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## Medieval Kiev from the Perspective of an Archaeological Study of the Podil District

Archaeological commentary on the early history of medieval Kiev has long attracted scholars' attention. Regular large-scale excavations, which opened new pages of the city's history, have contributed much to this. The 1970s and 1980s became the most important landmark in this process. It was the time of summing up the results of more than twenty years of research (1969–1982), the most distinctive feature of which was considerable expansion of the scope of excavations. Traditional excavations in the Upper Town were supplemented with large-scale investigations in the Podil district of the Lower Town. Despite frequent floods and disastrous episodes of deposition, this territory turned out to have been populated early and to have remained densely populated for a long time.

Excavations carried out along the construction of the second (Obolon') subway line revealed the remnants of a large urban settlement, which arose here in the late ninth century and came to occupy approximately 150 hectares within 30 to 40 years. The town began to form along the river, above the general level of the river valley, on the terrace above the flood plain. The terrace stretched between the precipitous slopes of the waterfront and the course of the deep Dnieper's tributary, the Pochaina River, which served as a convenient harbor.

From the very beginning of the excavations in the Podil district it became clear that it was definitely the beginning of a new stage in the study of the city. The major factor that changed attitudes toward the potential of archaeological study was the excellent preservation of the organic material in the earliest horizons of the cultural layer, primarily wood, the basic and principal building material of the Middle Ages, which is rarely preserved in soil. Everything that made up the material basis of life, from the timber dwellings that formed whole quarters of the city and to burial complexes with various wooden inventories, presented itself to the archaeologists in its original appearance in the cultural layer of Podil.

The second fact discovered in the excavations in Podil was also important. The cultural layer showed that besides human activity other factors also had a great influence on its formation. Layers of pure river sand, clay, and loess formed approximately half its thickness. All this pointed to the fact that the population inhabiting Podil had often been forced to leave the area. The intervals were short-term, but they changed the situation significantly. The entire expanse of the district was simultaneously covered with

these layers; the thickness of the deposits differed and in some cases reached 1.5 meters. Everything that people failed to carry away was covered with the deposition. After the situation stabilized the inhabitants had to build new dwellings and reconstruct their properties and city quarters.

As the excavations revealed, such a dynamic of life in Podil soon became standard for its inhabitants. This is confirmed by the signs of intensive reconstruction activity after each episode of deposition. The accommodation between disastrous natural phenomena and human beings took place for a rather long time, from the ninth to twelfth centuries.

In order to obtain clearer information about these processes, to understand and explain the mechanism of interaction of all the elements in such a complex system as this territory has turned out to be, we had to exceed the limits of the usual archaeological methods for studying a site. An assumption was made that the mechanism of development of the relief in Podil had been launched by the force of neotectonic movements apparently activated in this historic period. The movements (these were mainly subsidence, although rising was also possible) caused block deformations of the uniform surface of the hills which surrounded Podil, whereupon fast-forming ravines divided their sides.

In the 1970s, joint efforts of archaeologists and geologists resulted in putting together the stratigraphic section of the cultural layer of Podil along more than 2000 meters of the subway line (Fig. 1). During the next decade a dendrochronological study of the timber collections from the excavations in Podil was conducted. As a result, a dendrochronological scale was built and an attempt was made at absolute dating. The collection of timber suitable for dating allowed constructing a scale 383 years long. The last felling of trees represented in the scale was made in 1123, and 740 became the lowermost date, i. e. the date of the beginning of the growth of one of the specimen in the collection.<sup>2</sup>

The generalization of the stratigraphic data and correlation with dendro-dates opened a perspective on establishing a detailed chronology of all the horizontal strata of the cultural layer, even those which failed to produce timber suitable for dendrochronological dating. The earliest stratum, deposited at depths of 11.5–12.5 meters, is dated from the 880s to the 920s. The next one, deposited one meter above, covered the period up to the beginning of the eleventh century. The third stratum of the layer, 8 meters in depth at the top, is dated to the 1040s. On the level of the fourth stratum (7–7.8 meters) buildings were built in the mid-eleventh century and they fell into decay in the early twelfth century (Fig. 2).

If we take the full stratigraphic section composed of materials from the excavations in the central part of Podil — Kontraktova Square — we see that from 913 (i. e., the dendro-date of the earliest timber structure discovered by the excavations of 1971–1973) up to 1131 (the recorded date of the beginning of construction of the stone

<sup>1</sup> Гойжевський О. О., Сагайдак М. А. Замкова гора в Києві (до питання впливу природних факторів на топографію давньоруських міст). Старожитності Південної Русі. К., 1993. С. 63.

<sup>2</sup> Сагайдак М. А. Дендрохронология древнего Киева. Новое в археологии Киева. К., 1981. С. 450.

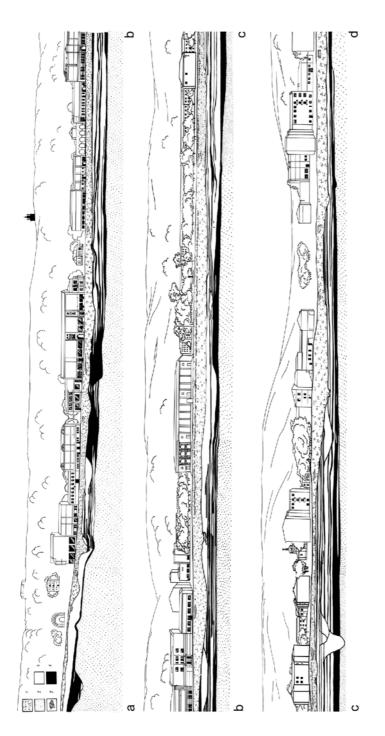


Fig. 1. 2000 meter stratigraphic section through Podil district of Kiev along the line of excavations for the subway (Reconstruction by M. Sahaydak; drawing b V. Shumakov)

