

The Mikulčice-Valy
Stronghold and Great Moravia

MV GM



Mikulčice-guide
Volume III

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The Mikulčice-Valy Stronghold
and Great Moravia

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Foreword

The major Great Moravian centre of Valy near Mikulčice was discovered relatively late - in 1954. Until then, this monument was hidden in a riparian forest and protected from unprofessional excavation due to regular flooding by the River Morava. Until the construction of a structure to regulate the river in 1971, periodical floods significantly limited both archaeological excavations and the management of the site. This has resulted in the construction of all modern-day buildings of the archaeological institute and the museum on higher ground for natural protection against floods, as with the most precious parts of the monument. Today, these buildings limit the scope of historic preservation and the presentation of the whole area.

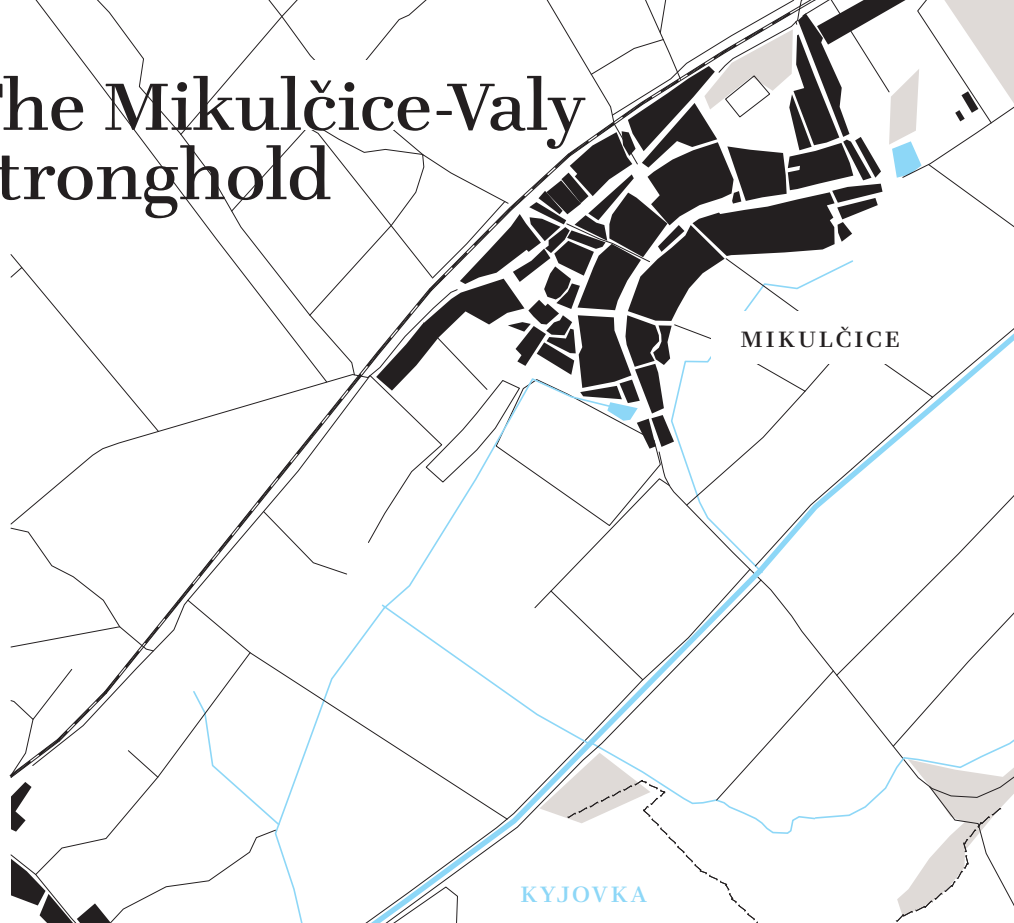
The site has been pronounced a national cultural monument under the name *Slavonic stronghold at Mikulčice* and is managed by the Masaryk Museum in Hodonín established by the South Moravian Region. The research into the stronghold and its hinterland is conducted by the Institute of Archaeology of the Czech Academy of Sciences, Brno, which has had a branch in Mikulčice since 1954. Archaeology lies behind all the knowledge of the early medieval agglomeration, which used to stand on islands in the River Morava and constitutes a border between the Czech and Slovak Republics. Unsuccessful nominations were made in 2007 and 2014 to UNESCO list the *Great Moravian monuments, the Slavonic stronghold in Mikulčice and the Church of St. Margaret of Antioch at Kopčany*. Today, the site administration follows the rules defined in the management plan for the two nominations and is preparing a final nomination. A long-term revitalisation of the entire complex is also currently under way. This includes the reconstruction of the external workplaces of the two currently active institutions: The Masaryk Museum in Hodonín and the Institute of Archaeology of the Czech Academy of Sciences in Brno. In 2019, the Czech and Slovak sides of the monument will be connected by a new footbridge.

The early medieval agglomeration has preserved its unique cultural, historical and scientific value, which is independent of current affairs. Despite the absence of historical reports, the results of the archaeological research clearly prove that Valy near Mikulčice was an early medieval central place associated with the ruling dynasty. Its historic importance, the picturesque landscape and the preservation of archaeological sources together with the knowledge they provide make Valy near Mikulčice an exceptional site - both locally and in the context of European cultural heritage and research.

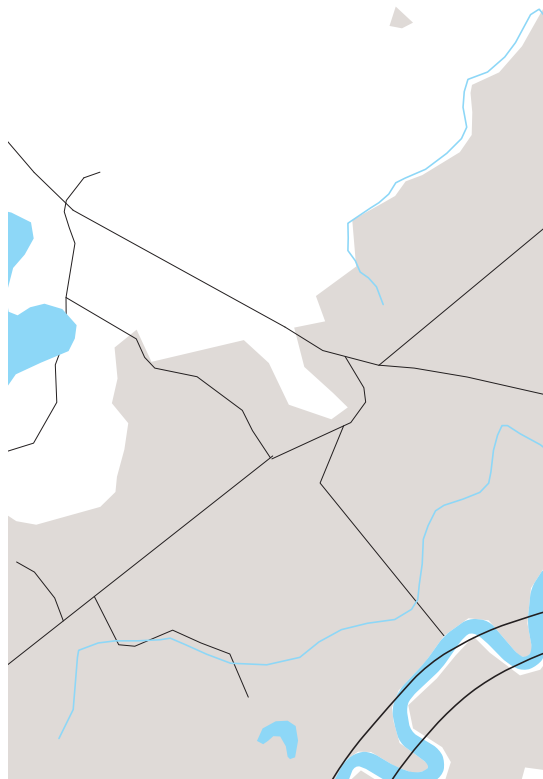
This guide presents the results of the archaeological research that has been conducted in the site for over sixty years by the Institute of Archaeology of the Czech Academy of Sciences in Brno.

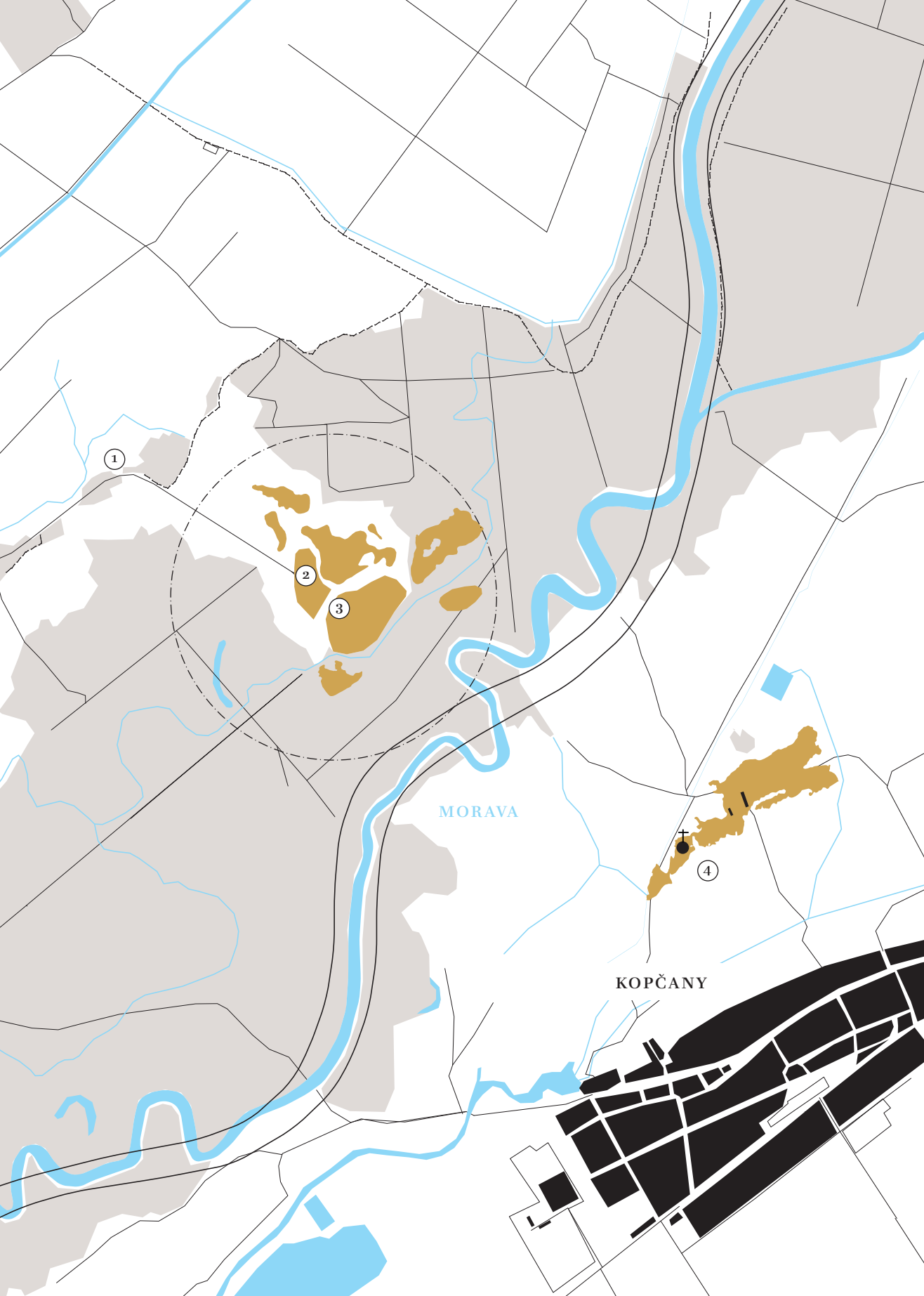
This book is the third volume in the edition of the Mikulčice guides. It is the English version of Volume 2, the publication entitled *Hradiště Mikulčice-Valy a Velká Morava* (Brno 2016), and is intended to be a more representative counterpart of the English version of the first volume of the Mikulčice guides entitled *The archaeology of Mikulčice* (Brno 2008). This new English guide is published with the support of the Czech Academy of Sciences within the framework of the research programme Strategy AV21 *Europe and State: Between Barbarism and Civilisation*.

The Mikulčice-Valy Stronghold



- ① new archaeological base in Mikulčice-Trapíkov
- ② visitor centre of the national cultural monument Slavonic stronghold at Mikulčice
- ③ old archaeological base in Mikulčice-Valy
- ④ Chapel of St. Margaret of Antioch near Kopčany
- early medieval agglomeration
- residential areas in Mikulčice and Kopčany
- bodies of water and watercourses
- riparian forest
- notional border between the extramural settlement and hinterland





1

2

3

4

MORAVA

KOPČANY

Stronghold

The Mikulčice Stronghold is situated in the final part of a meadow enclave that cuts into a continuous strip of riparian forest near what is now the regulated stream of the Morava River, approximately halfway between Mikulčice (CZ) and Kopčany (SK). In the 9th century, this was an extensive and varied residential agglomeration on what are now the banks of the River Morava. This is why it is sometimes referred to as the Mikulčice-Kopčany settlement agglomeration. The power centre itself, i.e. the fortified core of the agglomeration, the stronghold, lies in Valy in the territory of Mikulčice. The meadow with the stronghold contrasts with the “wall” of the riparian forest: this border between the bare and the wooded parts of the agglomeration runs exactly along the eastern rampart of the acropolis. Some of the settled parts of the extramural settlement to the north and east of the acropolis are thus located in the forest vegetation.

The site has the established name of Mikulčice-Valy or the Mikulčice-Valy Stronghold. Originally, the term Valy denoted the elevated part of the acropolis, which certainly constitutes the most historic part of the whole agglomeration. What was originally a geographical name is now used to identify the whole site.

Nowadays, unified terminology is used for the research and presentation purposes of the site that uses both functional and geographical names. Of course, they are modern, auxiliary names that do not necessarily match the original structure and function of the areas as understood by the inhabitants of the 9th-century agglomeration. The fortified core of the agglomeration consists of two structures: the acropolis and the outer bailey. These were surrounded by the extramural settlement, also called the suburbium, which in turn, was surrounded by the hinterland; their economic importance is partially overlapped.

The above functional terminology refers to the high phase of the settlement agglomeration, which occurred some time at the end of the 9th century. This phase was preceded by a relatively long continuous development of the settlement whose origins are dated to the 8th century. At that time, the settled area was substantially smaller and the central settlement area is hypothesised to have been only lightly fortified or simply enclosed. The latest research shows that the strong fortification, which is one of the characteristic traits of the Great Moravian power centre, was built in the high or late 9th century.

