installed at a considerable depth to provide heating for the cathedral. In the process of laying the channels, which ran deep under the floor, parts of the original flooring were completely destroyed.25

About this time the beautiful Baroque pediment of the western facade, dating from the end of the 17th and the beginning of the 18th century, was remodeled. Also the roof of the cathedral was changed from ridged to semi-circular, following the shape of the arches, vaults and cupolas, as it was in the time of Yaroslav the Wise. Thereafter, no important restoration activity was undertaken in St. Sophia for a long time except for routine repairs and clumsy attempts at fastening the mosaics to the walls where they had pulled away. They were reinforced simply by driving large nails into the walls.

²³ "Kievski Sofiiski Sobor," *Drevnosti rossiiskago gosudarstva*, I-IV, ed. Russkoe Arkheologicheskoe obshchestvo (St. Petersburg 1871-1887).

²⁴ P. Lebedintsev, "Vozobnovlenie Kievo-Sofiiskago Sobora v 1845-1853 gg.," *Trudy Kievskoi Dukhovnoi Akademii*, (Kiev 1878). Cf., also for comparison, *idem*, "O naruzhnosti Kievo-Sofiiskago Sobora v drevnem vide," *Kievskie Eparkhial'nyc Vedomosti*, (Kiev 1862, no. 7).

²⁵ M. Karger, Arkheologicheskie issledovaniya drevnego Kieva. Otchety i materialy (1938-1947 gg.), (Kiev, Akad. Nauk. Ukr. S.S.R., 1951), p. 229.

It was only after the beginning of the Ukrainian struggle for independence in 1917-1919 with the creation of the independent Ukrainian State that a more thorough investigation of the Church of St. Sophia was made possible. From 1917 on, research was carried out by the Central Committee for the Preservation of Ancient Monuments and Art and, from 1918 on, by the Ukrainian Academy of Sciences. Detailed photographs were made of the interior and exterior of the church by N. Negel, S. Arshenevs'ky, M. Makarenko and Y. Krasyts'ky.

During the Russian attack on the Ukraine in January 1918, the Cathedral of St. Sophia was seriously damaged by the artillery fire of Muraviev's Bolshevik troops. The Russians ignored the fact that the Government of the Ukrainian Democratic Republic had declared Kiev an open city in order to preserve its architectural monuments and had departed the capital.26 Bolshevik artillery fire did not spare the most important ancient monuments of the capital which were hit by some 200 to 250 shells. The valuable collections of Ukrainian art, such as those of Professor V. Krychevs'ky and M. Tereshchenko, and the house of the President of the Ukrainian Democratic Republic, M. Hrushevs'ky, were destroyed. The Old City and the quarter of Pechers'ke also suffered appreciable damage. Several dozen shells hit the area about the Golden Gate, the Tithe and St. Andrew Churches and the walls of the St. Michael Monastery. Some of them struck the refectory church of the St. Sophia Monastery, the St. Sophia bell tower and the cathedral itself. One of the shells hit the wall of the cathedral's old altar. Fortunately the mosaics were saved although they became loose and in places fell down. During the second Soviet attack of October 1918, a shell pierced the church's western wall above the gallery.27

In the first years of the Soviet regime, scholarly investigation of the Church of St. Sophia were continued by the St. Sophia Commission under the Ukrainian Archeological Committee of the Ukrainian Academy of Sciences, the Department of Architecture of the Ukrainian Museum Horodok (formerly Kiev-Pechersk Monastery) and the Central Authority for Inspecting Art Monuments of the Country. The photographs of the cathedral made by I. Morhilevs'ky, D. Demuts'ky, M. Skrypnyk and I. Stalyns'ky belong to this period. Some of them have been used in the present work. As a result of the intense and well-planned activity of these institutions and through state subsidies and contributions of private individuals, the church was repaired and the western wall, which was hit by a shell in 1918, reinforced. Moreover, the 19th century oil paints were removed

²⁶ From the proclamation of the Ukrainian Central *Rada* to the citizens of the Ukrainian Democratic Republic, dated March 11, 1918, in Kiev: "The Russian Government of the Bolshevik People's Commissars...staged an all-out attack against Kiev and began to cover it with merciless artillery fire... In order to avoid the destruction of the capital of the Ukraine, the Central *Rada* and the Council of People's Ministers decided to leave Kiev."

²⁷ F. Ernst, Khudozhestvennyya sokrovishcha Kieva, postradavshiya v 1918 godu, (Kiev, 1918), pp. 3-8; G. Lukomski, Kiev, (Munich, 1923), p. 38.

from a part of the ancient frescoes; the mosaics were cleaned and reset and the frescoes which had been pulled loose were fixed. This work was supervised by the artist M. Boychuk in 1919. At the same time investigation of the original architecture of the church proceeded by taking soundings and by stripping a part of the walls of their plaster. The survey of the church was continued and small sections of the original floor were discovered. A number of articles and monographs on the church were then published by such authors as F. Shmit, M. Makarenko, I. Morhilevs'ky, O. Novyts'ky, M. Novyts'ka, F. Ernst, V. Lyaskorons'ky and others.

While this research work was going on, the Soviet authorities began to carry out propagandistic and anti-religious measures. In 1934 the holding of service in the church was forbidden. Soviet tourist guides do not disguise the reason for this decision. For instance, in one of them we read, "For many years, the church was not only a center for the religious deception of the masses, but also a nest of counter-revolutionaries, where all the black forces of reaction were concentrated..." Two other passages inform us: "During the Great October Socialist Revolution the priests of the cathedral indulged in propaganda against the Communist Party and Soviet power, while proclaiming long life to the power of the Ukrainian bourgeoisie, the Central Rada." "In 1920 an autocephalous church was founded in the cathedral where Petlura's officers, in priestly disguise, conducted their base work which aimed at the separation of the Soviet Ukraine from Soviet Russia."28 In fear of this last type of activity the Party and the Soviet Government, acting "in the name of the working masses," transformed St. Sophia into a historical monument and named it the St. Sophia Museum in which was conducted research closely associated with the anti-religious program. After the official discontinuation of divine service in St. Sophia Cathedral, the clergy of the Ukrainian Autocephalous Church and its Metropolitans, Basyl Lypkivs'ky and Mykola Borets'ky, were either sent to forced labor or liquidated as "bearers of the opiate of religion." In a short time two metropolitans, thirty bishops, thousands of priests and tens of thousands of the faithful fell victim to the Government's oppressive measures.

Simultaneously, the Soviet Government began to confiscate the cathedral's most precious ecclesiastical objects. The treasures, allegedly set aside to satisfy the needs of the industrialization of the U.S.S.R. and for the relief of the famine-stricken population of the Volga region, were sold abroad, and gold and silver objects of high artistic value melted down into bars. The resistance offered by scholars and museum workers was to no avail and was followed by severe repressive measures. Some of the most prominent of the Ukrainian art historians such as Professors F. Ernst, D. Shcherbakivs'ky and M. Makarenko paid for the protest with their lives, while many others simply disappeared and were replaced

²⁸ Confidential instruction for St. Sophia guides, drawn up by the authorities of the State Architectural and Historical Monument "The Sophia Museum" and endorsed by the Art Administration of the Council of People's Commissars of the Ukrainian S.S.R. in 1939.