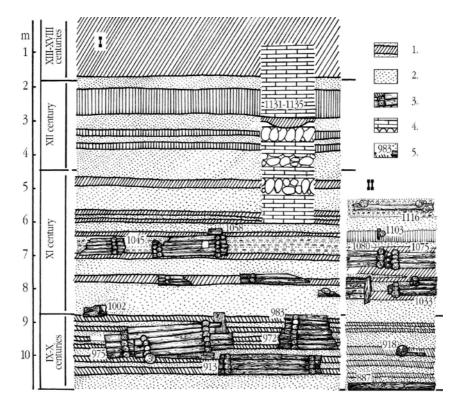
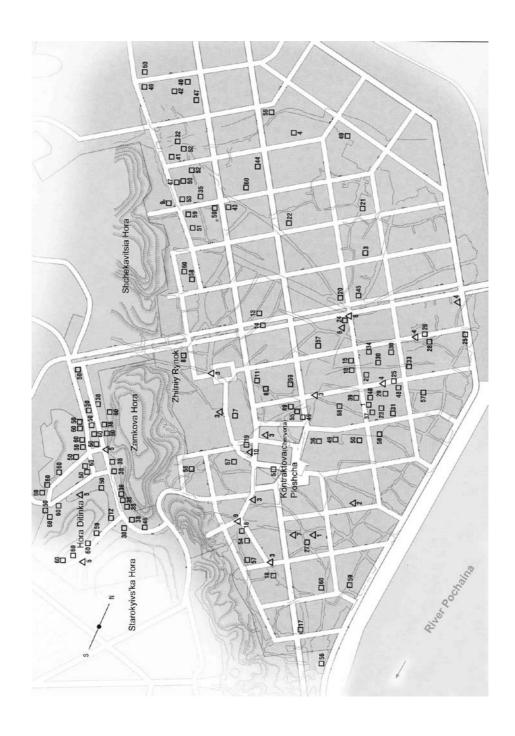


Fig. 2. The chronology of the Podil cultural layer. I. Kontraktova ploshcha 1971–1973. II. Zhytniy bazar (market). 1973. 1 — cultural layer; 2 — alluvial-diluvial depositions; 3 — wooden constructions found in the cultural layer; 4 — relics of the stone medieval architecture with the chronicle dates of building; 5 — dendrochronological dates

church of the Assumption of the Virgin Pirogoshcha, investigated in 1976–1978 and 1998–1999) 14 depositional episodes of different thicknesses took place.

The most surprising finding was that after the construction of the church the depositional episodes in Podil practically stopped. There are no traces of floods above the level of the entrance into the church. For 218 years, the period between the first occupation of the area and the construction of the church, the level of the surface of Podil grew more than by 10 meters, while in the next 870 years the level grew slightly more than 2 meters.

This evidence suggests that we managed to discover the traces of a natural phenomenon which sharply changed the relief of the district. Apparently the balance in the system was upset under the influence of external forces. The released energy caused the transference of huge masses of soil from the hills into the valley; afterwards the system regained its balance, but on a new level corresponding to the changed conditions.



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Fig. 3. Archaeological map of the Podil district (2002) by M. S
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square)		
	32. 1985 — 12 Obolons'ka St.	57. 1998 — 1 Andriyivs'ka St.; 7 Kontraktova
	33. 1985 — 11 Pochainins'ka St.	Ploshcha; 30 Spas'ka St.; 33-35 Khoryva St.
	34. 1986 — 28 Khoryva St.	58. 1999-2000 — 30 Borychiv Tik St.; 12/4
	35. 1986 — 23-27 Vvedens'ka St.	Volos'ka; 12 Spas'ka St; 1-3 Frunze St.
	36. 1987 — 4 Kontraktova Ploshcha.	59. 2001 — Honcharna St.; 13/5 Ihorivs'ka St.;
7. 1973 — 4 Prytys'ko-Mykils'ka St. 37. 19	37. 1987 — 14-18 Volos'ka St.	18 Frunze St.; 3/7 Mezhyhirs'ka St.
Square)	38. 1987–88 — Vozdvyzhens'ka St.	60. 2002 — 25 Vvedens'ka St.; Vozdvyzhens'ka
9. 1974 — 17 Frunze St. 39. 19	39. 1988–89 — 12 Spas'ka St.	St.; Honcharna St.; Dehtyarna St.; 7 Ihorivs'ka
10. 1974 — 17 Volos'ka St. 40. 19	40. 1988 — 61 Kostyantynivs'ka St.	St.; Kozhumyats'ka St.; 4 Yaroslavs'kyi Lane.
11. 1974 — 6 Kostyantynivs'ka St. 41. 19	41. 1988 — 3-5 Obolons'ka St.	
12. 1974 — 6 Honcharna St. 42. 19	42. 1988 — 6/32 Yurkivs'ka St.	△ Archaeological monuments
13. 1974 — Nyzhniy Val St. 43. 19	43. 1989 — 34 Kostyantynivs'ka St.	
14. 1975 — Verkhniy Val St. 44. 19	44. 1989 — 40 Mezhyhirs'ka St.	1. Flat graves cemetery (15 <sup>th</sup> century).
15. 1975 — 19 Volos'ka St. 45. 19	45. 1989 — 36 Volos'ka St.	2. Church of the Saints Borys and Hlib (12th
16. 1975, 1984 — 7 Pokrovs'ka St. 46. 19	46. 1989 — 41 Vozdvyzhens'ka St.	century).
17. 1975 — 6-8 Petra Sahaydachnoho St. 47. 1	47. 1989 — 55-61Kostyantynivs'ka St; 1, 7,	3. A wooden drainage and a road-way (17th-18th
4 Andriyivs'ka St. Obole	Obolons'ka St.	centuries)
19. 1976-79, 1997-99 Kontraktova Ploshcha. 48. 19	48. 1990-91 — 16 Volos'ka St.; 24/13 Spas'-	4. Cemetery of the Podil district of Kiev
20. 1980, 1987 — 41 Nyzhniy Val St. ka St.	t.	(early — mid 11th century; late 12th — 13th cen-
	49. 1991 — 1 Kontraktova Ploshcha; 2 Oleniv-	turies).
22. 1981–82 — 25–27 Shchekavyts'ka St. s'ka S	s'ka St.; 4-8 Skovorody St.; 26 Turivs'ka St.	5. Artisans' suburbs Honchari and Kozhumya-
23. 1981–82 — 16 Volos'ka St. 50. 19	50. 1992 — 11 Vvedens'ka St.; Dehtyarna St.;	ky $(12^{th} - 18^{th} \text{ centuries})$ .
24. 1984 — 23 Volos'ka St. Kozh	Kozhumyats'ka St.; 5 Obolons'ka St.; 1 Oleniv-	6. Church (12th century).
Naberezhno-Khreshcha- s'ka !	s'ka St.; 4-8 Hryhoriya Skovorody St.	7. Church (12 <sup>th</sup> — 13 <sup>th</sup> centuries).
tyts'ka St.; 25-39 Spas'ka St. 51. 19	51. 1993 — 12–18 Frunze St.	8. Church (13 <sup>th</sup> — 15 <sup>th</sup> centuries).
26. 1983-84 — 40-50 Khoryva St. 52. 19	52. 1992-93 — 5, 12 Obolons'ka St.	9. Church of the Virgin's Birth (Armenian)
27. 1983 — Brats'ka St. 53. 19	53. $1994 - 26/2^{a} - 2^{b}$ Frunze St.	$(14^{th}-15^{th} \text{ centuries}).$
28. 1984 — 40 Khoryva St. 54. 19	54. 1995 — 5 Pokrovs'ka St.	10. The church of Assumption of the Blessed
29. 1985 — 20 Spas'ka St. 55. 19	55. 1997 — 1 Kontraktova Ploshcha.	Virgin Pirogoshcha (12 <sup>th</sup> century).