[1] Orthophotomap of the Mikulčice Stronghold (in 2009).

[2] Orthophotomap of the Mikulčice Stronghold with plan of the settlement areas.



outline of the silted up river branches fortification settled areas in the extramural settlement

Acropolis

The acropolis refers to the central fortified formation of the stronghold and constitutes a palace, several churches and the main burial sites. The whole 7.7 ha area is delimited by a highly-visible rampart. Most of the archaeologically documented 9th-century stone constructions are situated in the elevated northern part of the acropolis, traditionally called Valy (Ramparts). This part of the acropolis occupies an area of 4.8 ha and is formed by the so-called *hrúd*, a sandy dune that significantly rises above the levelled relief of the Mikulčice alluvial plain. On the contrary, the lower part of the acropolis known as Dolní Valy (Lower Ramparts), which takes up an area of 2.9 ha, is one of the lowest areas of the agglomeration. These two parts are jointly walled off by a still visible circumferential acropolis rampart, a remainder of the original Great Moravian earth construction enclosed by a back wooden wall and a front stone wall.

The acropolis is sometimes called “the princely castle”. This is where the most important stone buildings - churches, the palace and other residential buildings - were found. The inner area of the acropolis was divided by ditches, palisades and fences into smaller areas - particularly sacred areas around churches and cemeteries, courts and other formations whose area and exact function has not been specified. This was the residential area of the ruling elite - the

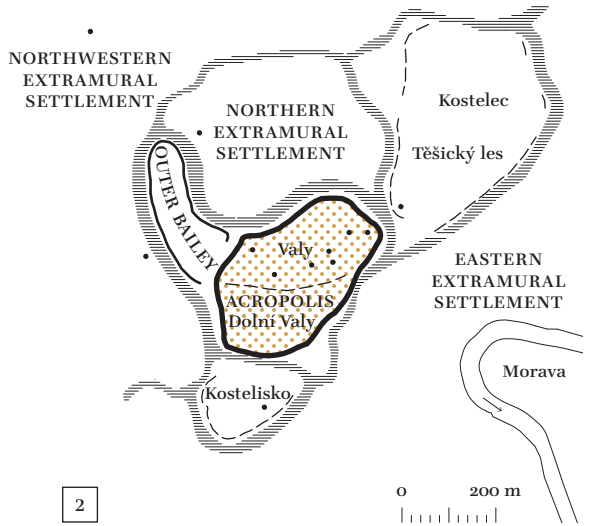
families of the prince and the aristocracy, the clergy, members of the military retinue, the craftsmen working for the princely “court” - and of course, the servant population. The acropolis hosted workshops for metal-casters, jewellers, smiths and probably glassmakers and other artisans. The basic types of houses were wooden single-floor log houses with earthen, sometimes even mortar, floors. The remains of such buildings were mainly preserved in the peripheral areas of the acropolis; the remains in the elevated central part were disrupted by natural erosion and ploughing, which took place there before the beginning of archaeological excavations in 1954.

The basic urban element of the acropolis was the main eastwest road that connected the main gates in the west and the northeast. The most important buildings - churches, or more precisely their sacred areas with burial sites, the palace area, and other residential and other buildings stood along this road.

The area of the acropolis has recently undergone revitalisation, the result of which is a unified presentation of the churches for the purpose of monument preservation, a unified finishing of the roads and the information system. The only distracting element is the old archaeological base, which is awaiting reconstruction into an “archaeological mission”.



- fortification of the acropolis
- fortification of the outer bailey
- - - significant terrain boundaries
- ▨ silted up river branches
- churches
- area of acropolis



[1] Aerial photograph of the north part of the acropolis with newly reconstructed plans of the palace, Churches 3 and 4, and of the ongoing revision excavation of the fortification (1) and Church 5 (2; in 2012).

[2] Layout of the Mikulčice Stronghold with the area of acropolis marked in yellow.

Outer bailey

The elongated tongue-shaped outer bailey joined the west side of the acropolis and occupied an area of 2.4 ha. Its fortification was much lighter than the rampart around the acropolis; this is why it did not leave any visible traces in the current landscape - it was archaeological research that proved its existence. The outer bailey was situated on a mild terrain elevation formed by older flood loams clays, which was an in-river island surrounded by a meander in the 9th century.

The outer bailey was a densely built-up and inhabited residential area. No churches, cemeteries or proof of intensive crafts and manufacturing were found here. There is no equivalent of such a pure form of a residential area from among the early medieval strongholds in the Czech Republic and the nearby vicinity. However, the question of who inhabited the outer bailey and what was its primary purpose still remains unanswered. One interpretation, purported 50 years ago by Josef Poulík, says it was the seat of the duke's retinue. Since then, many other hypotheses have been put forward although none of them has been proven. Following the latest excavations in this area in connection with the reconstruction of the visitor centre, new facts have begun to emerge:

the archaeological expression is not the same across the whole area of the outer bailey - different departments serving various groups of inhabitants and purposes are likely to have existed there.

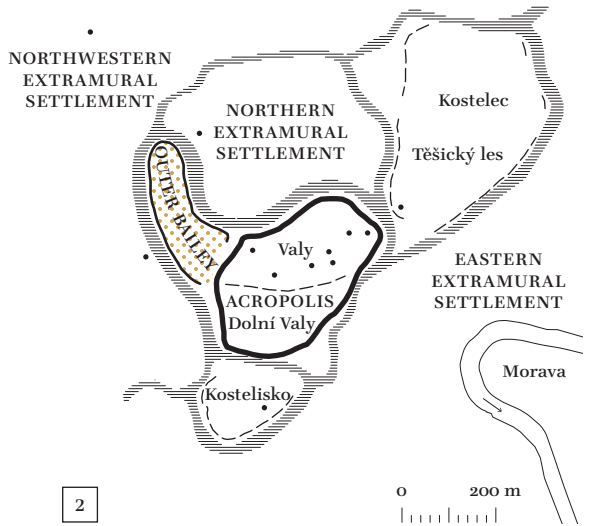
One element is common for the whole area of the outer bailey - the regularly and densely built-up area of log houses on a sandy-clayey floor backfill. This regular (square or rectangular) flooring identifies the disposition of the original wooden houses whose above-ground parts, with a few exceptions, were not preserved at all. The development of the outer bailey settlement was unusually dynamic: multiple layers of floor backfills attest the repeated renewal and reconstruction of the houses in fast succession.

From the point of view of monument preservation and visual presentation, the outer bailey is a weak spot in the Mikulčice archaeological site. In 2014, the visitor centre of the museum was reconstructed and fitted with an observation tower, while the rest of the buildings - together with the large asphalt car park - continue to disturb the archaeologically and historically precious parts of the fortified core of the agglomeration.



1

- fortification of the acropolis
- fortification of the outer bailey
- - - significant terrain boundaries
- ▨ silted up river branches
- churches
- area of outer bailey



2

[1] Aerial photograph of the acropolis (front) and the outer bailey (1) from the east. The area of the large car park is adjacent to the original museum building (as of 2012) that has undergone reconstruction and was fitted with an observation tower in 2014.

[2] Layout of the Mikulčice Stronghold with the area of outer bailey marked in yellow.

Extramural settlement

The extramural settlement (suburbium) denotes the area surrounding the fortified core of the Mikulčice agglomeration and primarily consists of several settlement areas, five churches with cemeteries, and other simple burial sites. The oldest settlement was excavated on the two sand dunes to the northeast and the south of the acropolis, locally denoted as Těšický les (Těšice Forest) and Kostelisko. In the 9th century, these sites - nowadays forested - were probably individual river islands whose elevation offered good settlement conditions; such areas were also frequently used as burial grounds.

The acropolis and outer bailey were divided from the extramural settlement by a ring of river branches that have since been silted up. These channels also used to divide the terrain further away from the stronghold and formed borders with the other isles and settlement areas. This is particularly true for the lower parts of the suburbium where settlement was founded on a base of older flood sediments. It is typical that these positions with less favourable living conditions were mainly settled in the high and late phases of the Great Moravian period - the greatest boom of the power centre. The largest such settlement had 5 ha and was in the northern extramural settlement; more settled areas were in its

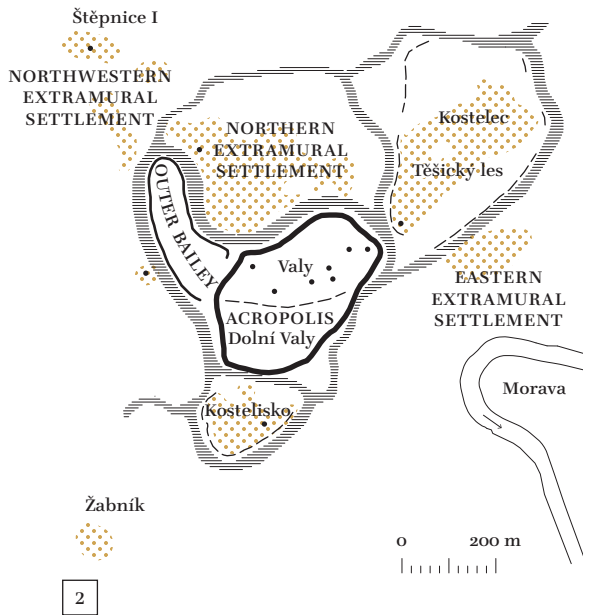
northwestern and eastern parts. The overall map of the settlement shows that the areas close to the fortified core were taken first. The settlement spread to more remote places only when they were heightened and thus naturally advantageous (sand dunes). One such example is the settlement area near Church 7 in Štěpnice I, 300 m northwest from the outer bailey, and a small, now extinct, Žabník dune, 300 m southwest from the acropolis.

The extramural settlement is where the dwellings of craftsmen, farmers and other members of the population that ensured the economic operation of the princely court are usually found. The largest proof of production - smithery and metal casting - was unearthed in the northern extramural settlement. The churches in the Mikulčice suburbium are considered to be part of the princely courts - residential and economic formations founded by the elite in the vicinity of the princely court; however, no such formation has been archaeologically researched in its entirety. The extramural settlement saw intensive burying, particularly on top of the sand dunes. There were both simple burial grounds and cemeteries belonging to churches and the graves contained both poor and luxurious grave goods.



1

-  fortification of the acropolis
-  fortification of the outer bailey
-  significant terrain boundaries
-  silted up river branches
-  churches
-  settlement areas



2

1 Aerial photograph of the extramural settlement from the northwest. Front: Church 7 (1), centre: the stronghold and the northern extramural settlement on its left (2), back: Chapel of St.Margaret near Kopčany (3), further back: slopes of the White Carpathians (as of 2011).

2 Layout of the Mikulčice Stronghold with the settlement areas marked in yellow.

Hinterland

The hinterland of the Mikulčice Stronghold refers to the area adjacent to the extramural settlement strip. Based on current research convention, this is a circuit surrounding the stronghold with a diameter reaching from less than 1 km to approximately 10 km. This circuit also defines the closest area of interest to the Mikulčice archaeological research. In addition to the geographically defined hinterland, there is also the concept of the economic hinterland, which is the area that supported the operation of the stronghold. We assume that this included the supply of agricultural products and various services, as well as military support. In this sense, the economic function was fulfilled by the area of the extramural settlement and significantly, by more distant villages. After all, the servant population of the stronghold had to participate in the operation of the centre.

The distribution of food and other basic needs for 1,000-2,000 people, which is a rough estimate of the population of the Mikulčice agglomerations in the late 9th century, had to be provided by a large number of people with a well-organised system. How did this organisation work? What parts of the fortified core, the extramural settlement and the hinterland were involved in it, and to what extent? These are the questions addressed

by the current research in Mikulčice. The questions concerning supplying the centre inhabitants with food and other vital resources are examined using subsistence strategy models. These are particularly used by the archaeobotanists and archaeozoologists who process the finds of plant macroremains and animal bones unearthed in Mikulčice.

The best-explored settlement in the hinterland is a 9th-century village discovered where the new Mikulčice-Trapíkov archaeological base is - about 1 km from the acropolis. During preliminary large-scale excavations between 2010 and 2011, a rural settlement with several sunken dwellings, so-called pithouses, agricultural objects and graves was discovered. This settlement formed part of the economic hinterland of the stronghold and differed from the centre both in terms of constructions and material culture.

A geographical counterpart of the Trapíkov settlement was the one proven in the vicinity of the Chapel of St. Margaret in Kopčany on the Slovak side of the agglomeration, which is 1.7 km from the acropolis (see the figure on the cover page of the chapter The Mikulčice-Valy Stronghold, p. 6-7). Both the settlements in the hinterland of the stronghold showed similar characteristics.