by Communist Party members. The remaining museum personnel no longer dared to defend the art treasures. As a consequence of this the valuable collection of the bishop's vestry, the so-called skarbets', was lost. It contained such relics as the silver-plated cyprus cross of Metropolitan Macarius (16th century), the six-armed cross of Metropolitan Joseph Tukal'sky, a panagia (an image worn around the neck by bishops) with a crucifixion and a head of St. John the Baptist, a panagia in the form of an eagle above which angels held a crown (18th century), a panagia of Gedeon Chetvertyns'ky set with amber, a panagia of R. Zaborovs'ky set with diamonds and rubies, and a panagia of Samuel Myslavs'ky (1784). One ivory panagia bore the inscription "In the year 1580 Gedeon (i.e. Balaban), Bishop of Lviv." Moreover, the vestry contained valuable gold-plated mitres, set with precious stones, and richly bound gospels dating from the 17th to the 19th centuries, etc. Among the precious vestments confiscated by the Government the following deserve special mention: the robe of Gedeon Chetvertyns'ky made from gold brocaded satin embroidered with pearls and diamonds and his amberencrusted staff; two silver brocade sakkoi of Raphael Zaborovs'ky embroidered with diamonds; a brocade sakkos and an omophorion of the Metropolitan Joasaph Krokovs'ky; a Georgian omophorion dating from 1611 with scenes representing the twelve annual feast days embroidered in gold upon it; a sakkos made from a Venetian mantle which had covered an 18th century statue of the Madonna. Between 1935 and 1937 eight Baroque iconostases, all works of local Ukrainian artists of the 17th and 18th centuries, were dismantled. The most valuable of them was the iconostasis of the Altar of the Presentation (18th century), which had formed the middle story of the main iconostasis and was transported to this altar in 1888. Other destroyed iconostases were those of the St. Nicholas and St. Andrew altars, the valuable iconostasis of the Epiphany Altar on which the story of Christ's baptism was carved, that of the Transfiguration altar on which Mount Tabor and the Transfiguration were depicted and that of the Passion altar representing the Crucifixion. The Government ordered the gold leaf stripped from these monuments of Ukrainian Baroque wood carving and the carving themselves burned. The royal gate, weighing 114 kilograms and made of silver reliefs covered with gold, which was located in the main iconostasis, the work of the Kievan masters Volokh and Zavadovs'ky (1747), was taken away. Among the other objects removed from the cathedral were four silver candelabra of the 17th century, which hung from brackets in front of the icons of the main iconostasis, and the silver vestments of the four main icons, the so-called Namisny ikony. The silver coffin containing the relics of Metropolitan Macarius, which had stood in the St. Michael nave in front of the iconostasis, was also removed. Chandeliers from various parts of the church disappeared: one, which hung above the central part of the temple, a bronze work in the Ukrainian Baroque style of a prominent master which was donated by Metropolitan Raphael Zaborovs'ky in the thirties or forties of the 18th century. Two larger chandeliers were removed from before the altars of Joachim and Anna and that of the Three Pontiffs.

A third, donated by Metropolitan Timothey Shcherbats'ky and of the same workmanship as the vestments of the Namisny icons was taken from before the ambo. The altars were stripped of their gold-plated decorations, and silver candelabra, candlesticks, liturgical vessels and rich vestments, rugs, and icons were seized. Finally, the cathedral library containing a large number of rare editions was confiscated. The Ostroh Bible of 1581, the L'viv Acts of the Apostles and Epistles of 1574, about a thousand manuscripts, autographs of Metropolitan Peter Mohyla and Dmytro Rostovs'ky and many other old theological works, indicative of the religious scholarship of the 17th and 18th century, were among the choice pieces thus lost by the library. Only a part of the library's rare editions and an insignificant portion of the treasures of the bishop's vestry could be saved for the so-called Ukrainian Museum Horodok, situated near the Kievan Lavra, and for the library of the Ukrainian Academy of Sciences. Unfortunately, most of these remnants were plundered by the Germans during the occupation of 1941-1943. The bells with baroque reliefs and inscriptions were removed from the St. Sophia bell tower: the "Raphael" bell cast by the celebrated Master Motoryn in 1733 and weighing about one and a half tons; the "Eagle" bell, weighing over a ton; and ten other bells of various weights.

But this short list in no measure covers the great number of objects of material and artistic value which the church possessed before the advent of the Soviet regime. Many exhibits of the so-called St. Sophia Architectural and Historical Museum, such as the exhibits dating from the period of the Grand Prince belonging to the Section of Architecture and Painting, and many icons of the 17th and 18th century were stolen by the Germans in 1943.

Between 1920 and the forties, almost no restorations were made in St. Sophia except the repair of the western part of the arch, damaged by a Bolshevik shell in 1918, and routine repairs of the roof. In 1938-1939 an exhibition of projects by the architectural units of the Ukrainian S.S.R. was arranged in the Nave of St. John the Theologian. In the process of the remodeling, the shape of the 17th century windows was changed, all the religious paintings were whitewashed, a new floor was laid, and to cap it all — a monstrous gypsum statue of Stalin installed. When large exhibition frames with architectural models and parts of the statue of the "genius of mankind" were being carried up the narrow spiral staircase to the St. John nave, the 11th century frescoes of the northwestern tower were badly scratched. About the same time the Dormition nave was transformed into the museum office where all the wall paintings were covered with whitewash, among them the beautiful 18th century picture of the Holy Virgin's Dormition. A parquet floor was laid on a damp and badly insulated foundation so that it moulded and buckled in places and the damp rot also endangered other parts of the building. The Transfiguration and Ascension Chapels, in both towers, were converted into auxiliary museum offices, a photographic laboratory, and so forth. Here, changes were made in the ceiling, the walls were plastered over and all the 18th century Baroque iconostases were dismantled.



Patriarch's seal (lead) of 11th century. Олив'яна патріарша печатка 11 століття.

In each of these remodeled rooms primitive stoves were installed from which the smoke escaped by stove-pipes leading through the windows. The premises of the bishop's library and vestry were used for the exhibition rooms of the architectural museum, which contained photographs and drawings of churches of the Grand Princely period and specimens of architectural details of 11th and 12th century Kievan churches dismantled by the Soviet authorities. In one of these rooms, which had direct entrance from the southwestern tower, a part of the mosaics and frescoes of the dismantled St. Michael (St. Demetrius) Monastery were exhibited. The mosaic figures of St. Demetrius of Thessalonica and some other frescoes were taken to the Tretyakov Gallery in Moscow.

In spite of the difficulties, a considerable amount of research was carried on in these years. In addition to restoration of the frescoes, the fixing and cleaning of the mosaics, and the reconstruction of the original floor, in 1935-1936 the bases of the octagonal columns were uncovered in the western wing of the crossing, as were the marble thresholds of the main (i.e. western), southern, and northern entrances. In the central part of the church the floor was stripped down to the original level and this led to the discovery of the true proportions of the interstices between the arches, piers and columns, and the remnants of the lower part of frescoes. Excavations were made in both towers and in the northeastern part of the St. Volodymyr nave. In the southern wing of the crossing of the plan, a slab of slate encrusted with smalt was discovered and fragments of a mosaic floor were found in the eastern part of the church. A room, probably a treasury (qazophylakion), was discovered under the southwestern tower. Up to that time it had been walled up and its existence unknown. On the walls and vaulted ceiling of this room a fresco ornament was found which was in an excellent state of preservation because, fortunately, it had not been painted over as had the other frescoes of St. Sophia. The northwestern tower yielded much new material. There, fragments of mosaic floor and glazed slabs, small single fragments of smalt and the raw materials for its preparation, came to light.

In addition, an interesting seal belonging to an 11th century patriarch was found. This seal was made of tin and was about four centimeters in diameter. On one of its faces the Holy Virgin of Blachernae is represented, the other carries the Greek inscription:

+ EY
CTPATIOC
EΛΕΘΥΑΡ (XI)
EΠΙCΚΟΠΟC
ΚΩΝCTANT(I) NOY
ΠΟΛΕΩCNEAC
POMHC ΚΑΙ ΟΙ
ΚΟΥΜΕΝΙΚ (OC)
ΠΡΙΑΡ (XHC)

"Eustratius, by the Grace of God, Archbishop of Constantinople, the New Rome, Oecumenical Patriarch." M. Karger rightly believes that this seal belonged to the Patriarch Eustratius Garides, who ascended the throne in 1081, and that it found its way to Kiev in connection with the correspondence carried on between Eustratius and the Kievan Metropolitan John II (1077-1089).²⁹

In 1945 a deep ditch was dug across the precinct of St. Sophia by the authorities of public works. During this excavation walls of the Grand Princely period were disclosed near the northwestern corner of the cathedral. In 1946 archeological diggings were undertaken on this site and ruins of a large three-chambered brick kiln unearthed. During the same period a trial shaft was dug near the northern wall of the garage (the northeastern corner of the St. Sophia courtyard). Fragments of marble, slate, mosaics tesselae and frescoed plaster, shards of window glass, pieces of tin roofing and parts of a large carved slate slab, which probably belonged to one of the parapets of the galleries of the Sophia Cathedral, were uncovered in this shaft. All of these fragments must have been thrown there during one of the restorations, probably in the 17th or 18th century.³⁰

By Decree No. 793 of the Council of the People's Commissars of the Soviet Union, dated April 18, 1945, the Council of the People's Commissars of the Ukrainian Soviet Republic was permitted to found the Academy of Architecture of the Ukrainian S.S.R., superseding the Ukrainian branch of the Academy of Architecture of the Soviet Union. The same decree enjoined the president of the latter academy (Comrade Vesnin) to trans-

²⁹ M. Karger, "K istorii vizantiiskoi sfragistiki," *Vizantiiski sbornik* (Moskow-Leningrad 1945), pp. 260-264.