As specialists in geomorphology note, unbalanced geomorphologic systems automatically tend to return to a previous state.<sup>3</sup>

Thus, the energy of the hills surrounding Podil on the south and west caused a transformation in the relief of the river valley. Here, a terrace formed on the valley sloping towards the Dnieper; its area expanded together with the increase of the material on it (i. e. the thickness of the layer).

In view of the fact that the terrace formed on a narrow sloping space, its spatial development was limited by the slope on one side and by the river on the other. During seasonal floods the river leveled the whole valley, bringing masses of river sediment together with water. Within the interaction of these complicated processes people had no other alternative than to engage in constant construction activity.

Earlier conclusions were based on materials from only 11 excavated units; during the last twenty years their number has increased to 60 (Fig. 3). This considerable increase in the number of excavated units has not only produced data important for reconstructing the landscape which preceded the growth of the area, but also for reconstructing a picture of the efforts undertaken by the inhabitants of the waterfront district to secure the place of their settlement. This is important information according to which one may judge the degree of organization of the first settlers in their adjustment to natural calamities.

It turned out that considerable effort and resources were spent on reinforcing the riverbank, which practically coincided with the edge of the terrace. During the 1985 excavations at 40 Khoryva St., a system of timbering was discovered which occupied the whole area of the excavation. It consisted of three lines of parallel cells made of planks placed edgewise. The cells were attached to the soil by stakes driven into the corners of the cells from the inner and outer sides. Most of the stakes had cut holes measuring  $2 \times 2$  cm. Overall, three lines of cells were revealed on the site; the distance between them was 1.6 to 2.6 meters, while the individual cells measured  $2.4 \times 3.3$  m; in the middle part they were sometimes divided into smaller chambers (Fig. 4).

Analogous constructions were also found in other parts of Podil and as a rule they were oriented towards the riverbank or towards the banks of full-flowing streams running from the slopes to the river. Interestingly, these hydro-technical structures formed part of the buildings on properties bordering dangerous plots. Sometimes they stretched deep into the space which faced the river. Such structures were discovered in 1987 at Obolons'ka St. They are reminiscent of the wooden bases for transporting cargo on shallow water or possibly even ships.

The reconstruction of the town-planning structure of the Podil settlement has been the most important result of the excavations of Podil. Investigation of the borders of properties showed that the fence lines of one plot were reconstructed about 12 to 17 times, preserving a stable layout for centuries. Displacements either deep into the property space or outside it (the distance did not exceed 1–1.5 m) were possibly connected

<sup>3</sup> Поздняков А. В. Динамическое равновесие в рельефообразовании. М., 1988. С. 6.

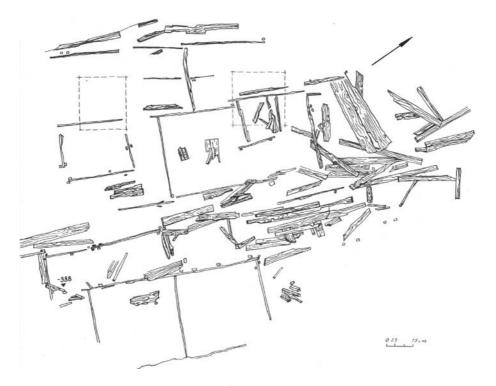


Fig. 4. Plan of cells' location (11th century) in 40 Khoryva St., Kiev. 1984

with wider-scale changes, for example, fluctuations in the course of the stream flowing through the central part of Podil or with movements of the riverbank of the Dnieper and the Pochaina rivers. Snow melt and heavy rains caused fast alluvial deposition of soil material; with the ravines growing, conditions developed for forming streams. Despite the timbering of the banks, the stream changed its course repeatedly and sharply, forcing people to change the lines of fences.

The first horizons of the occupation of Podil in the late ninth-early tenth century show that the first line of properties was constructed along the edge of the terrace. The terrace itself had a complicated configuration and did not stretch along the course of the Dnieper, but diverged from this line along an east-west axis (Fig. 5). This was one of the main directions along which the street system of the settlement of Podil formed. Fragments of such streets have been located by archaeological excavations. According to topographic reference-points, this may be seen in the direction from the foot of Shchekavytsia hill towards Kontraktova Square and further on to the St. Elias and St. Nicholas Naberezhny churches (Fig. 6). The north-south axis, i. e. from Starokyivs'ka hill towards the Obolon' district, was another direction. Properties

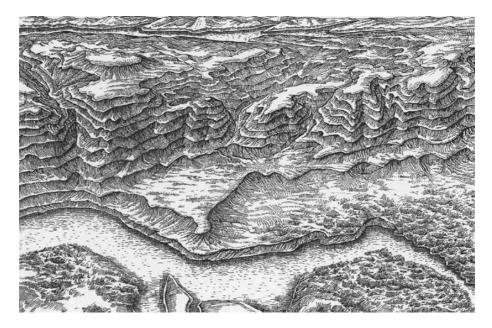


Fig. 5. Erosion of the hills to the west of the Dnieper River that created and enlarged the Podil terrace

which had been built along this street were excavated in 1971–1973 in the foundation pit of the subway line from the southern side of Hostynny Dvir.

No matter how trivial it may sound, every town reflects, expresses, and embodies the social system of its society and the way its population lives. Hence, the first impulse of town formation plays the most important role in the further history of the town's development. Later, some functional points of attraction may form, reflecting the interests of the population in the city: a cult center, a castle or a trading point. But the main question about the beginning of urban life is: What was it in the very beginning?

Nowadays, many students of cities stress that archaeologists should suggest their own criteria of urbanization based on the materials from excavations and only afterwards should they refer to historical sources. Judging from the distinctive layout structure, Podil most likely emerged as a trading point. It definitely represents a new type of a settlement for the whole Dnieper area. It was rather large (approximately 150 hectares) and densely built up. The river, or rather harbor, was the main center of attraction for its population. The large scale of building attests that this was purely an economic center, since a political center would never have attracted such a large population so rapidly. However, the stability of the layout reflected the substantial stability of basic conditions there, which suggests that the Podil settlement emerged under the auspices of the authorities and enjoyed their support (Fig. 7).