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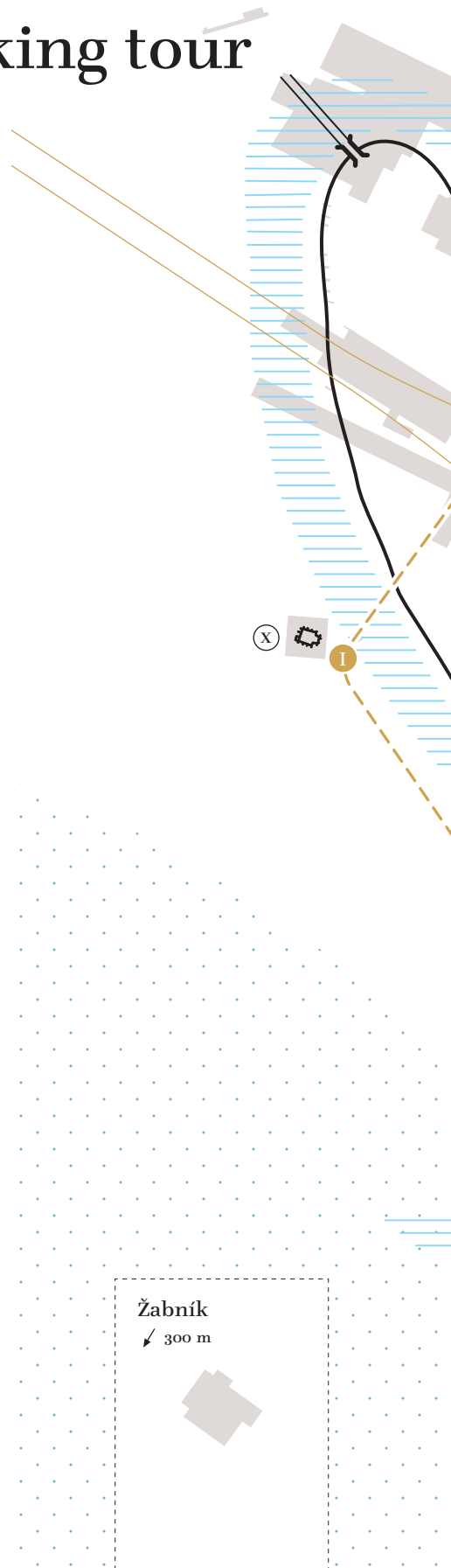
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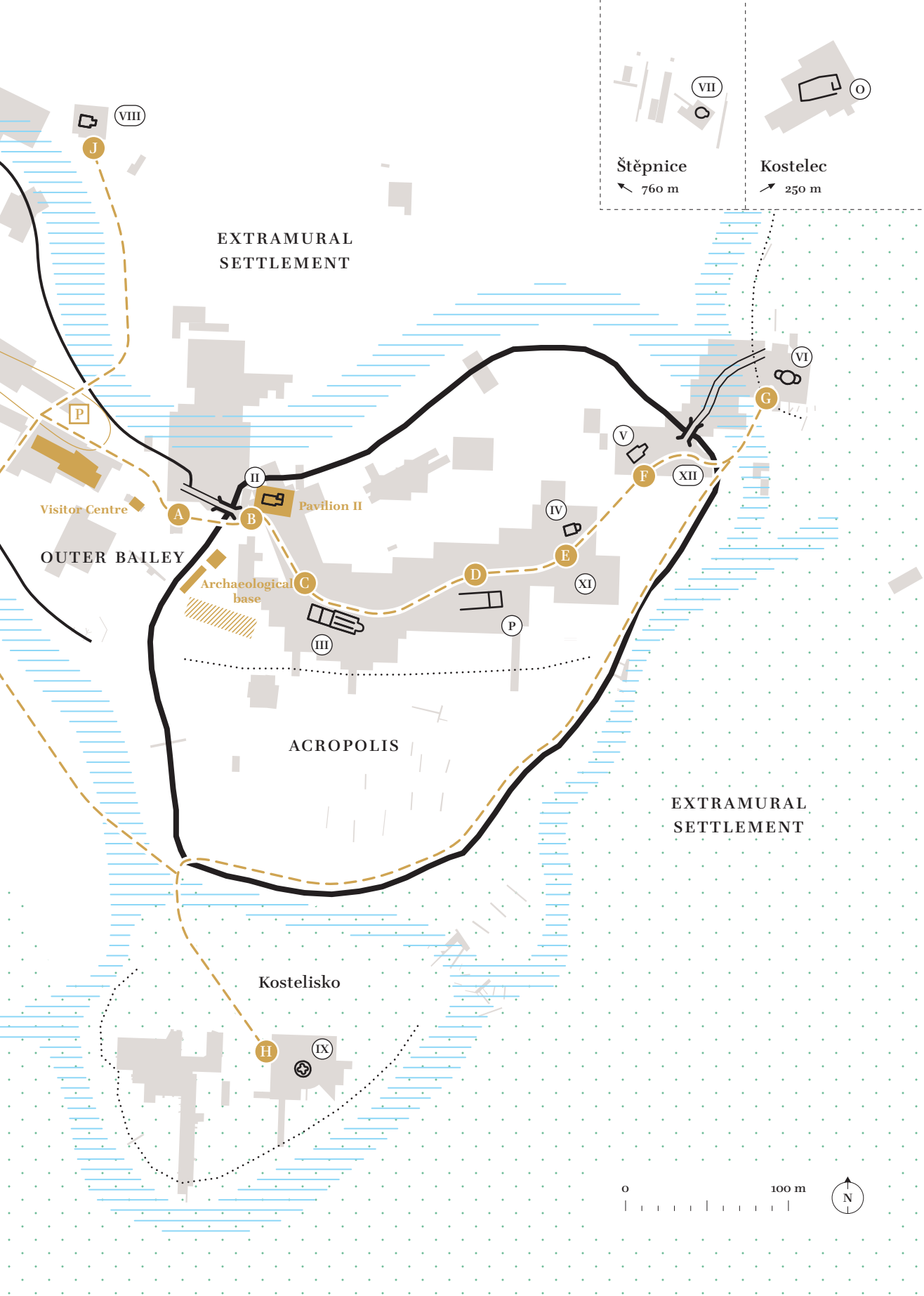
1 Aerial photograph of the Mikulčice Stronghold with the Trapikov site in the background (1); view from the east (as of 2012).

2 Mikulčice-Trapikov, the plan of the rural settlements excavated in 2010/2011 at the site of the new archaeological base.

2 Sightseeing walking tour

-  (IV) churches
-  (P) palace
-  (O) wooden architectural feature
-  fortification of the acropolis
-  fortification of the outer bailey
-  significant terrain boundaries
-  excavated areas
-  silted up river branches
-  derelict gateways and bridges
-  stops on the visitor route
-  visitor route
-  modern buildings
-  planned historical garden
-  road and car park
-  riparian forest





EXTRAMURAL
SETTLEMENT

Visitor Centre

Pavilion II

Archaeological
base

OUTER BAILEY

ACROPOLIS

EXTRAMURAL
SETTLEMENT

Kostelisko

Štěpnice
↖ 760 m

Kostelec
↗ 250 m

0 100 m
N

The entrance to the acropolis

The sightseeing route around the Mikulčice Stronghold starts where the main access road enters the elevated acropolis of the Great Moravian stronghold. This is where the western gateway to the acropolis stood in the 9th century. Before anyone could pass through the gate, they had to cross the wooden bridge that connected the outer bailey to the acropolis and ran across the moat that divided the two fortified areas. On the northern side, the moat joined the bed of the River Morava, which nowadays is completely filled in. A line of wooden caissons filled with stones forms a barrier between the northern mouth of the moat and the river. The purpose of this unusual construction was to secure this strategically sensitive place with regards to defence and against any adverse effects of the water stream. The historical riverbed of Morava was 3 to 4 m below the current surface.

The preservation of wooden constructions and other organic materials in former riverbeds in Mikulčice is absolutely unique in the climate and pedological conditions of the Moravian archaeological sites. This is due to the depositing of these finds below the level of the underground water that conserved the wooden constructions, artefacts, and archaeobotanical material. Plant macroremains found in the riverbeds are vital materials for the reconstruction of the natural environment in 9th century Mikulčice and for the knowledge of the level of the then agriculture. A number of fruit and vegetable species grew there, such as peach, grapes, cucumbers, and parsnips, which constitute the oldest proof of this kind on the territory.

[1] A barrier at the bottom of the riverbed: a line of wooden caissons filled with stones. The irregular rows of piles on the right of this construction probably bore a wooden platform that might have served as a protected access to water for the stronghold inhabitants and the landing of boats.

[2] Excavation in the area of the northern mouth of the moat between the outer bailey and the acropolis (excavated area K 1972-75).



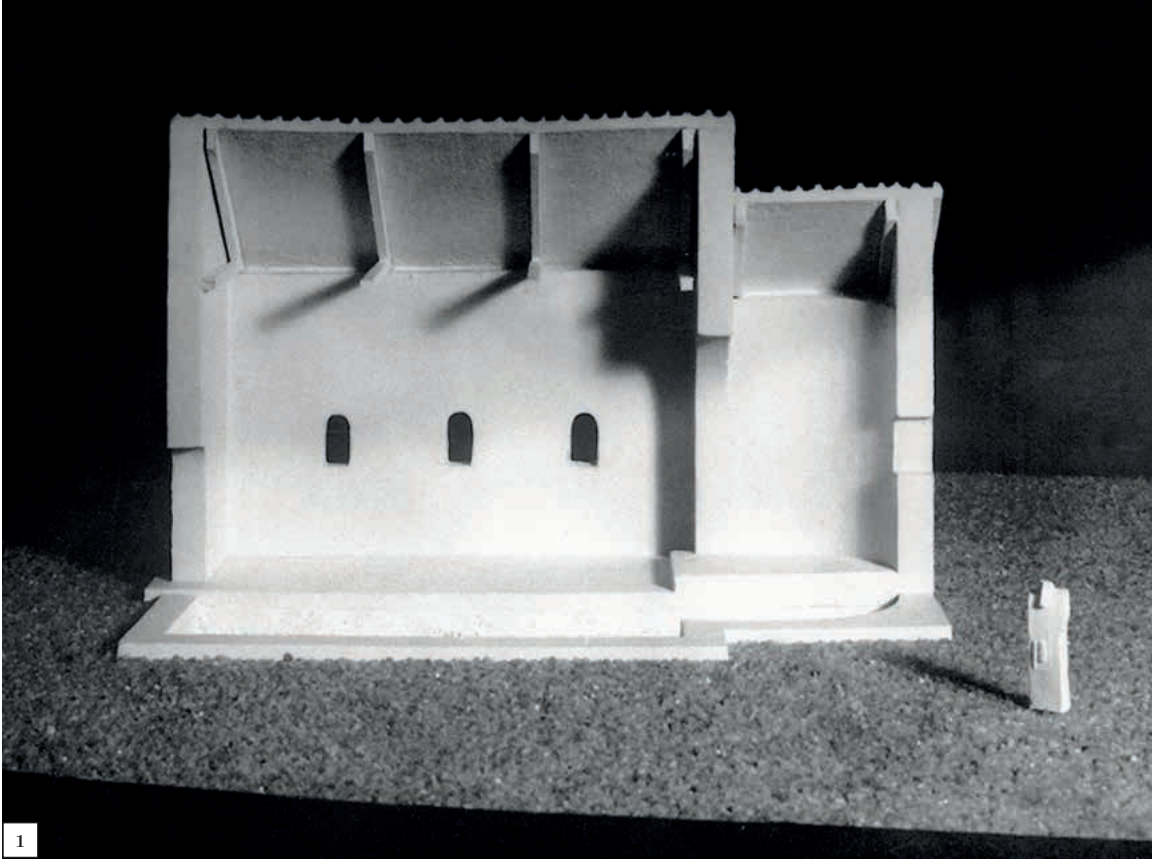
Church 2

Upon entering the area of the acropolis, there is a building that protects the conserved foundations of Mikulčice Church 2. This is where excavations were started by Josef Poulík in 1954. A total of seven sacred buildings were found on the acropolis. The churches denoted with numbers 2, 3, 4, and 5 are clearly proven by their plans. On the other hand, the sparse building remains that were interpreted as the remains of Church 1 at the beginning of the excavations of the Mikulčice Stronghold cannot be considered to be convincing. Churches 11 and 12, represented by the heavily disturbed remains of either a stone or a combined construction, must also be considered hypothetical; the church function of these two buildings is supported by the localisation of the destruction - in the middle of separate burial grounds.

Church 2 used to stand at the bend of a rampart near the acropolis gateway. Churches 2 and 3 are some of the oldest sacred buildings in Mikulčice and have the most complicated construction. In the case of Church 2, three main construction phases are discerned: a wooden building with a cast mortar floor (1), a stone single-nave building with a right-angle choir (2) at whose northern side another room, probably a burial chamber (3), was added later. The significance of the building is attested by the presence of important burials under the church. Grave 265 below the cast mortar floor, which contained a sword and spurs, attest to the probable origin of the church in the first half of the 9th century. Child grave 2032, found during the 2008 revision excavations of the church under the southwest corner and containing minor golden hollow spherical buttons, in Czech language called *gombíky*, dates the second construction phase to the late 9th century.

[1] Reconstruction of the later phase of Church 2 after J. Pošmourný. The outer dimensions of the construction are approximately 13 × 8.5 m.

[2] The excavation area with the remains of Church 2 in 1956. Three construction phases of the building are numbered 1-3. The stone layer in front belongs to Church 1 whose existence is contested.



In the area of Church 2, around two hundred people were buried inside and around the building. Interior graves 265 and 2032 mentioned earlier probably belonged to prominent individuals - the Mojmirid Moravian rulers. There is an analogy between the cross-shaped mark forged into the blade of a sword found in grave 265 and the sword from grave 580 in the nave of Church 3. Both of these weapons fitted with forged crosses are considered attributes of ruling power and the corresponding graves considered as potential dynastic burials. In addition to the graves containing swords (No. 90, 265 and 280), the most important individuals were buried in graves with sumptuous belt fittings (grave 100), gilded bronze spurs with human masks (grave 44) and golden jewellery. A number of other graves contained silver or gilded decorations - most often hollow spherical buttons. Spurs were frequently found in the graves.