 $^{^{30}\,\}mathrm{M.}$ Karger, Arkheologicheskie issledovaniya drevnego Kieva... (1951), pp. 246-251.

fer to the Ukrainian Academy all the property and valuables of the Ukrainian branch of the All-Union Academy which they had held as of April 1, 1945. The Museum and Architectural Monuments Division is the twelfth among the institutions of the academy. It includes the Museums of Architecture and Applied Arts and the St. Sophia Monument.³¹ From that time on, the Cathedral of St. Sophia has been under the immediate supervision of the Ukrainian Academy of Architecture with offices now located in the former Palace of the Metropolitan, which stands across the courtyard from the main portal of the cathedral.



General view of eastern façade of St. Sophia. Загальний вигляд східньої фасади катедри св. Софії.

³¹ Vistnyk Akademiyi Arkhitektury U.R.S.R., I (Kiev 1946).



Architectural ensemble from St. Sophia Square. From left to right: Refectory Church (Little Sophia), Bell Tower, and Cathedral.

Архітектурний ансамбль св. Софії. З ліва направо: трапезна церква (Мала Софія), дзвіниця і катедра.

GENERAL CHARACTERISTICS OF THE ARCHITECTURE

The plan of the Kiev Cathedral of St. Sophia as it looked after the addition of the exterior galleries is a rectangle measuring 37.5 by 55 meters (119 by 180 feet) with its longitudinal axis running from north to south. Piers, in section cross-shaped, divide this rectangle into five naves which end with semicircular altar apses in the east. An exterior gallery of one story extends around the remaining three sides of the church, behind which rises the second story of the inner gallery. On the outside, the center (i.e. the main) apse is pentagonal while the remaining apses are semicircular.

The central nave (7.5 meters in width), as well as its apse, is twice the width of the lateral naves. Behind the first row of piers (counting from the apses) runs a broad, transverse arm intersecting all five naves. This arm is equal in width to that of the central nave and forms the crossing (or central square) of the church which is crowned by the dome. Two other transverse arms run parallel to the main one on the western side of the plan's rectangle. Their width is the same as that of the lateral naves. Both these transverse arms form, by intersection with the lateral naves, a system of smaller squares symmetrically divided by the longitudinal axis of the main nave. Thus they carry out the rectangle of the plan and make the composition logical and structurally justified.

On the north, west and south the original five-nave body of the church is girdled by two galleries, the interior of two stories and the exterior of one. In the eleventh century the one-story galleries were open and had the form of girdling which may still be observed today on Ukrainian churches of the 17th and 18th centuries. On the north and south, the exterior galleries, composed of pillars, arches and vaults, were covered with low sloping, half-pitched roofs. These galleries were composed of flying buttresses arranged two-by-two and roofed in transverse barrel vaulting. The arrangement of the western gallery was probably the same. The latter filled the space between the two towers standing at the northwestern and southwestern corners of the church. These towers were asymmetrically placed with respect to the axis of the main nave. The northwestern was probably built about the same time as the original church; the one opposite is of later construction. A chronicle reference to the second consecration of the cathedral by Metropolitan Ephraim (1055-1062) led P. Lebedintsev to believe that this consecration took place on the occasion of the completion of the exterior galleries and the southwestern tower, which had been ordered by Prince Izyaslav Yaroslavych.32

³² P. Lebedintsev, *Opisanie Kievo-Sofiiskago Kafedral'nago Sobora* (Kiev 1882), pp. 5, 71. Speaking of the second consecration of St. Sophia, P. Lebedintsev states that "this second consecration was probably occasioned by the erection of the galleries encompassing the church on three sides and of the second tower in the southwestern corner of the edifice."

I. Morhilevs'ky has offered a very interesting hypothesis concerning the addition of the gallery and tower. During his investigation of the baptistry, he found that a flying buttress, since destroyed, did not abut against the brickwork of the pilaster of the transverse wall but touched directly on the frescoed surface. Therefore, Morhilevs'ky concluded that the construction of the exterior galleries was undertaken at a time when the main body of the church, including the interior gallery, was completed and already partly decorated with wall paintings. He considers that the builders of the cathedral, whose knowledge of engineering problems was quite adequate, planned from the very outset to add the galleries but that the work of the guild of wallpainters was not very well synchronized with that of the bricklayers. In consequence, the painters, knowing beforehand which would be the interior walls, covered them with frescoes, but they did not allow for the places where the flying buttresses supporting the structure were to become one with the pilaster.³³

During the extensive restoration undertaken between 1690 and 1707, when the rotted spires of the towers were being re-roofed, the cupola of the southwestern tower was completely dismantled and another erected over the baptistry to make it symmetrical with the north-western tower. In the 12th century, during the reconstruction of a part of the western exterior gallery, the baptistry itself probably was built. At first it was entered from the outside, then this opening was made into a window and a new entrance cut through the southern wall of the narthex. The 12th century baptistry apse was built in the aperture of the lateral arch of the southern interior gallery.³⁴

The interior arcades of the main floor gallery, over which the second floor galleries were built, were used as a burial place for prelates and members of the princely family. The exterior open arcades served as shelters from the weather and in their function resembled analogous elements of old Ukrainian wooden churches. However, sometime in the 12th century these open arcades were walled up and apertures left for windows and doors. The arcades also had a structural function, for their flying buttresses received the thrust of the church walls.

The towers, which gave access to the second story of the internal arcades (the enclosed gallery), probably also had another function. St. Sophia, as every other church of the epoch, served as a fortress and a vault where the princely family could take refuge and valuables be deposited in case of enemy attack. The towers rising at the corners of the church and overlooking the open space provided an observation point second only to the Golden Gate. From them were visible the entire city and the vast plains beyond.

³³ I. Morhilevs'ky, "Kyyivs'ka Sofiya v svitli novykh sposterezhen'," *Kyyiv ta yoho okolytsya v istoriyi i pam'yatkakh*, ed. by Acad. M. Hrushevs'ky, (Kiev 1926), pp. 102-104.

³⁴ N. Okunev, "Kreshchalnya Sofiiskago Sobora v Kieve," Zapiski otdel. russkoi i slav. arkheol. Imper. Russkago Arkheol. Obschestva (Kharkov, 1915).

From the very first the church could be entered from three sides, viz., from the north, south, and west — an arrangement which, in most cases, was followed in later Ukrainian churches. With the addition of the exterior galleries and the towers with staircases leading to the upper galleries, three portals were given to the church on the west, the main one facing the main altars and the others situated symmetrically on either side and opening into the Anthony, Theodosius and St. George attars, respectively. Through these lateral gateways one could also enter the towers. Two doorways each opened on the northern and the southern sides of the church. The doors situated nearest the eastern part led into the main transept through the triple arch of the exterior gallery; the other two led through the arches of the exterior gallery situated on the longitudinal axis of the western interior arcade. The west central threearched portal of the church with its marble revetment is not preserved and the triple arches of the northern and the southern entrances (now opening upon the Dormition and St. John the Baptist naves) have been altered: the lateral arches have been changed into windows and the central arch into a door.

Prior to the erection of additional stories over the exterior and the changes in roofing (17th to 19th centuries), the St. Sophia Cathedral was much better illuminated since light could enter through windows in the drums of the domes (now partly walled up) and through the windows of the second story of the interior galleries which cleared the roofs of the exterior ones. The addition of upper stories on the latter blocked off this source of light for the northern and the southern parts of the church.

The masonry work of St. Sophia is Byzantine, but the technique (with some variations) had already been known to Kievan builders of the 10th century and was also used in other cities of Ukraine-Rus' in the 10th and 11th centuries. This particular method was employed in the construction not only of churches (most notably in the Tithe Church) but also of princely palaces.