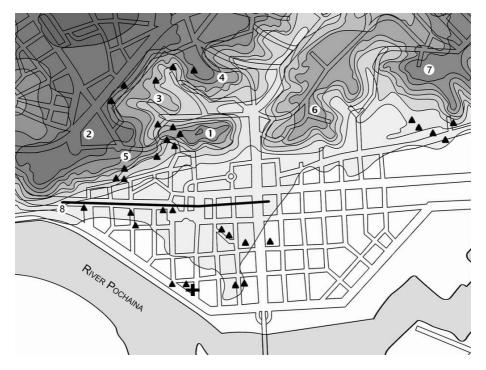


Fig. 6. Map of the relief of Kiev and the distribution of objects imported from Scandinavia. Key: 1 — Zamkova Hora; 2 — Starokyivs'ka Hora; 3 — Hora Dytynka; 4 — Kudriavets' Hora; 5 — Uzdykhal'nytsia Terrace; 6 — Shchekavitsia Hora; 7 Lysa Hora (Yurkavytsia)

It is well known that in the early 1980s an official concept was forged according to which the continuous history of Kiev dated back to the fifth and sixth centuries. It was linked to a large-scale celebration of the city's millennium and an anniversary. One has to note, however, that at that time, as well as later, most scholars did not consider it an axiom or universally recognized theory. For many it probably appeared to be one of the possible and admissible compromises between scholarship and the political and social practice of the time.

The anniversary of the city was conceived as an act of consolidating Soviet patriotism and internationalism in historical examples, which was vital for the former party leadership. However, one can suggest that for the academic establishment it had yet another, deeper, mission. It was intended to prolong the life of one of the fundamental concepts of the Soviet historiography, created by works of the Marxist historians Serafim V. Yushkov, Boris D. Grekov, Mikhail N. Tikhomirov, Boris A. Rybakov, and M. G. Rabinovich. By the 1980s, with the advancement of medieval archaeology, the concept had started to crumble and the need to stabilize it was felt intensely.

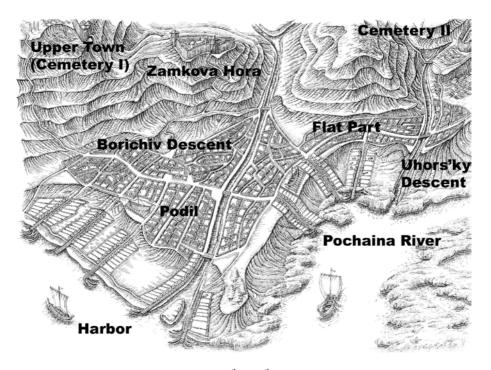


Fig. 7. The Lower Town (Podil) of Kiev of the  $9^{th}$  —  $10^{th}$  centuries (Reconstruction by M. Sahaydak; drawing by Y. Malanyuk)

The notions formulated by this school in 1940s and 1950s regarded urbanization of Eastern Europe as a phenomenon intrinsically linked to the emergence of classes and the state. Town formation coincided with the origin of class relations in the depths of primitive society. "Feudalizing" traditional nobility acted as town founders. In due time this led to subordination and making the population of the towns pay tribute. Thus, towns' incorporation into the texture of tribal society was being explained. As yet another type of city, the locales artificially founded by the central authority were also ranked. They were intended for the consolidation of a new (state) system — feudalism. In this way the appearance of castles and fortresses were explained; later their populations grew and they turned into towns.<sup>4</sup>

The agrarian sector was considered the economic basis for early urban life; therefore, the most ancient towns must have appeared in the regions with advanced agriculture, primarily in the Middle Dnieper area. In addition to the state-administrative function, such towns of the region as Kiev, Chernihiv, and Pereyaslavl', as well as the numerous

<sup>4</sup> Довженок В. И. Сторожевые города на Киевской Руси. Славяне и Русь. М. 1968.

centers of the Dnieper area, also performed redistributive functions; in other words, they were considered the economic centers of the agricultural hinterland.<sup>5</sup>

The theory within which the hierarchy of the main town functions was defined had a direct effect on the ways the early topography of the Rus' towns was reconstructed. It is possible to speak about the pressure of theory compelling the unification of the layout of towns. The social and topographic aspect allowed a town to be pictured as consisting of two main parts, namely, an administrative and ideological center, *dytynets'*, which usually included its original ancient settlement, and the commercial and industrial outer hold of a castle or *okol'ny grad*. The former, necessarily well fortified, accommodated the military and political administration (the prince and his retinue) and sometimes cult relics of a tribe, indicating the connection of the center with the life of a tribe. In comparison with a *dytynets'* fortress, the outer holds of a castle were secondary urban structures. Their existence was conditioned by a growing demand on the nearest neighborhood for commercial and trading services, which accordingly affected the social composition of the population.<sup>6</sup>

It should be admitted that owing to the anniversary of Kiev, this compound old-fashioned conception, which claimed to cover all aspects of town formation in Eastern Europe, gained a new impulse in development. Many of the opinions and stereotypes formed then remained in academic circulation until recently. Then as now there were some good reasons for this. The theory of urbanization in Eastern Europe was built into the general theory of state formation (which became axiomatic for most scholars), according to which Kievan Rus' was viewed as a state formed as a result of the internal fermentation within the society and consolidation of East Slavonic tribal units.

The two theories correlated splendidly and did not encourage any alternative approaches, not even minor dissenting views. Being guided by the theoretical framework designed by eminent historians, archaeologists were expected only to present their own findings, proving the continuous line of evolution of archaeological materials starting from the middle of the first millennium AD up to the formation of Kievan Rus'. Archaeology supplied illustrative material; the world of ideas made the world of things its hostage.

Settlements belonging to the *Praha-Korchak* culture, identified with the historic Sclavini (recognized as Slavs), were taken as the starting points. According to the dominant view, later this culture incorporated the Slavonic *Raykovets'ka* and *Pen'kivka* cultures (identified with the historic Antae) of the right-bank Ukraine. Thus, Kiev, where an impressive assortment of both pre-Slavonic (*Zarubintsy*, *Chernyakhiv* and *Kiev*) and the Slavonic cultures can be documented at the core of town formation, was considered the first east Slavonic urban center.

In numerous publications and discussions generated by this occasion, the word of Boris Rybakov turned out to be decisive. He advocated an early date, yet he proceeded from his own idiosyncratic theory about the genesis of the eastern Slavs and not from

<sup>5</sup> Карпов В. В. О факторах экономического и политического развития русского города в эпоху средневековья. Русский город. М. 1976.