During the excavations of Church 2 in the 1950s, the adjoining part of the fortifications of the acropolis was examined. The results of the research were readily published by J. Poulík as early as 1957. Due to the revision excavations in 2012, an explanation of the presence of the two stone walls in the face of the rampart was possible: they were not part of two phases of the fortification system, as was initially assumed, but part of a single construction. The outer stone construction projected into the riverbed was a massive barrier that expanded the narrow space of the cemetery, which also provided a solid base for the construction of the wood-and-earth rampart with the stone frontal mantle (read more about the rampart construction on p. 70-71).

The swords with cross-shaped mark forged into the blade found in the two most important graves in Mikulčice could be attributed to the ruling power.



3 Plan of the area surrounding Church 2 excavated between 1954 and 1959.

4 Rampart of the acropolis excavated in 1956. The bottom barrier, originally held by wooden piles in the front, and recessed remains of the stone frontal wall of the rampart itself on top of it.

5 Elite grave 265 discovered under the cast mortar floor of the oldest construction phase of the church.

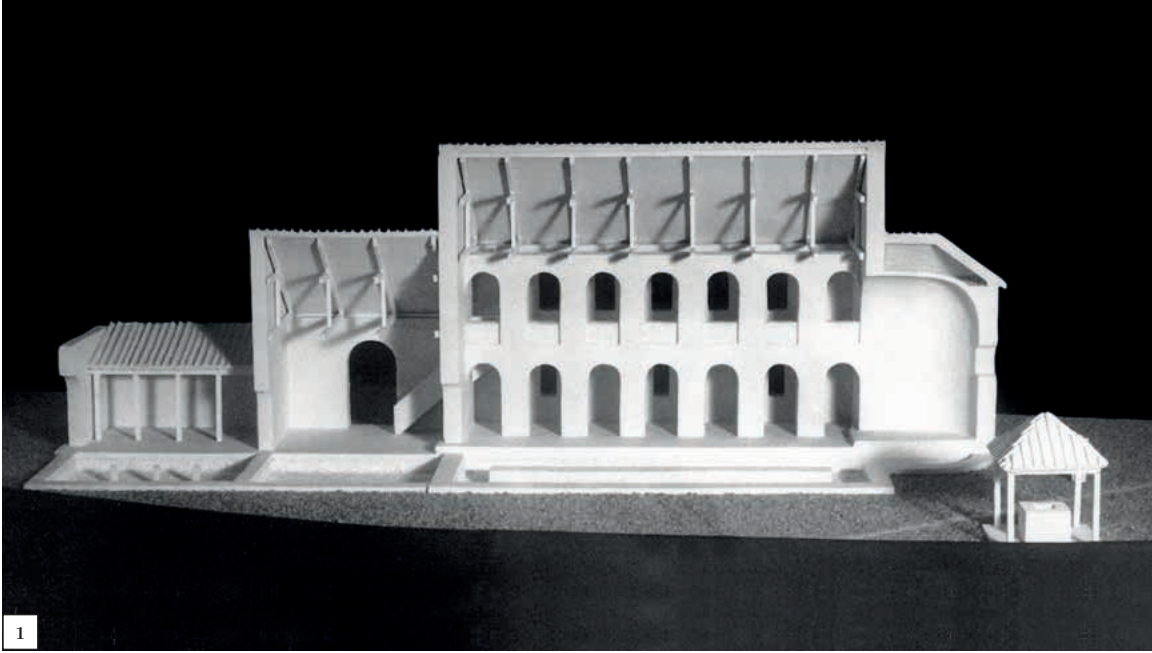
Church 3 - the basilica

Two buildings situated at the highest point of the acropolis represent the ducal domain of Great Moravian Mikulčice: the basilica and the palace.

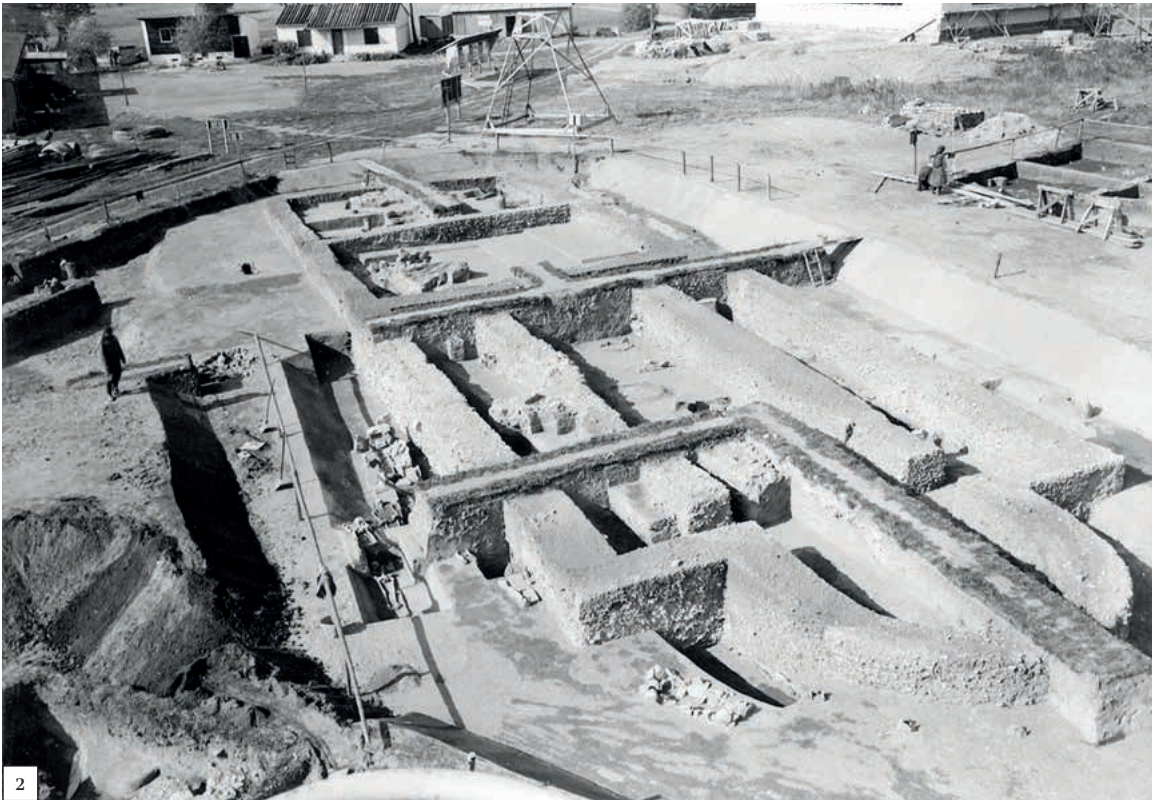
The only sacred building on the site as well as the largest Great Moravian church excavated to date, the basilica is the third church of Mikulčice. It was discovered in 1956 and researched over the following two years, with excavations on the outskirts of the burial ground lasting until as late as the 1960s and 1970s. The 2011/2012 revision excavations of the church revealed some new and surprising findings.

The three-nave building with an apse on the west side was given two additions: an atrium and a narthex. Based on the reconstruction of architect Josef Pošmourný, an expert in Great Moravian architecture, the building was originally considered a “Hellenistic basilica”, featuring tribunes above both its side naves. However, according to the current consensus, it was in fact a classic basilica with lower side naves and a main nave illuminated by windows in the walls of the side naves. The basilica is assumed to have been a bishopric church. Serving a sizeable community of priests, a church school probably existed there, too. Part of the complex consisted of partially preserved wooden buildings in the cemetery area, while a stone well, incorrectly assumed to have been a baptistery, was excavated in one of the buildings.

The basilica was the most monumental sacred building of Great Moravia. It probably represented the power of the Mojmirid ruling dynasty.



1



2

1 Model of Church 3 in the form of a “Hellenistic Basilica”, after J. Pošmourný.

2 Excavation of the church in 1957. The dimensions of the building were quite impressive for its time and place (35 × 11 m).

Church 3 has since undergone further architectural development, with a narthex and atrium later added to the three-aisled basilica. The foundation date of the building has yet to be assigned precisely, but the mid-9th century is assumed.

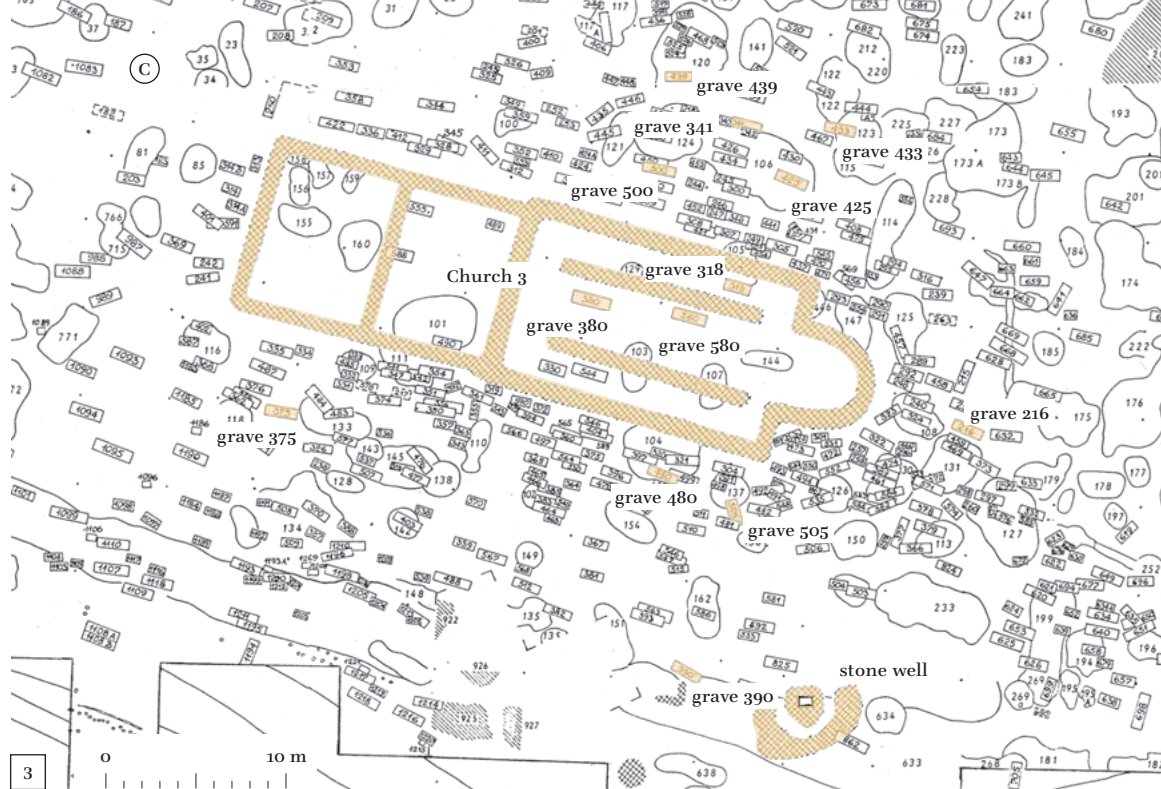
The graves excavated inside Church 3 attest to its unique importance. In the three aisles and narthex, several tombs belonging to prominent members of the Great Moravian ruling class were found.

These dead were buried in coffins with iron fittings. Burial chambers were covered with a mortar layer painted red. Unfortunately, due to unfavourable conditions, the bone remains in these tombs have been poorly preserved, resulting in a lack of detailed demographic data on the buried individuals.

The most privileged place inside the church and in Mikulčice generally was occupied by two male graves (numbered 580 and 380), each equipped with rich goods. Grave 580 contained a sword, an axe, a dagger (with a sumptuously decorated handle), decorative belt fittings, a golden hollow spherical button, a bucket and other items. Artistically valuable fittings were discovered in grave 380. They included calf ties, a golden hollow spherical button, a golden plate (which was possibly used as a Charon's obol) and an all-metal bucket with a bird figure on the lid.

In a female grave (no. 318) in the side nave, luxurious grave goods consisting of three lantern-shaped hollow spherical buttons with glass cabochons and three gold grape-shaped earrings were found.

The five graves found inside of the church belonged to the members of the ruling class of Great Moravia.



[3] Plan of the excavated area surrounding Church 3 and its cemetery.

[4] Mortar lid of a tomb in the main nave of the church.

[5] Grave 580 in an honourable position in the main nave of the church in front of what is assumed to be an altar.

Outside the church, a burial ground containing around 550 graves was excavated. The density and overlapping of the graves point to intensive burial activity. The items unearthed included countless remains of stone and wooden grave linings, iron fittings for wooden coffins and, notably, the remains of tombs in masonry. At the necropolis, a considerable number of rich graves belonging to the ruling elite were found. They contained gold jewellery (26 graves), swords (6 graves), sumptuous sets of belt fittings, precious textiles, and artefacts of foreign provenance. Many of the basilica finds were art and craft masterpieces of the time. One of the most remarkable finds was from grave 505, which contained a pair of two-layered hollow spherical buttons with soldered-on bridges and granulation-style decoration. Many of the beautiful jewels found were evidently made with considerable finesse and skill.