This technique, known as opus mixtum and used from late Roman times on, consisted in alternating layers of brick and stone. Square or rectangular bricks (plinths), made of well-baked clay and measuring for the most part 35 by 36 (sometimes 35 by 32 or 35 by 26) centimeters and 4.5 to 5 centimeters thick were used. They were laid flat in horizontal courses on a thick bed of mortar, a mixture of slaked lime and ground fragments of brick. This compound had the quality of hydraulic mortar and grew stronger with time. The horizontal layers of brick were alternated with layers of stone (mostly quartzite) which was also embedded in the mortar. Only well-cut stone of the best quality was used for the facing of the walls in order to provide a smooth surface. The amount of stone used in the construction of the walls was large, since skilled workers, who were scarce at the time, would have been needed for the preparation of such a quantity of bricks and many kilns would first have had to built. But unskilled workers or even prisoners of war could be used for the extraction and transportation of stone from Volynia (there are no deposits of

stone in the region of Kiev). On the other hand, structures of the 12th century, when brick was abundant in Kiev, were made mostly of that material: the Churches of St. Cyril, the Three Saints and the Redeemer in Berestovo. The bricks, laid over stone courses, acted as relieving layers and leveled off the stone work. The mortar beds were usually thicker than the courses of brick. Arches, vaults and cupolas were of brick; other architectural details, such as pilasters, shafts and the ornamentation for windows and door jambs were also made of brick — in which case the following technique of decorative brickwork was used: Alternate layers of brick were set back into mortar and the space in front filled with mortar up to the level of the protruding rows of bricks. The same system was used with respect to horizontal courses of brick in opus mixtum wall work and created a beautiful impression as if between the rows of yellowish brick slightly pink layers of stone were set. (Kievan brick is of a specific yellowish color since the local clay, so-called spondilov, a type of clay used in making yellow-colored bricks, contains little iron). Similarly, in the other parts of the walls done in the opus mixtum technique, the layers of brick alternated with quartzite of a pleasant reddish hue.

In the 17th and 18th centuries the exterior walls of the cathedral were plastered, but originally the above-mentioned technique, with its finished edges and smooth strips of mortar between layers of brick, provided adequate decoration. Since remnants of frescoes have come to light in some places on the exterior of the church — for instance, on the pillars of the arcature and the arches of the exterior arcades — perhaps this has led certain investigators to believe that the whole exterior of the church was originally covered with plaster.

But among the exterior architectural embellishments, only fragments of slate cornice, set into the walls at the level of the imposts in the arches of the exterior gallery, and slate imposts of the semicircular heads of the door and window apertures of the enclosed gallery of the interior arcades, have been preserved. In the main altar apse, slate imposts of arched heads remain in the jambs of the windows, as do the shafts, skillfully executed from gauged or hewn brick, which run along the corners of the altar apse walls. Similar shafts still exist in the drum of the main cupola. The typically Byzantine blind windows, in the form of two or three round-headed niches set into each other, are also well preserved. Still there are several details which seem to prove that most of the outer walls of St. Sophia originally were free of plaster. Such are the meander-like ornament, skillfully executed in brick, set sideways into the wall (uncovered while taking soundings in the north wall), a brick cross set between the arches of the southern exterior arcade, and the decorated arched heads of window and door apertures and niches. A meander frieze also has been uncovered on the main cupola above the windows.

The domed Greek-cross plan of St. Sophia with its supports symmetrically arranged around the crossing is roofed with barrel vaulting. The barrel vaults rise step-by-step toward the central cupola so that the sections of the lateral arms of the cross which are nearest to it are some-

what higher than the vaults of the adjoining sections (see cross section of plan). In accordance with this graduated height of the vaults over the arms of the cross toward the main dome, the smaller domes also mount progressively. The original construction of St. Sophia contained thirteen cupolas; not the fifteen, eleven or nine that certain recent authors have maintained.³⁵ The number of the thirteen original cupolas of the church was indicated in the composition of the plan but it also had a symbolic meaning, representing Christ and the Twelve Apostles. The four larger cupolas, which symbolize the four Evangelists, surround the dome, while six of the eight minor cupolas are arranged in groups of three in the western part of the church over the intersection of smaller transverse arms with lateral naves. The last two rise above the pre-apsidal parts of the first and the fifth nave. All the cupolas were spherical in form — a feature characteristic of Byzantine architecture. There were no rafters over the cupolas and vaults. Consequently, there was no garret and the original lead roofing lay directly on the spherical surface of the cupolas and the cylindrical surfaces of the vaults.

The smaller cupolas of the church are of unequal height. The four directly adjoining the main cupola rest on drums much higher than those of the remaining cupolas. This increasing height of the cupolas corresponds to the progressive rising of the vaults in the direction of the dome. All this logical compositional system of architectural masses mounting from the periphery toward the center is paralleled by the increasing volume of the apses which in rhythmic proportions progress outward as they rise upward toward the main apse (which is twice their width). The general composition of the structure — the lateral apses, the vaults, and the cupolas pyramiding toward the dome — creates a noble harmony of architectural masses consummated in a majesty of light and shade.

Repeated surveys, investigations and the attempts at restoration of the original appearance of the cathedral (undertaken by F. Solntsev, O. Novyts'ky, I. Morhilevs'ky, K. J. Conant, N. Brunov, and others) have led to the conclusion that St. Sophia was not a specimen of pure Byzantine architecture. This conclusion has in turn provided the basis for various, sometimes contradictory, hypotheses.

The presence in St. Sophia of two façade towers, enclosed galleries running along the body, triple arches in the lateral and main naves, flying

³⁵ The total number of St. Sophia cupolas in the present state is nineteen (thirteen cupolas dating back to the Grand Princely period and six added under the Hetmanate of Mazeppa). Here are some erroneous indications of earlier authors: K. V. Sherotski, Kiev, Putevoditel', (Kiev, 1917), p. 34: fifteen; A. Nekrasov, Vizantiiskoe i russkoe iskusstvo (Moscow, 1924), p. 58: eleven; V. Sichyns'ky, Arkhitektura staroknyazivs'koyi doby (Prague, 1926), p. 13: eight, or twelve (besides the main one); the same author in "Katedra sv. Sofiyi v Kyyevi," Shlyakh, (July 22, 1951), p 4: writes of "cupolas and drums of the four larger domes, surrounding the main one, and seven others, which now are covered under the roofs"; in Ukrainian Arts (New York, 1952), p. 146, Sichyns'ky speaks of St. Sophia's nine domes. The same error is repeated by S. Hordyns'ky, ibidem, p. 127.

buttresses in the exterior galleries, the clustered columns, and other features, remind some scholars of certain analogous elements in the Romanesque architecture of Germany [the Cathedrals at Worms (1110-1200), Trier (1047), Speyer (1030)] as well as of features of basilicas of Armenia, Syria and Asia Minor. Certain scholars (Aynalov, Zalozets'ky) compare the St. Sophia of Kiev with the *Nea* of Constantinople (dedicated in 881), which is in many respects related in architectural forms and partly in construction to such Constantinopolitan churches as that of the Pantocrator, the Kahrie-djami (Chora), the Church of St. Nicholas in Myra of Lycia and of certain Caucasian churches (such as those of Odzun [Uzunlar], Ereruyk [Ani-Pezma], Mugni, Zarzma, Ani).

Professor Morhilevs'ky attempts to find "common features and roots for the main architectural elements of St. Sophia in quite unexpected places and periods," for instance, the palace of Shapur I in Ctesiphon, the palace of Okhajder near Kerbela on the Euphrates, the palace of Tag Eivan of the Sassanid period and the edifices of Trans-Jordanian Syria displaying Sassanid characteristics (Al-Qarani, Kusejr-Amra, and others).³⁶

During the period of its influence on Ukraine-Rus', it is true that Byzantium itself was in turn influenced by Arabian, Armenian and Syrian art. The Princely State of Rus', however, carried on extensive relations with neighbors other than Byzantium. It was exposed to artistic influences coming from the east, west and south; the northern provinces of Rus', such as Novgorod, Pskov, Suzdal' and Vladimir on the Klyaz'ma, were, in their turn, influenced by the cultural center of Kiev. Therefore it is not astonishing that early Ukrainian artisans were well acquainted with the stylistic devices used in the constructions and architecture of their neighbors. The fact that Romanesque architectural forms, present in the buildings of the so-called Byzantine period in Kiev, Chernihiv, and especially Halych, appeared almost simultaneously with the Cathedrals of Worms, Speyer and Trier, is additional proof of the increasing artistic competence of early Ukrainian artisans.