<sup>6</sup> Тихомиров М. Н. Древнерусский город. М. 1956. С. 47-51.

a rigorous analysis of the artifacts. The late fifth century was recognized as the date of foundation of Kiev.

From the present perspective, it is obvious that excessive trust was put in written sources. Scholars fell under the spell of the version narrated by *The Primary Chronicle* and were trying to substantiate it with evidence.

The Primary Chronicle tells the story of the Poliane and their leaders Kyi, Shchek, Khoryv, and their sister Lybid', who founded their own townships and a central one named after the eldest brother. The status of this story was never clearly defined in historiography. The tale, typical for medieval chronicles, is now believed to be representative and symbolic. It might have had a folkloric origin and its symbolism was interpreted by the chronicler as a practical activity of the progenitors of the Poliane tribe. Without an understanding of its inner substance and its place in the chronicler's vision of the past, it cannot be used as direct evidence. In any case, it has resisted attempts at incorporating it into purely archeological argument.

It has not been clear enough until now which group of *Korchak* artifacts the beginning of urban life of Kiev should be identified with. For a long time most researchers showed their preference for Starokyivs'ka Hill, but a topographic adjustment was made during the preparation for the anniversary, when great importance was attached to dating finds and also to a site with good fortification characteristics. Zamkova Hill was recognized as the most ancient settlement and prototype of the future city *dytynets*'; a spot of the "town" proper was assigned to Starokyivs'ka Hill. The area on Starokyivs'ka Hill (in comparison with Zamkova Hill) was significantly larger, allowing scholars to visualize a perspective of urban development that would match the city's status.

The cultural layer of the hill has been damaged by later intrusions, which complicates the aim of detecting closed complexes. However, the finds of many archaeological cultures that existed in the Middle Dnieper area from the first millennium AD until the late Middle Ages have been uncovered here. On the northwestern side a layer corresponding to the *Zarubintsy* culture was excavated. Among the finds with rather precise dating are fragments of a double handle and conic base of a light clay amphora from the first century BC-first century AD, a bronze fibula of the late La Téne period, some Roman coins (among which there is a bronze *as* bearing the name of *Spurius Aphranius*, a consul during whose reign it must have been coined in 200 BC), and also many finds of other coins.

From the mid-first to the mid-second centuries AD there was a recession of activity on the hills. Renewal of activity is connected with solitary finds belonging to the *Kiev* culture: a bow-like garter-type fibula with a broken receiver, 9 a pendant with enamel, 10 and a biconic spindle whorl. Proceeding from the established dates of fibulas similar to

<sup>7</sup> Максимов Е. В. Среднее Поднепровье на рубеже нашей эры. К., 1972. С. 28.

<sup>8</sup> Брайчевський М. Ю. Римська монета на території України. К., 1959. С. 40.

<sup>9</sup> Шовкопляс Г. И. Памятники зарубинецкого времени в Киеве. МИА. 1969. № 160. С. 78.

<sup>10</sup> Корзухина Г. Ф. Предметы убора с выемчатыми эмалями V — первой половины VI вв. н. е. в Среднем Поднепровье. *САИ*. Л., 1978. С. 68. .

this one, the complex may be dated to the late second century AD, but no later than the first decades of the third century AD.<sup>11</sup>

Overall, the antiquities of the *Kiev* culture hint at the possibility that a group of settlements existed in the central districts of Kiev around Zamkova Hill. Besides the Starokyivs'ka area, they were discovered on Dytynka Hill near Lvivs'ka Square and on Kudryavets' (a ridge of hills overlooking Podil). Since the people of the *Kiev* culture as well as the *Zarubintsy* culture used slash-and-burn agriculture, it may be assumed that in this case we are dealing with the same community, which changed its location according to its agricultural needs. Shifting of the settlements took place on the level space of the Kiev plateau, which according to the landscape map was covered with oak groves alternating with areas of steppe.

A similar situation was observed with the antiquities of the *Chernyakhiv* culture, which appeared in the mid-third century AD. First, a compact settlement emerged on Zamkova Hill, and then a burial ground on Starokyivs'ka; the settlements also moved within the central plateau from the southern slopes of Khreshchatyts'ky Ravine to Lukyanivka. The relics of this period on Zamkova Hill are represented by pottery, the stray find of a glass vessel with drops of blue glass on it, which is dated by analogy with northern Black Sea area antiquities to the forth-early fifth centuries AD,  $^{12}$  and also by a garter fibula with a lamellar body ((National Historical Museum of Ukraine,  $^{12}$  2050).  $^{13}$  The cemetery of this period on Starokyivs'ka hill occupied a rather large territory; a second burial ground occupied the slope of Khreshchatys'ky Ravine near Prorizna St.  $^{14}$ 

As this brief review suggests, a certain pattern was established during the first centuries AD: a hill fort settlement always gravitated towards Zamkova Hill, while Starokyivs'ka Hill was mostly used for burial grounds. For some reason, this tradition changed during the time of the *Praha-Korchak* culture.

The finds of this epoch on Zamkova hill are represented by scarce fragments of pottery which can be dated to the late fifth-early sixth centuries according to the typology by I. P. Rusanova. Besides, four Byzantine *follises* of the emperors Anastasias I (491–518) and Justinian I (527–565) were also found there. Nevertheless, scholars assume that there was a well-fortified hill fort with man-made fortifications on this site. 17

Some distinct traces of a settlement were excavated in the Starokyivs'ka area, where the remains of buildings and a stove filled with ceramic vessels were found. <sup>18</sup> Thus, the settlement on Zamkova Hill spread, in particular to Starokyivs'ka Hill and

<sup>11</sup> Амброз А. К. Фибулы юга европейской части СССР. М., 1966. С. 50-51.

<sup>12</sup> Древности Приднепровья. Собрания Ханенко. Вып. V. К., 1902. С. 59.

<sup>13</sup> Корзухина Г. Ф. Предметы убора с выемчатыми эмалями. С. 63.

<sup>14</sup> Полевой П. Очерки русской истории в памятниках быта. Т И. СПб. 1880. С. б.

<sup>15</sup> Русанова И. П. Славянские древности VI–IX вв. между Днепром и Западным Бугом. *САИ*. М., 1973. С. 19–22.

<sup>16</sup> Брайчевський М. Ю. Коли і як виник Київ. К., 1963. С. 77.

<sup>17</sup> Толочко П. П. Древний Киев. 1983. С. 29.