Male graves frequently contained weaponry and equestrian equipment: apart from swords, there were axes (14 graves) and, importantly, spurs (59 graves). There was a prevalence of earrings, mostly made of silver and gold, in female graves.

Further finds included artefacts featuring Christian symbolism, such as small crosses and fittings in the form of a miniature codex. Only one Mikulčice grave (no. 480) contained a coin: a golden Byzantine solidus of Michael III dated to 856–866. The most well-known finds from the burial site near the basilica are the sets of sumptuous belt fittings, consisting of strap ends, buckles, and bird-shaped clasps. Some of the strap ends are decorated with a praying figure known as an “orant”, a motif that, although occurring only three times here, is typical for Mikulčice.

The burial site next to the basilica is the largest and richest necropolis in Mikulčice.



[6] Grave 500 of a member of the elite with warrior equipment. The coffin was reinforced by iron angle fittings and supported by flat stones.

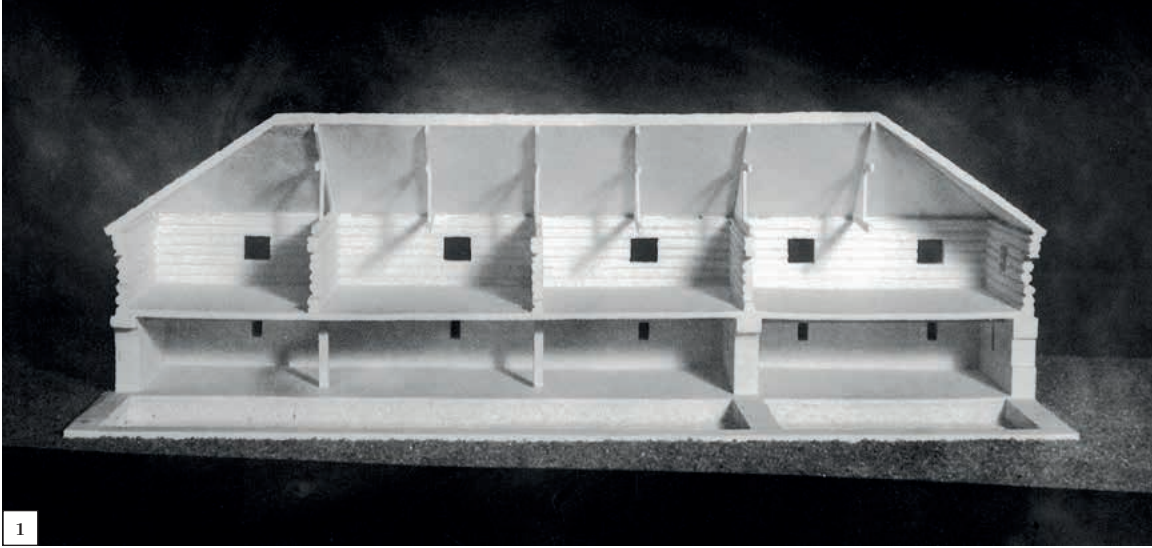
[7] Stone well located 15 m south of the apse that served as a water source for the local religious community. The earlier hypothesis that it was a baptistery is improbable.

Palace

The only large masonry building in Mikulčice lacking the attributes of a sacred building is this rectangular construction, 26 × 10 m in dimension. First discovered in 1958 and revised in 2010, it stood at the highest part of the acropolis, roughly at its centre and close to the main road. It was most likely a palace that served as the residence and official premises of the duke. Unfortunately, due to erosion and tillage, only the remains of foundation masonry have been preserved, which is why very little can be inferred from its construction and equipment. What is certain, though, is that the stone ground floor had two parts. An earlier excavation revealed remains of a mortar floor, a stone fireplace, and stakes with stone panelling. The western outside wall was not preserved and probably destroyed to accommodate later buildings constructed between the 11th and 13th centuries. The wooden structure is an idealised reconstruction, albeit only hypothetical in design.

One of the major indications that a courtly milieu resided in this Great Moravian centre is the presence of a number of elite graves. In particular, seventeen burials containing swords stand out. Three of them – graves 715, 717 and 723 – were discovered as part of a group containing other richly equipped graves and simply furnished burials to the northwest of the palace. Although it cannot be ruled out that they belonged to an unpreserved wooden church, it is more likely that the dead were deliberately buried outside in cemeteries that were established for particular religious or social reasons.

The palace was situated in the centre of the acropolis at the highest point of the agglomeration.



[1] Hypothetical reconstruction of the palace after J. Pošmourný. The flat ceiling, probably supported with wooden columns, was covering two-part masonry ground floor.

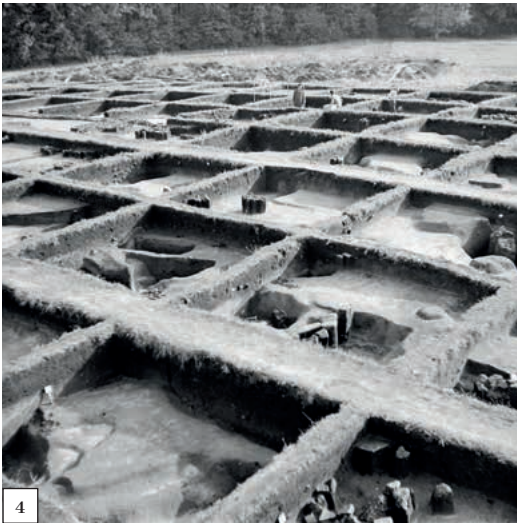
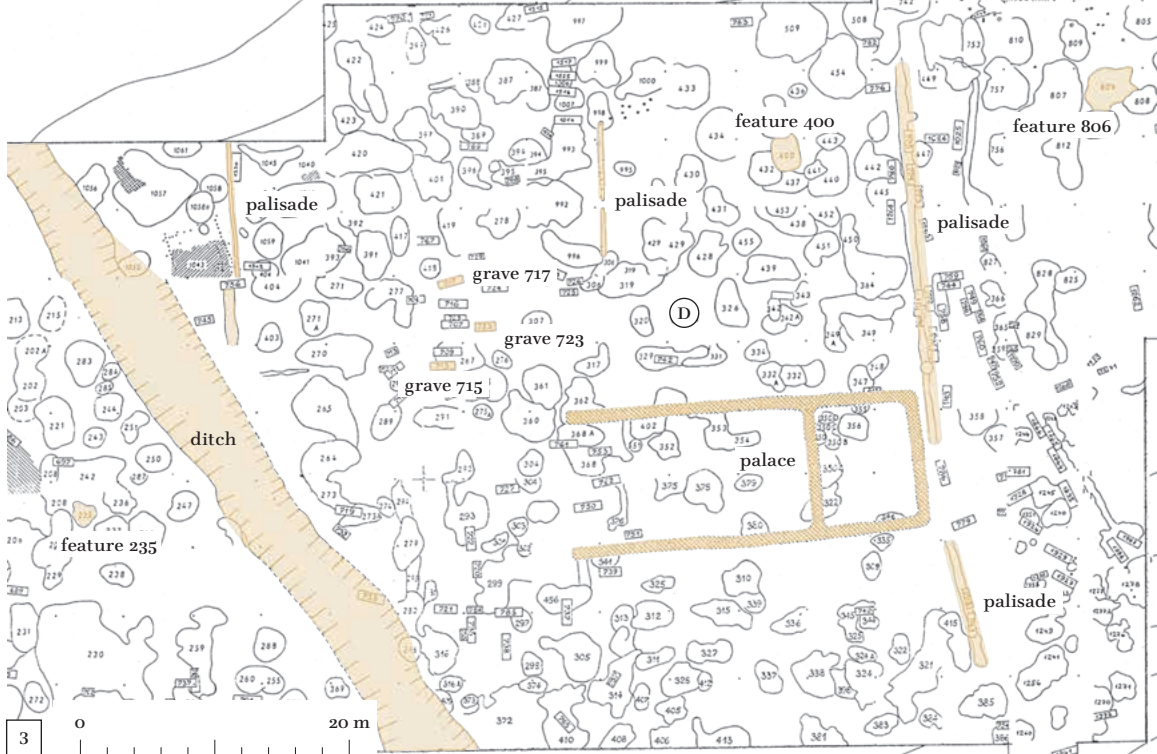
[2] Large-scale excavation of the acropolis with floorplan of the palace. The regular 5×5 m grid division of the site surface served for the observation and documentation of stratigraphy relations.

The inner structure of the acropolis reflects the specific function of this complex. The archaeological evidence of ditches and palisades would seem to suggest that there were a number of separate church or cemetery precincts, yards and other areas inside the fortification. Their arrangement would have corresponded with the main eastwest stronghold communication route that connected the west and northeast gates of the acropolis.

The built-up area at the acropolis underwent a major transformation during the pre-Great Moravian and Great Moravian periods. A large number of dug-out features, mostly (storage or waste) pits, which literally fill the acropolis, date to a settlement that preceded the establishment of the churches, the extensive cemeteries and the palace. Pit 400, which was excavated about 20 m to the north of the palace, contained an exceptional find: a large set of clay figures assumed to have been part of a storage container of votive symbols or offerings.

Evidence of specialised production sectors, particularly those that specifically fulfilled the demands of the princely court, such as smitheries and fine metalworking (including jewellery making) shops were concentrated at the acropolis, while metalworker production facilities were found in the wider vicinity of the palace (features 235 and 806).

The only large masonry construction in Mikulčice without sacred features is the building known as the palace.



3 Plan of the central part of the acropolis with the palace and the elements dividing the settlement area - ditch and palisades.

4 Pits dug in the subsoil belong to the buildings preceding the foundation of the palace and the churches at the acropolis.

5 Grave 723, burial of an elite member with a sword.

Church 4

Observed from the palace, the position of Church 4 is antipolar to the basilica. Built on the northeast tip of the palace hill, which constitutes a slight raise in the central part of the acropolis, it is a simple one-nave church with a semi-circular apse surrounded by a modestly equipped cemetery. Church 4 is particularly notable for its interior graves and frescoes. Those who discovered the church initially designated it a mausoleum, i.e. a monument specifically built to house the remains of an important person. However, the revision excavations of the church carried out in 2012 refuted this interpretation. No evidence was found for the presence of what was originally considered two stone tombs, which would have occupied most of the nave. However, the revision did confirm that an individual had been buried in the nave. That grave was completely disturbed, probably due to secondary dismantling of the stone structures after the demise of the settlement. The only bones preserved were of an adult male scattered in the north part of the nave. Interpreting the archaeological contexts for the interior of Church 4 were immensely complicated following the collapse of the church foundations and grave in the nave into the loose backfill of a large pit that predates the church.

Together with Churches 2 and 3, Church 4 is the third sacred building in Mikulčice with evidence of burials inside the church's main nave.



1



2

1 Reconstruction of Church 4 by J. Pošmurný.
The single-nave building is 11 × 8 m large.

2 Excavation of Church 4 in 1958.

Featuring an almost square nave and semi-circular apse, the building stood at the northern tip of a site delimited by a palisade, the length and precise function of which are unknown. Around a hundred individuals were buried at the cemetery surrounding Church 4. Compared to the burial sites near other churches in the acropolis, graves containing weapons and vessels were notable by their absence. The grave pits were very basic. However, the relatively simple grave goods do not necessarily reflect the lower social status of those buried, but rather represent a more advanced stage of Christian burial rite as well as possible other influences.

The interior of Church 4 was richly decorated with colour frescoes, and numerous finds of painted plaster fragments recall those found in Church 6.

In the 9th century, another sacred building (Church 11) probably stood 30 m to the south of Church 4. Construction fragments found around the centre of an independent cemetery are thought to be the remains of this church. In contrast to the graves found near Church 4, this necropolis was characterised by richer grave goods and wood-lined grave pits. Isolated finds consisted of gilded jewellery in the form of earrings and hollow spherical buttons, while one of the graves contained a sword.

3 Plan of the excavated area surrounding Church 4 and hypothetical Church 11.

4 Excavations in the area of hypothetical Church 11. Only masonry blocks, mortar fragments and destruction layers with stones and mortar were preserved from the hypothetical building.