In considering the long established view that almost all the first Christian buildings of Kievan Rus' were erected by Byzantine master-builders, it may be suggested that one should expect from them the introduction of purely Byzantine architectural forms on Kievan soil. But even if Byzantine builders were sometimes invited to come, they did not play a decisive part in Rus' whose buildings continued to display their own particular artistic features. St. Sophia does not show any notable similarity to contemporary architectural monuments and much less likeness to Constantinopolitan churches than might be inferred from some recent discussions on the subject. In short, the distinctive features in the construction and architectural forms of St. Sophia, although under Byzantine

³⁶ I. Morhilevs'ky, "Kyyivs'ka Sofiya v svitli novykh sposterezhen'," Kyyiv ta yoho okolytsya v istoriyi i pamyatkakh (Kiev, 1926), p. 106; ibidem, "Ob izuchenii Sofiiskogo sobora v Kieve," Russkoe iskusstvo (Berlin, 1923).

influence, display characteristics of their own, and the church, outstanding in its artistry, occupies a prime position in the architecture of the 11th century.

If we consider the most important of the churches of the 11th century — Ani (1001), Kutaisi (1003), Pisa (1063), St. Mark's Cathedral in Venice (1071), the Church of St. Remi in Reims (1095), the Byzantine churches of St. Luke in Phocis and of Daphni and the Church of St. Sophia in Kiev — three, St. Mark's, the Cathedral of Pisa and St. Sophia stand out (and it must be noted that the first two are later in date than the Kievan cathedral). We know of no contemporary churches of comparable magnificence in Bohemia, Moravia or Bulgaria. St. Sophia of Kiev served as a model for the Churches of St. Sophia in Novgorod (1046) and Polotsk (1048-1052), lending them not only its name but also its plan and architectural composition. Making use of Byzantine elements, the early Ukrainian artisans by their work on St. Sophia laid the foundation for the distinctive features and traditions of Ukrainian architecture which have survived to the present day.

Nevertheless, certain scholars either reject the autochthonous origin of the cathedral altogether (e. g. Zalozets'ky) or, while recognizing its originality, regard it as Russian (Aynalov, Brunov and others). V. Zalozets'ky denies completely the hypothesis of the autochtonous origin of St. Sophia, calling such a theory "an echo of the old romantic trends and their uncritical glorification of the national past dissociated from universal currents."37 He bases his conclusions on the following considerations: "Even if it (i.e. the authorhthonous architecture) had existed, it is beyond doubt that the hypothesis of its influence upon the monumental stone architecture of Byzantium should be discarded for the simple reasons that (a) it was a pagan architecture with a different purpose from the Christian; (b) at no time in the history of architecture do we know of an influence exerted by wooden architecture on stone; (c) in the Byzantine churches of the Ukraine, no forms — except the Byzantine, which from the 12th century adopted certain Romanesque architectural ornaments — have been disclosed which would point to any autochthonous pre-Byzantine pagan style."38

However, it may be argued that Dr. Zalozets'ky (a) takes into consideration only the pre-Christian religious architecture of Rus', omitting lay architecture, whereas both could have left traces upon the early Christian architecture of Rus'; (b) we know many examples of the influence of wooden architecture upon stone, starting with the Lycian

³⁷ V. Zalozets'ky (W. Zalozecky), "Sofiys'ky sobor u Kyyevi i yoho vidnoshennya do vizantiys'koyi arkhitektury," *Zapysky chyna sv. Vasyliya Velykoho*, III (Lviv-Zhowkya, 1929).

³⁸ Ibidem, p. 317. Cf., also, W. Zalozecky, "Byzantinische Baudenkmalerei auf dem Gebiet der Ukraine," Jahrbuecher fuer Kultur und Geschichte der Slaven, N. F., III (1927), 209-230.

tombs. To remain on Ukrainian territory, the Ukraine's stone architecture of the so-called Ukrainian Baroque period (17th and 18th centuries) is patterned upon Ukrainian wooden churches, the earliest examples of which date back to the Grand Princely period. As early as the 10th century (in 989, according to the Novgorod Chronicle), there existed in Novgorod a wooden church of St. Sophia which had thirteen cupolas (verkhy) — that is, as many as the later thirteen-cupolated Church of St. Sophia in Kiev. In Kiev itself we now know of examples of stone architecture of the pre-Christian period (through excavations in the courtyard of the Palace of the Grand Princes); (c) even in the 10th and 11th centuries Kievan buildings did not present a purely Byzantine aspect.

With his three arguments, Dr. Zalozets'ky supports the old 19th century concept which denies any original features to the architecture of the Grand Princely period and which imputes to the builders of Rus' a mechanical imitation of Byzantine models. Western European Byzantinists, not having direct access to the Cathedral of St. Sophia, have been forced to base their researches on obsolete and occasionally tendentious studies, especially those of the present time. Nevertheless, the autochthonous hypothesis of the origin of St. Sophia, mentioned, among others, by Professor V. Sichyns'ky,39 is based not on "old romantic trends" but on pertinent, although sometimes divergent, conclusions of researchers. We shall omit any detailed discussion of the conclusions reached by earlier Russian investigators of Grand Princely architecture who considered the Cathedral of St. Sophia as a Byzantine work executed by "masters from Greece" coming from Constantinople. We shall only remind the reader that the generally known works from the end of the 19th, and the beginning of the 20th century (those of D. Aynalov, E. Redin, I. Tolstoi, N. Kondakov and N. Pokrovski) follow the leading view that the development of Kievan architecture depended directly on Byzantium and that it took a path different from that pursued by the art of Western Europe.40 We shall, however, discuss the opinions of a few scholars who deny this concept of St. Sophia's unadulterated "Byzantinism." Here we meet quite divergent explanations which may be reduced to three main

³⁹ V. Sichyns'ky, *Arkhitektura staroknyazivs'koyi doby*, (Prague 1926), p. 35. This *a priori* statement could not convince the scholarly world since on the whole the results of the investigations of the twenties, thirties and forties were unknown to Western scholars. For an exception, cf S. H. Cross, H. V. Morgilevski, and K. J. Conant, "The Earliest Mediaeval Churches of Kiev," *Speculum*, XI:4 (October 1936), 477-499.

⁴⁰ Principal literature: D. Aynalov and E. Redin, Drevnie pamyatniki iskusstva Kieva, Sofiiskii sobor, Zlatoverkho-Mikhailovski i Kirillovski monastyri, (Kharkov, 1899); A. Prakhov, "Kievskie pamyatniki vizantiisko-russkago iskusstva. Drevnosti," Trudy Imp. Moskovskago Arkheologicheskago Obshchestva, XI, 3 (1886); D. Aynalov and E. Redin, Kievo-Sofiiski sobor (St. Petersburg, 1889); I. Tolstoi and N. Kondakov, Russkiya drevnosti v pamyatnikakh iskusstva, IV (St. Petersburg, 1891); N. Zakrevski, Opisanie Kieva (Moscow 1868); N. Petrov, Istoriko-Topograficheskie ocherki drevnyago Kieva, (Kiev 1897).

trends: the Romanesque theory, the so-called Caucasian hypothesis, and the assumption of the autochthonous origin of St. Sophia.

Professor D. Antonovych discovers Romanesque elements in the general Byzantine architectural composition of St. Sophia.⁴¹ L. Kraskovs'ka, who also belongs to the group of "Romanesque" scholars, stresses that the church possesses many forms alien to Byzantine art. She points out that the plan of the church has no analogy in the architecture of Constantinople and other Byzantine cities and that it presents distinctive features in its five naves and apses, its galleries, and its thirteen cupolas. In addition, Dr. Kraskovs'ka draws our attention to the two towers of the western façade of St. Sophia. She considers them a striking feature of the Romanesque style. 42 However, the towers of St. Sophia have been built independently of any influence from the cathedrals along the Rhine, inasmuch as the most important among the latter, such as the Cathedrals of Worms, Speyer and Trier, were built after St. Sophia. It also seems that the towers of St. Sophia had a somewhat different function from the Treppentuerme or Glockentuerme of German Romanesque cathedrals; nor are the towers of St. Sophia round in shape, as Dr. Kraskovs'ka maintains.

Academician F. Shmit, the most prominent exponent of the Caucasian hypothesis, finds some similarity in plan and construction between St. Sophia and the church of Mokvi in Abkhasia. Therefore he concludes that the roots of old Rus' art should be sought not in Constantinople but in the northwestern Caucasus.⁴³ Professor V. Nikol'sky sees no other way through which artistic influences could have penetrated into Kiev of the Grand Princely period other than the direct Caucasian route.⁴⁴

⁴¹ D. Antonovych, Skorocheny kurs istoriyi ukrayins'koho mystetstva, (Prague 1923), p. 28: "The St. Sophia Cathedral remained throughout the period of the Byzantino-Romanesque style to which it belongs and through the subsequent centuries, the most magnificent art monument in all Ukrainian architecture. It was unequalled by any of the churches built in Kiev in the 11th and 12th centuries, similarly marked by the transition period from the Byzantine to the Romanesque type prevailing throughout Europe at that time."