<sup>18</sup> Килиевич С. Р. Детинец Киева IX — первой половины XIII веков. К., 1982. С. 28–29.

Kudryavets'. This expansion, however, can not be interpreted as evidence of a sharp growth in population size.

Slash-and-burn agriculture, exhausting the soil, might have caused the same community to move within the core of the town formation, spreading artifacts over a large area, which produced the impression of settlement expansion. This pattern is well attested. <sup>19</sup>

More precise dating of ceramics lately has started to confirm the idea of significant interruptions in the occupation of this territory. It has been suggested that the dwellings on Starokyivs'ka Hill as well as other *Korchak* sites in Kiev territory were destroyed, since they bear traces of fire. Can this be evidence of a military intrusion? In 560, the Avars appeared on the historical horizon of Eastern Europe; ruining the Slavonic settlements, they caused population to move west.

The continuity between the antiquities of the *Korchak* type and the antiquities of the following *Pen'kivka* and *Kolochin* cultures is also an important problem. There seems to have been a gap in the occupancy of the site in the early seventh century. A recent reexamination of ceramic fragments excavated on Zamkova Hill in 1940 shows that above the *Korchak* layer (the upper dating of which is the early sixth century) there were the horizons with ceramics belonging to *Pen'kivka* culture which are dated to the late seventh-early eighth century.<sup>20</sup>

Recently the artifacts of the *Sakhnivka* type have been detected. The finds of an anthropomorphic fibula, a cast star-like earring, and a silver bracelet with round cored ends, covered with incisions, which were excavated in the southern part of Starokyivs'ka hill may be evidence of the existence of a graveyard here. The finds of five more analogous bracelets and a Byzantine coin of the eighth century in the eastern area may also indicate a burial ground, although G. F. Korzukhina considered them to be deposited as hoards. Obviously, an urban model of central Kiev during the so-called Antae epoch cannot be reconstructed according to the traditional scheme as a settlement on Zamkova Hill and a necropolis on Starokyivs'ka Hill. Based on a specific agricultural model, these settlements moved quite often.

The late eighth century remains unconfirmed in finds. During this period, a culture of *Luka Raykovets'ka* type was prominent in the right-bank Ukraine and a culture of *Volyntsevo* type was dominant in the left-bank Ukraine.

One more detail, established by the excavations of Zamkova Hill in 1940, is significant for our discussion. While inspecting the stratigraphy documentation of the excavation, a sterile layer of loam with no traces of human activity was discovered.<sup>21</sup> This layer divided the early Slavonic and Old Rus' strata.

The sterile layer, identifying the decline of activity, is evidence of the next activation of geologic processes, which affected the stratigraphy of Podil. This is visible in the traces of numerous depositional episodes in the territory. This layer covered

<sup>19</sup> Баран В. Д. Давні слов'яни. Україна крізь віки. Т. 3. К., 1998.

<sup>20</sup> Щеглова О. В. Проблемы формирования славянской культуры VIII–X вв. *Кандидатская диссертация*. 1987 г. С. 8.

<sup>21</sup> Археологія. Розкопки в Києві на горі Киселівці в 1940 р. 1947. С. 145-146.

the "early Slavonic stratum", generally dated to the sixth-seventh centuries, and the layer of the ninth-tenth centuries followed the sterile one.

It was mentioned above that archaeological finds excavated in the layer underlying the sterile stratum belonged to the *Pen'kivka* culture. Bracelets with roundish cored ends and cast earrings existed from the late seventh to the early eighth centuries, as well as lamellar, anthropomorphic, and zoomorphic fibulas analogous to those found in the Pastyrs'ky and Khariyevs'ky hoards.

Consequently, the sterile layer may have appeared as early as the late eighth century. It was one of the first signs of the natural cataclysms beginning, which caused further dynamic changes in the original relief of the Upper Town, and "explosive" landslides in the territory of Podil. Taking into account the earliest dendrochronological date for the occupation of Podil (a building excavated in the Zshytniy Market dating to 887), it is possible to assume that the most active phase of the first cataclysm lasted for about 100 years. Only after this phase was over, when landslides became rare and a phase of temporary stabilization ensued, did the building up of the Lower Town begin (its tempo and dynamics will be discussed below).

The isolation of Zamkova Hill went on quickly. As for the mechanism of forming the sterile layer of the hill, it could only have appeared if the soil from higher neighboring territories had eroded onto the sunken terrace. The lower ground of Zamkova Hill for some time became a place for the accumulation of soil material washed down from the main plateau. Soon deep ravines formed around the hill; eroded soils rushed down in their channels and deposition stopped on the hill. The steep slopes of the ravines interfered with communication with the other areas of the Upper Town, although the hill remained one of the most attractive places for occupation.

Activation of the natural processes would have had a significant influence on the topography of settlements and in particular on the loss of the "dominant" position of Zamkova Hill. Still, as the growth of the urban territories after the eighth century shows, it was not the only factor which caused the changes. Starting from the late ninth century, the picture of Kiev's occupation changed radically.

This has been demonstrated by the rate and dynamics of the process of town planning revealed by excavation. The following material serves for comparison with the previous epochs.

The founders of the town were compelled to look for territories which could accommodate a large population; the territory of Podil was the most suitable for this purpose. Frequent landslides and floods were the only inconvenience. Nevertheless, they did not stop the founders of the city and by the early tenth century Podil had turned into a large urban district with regular building throughout the territory and a developed layout structure.<sup>22</sup>

Thus, if we assume the sterile layer to be the result of geologic subsidence of the hill from the ninth to the twelfth centuries, we see that the territory of Podil sank, together

<sup>22</sup> Сагайдак М. А. Давньокиївський Поділ. К., 1996.

with Zamkova Hill and the adjoining zone, and the rate of subsidence sometimes slowed down, sometimes accelerated. During the delayed sinking or stabilization of the hills, conditions appeared for building Podil. The acceleration of subsidence led to the submergence of Podil and to an accumulation of the sterile layers of soil. Certain risings may also have happened there (the oscillatory character of tectonic movements is well known); this created conditions for the occupation of the territory. With some tendency towards growth, which is confirmed by the thickness of the layer, this process lasted until the mid-twelfth century. No traces of its activity have been discovered in the upper part of the cultural layer. There is no alternation of strata here; a certain uni formity of the layer is observed: the layers of the twelfth to thirteenth centuries are covered with the horizons dating back to the fourteenth to sixteenth century and up to the modern surface (the layers of the seventeenth through the nineteenth century).