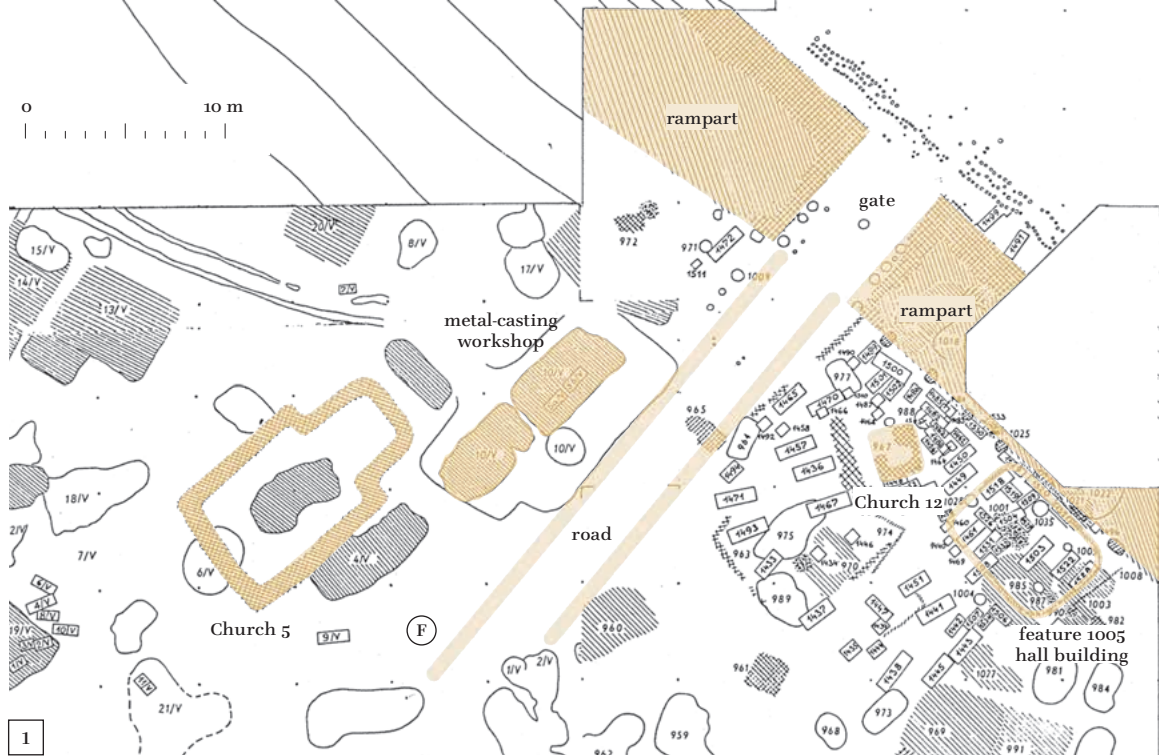


Church 5 and the northeast gate of the acropolis

The stone construction of Church 5 stood in the vicinity of the northeast gate to the acropolis. Its unusual plan, characterised by a narrowing trapezoidal east end and the absence of any burial ground around it, originally raised doubts over its function and dating. However, the revision excavation carried out in 2012 confirmed that it used to be a simple church building in the unusual shape of a presbytery. Like Church 4, it is probable that Church 5 was built as late as the last third of the 9th century or at the beginning of the 10th century. The foundation of the church during the final phase of this Great Moravian centre might explain why there is no burial ground nearby.

The area surrounding the church is very interesting because of a long-term settlement phase, which lasted from the 8th to 13th century, and the presence of a nearby metal-casting workshop. A number of indicators suggest that the northeast part of the acropolis could have been populated as late as the post-Great Moravian period (10th century); a quite exceptional finding given the rest of the acropolis had been deserted by then.

The fine metalworking workshop is the most important production building of the stronghold. It was reconstructed as an above-ground log building very near to Church 5. It is hardly a coincidence that the workshop, which most likely produced luxury fine art, was situated directly in front of the acropolis. It probably functioned as a direct supplier to the duke and his closest allies.



1 Plan of the area surrounding Church 5 and hypothetical Church 12. It was excavated at the turns of the 1950s/1960s and 1970s/1980s.

2 Excavation of Church 5 between 1959 and 1960. The building with the external dimensions of 13×7 m was identified as a church with a rectangular nave and slightly trapezoidal choir.

About 15 m east of Church 5, inhumations linked with Church 12 were excavated. Church 12 featured a cast mortar floor and the modest remains of walls excavated around the centre of an independent burial ground. Most of the 80 graves contained no finds. Similar to the burial sites around Churches 4 and 6, no graves containing weapons or vessels were found here. Silver jewellery, including rare finds of gilded earrings and hollow spherical buttons, was found in several graves. The burial site probably dates to the end of the Great Moravian period, an estimate that also applies to the graves inside what was assumed to have been the church building. The lack of clarity on the situation is also complicated by the long-term occupation of the area, which lasted until the 13th century.

A road forming part of the stronghold's main westeast route connected Church 5, or more precisely its metal-casting workshop, to the graveyard of Church 12. It ran to the northeast gate of the acropolis, which is still visible, forming a slight depression in the rampart. Behind the gate, a wooden bridge spanned a branch of the river that divided the acropolis from the extramural settlement.

Evidence of settlement as late as after the demise of Great Moravia has been found in the northeast part of the acropolis around Church 5.



3



4

[3] Two-part floor of the metal-casting workshop (feature 10/V). The workshop contained concentrations of iron slag, bronze and lead ingots, drops of glass material and other evidence for specialised craft production.

[4] Excavations in the area of Church 12. The square-shaped 2×2 m block of cast mortar is considered to have been the choir floor of Church 12.

Church 6 and the adjoining bridge

Churches 6 to 10 are all sacred buildings. They were discovered at the extramural settlement of Mikulčice's fortified settlement. Church 6, also known as the "two-apse rotunda", was the first Great Moravian rotunda to be discovered in Mikulčice. Not only is the building remarkable for its architecture, mortar quality and rich polychrome interior painting, it is also one of the most progressive and culturally important of all the sacred buildings. This is in large part due to the unusually preserved original masonry of the east apse, whose intact wall reaches as high as 1 m. Indeed, such detail is rare given that only negatives of foundation trenches were preserved in the other Mikulčice churches.

A burial ground containing 200 graves was excavated in the vicinity of Church 6. Strangely, no vessels or weapons were found in these graves, indicating a more progressive phase of Christian burial practice. On the other hand, jewellery and spurs were frequently found. Silver, gold and gilded jewellery - mainly earrings - were found in many of the female graves, with hollow spherical buttons discovered in both male and female graves. A relatively high proportion of these graves contained gold jewellery, which confirms the elite status of the community members buried there. Male graves typically contained spurs, some of them silver-plated. The most sumptuous grave goods were found in grave 50/VI, which contained cast-gilded bronze spurs and a belt fitting probably belonging to an important elite member from the close circle of the duke. The burial site was in use mainly in the second half of the 9th century, while the area around the church was briefly settled in the 10th and 11th centuries. A smaller group of graves was dug up during the destruction of the church building some time in the 11th/12th century. It is assumed that Church 6 was part of a farmstead of an elite seat, the location of which is unknown.



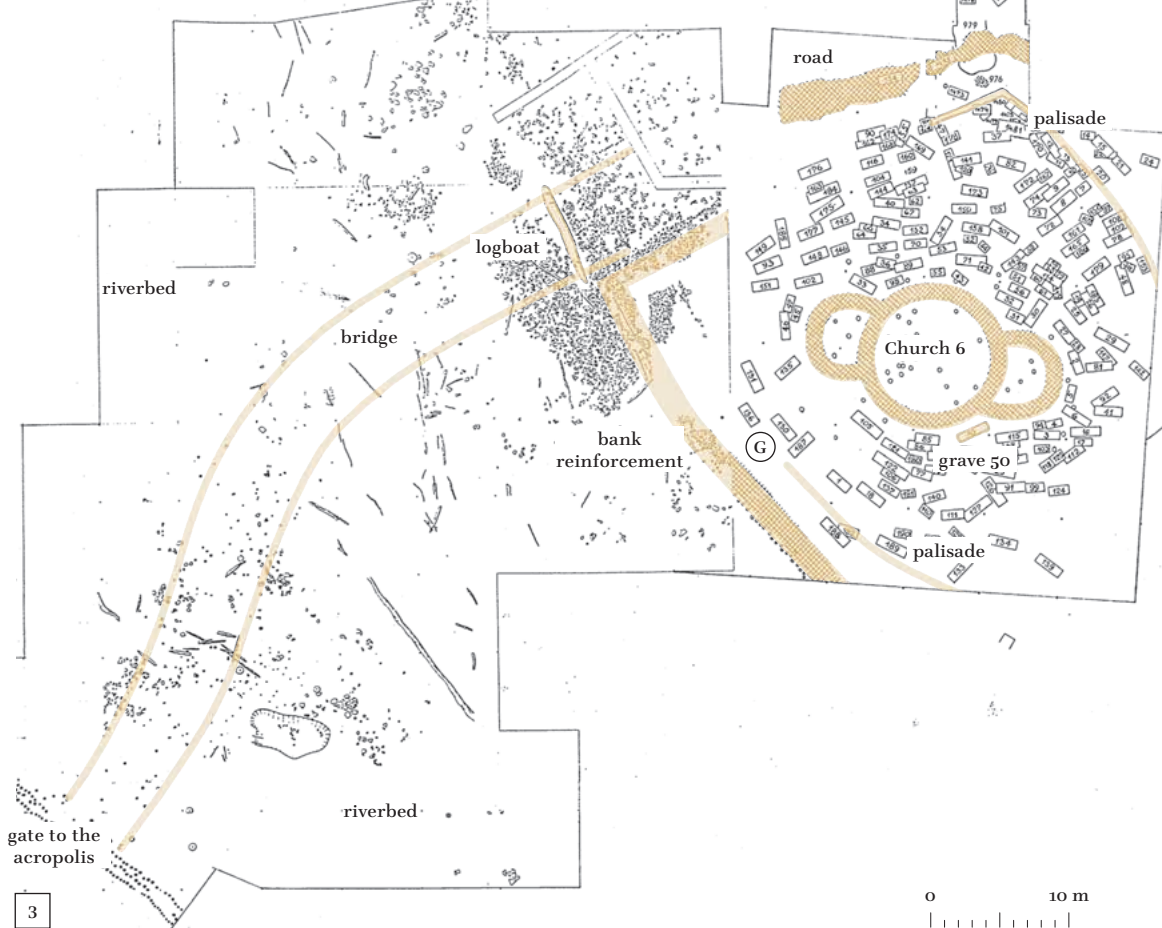
1 Model of Church 6 by J. Pošmourňý. Most often, the church is interpreted as a rotunda with vault cylindrical nave and two apses while the function of the western apse remains unclear. The outer dimensions of the construction are 17 × 9 m.

2 Excavation of Church 6 in 1960. In the forefront, there is an exceptionally well preserved intact wall of an apse. This also was documented during the 2013 revision excavation of the church.

Church 6 stood on the edge of a sand dune divided from the acropolis by a river channel. Today, a small lake containing the remains of excavations (without backfilling) is situated where the channel used to be. The bed of the silted up channel uncovered here contained pilots of a wooden bridge, large amounts of alluvial wood and other organic remains, and many wooden finds, including a logboat. A large assemblage of axes with preserved handles was retrieved from the riverbed under the bridge that used to connect the northeast acropolis gate with the extramural area around Church 6. On the extramural side, the bridge continued as a paved road. Reinforced with gravel and flat stones, it ran around the cemetery enclosure further to the east, probably towards the Chapel of St. Margaret, now on the Slovak side of the agglomeration.

The sand dune on the south end, where Church 6 and the cemetery lie, runs further northeast to occupy most of the territory known as Těšice forest. The largest part of this slightly elevated 10 ha area comprising the extramural settlement, was settled and used intensively for burials. A wooden building stood on top of the dune, about 300 m northeast of Church 6. It was later surrounded and superimposed by a rather large burial ground. Exactly what function the building served is still unclear, but it has been conjectured that the building was used as a pagan sanctuary.

Among the Mikulčice sites, the burial ground around Church 6 is exceptional with the high number of golden jewellery finds.



[3] Overall archaeological context of Church 6 with a burial ground and the adjacent riverbed with a bridge.

[4] Large-scale 1977-1984 excavation of the silted up riverbed. Only the torsos of wooden piles driven to the riverbed 3 m below today's surface have been preserved from the original bridge.

Church 9 and the Kostelisko burial site

The body of the dune that delimits the acropolis from Church 6 can be traversed on foot to another prominent sand dune at the extramural settlement known as Kostelisko. This 2 ha elevation in the forest south of the acropolis was settled as early as the pre-Great Moravian period. The settlement was still in use in the 9th century, during which most of the dune was occupied by a large burial ground. Church 9 used to stand at its eastern border. In the 9th century, the elevation probably assumed the form of an extramural river island.

Church 9 - a rotunda with four interior thick-walled niches - was surrounded by a burial ground. About 15 m to the east of the rotunda lie the remains of a masonry building - circular in layout and with a stone well - originally thought to be a baptistery. The church probably continued to function in the post-Great Moravian period, as attested by its multi-layered nave floor. The bottom layer, a Great Moravian mortar floor, contains small brick fragments that form a geometrical mosaic ornament.

Given its interior area, Church 9 is the smallest sacred building in Mikulčice. Its size has also contributed to some doubts remaining over whether the sanctuary functioned as a memorial or as a baptistery.



1



2



3

1 Model of Church 9 by J. Pošmourný as a cylindrical building with four interior niches and a dome. Inner dimension is 4 m.

2 Large burial ground on a mild sandy hillock to the west from Church 9 was excavated between 1984 and 1990. Over 450 graves were discovered.