⁴² L. Kraskovs'ka, "Zakhidni vplyvy v ukrayins'kiy arkhitekturi X-XIII st.." Zbirnyk ukrayins'koho naukovoho instytutu v Amerytsi, (St. Paul-Prague, 1939): "as we do not find such towers in Byzantium or in the East, for instance in the Caucasus, we may assert that this architectural form was introduced into the architecture of the Grand Princely period from the Romanesque style of the West. The towers of Kiev, Chernihiv and Volynia, which are still extant, are usually round in shape. Such a form is found in the Romanesque period only in German architecture of the Rhineland. Therefore this is the only area from which the models for the round-shaped tower could have come. In Central Europe we do not find examples of this form which would point to its way eastward."

⁴³ F. Shmit, Mystetstvo staroyi Ukrayiny-Rusy (Kharkov, 1919), pp. 30-44; ibidem, "Pro vydannya sv. Sofiyi," Zbirnyk sektsiyi mystetstv, (Kiev, 1921), p. 103-

⁴⁴ V. Nikol'ski, *Istoriya russkogo iskusstva*, (Berlin, 1923), p. 68: "...the investigation of the plans, foundations and details of Byzantine architecture in Kievan Rus' points to the conclusion that the builders came from Armenia and Georgia."

Charles Diehl, who calls the Cathedral "une des merveilles de l'art byzantin," thinks, nevertheless, that its plan is strikingly similar to that of the church of Mokvi and that it could be argued that the Kievan cathedral is a work of Armenian, rather than Byzantine, hands. Louis Réau agrees with this opinion in most respects although he also finds certain western influences in St. Sophia. Professor A. Nekrasov disagrees with the scholars who find similarity between the Caucasian church of Mokvi and St. Sophia, contending that their conclusions are based on a number of features only remotely common to the two plans. He is also disinclined to relate it to the St. Sophia in Constantinople or any other large church of the same name (such as those of Thessalonica and Trebizond). He objects particularly to those scholars who find common forms in the curvature of domes and roofs of the St. Sophia in Kiev and the Hagia Sophia in Constantinople and who conclude from this similarity that the first was modeled on the second.

K. Sherots'ky was among the first scholars who boldly propounded the hypothesis of the autochthonous origin of the church.⁴³ Professor Sherots'ky's conclusion that the architectural composition of St. Sophia is a development of its predecessors, e.g. the Tithe Church and the Cathedral of the Transfiguration in Chernihiv, is of high importance. This conclusion militates against the assertion of G. Pavluts'ky, who considers that the St. Sophia of Kiev commences a new group of Kievan churches of the 11th and 12th centuries. He introduces as a model between the Tithe Church and St. Sophia the no-longer extant Nea Ecclesia of Constantinople, built by Emperor Basil I.⁴⁹ Finally, Professor S. Bezsonov calls St. Sophia the first product of national architecture without analogies in Byzantium and denies not only the idea of St. Sophia as a direct imitation of Constantinopolitan architecture but doubts any leading or direct part played by Greek artisans in its construction. He ignores the so-called Caucasian hypothesis because for him it lacks substance.⁵⁰

⁴⁵ Ch. Diehl, Manuel d'art byzantin (Paris, 1926), pp. 513, 518.

⁴⁶ L. Reau, L'art russe des origines a Pierre le Grand, (Paris, 1921), pp. 93-103.

⁴⁷ A. Nekrasov, Vizantiiskoe i russkoe iskusstvo, (Moscow, 1924), p. 58.

⁴⁸ K. Sherotski, *Kiev, Putevoditel'* (Kiev, 1917), p. 35: "The architecture of St. Sophia of Kiev has many Byzantine and Romanesque features, though it resembles the St. Sophia of Constantinople but little. However, the cathedral of Kiev does not have complete analogy in Byzantium or in the West and represents an independent monument of world art developing in many respects the distinctive features of earlier Kievan monuments (Tithe Church and the Chernihiv Cathedral of the Transfiguration)." Cf. his *Starovynne mystetsvo na Ukrayini*, (Kiev, 1918), p. 9, where he says that "the more distinctive features of St. Sophia are connected not with St. Sophia of Constantinople, but with churches of Syria, Armenia and Asia Minor, as well as with Western influences (churches in Trier, Worms and others)."

⁴⁹ G. Pavlutski, "Kievskie khramy domongol'skago perioda i ikh otnoshenie k vizantiiskomu zodchestvu," *Trudy XIV arkheolog. s'ezda v Chernigove*, (Moscow, 1911), p. 34.

⁵⁰ S. Bezsonov, "Arkhitekturni zvyazky skhidn'oho slovyanstva v XI-XII st.," Vistnyk Akademiyi Arkhitektury URSR, I (Kiev, 1948), 16-17: "Chronicles contain

The Cathedral of St. Sophia may be considered as an original, early Ukrainian architectural monument. Although in its artistic complexity foreign influences had been absorbed, their synthesis within the unique composition of the cathedral is the creative achievement of early Ukrainian masters. Nevertheless, both earlier and recent works of Russian scholars on St. Sophia attribute the difference between it and other churches of the Byzantine period to the merits of Russian architecture. Such is the opinion of Professor N. Brunov who also envisages St. Sophia as exposed to the influence of the Eastern school of Byzantine architecture.⁵¹ Brunov finds analogies between particular architectural details of St. Sophia and the details of such 11th century churches in Constantinople as Mollagyurani-djama and Eski-imaret-djami (Pantepopte). But in the latter, the triple arches rest upon thin round columns typical of Byzantine buildings (cf. the Church of St. Vitale in Ravenna), whereas in St. Sophia of Kiev the arches of the triple embrasures in the lateral arms of the central architectural cross are supported by thick octagonal piers; in the internal galleries, the piers are rectangular in plane with typical Romanesque shafts bordering their four corners. In Professor Brunov's opinion these piers completely divide the triple embrasure into three separate passageways, for, he argues, the piers are so thick that they almost equal the embrasures in width. This statement is not exact as applied to the piers of the triple arches of the cathedral, inasmuch as the embrasures are half again as wide as the piers (and the central embrasure, incidentally, is slightly wider than the two lateral ones). The lower (octagonal) piers may have appeared so thick to Professor Brunov since his investigations were carried on before the 19th century floor was lowered to the level of the original 11th century one (in 1939-1940). Only then did the true proportions of these triple embrasures of the arches come to light.

direct references to the part played by Greek masters in the building of certain monuments of Kievan architecture. No source mentions this with reference to St. Sophia. The opinion that Greeks had built St. Sophia was once expressed by Academician Kondakov and since then scholars repeat it constantly, varying only as to the place from which these Greeks supposedly came. They mention Constantinople, Bulgaria, Asia Minor, Khersonesus and the Caucasus. The comparative historical and stylistic analyses of our monument give a negative answer to this hypothesis. St. Sophia has too many stylistic features which are not encountered in Byzantine art: the width of its body is greater than its length, its galleries, towers, cross-shaped piers, the pyramidal character of its composition...all these are peculiar only to St. Sophia."

⁵¹ N. Brunov, Ocherki po istorii arkhitektury, II (Moscow-Leningrad 1935) 518-520: "St. Sophia of Kiev is closely connected with the architecture found in the larger Byzantine towns of Asia Minor. At the same time, however, St. Sophia displays features which distinguish it from Byzantine buildings and bring it close to the works of the later Russian feudal architecture. This authorizes us to call it the first product of Russian architecture. A comparison of the exterior and interior parts of St. Sophia in Kiev with the middle Byzantine buildings in Constantinople and its eastern provinces discloses on one hand the source of Russian architecture, while on the other it very clearly bares the contrasts existing between the architecture of the capital and of its oriental provinces in the middle Byzantine period."