In the context of these developments, we consider the appearance and existence of the original castle on Starokyivs'ka Hill, which was usually referred to as the most ancient town core of the sixth-ninth centuries. However, as we have seen, comparatively reliable continuity between the archaeological cultures of the late first millennium AD on this territory has never been established. The accepted theory of the city's origin needs to be revised.

The condition for its survival was the identification of the Upper Town with its early hill forts on Zamkova and Starokyivs'ka hills as the absolute center. They were given the role of the major core of the town formation; other areas were considered suburbs. Subsequently, the regular growth of Kiev Podil within this model could only have started after the spatial formation of such urban elements as administrative, cult, military, and political functions. In other words, after the appearance of *dytynets'* before the late tenth century, when the administrative and cult center in the Upper Town formed completely. According to this concept, starting with legendary Kyi, each period of the town's life had to have a significant person who defined the strategy of the town's development, especially as both types of sources (written and archeological) seemed to corroborate it.

Without going into the specifics of this model's basic notions, we note that until the 1970s no principal modifications were introduced into it. They suddenly appeared with the publications of comparative studies, which suggested that in Northern Europe a network of early urban centers emerged in the late first millennium AD and that these towns represented a distinct type. It became obvious that while solving such fundamental problems the world of things should not yield to the world of ideas, i. e. archaeology should not be given the role of illustrative material only. The materials from the excavations of Podil presented a picture of Kiev's urbanization quite different from the accepted one.

The written sources narrate only one wide-scale construction in the town in the ninth and tenth centuries. This period is associated with the reign of Volodymyr Svyatoslavych in Kiev (978–1015), when a town was founded on Starokyivs'ka Hill. The annalist describes Volodymyr's program in detail; it envisioned the construction

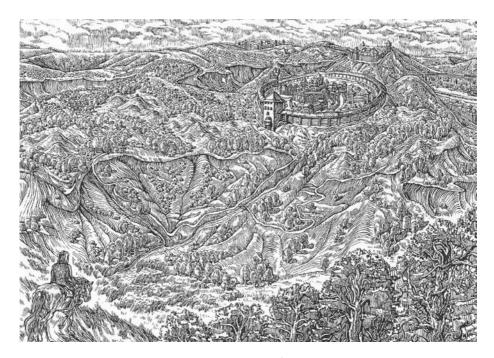


Fig. 8. Reconstruction of the Town of Volodymyr (late 10<sup>th</sup> century) and the "Field outside the town" with the barrows of the Pagans' cemetery (Reconstruction by M. Sahaydak; drawing by Y. Malanyuk)

of a line of defensive structures with some entrance gates, erection of the main church and a complex of palace buildings around it. The rest of the territory was allotted as land for the clergy and the closest members of the prince's retinue. On the whole, the program may be considered to be the crown of Volodymyr's successful reign. He was baptized; religion was established throughout Rus'; the opposition of rebellious territories was suppressed; the Kiev prince's sons reigned in the capitals of the appanage principalities. All this culminated in the construction of the new Christian capital (Fig. 8).

However, archaeological data raised a question: Who had organized the grandiose (for those times) construction of Podil one century before? Where was the military and political administration located and what did it look like? These questions need the most scrupulous investigation because the answers remain obscure.

A number of stereotypes still dominate academic discussion. Traditionally, the task is reduced to the corroboration of the myth found in the written sources, the inner substance of which is ignored. A search was launched for archaeological sites that would confirm it chronologically. It was also thought necessary to identify the sites and objects in space in order to demonstrate that the annalistic tale about the foundation of the town reflects real stages of the town's history. Yet, the resulting concept of the "em-

bryos," advanced to explain the city's existence before the actual urban settlements appeared, does not provide a clear explanation of the town's genesis. It makes the initial stages of urbanization in Eastern Europe unnecessarily vague, which stands in sharp contrast to Northern Europe, where this process had common roots and went on rather simultaneously.

In its earliest stage, Kiev is viewed as a complex conglomerate of independent settlements which had appeared on the spots where it was convenient to live. Scattered on the hills around the 'core' (a small piece of territory on the edge of a wide plateau which included Zamkova Hill and part of Starokyivs'ka Hill), they were somehow subordinated to the 'center'. Gradually fusing around this 'core', they formed city of Kiev as we know it.

According to this concept (suggested by the chronicle account), the town developed naturally, since its space had a significant reserve of free areas. However, from the point of view of the medieval town planning, in which the defensive function of the city walls was a major consideration, these areas were unfit to form a homogeneous town body. They were limited in size and had natural borders (ravines) blocking communication between different parts of the city.

Archeological studies in recent years have led to a critical revision of the accepted theory. It is now obvious that the origins of urban life, which became vivid in Kiev from the late ninth century, should be associated not with the construction of the Upper Town, but with the territory of the Podil district. In just one century (from ca 887 AD, according to dendrochronological dating, to the late tenth century) and in spite of the restraining natural phenomena, its territory covered 150 hectares.<sup>23</sup> The town's structure was formed almost instantly from two main cores. The first was situated between the bank of the Pochaina River and the foot of Zamkova Hill, while the second formed on the territory later known as the "Flat part" (Ploska chastyna) of the Podil district between the right bank of the Pochaina River and the foot of the adjacent hills. The first street with a regular urban layout started its formation from the road which connected the two cores and led to the northern (Borychiv) and the northwestern (Ugors'ky) slopes (Fig. 9). Borychiv slope, facing southeast and mentioned in a chronicle entry of 945, stretched (according to our version) from the center of Podil to the Triokhsvyatitels'ka Church of the late twelfth century (which marked the place of a pagan sanctuary) and the St. Basil Church of the tenth century in the Upper Town. The second slope stretched along the Yurkivs'ka gully towards Vyshgorod and Bilgorod. A settlement here was marked by a (newly discovered) twelfth-century church and it may be identified as the 'Ugorskoie' mentioned in chronicle. The slopes were also used by the inhabitants of the Lower Town as ascents to the barrow cemeteries situated on the upper plateaus of Starokyivs'ka Hill and Lysa Hill (Cemetery I and Cemetery II) (Fig. 7).

<sup>23</sup> Сагайдак М. А. Актуальні питання зародження та формування раннього Києва. Магістеріум. Вип. 6. К., 2001. С. 13.