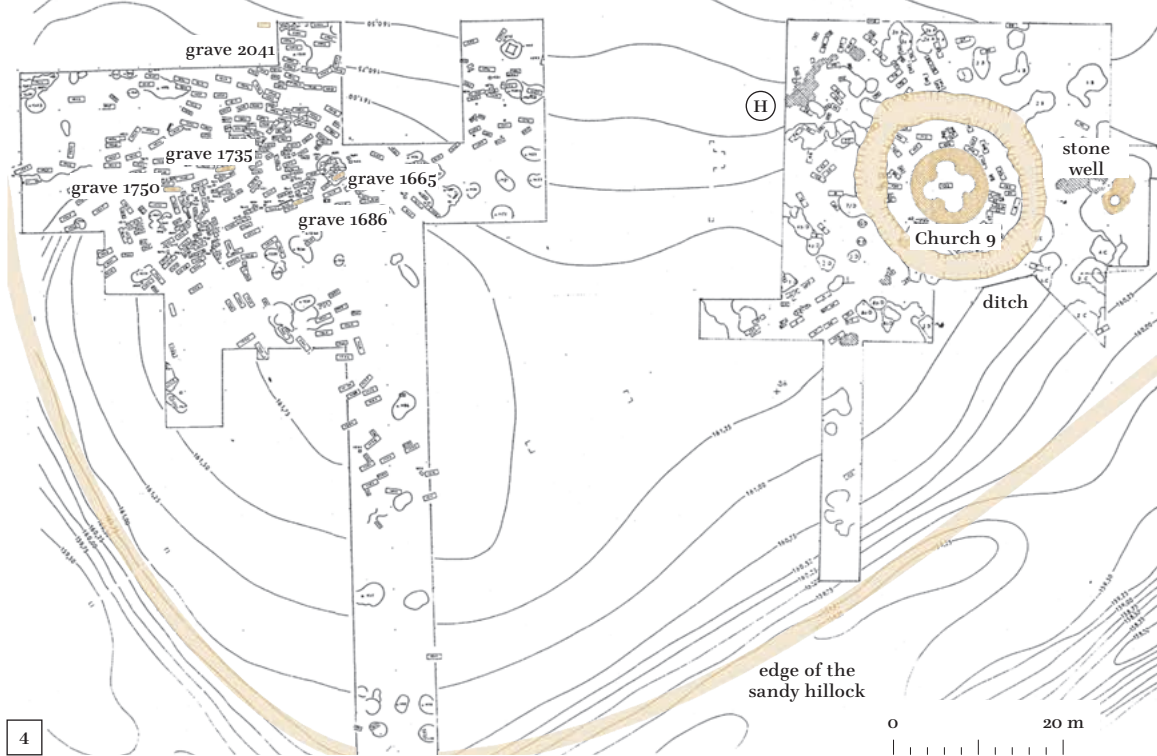
3 Foundations of Church 9 in form of the negative of removed masonry.

In order to make sense of the ongoing settlement after the fall of Great Moravia, a complex stratigraphy was carried out on the surrounding area. In the 14th and 15th centuries, the remains of the church were reconstructed as a fort, around which a circular ditch was dug. The whole structure was destroyed, however, during the Hussite Wars.

Of the roughly 150 graves excavated in the vicinity of Church 9, eighty date to the Great Moravian period. Other burials date to a later medieval period. A large proportion of the 9th-century burials were warrior graves containing axes and spurs, while ceramic vessels were frequently found. “Poorer” jewellery, copper alloy earrings and glass buttons were also discovered. An association between the graves near the church and the vast Kostelisko necropolis on the western half of the sandy hillock has yet to be determined. It is not known whether it was a single burial site or two different necropolises.

In the context of Mikulčice, the extensive burial site at the elevated western end of Kostelisko is a “rich” necropolis similar in many aspects to the basilica cemetery. Many graves contained silver, gilded or golden jewels, with frequent finds of spurs, axes and gilded belt fittings in male graves. Finds excavated included three elite graves containing swords (1665b, 1750, 2041), inhumations consisting of coffins with iron fittings, and other graves of the social elite (e.g. grave 1735 contained three belt fittings in the shape of a book).

Wider vicinity of Church 9 shows the longest continuity of settlement in the Mikulčice Stronghold.



4 Overall plan of the excavated area in Kostelisko. The relationship of the two burial grounds has yet to be determined.

5 Excavation around Church 9 in 1962 with a stone well in the front. The stratigraphy complexity of this area is the result of the long-term settlement phases at the site.

Church 10, the riverbed and the built-up area in the outer bailey

Another sacred building in the extramural settlement of the Great Moravian stronghold is Church 10, discovered in 1963 and re-excavated in 2010/2011. It is a single-nave building with a rectangular presbytery and external supporting pillars (lesenes). In a later construction phase, two pillars were built into the church wall bearing a tribune. At the same time, a staircase was added to the west façade. Reconstructed in the west part of the nave, the tribune tallies with the assumption that the church was used by the princely court. A more precise dating for the building cannot be assigned due to a lack of sources: only ten graves (containing no goods) were excavated near the church and there is no tangible evidence of any nearby settlement. The construction may date to the final period of the stronghold, coinciding with the demise of the Great Moravian centre at the beginning of the 10th century, which would have interrupted both burial activities around the church and the construction of settlement features in this part of the extramural settlement.

Church 10 stood in the immediate vicinity of the fortified part of the outer bailey, divided by what is now a silted up river branch. It was first excavated in 1964. The riverbed functioned as a natural water moat, running around the Great Moravian stronghold and dividing it from the extramural settlement. During the excavation of the riverbed, wooden artefacts and numerous alluvial wood and plant remains were found under groundwater level.

[1] After J. Pošmourný's model, the load-bearing pillars, or buttresses, at the outer side of the church were supposed to reinforce the barrel vault of the nave. But it is more probable that the outer walls of a church with a flat-ceiling were segmented by massive lesenes that created blind arcades in the outer wall. Outer dimensions of the church are 12 × 7.5 m.

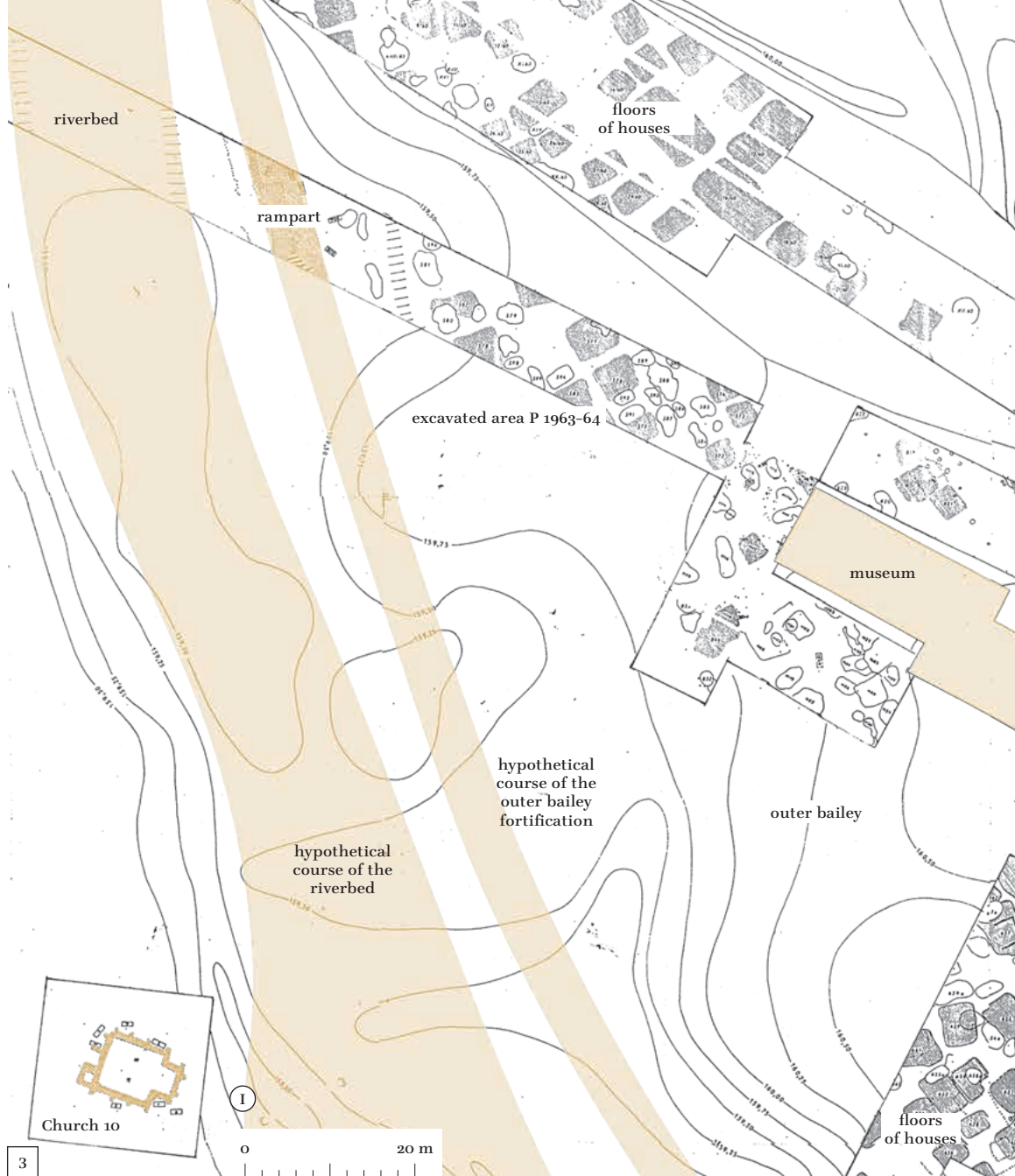
[2] Excavation of Church 10 in 1964. In the front, there is an addition on the western façade that enabled an access to the tribune.



The outer bailey, spanning a fortified 3 ha area, bordered the west side of the acropolis. Assuming a slightly elevated oblong formation situated in the meander of the old channel, the bailey consisted of wooden houses with earth or clay floors. The density and regularity of this built-up area indicate that the settlement was urban in character. The outer bailey was mostly used for residential purposes, as documented by the mass occurrence of typical settlement finds such as pottery, spindle whorls and animal bones, indicating that the population consumed a meat diet. However, no convincing evidence of any type of specialised production was uncovered. Despite various attempts to prove otherwise, Poulík's hypothesis that the Mikulčice outer bailey was home to a military retinue remains valid. Unlike at the acropolis, no sacred building or burial ground was found here. The more noteworthy finds were isolated rich graves dug into the floor backfills in the central part of the outer bailey (graves 794 and 798).

Archaeologically, it contains some unique groups of strata, which correspond with the development of the settlement from the late 8th to the beginning of the 10th century. Further occupation layers have been distinguished from the sand and clay floor backfills, which were renewed several times over the lifetime of the settlement.

The outer bailey with well preserved house floor backfills has unique stratigraphies that are important for the understanding of the settlement and material culture development.



3 The area around Church 10 and adjacent parts of the fortified settlement in the outer bailey. The built-up area of the outer bailey is attested by regular floor backfill of the houses. The outer bailey settlement was protected by the rampart and the river channel, now completely silted up.

4 Clay-and-sand floor backfill of a wooden house with the remains of a fireplace. Narrow lanes between the houses were covered with a layer of waste with bones, shards and other objects (see the front of the photograph).