Pursuing his comparative method, Professor Brunov states that in the Church of St. Sophia we encounter a propensity toward concentration of mass as opposed to the clear tendency of the churches of Constantinople to accentuate spaciousness and to articulate architectural masses by more plastic forms (e.g. the niches on the exterior walls of the altar apse of Molla-gyurani-djami are deeper than in Kievan churches). Thus, for instance, all the piers in the interior of the cathedral are cruciform and divine the internal space of the church into separate squares. In comparing the Cathedral of St. Sophia with the architecture of Constantinople, Brunov remarks that an increased corporeality is encountered (a feature of the Eastern school of Byzantine architecture) at the expense of dynamism and an impression of immateriality. Brunov thinks that St. Sophia of Kiev is built in the five-nave variant of the capital of the Byzantine Empire (the example quoted being the church of the Lips Monastery in Constantinople, the present Fenari-Issa-Mesdjid), but he finds that it reflects the elements of the Eastern Byzantine architectural concept and also represents a type of simple Greek-cross plan surmounted by a dome similar to the three-nave, three-apse church in Corfu.

Brunov sees the most distinctive feature of St. Sophia in the elongation of the rectangle of its plan in a north-south direction (whereas the plan of Constantinopolitan churches is, for the most part, square), in the characteristic growth of its architectural volumes from the periphery toward the center, and, finally, in the fact that Sophia was crowned with thirteen cupolas, an arrangement unknown in Byzantine architecture.

Nevertheless, after these correct comparisons and analyses, Professor Brunov is reluctant to consider the cathedral as an expression of a creative adaptation of Byzantine, Oriental and Western stylistic pecularities to the local artistic taste and needs. His tendency to reckon the St. Sophia among the "first creations" of Russian architecture stems from the same attitude. In his opinion, "the cathedral of St. Sophia in Kiev in its original form contains independent Russian compositional elements which, developing in the course of later centuries, led to the composition of the Sobor of Basil the Blest." 53

We do not intend to deny the independent Russian compositional elements of such an autochthonous Russian building as Basil the Blest. We cannot concede, however, that its forms go back to the Cathedral

⁵² N. Brunov, op. cit., p. 520: "St. Sophia in Kiev differs rather greatly from contemporary Constantinopolitan monuments and shows an interpenetration of the Constantinopolitan and Eastern schools of Byzantine architecture, which is typical for a province exposed to the strong impact of the culture of the capital."

⁵³ N. Brunov, "K voprosu o samostoyatel'nykh chertakh russkoi arkhitektury X-XII vv.," Sbornik Akademii Arkhitektury SSSR, Russkaya Arkhitektura (Moscow, 1940), p. 123. Other studies of this author are conceived in the same spirit. Cf. "K voprosu ob istokakh russkogo zodchestva," Vestnik Akademii Nauk S.S.S.R. (No. 6, 1944) and "Kievskaya Sofiya-drevneishy pamyatnik russkoi kamennoi arkhitektury," Vizantiiski Vremennik, III (1950).

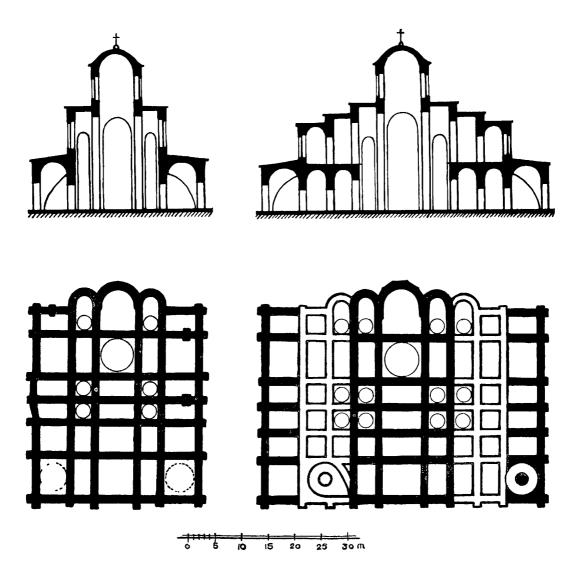
of St. Sophia in Kiev. It is true that architectural forms of the buildings of Grand Princely Ukraine-Rus' were imitated for a long time in Moscow, whose architecture was strongly influenced by Kiev, but the *Sobor* of Basil the Blest in Moscow (16-17th century) is an exclusively Russian architectural monument in no way related to St. Sophia. The majority of Russia scholars (Professors Lukomski, Alpatov, Brunov, Grekov, Voronin and others⁵⁴) reckon among the Russian, the achievements of early Ukrainian architecture which, on the contrary, often yielded models for Russian constructions.

If we look carefully for the source which inspired the plan of St. Sophia we shall find it in Kiev itself. That St. Sophia has an immediate Kievan antecedent may easily be proved by comparing its plan with that of the Tithe Church. If we juxtapose, in the same scale, the plan of the foundations of the Tithe Church (found in numerous publications) and the plan of St. Sophia, the similarity of these two plans will appear most convincingly. We take as a basis of comparison the plan of the Tithe Church, after its enlargement and the completion of additional structures under Prince Yaroslav following the fire of 1017, and the plan of St. Sophia, after the erection of the exterior one-story galleries and the southwestern tower, both constructed during the rule of Prince Izyaslav (1055-1060).

The length of the main nave, measured from the western wall to the altar apse, is almost the same in both churches. So is the arrangement and the number of transepts which create the same number of transverse sections, namely, six in both cases. The two outer (western) sections constituted the western parts of the gallery in the two churches. With regard to the number of longitudinal naves and lateral galleries the difference between the plan of St. Sophia and that of the Tithe Church consists solely in the fact that one nave and one internal two-story gallery were added on the southern and northern sides to the three central naves of the Sophia Cathedral.⁵⁵

⁵⁴ G. Lukomski, Kiew, Denkmäler kirchlicher Architektur des XI. bis XIX. Jahrhunderts. Byzantinische Baukunst. Ukrainische Barock. München, 1923; G. Lukomski, Starye gody, (Berlin, 1923), p. 20. Ibidem, p. 16. See also G. K. Lukomski, L'architecture religieuse Russe, (Paris, 1929); M. Alpatow — N. Brunov, Geschichte der altrussischen Kunst, (Augsburg, 1932), pp. 10 and 23; B. D. Grekov. The Culture of Kiev Rus' (Moscow, 1947), pp. 121 and 125. See also the same work in German and French, published in 1947 in Moscow. B. Grekov, Kievskaya Rus', (Moscow, 1949), pp. 8-12, 273-288; N. Brunov, Ocherki po istorii arkhitektury, II, 520; N. Brunov, "Architektura Konstantinopolya IX-XII vv." Vizantiiski Vremennik II (XXVII), Academy of Sciences of the USSR, (Moscow-Leningrad, 1949), p. 214; N. Brunov, "Kievskaya Sofiya — drevneishy pamyatnik russkoi kamennoi arkhitektury," Vizantiiski Vremennik III, Moscow-Leningrad, 1950, 154-156; N. Voronin, Glavneishie etapy russkogo zodchestva X-XV stoletii, Izv. A. N. SSSR, Seriya Ist. i Fil., 4, 1944.

 $^{^{55}}$ On the explanatory diagram the additions to the plan of St. Sophia are outlined in black as opposed to the solid black of the parts which correspond to those of the Tithe Church.



Comparative floor plans and sections of the Tithe Church and St. Sophia Cathedral. (Restoration by author).

Порівняльні схеми плянів і розрізів Десятинної церкви і катедри св. Софії. (Реконструкція автора).

At present it is impossible to solve the problem of the similarity in the arrangement of the towers of the two churches, since we have almost no data on the towers of the Tithe Church. Nevertheless, it may be asserted with some probability that if the Tithe Church had two towers after the additions of 1017, they may have been situated in the northwestern and southwestern corners of the church. In that case, the arrangement of the towers of St. Sophia would be slightly different in its asymmetry, but that may have been prompted by the necessity of setting

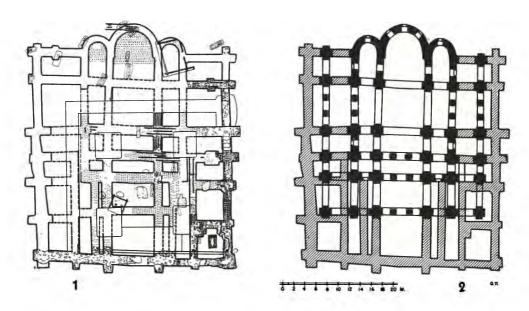
the baptistry aside, which was less feasible in the Tithe Church. There, a similar isolation of the baptistry would lead to an embarrassing reduction in the width of the narthex where the main entrance led into the church. In both churches the location of the new towers may have been decided during the erection of exterior galleries and therefore adapted to local changes necessitated in both churches by these additional structures.