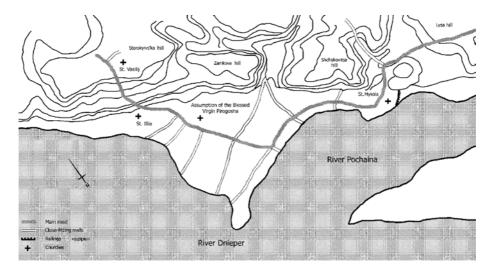


Fig. 9. Reconstruction scheme of the first street of the Podil district with the main Christian temples (Reconstruction by M. Sahaydak)

Gradually, the street came to play the role of the city's main axis; it stretched along the river and reached the slopes where the roads from the city begin. The street's main function was to provide access to the river, which was navigable all year round due to the constant inflow of the Dnieper. Narrow but full-flowing rivers and streams from hilltops through valleys played the role of additional communications.

The territory allotted for household construction bears traces of regular planning. The properties were of almost identical size (300–320 square meters); fence lines which marked their boundaries were fixed for several centuries despite the fact that they had to be renewed after natural calamities. The connection with the outer world was of principal concern for those who founded the town on the Pochaina River, therefore they paid special attention to the formation of the waterfront and access to the river. However, it has been difficult so far to identify the key element which defined the settlement's structure in this initial stage. The 'central street' and the waterfront compete for this role.

In this phase the prince's residence was ex-territorial in relation to the town. However, in the late tenth century, when the role of the town increased as the stronghold of the political power and Christian faith, the administrative function became dominant. It resulted in the construction of a new town with a prince's court and the major Christian church at the center on the site of the former pagan cemetery. Thus the Upper Town on Starokyivs'ka Hill was formed. At the same time the Lower Town's land-scape also started to change. The church of St. Elias might have been the first to appear,

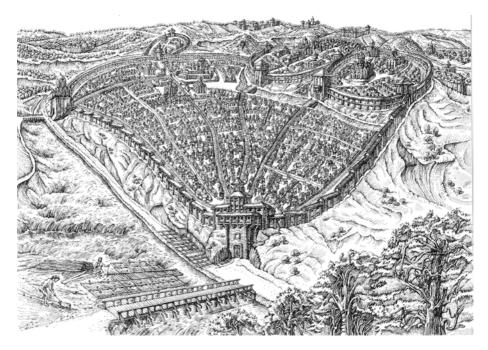


Fig. 10. Town of Yaroslav viewed from the Lyadski Gates (11<sup>th</sup>-12<sup>th</sup> centuries) (Reconstruction by M. Sahaydak; drawing by Y. Malanyuk)

still in the mid-tenth century. The church marked the route of ancient Borychiv Lane<sup>24</sup> and was followed by the stone St. Nicholas Church on "Ugorskoie."

The next phase is associated with the expansion of town by Yaroslav 'the Wise' in 1037. Its walls encircled a new space termed the "field outside the town" in the chronicle (Fig. 10). The impressive new urban ensemble (called the 'town of Yaroslav' by historians) was meant to establish Kiev's status as the capital of Rus' and the dynasty's most precious possession. The Rurikids' collective rule over the family domain and the system of lateral inheritance practiced by the clan prompted Yaroslav's sons to found Christian monasteries in or around the city in order to demonstrate their sharing in common authority. Politics affected the city's landscape and its layout. Each of Yaroslav's elder sons had a chance to rule in Kiev and during the next period the Upper Town emerged as the sum of separate princes' settlements: the 'Town of Volodymyr,' the 'Town of Yaroslav,' the 'Town of Izyaslav,' and the 'Town of Svyatoslav.'

In contrast with the developments in the Upper Town, the structure of the Podil district experienced virtually no change during the eleventh century: its spatial dimensions remained practically the same; the district preserved the same streets and alleys as

<sup>24</sup> Сагайдак М. А. Давньокиївський Поділ. К., 1991. С. 22.

during the phase of its origin. The streets initially founded in the late ninth and the early tenth centuries preserved their directions. The boundaries of the properties did not change significantly. Contrasting with the Upper Town, natural factors like oscillations of the riverside line and movements of the streambeds had the greatest impact on the district's development.

As the pagan burial ground on Starokyivs'ka Hill (Cemetery I) stopped functioning, those who died in the old faith might have been buried in Cemetery II, close to the church of St. Nicholas on Ugors'ky descent. However, in the early eleventh century the first Christian cemetery appeared in Podil near the mouth of the stream which crossed the territory of Podil in an east-west direction, almost on the bank of the Pochaina River.<sup>25</sup>

By this time the Lower Town had reached its maximum size, approximately 180 hectares. The urban system was enriched with new streets, along which new properties emerged. The construction of stone structures must have been supplemented by the construction of timber churches. The remains of such a church were discovered during the excavations of 2003 not far from the plot of the initial building (3/7 Mezhyhirs'ka Str.) Apparently, these were private churches.

Scandinavian and North European early merchant towns in general provide a reliable parallel to Podil's initial layout as a settlement stretching along the waterfront. Hopefully, future excavations will reveal this model in more detail, allowing comparative studies with the towns of Viking-Age Sweden, such as Sigtuna. However, during the next phases of urban development, when the town of administrative type formed in the eleventh century, Byzantine influences prevailed.

Most of the Scandinavian imported objects in Kiev of the ninth through the early eleventh centuries have been excavated in the Podil district and the so-called "Flat part" (Ploska chastyna) adjacent to it on the northwestern side, but also come from the burial ground on Starokyivs'ka Hill with its "St. Michael's part" towering over the Podil district. To a lesser extent the Scandinavian materials have been traced on Zamkova Hill (Kyselivka). The North European artifacts found in the Podil district as well as on Zamkova Hill were originally connected with residential complexes. The situation in the "Upper Town" is quite different. Up to the 980s, Scandinavian fabrications were deposited here in the burials of Cemetery I. Afterwards, occasional artifacts of North European origin came from the prince's court and household complexes of the Kiev nobility. The number of Scandinavian items dating from the ninth to the eleventh century found in Kiev, according to the data of the recently compiled catalogue, amounts to 70 items from 64 sites. Judging from their archaeological context, they were integral components of urban material culture and were used by both men and women residing in Kiev. Scandinavian in type and style, these objects were not limited to the military sphere, but represent daily life of the town's residents. Hoards of

<sup>25</sup> Ibidem. P. 96.

Arabic coins suggest that the periods of their accumulation were also linked with Scandinavian activity.

Our discussion of the Kiev's origin suggests that the city was founded and initially set up as a merchant town of North European type. Its major function was trade, which determined its original layout and defined its development for the first hundred years. During this time the town proper was located on the low terrace overlooking the Pochaina River, while a vast burial ground occupied the plateau. Only later, with the massive construction efforts by Volodymyr and Yaroslav, did the city's center shift to the Upper Town. The initial stage of Kiev's history must be viewed in the context of urbanization processes in Viking-Age Northern Europe.

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