It can be assumed that the necessity of lighting the central part of the Tithe Church led to the construction of at least seven cupolas. The dome must have crowned the crossing of the church, while the remaining minor cupolas rose above the intersections of the lateral transverse arms. It is possible, as such was the case in St. Sophia, that the four cupolas surrounding the dome were built higher than the two outer western cupolas. These seven cupolas (in addition to towers, if they were existent) were sufficient to provide the church with light, along with the windows cut in those walls which extended above the roofs of the one-story galleries. If the galleries were filled at a later date, we may also postulate the existence of windows set into the galleries themselves.

The transformation of the plan of the Tithe Church in St. Sophia carried with it the necessity of providing adequate lighting for the additional naves and the two-story galleries. This led to the construction of six more cupolas, in addition to the seven principal ones, over the intersections of the first and the fifth nave with transverse arms corresponding to those of the Tithe Church. Thus the thirteen-cupola form of the cathedral was obtained — a form unknown before in Byzantium and not used in any of the contemporary five-nave churches considered by certain scholars as prototypes of St. Sophia.

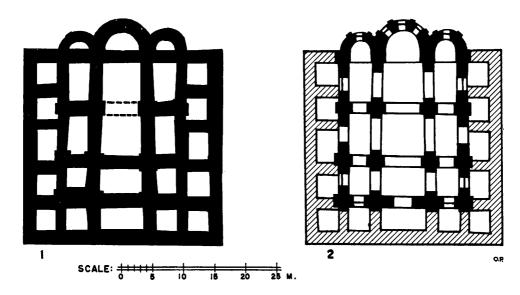
Thus it would seem more appropriate to look for models of the plan of the Tithe Church than for that of St. Sophia. But inasmuch as the original plan of the Tithe Church has been complicated by later additions, the finding of direct analogies will prove difficult. Whereas the prototype for the plan of St. Sophia is undoubtedly Kievan, the Tithe Church, after the enlargement in the 11th century, must have displayed an architectural design both adapted to local peculiarities and reflecting a Byzantine model. Regarding the source of its original plan no sure conclusions may be reached before new excavations are undertaken. One may only speculate that these sources may not be farther away than the nearby Khersonesus.

During the detailed archeological excavations of 1938-1939, the technique of erecting the walls and foundations of the Tithe Church was ascertained. Since the church was built on filled soil (on the site of an ancient necropolis), the packing of the ground by means of short wooden piles and grillage and closely spaced wooden spikes driven into the clay (the procedure followed by the builders) appears to be completely justified. Until recently, it was thought not to have been a necessity but simply a technique introduced by some foreign artisans and mechanically applied in Kiev.



Comparative floor plans of the Tithe Church:
1. Archeological (by Prof. M. Karger); 2. Restored (by author).
Порівняльні пляни Десятинної церкви: 1. археологічний (проф. М. Каргер),
2. реконструктивний (автор).

Detailed measurements permit us to reconstruct the exact plan of the original church. It was a three-nave structure terminating in the east with horseshoe-shaped altar apses (a type known in Khersonesus) and enclosed by galleries on the south, north and west. As has already been stated, the original church was remodeled and enlarged by Yaroslav after the fire of 1017. In the present writer's opinion, the enlargement consisted in widening the church on its southern, northern, and western sides in other words, in broadening the galleries and perhaps erecting an additional story above them. It appears from the foundation plan of the Tithe Church, drawn on the basis of the latest excavations, that the foundations of the northwestern and southwestern parts of the gallery are not extensions of the foundations of the corresponding walls of the original church built by Volodymyr. Moreover, in the eastern exterior foundation of the northern gallery, as well as in the second (counting from the east) and the fourth interior foundations of the southern gallery, rectangular extensions are clearly distinguishable on both sides of the wall. These extrusions are at an equal distance from the walls of both lateral naves of the church. M. Karger, who directed the excavations of the foundations of the Tithe Church, drew attention to them but he did not suspect their purpose, stating only that they were internal



Comparative foundation plans of Dormition Cathedral in Halych: 1. Archeological (by Dr. Ya. Pasternak); 2. Restored (by author).

Порівняльні пляни Успенської катедри в Галичі: 1. археологічний (Др. Я. Пастернак); 2. реконструктивний (автор).

articulations for constructional purposes.⁵⁶ In the opinion of the present writer, they are the foundations of cross-shaped piers which served as supports for the original galleries and entered into the new wall at the time of their enlargements. The position of these piers did not coincide with the axis of the new walls and they must have been dismantled. On the basis of this inference, we are giving one of the variants for the reconstruction of the plan of the Tithe Church. Our reconstruction of the original structure quite naturally corresponds to the principles of planning and arrangement of the naves and transepts of the St. Sophia Cathedral. This reconstruction accounts for the prolongation of the foundations of the galleries and the construction of new foundations which do not coincide with the direction of the old ones. It also shows that the earlier outer walls (the northern and southern) were bound on both sides by newer foundations dating from the time of Grand Prince Yaroslav. This may have been done in order to stop the deformation of the walls which had been disclosed in the western part of Volodymyr's Church. On the basis of these investigations it might be asserted that the person represented on Abraham van Westervelt's drawing of the central part (now

⁵⁶ M. Karger, Arkheologicheskie issledovaniya drevnego Kieva, (Kiev, 1951), p. 74.

lost) of the St. Sophia frescoes, depicting Prince Yaroslav's family, is Yaroslav himself holding the model of the Tithe Church he had restored. It is possible that the model was erroneously represented in the copy from Westervelt's lost drawing. If this assumption be true it will be difficult to agree with the reconstruction of the general view of the Tithe Church made by Professor Conant.⁵⁷

Cases of enlargements of existing churches in the Grand Princely period are fairly numerous. The construction of galleries on three sides of the Dormition Cathedral in Halych (third quarter of the 12th century) is among the most striking examples of this procedure. There the partitions of the added northern and southern galleries do not correspond to the directions of the transept walls. This lack of coincidence is underlined by the fact that the outer pilasters of the original church protrude into the added arcades. Dr. Pasternak, who failed to notice this detail, looks for affinities between the Dormition Cathedral in Halych and the Dormition Cathedral in Vladimir on the Klyaz'ma and objects to the thesis of Professor H. Pavluts'ky,58 who quite rightly finds some similarity in the plans of the Tithe Church and the Vladimir Cathedral.⁵⁹ While detailed comparative discussion transcends the scope of the present book (the reconstruction of the original plan of the foundations for the Dormition Church in Halych and the galleries added at a later date is given here only for comparison with the somewhat similar addition of galleries in the Tithe Church), it may be stated briefly that the churches of the northern (the principalities of Novgorod, Pskov, Vladimir-Suzdal') as well as western territories (Galicia, Volynia) of Eastern Europe had remained for a long time under the influence of the cultural center of Kiev where an original architecture had come into being.

Strong influences of Kiev are reflected for several centuries in architectural compositions and especially in the plans of a great number of Ukrainian and Russian churches, even at the time when these churches adopted Romanesque architectural forms. From time to time these early elements are borrowed for the architecture of modern churches. Thus the culmination of early Ukrainian architecture, begun by the Tithe Church and brilliantly crowned by the Cathedral of St. Sophia, opened a separate chapter in the history of the architecture of Eastern Europe.

⁵⁷ Samuel H. Cross and K. J. Conant, *Mediaeval Russian Churches*, (Cambridge, Mass., 1949), fig. 1.

⁵⁸ Not to I. Grabar' as Pasternak thinks.

⁵⁹ Ya. Pasternak, Stary Halych (Krakow-Lemberg, 1944), p. 128f.; cf. I. Grabar (ed.), Istoriya russkago iskusstva, I, 311, 314 (article by Professor G. Pavlutski). Comparing the dimensions of the Dormition Cathedral in Halych with those of St. Sophia of Kiev, Dr. Pasternak says: "With regard to the question of the time of the erection of the Halych Dormition Cathedral, the first chronological clue may be obtained from its monumental appearance, which it shares only with the largest churches of the Ukraine's Grand Princely period. Among extant churches, only St. Sophia in Kiev is superior to it in this respect." It must be observed, however, that even the Tithe Church (33 by 40 meters) is larger than the Cathedral in Halych (32 by 36 meters, including the added galleries).