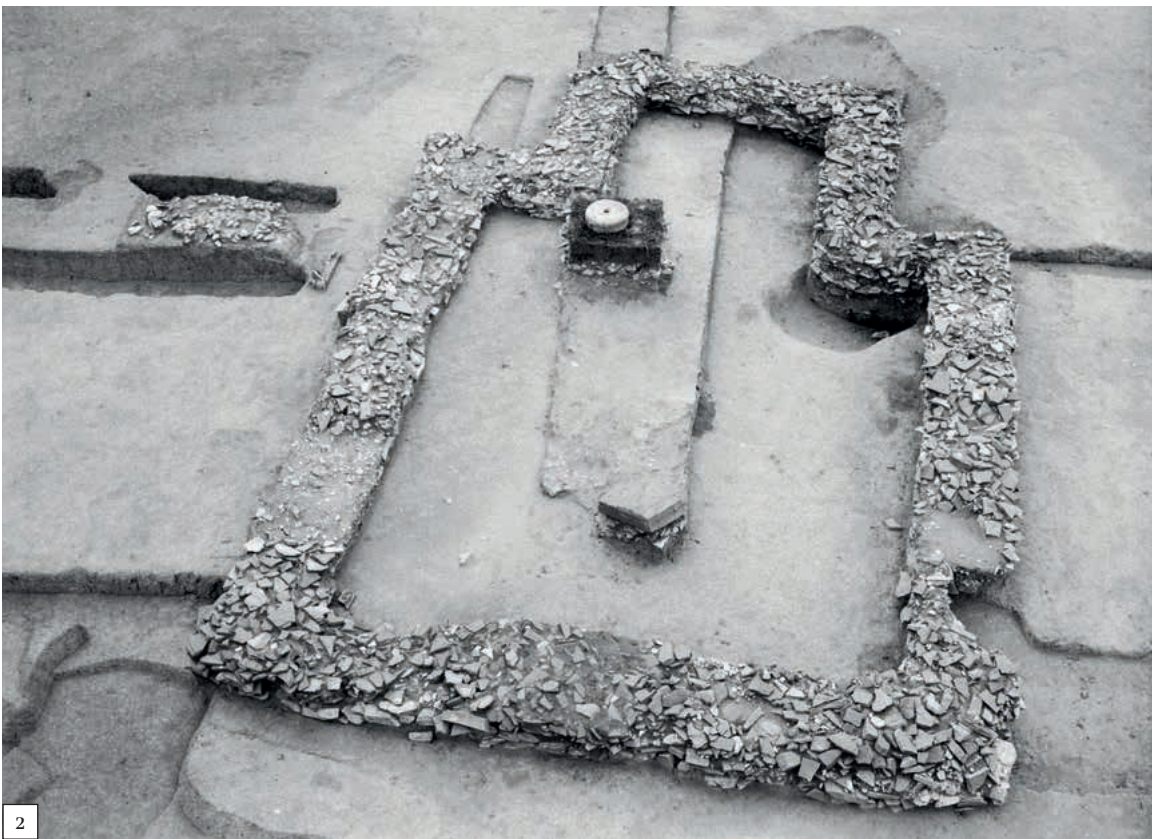
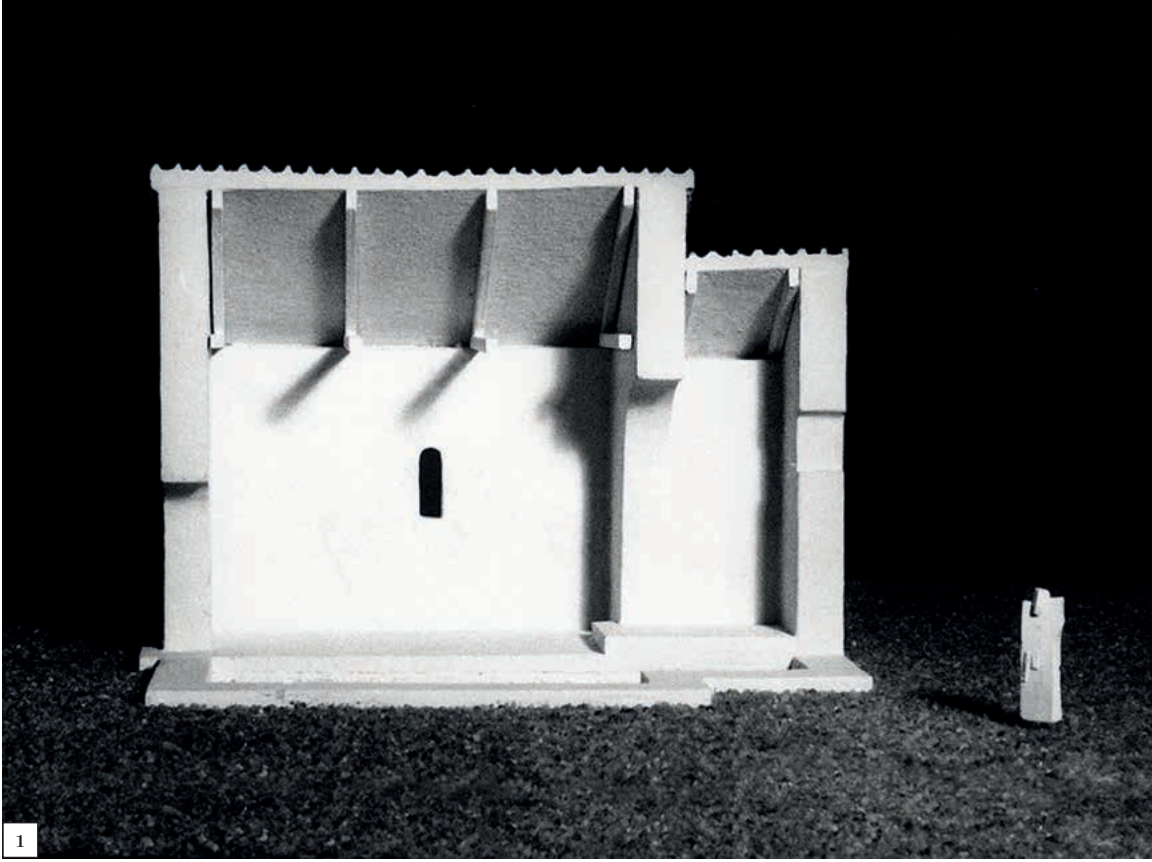
Church 8 and the settlement in the north suburb

Church 8 used to stand on the north bank of the channel that ran around the fortified area of the outer bailey, providing natural protection. This single-nave building had a rectangular presbytery and was surrounded by a small, relatively poor burial site. The church was founded at a previously settled site. The remains of another building discovered under its foundations are understood to be its wooden predecessor. Notably, a mass find consisting of a stash of iron items was found in the presbytery under two quernstones. The church was discovered in 1961 and re-excavated in 2011.

The lowest area in the vicinity of the stronghold that provides evidence of Great Moravian settlement is the north extramural settlement. During the 1970s/1980s, the bank of the silted up river channel that ran around the northern side of the stronghold was excavated. Part of a settlement showing evidence of crafts, mainly smithery and foundry, was unearthed there. One of the more striking finds was a smithing workshop. The type of buildings found there were the same as those found in the outer bailey, namely log houses on a sand-earth floor backfill. Based on the results of a trial excavation conducted in 2005, the period in which the settlement was destroyed coincided with the end of Great Moravia at the beginning of the 10th century.

[1] A model of Church 8 after J. Pošmourný as a simple flat-ceiling construction with a rectangular nave and rectangular presbytery. Outer dimensions of the church are 10.5 × 6.5 m.

[2] Excavation of Church 8 in 1961. The building has been preserved in the form of intact foundation masonry, which is exceptional in the Mikulčice churches. The results of the revision excavation in 2011 do not exclude that it is a stone foundation wall of a wooden or wood-clay-stone construction.

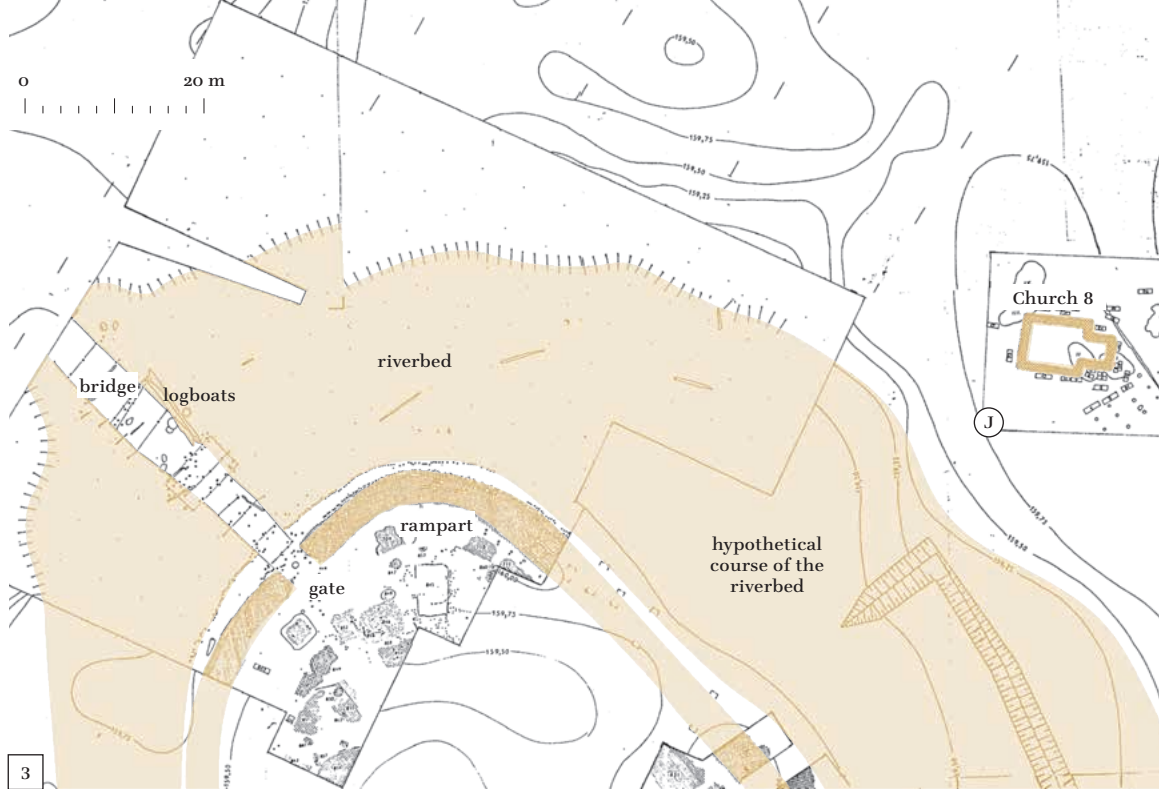


In the 9th century, a wooden bridge – situated west of Church 8 where the river used to bend – connected the fortified outer bailey with the extramural settlement. The bridge, around 50 m long, provided access to the northwest gate in the outer bailey. Like today's access road, it formed part of the main communication route that led to the stronghold from the northwest, probably passing through where Church 7 used to stand. The remains of the bridge were discovered about 300 m northwest of the gate.

The excavations in this area of the river channel in front of the northwest gate revealed bridge pilots as well as a number of wooden items, alluvial wood and other organic (especially plant) remains. The most important finds included three oak logboats and part of a yew bow. Among the wooden finds were a large assemblage of axes and wicker fish-traps, ladles, spoons, various parts of buckets and barrels, clubs and sticks, tool handles, construction fragments, pickets and many indistinguishable items.

Today, the area of the former riverbed is filled and planted with grass, effectively forming a type of “grass river”. The modern landscaping, which features a slight ditch planted with hygrophilous sedge, copies the course of the silted up river branch that used to run around the stronghold.

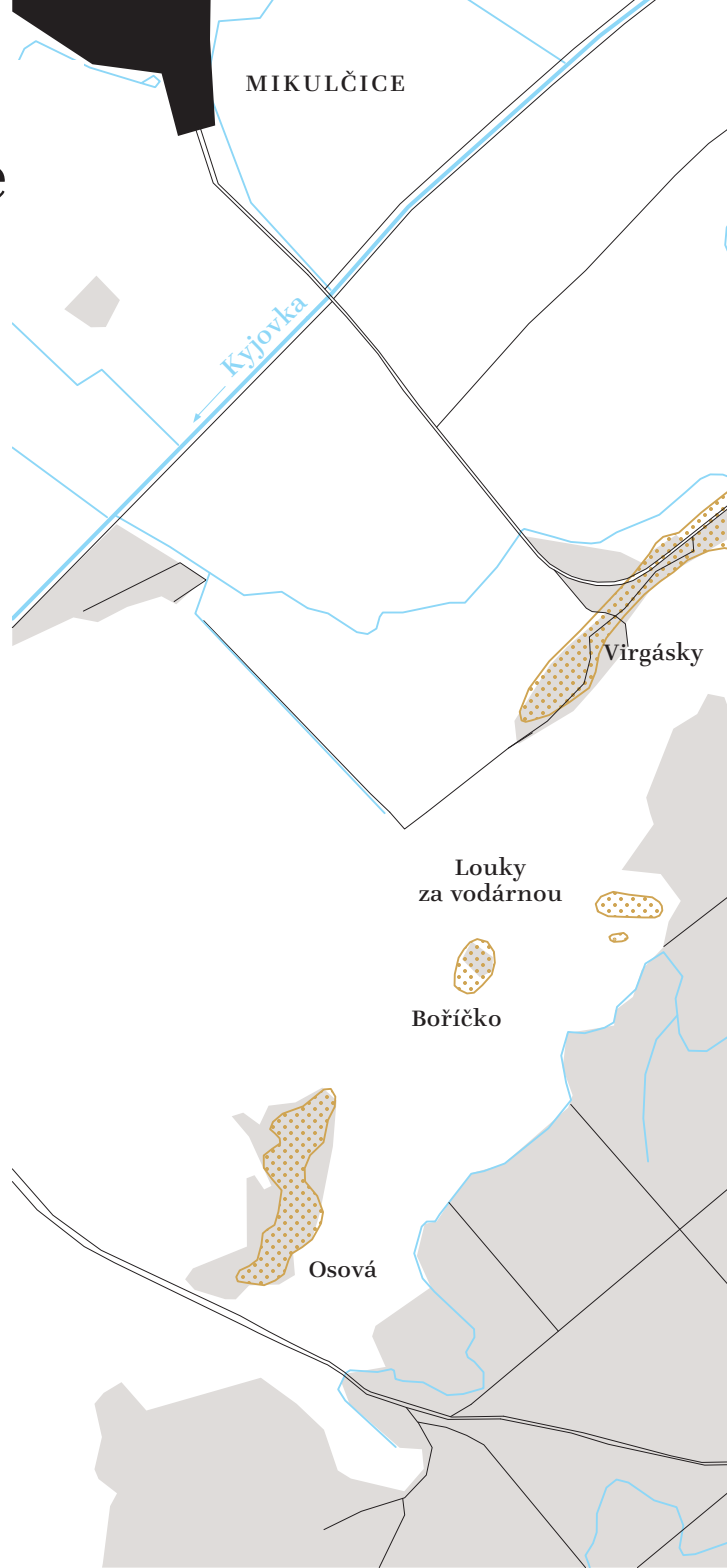
The large-scale excavations of silted up riverbeds in Mikulčice started by uncovering the area surrounding the bridge in front of the northwest gate of the outer bailey.






3 Church 8 and the nearby river meander flowing around fortified outer bailey.

4 Large-scale excavations of the silted up riverbed in front of the northwest gate of the outer bailey in 1967. Front: one of the two logboats leaning against the bridge piles. Two 10 m long boats attest the navigation on the river Morava in the 9th century.

River landscape



-  riparian forest
-  modern buildings
-  sand dunes





Kněží

Za mysliveckou chatou

Štěpnice II

Štěpnice I

Trapíkov

Těšický les

Valy

Kostelisko

Žabník

Morava

Kačenáreň

Chapel of St. Margaret

Melesín

I

II

Př. Úhlenka

KOPČANY

Sand dunes (hrúdy) and river branches

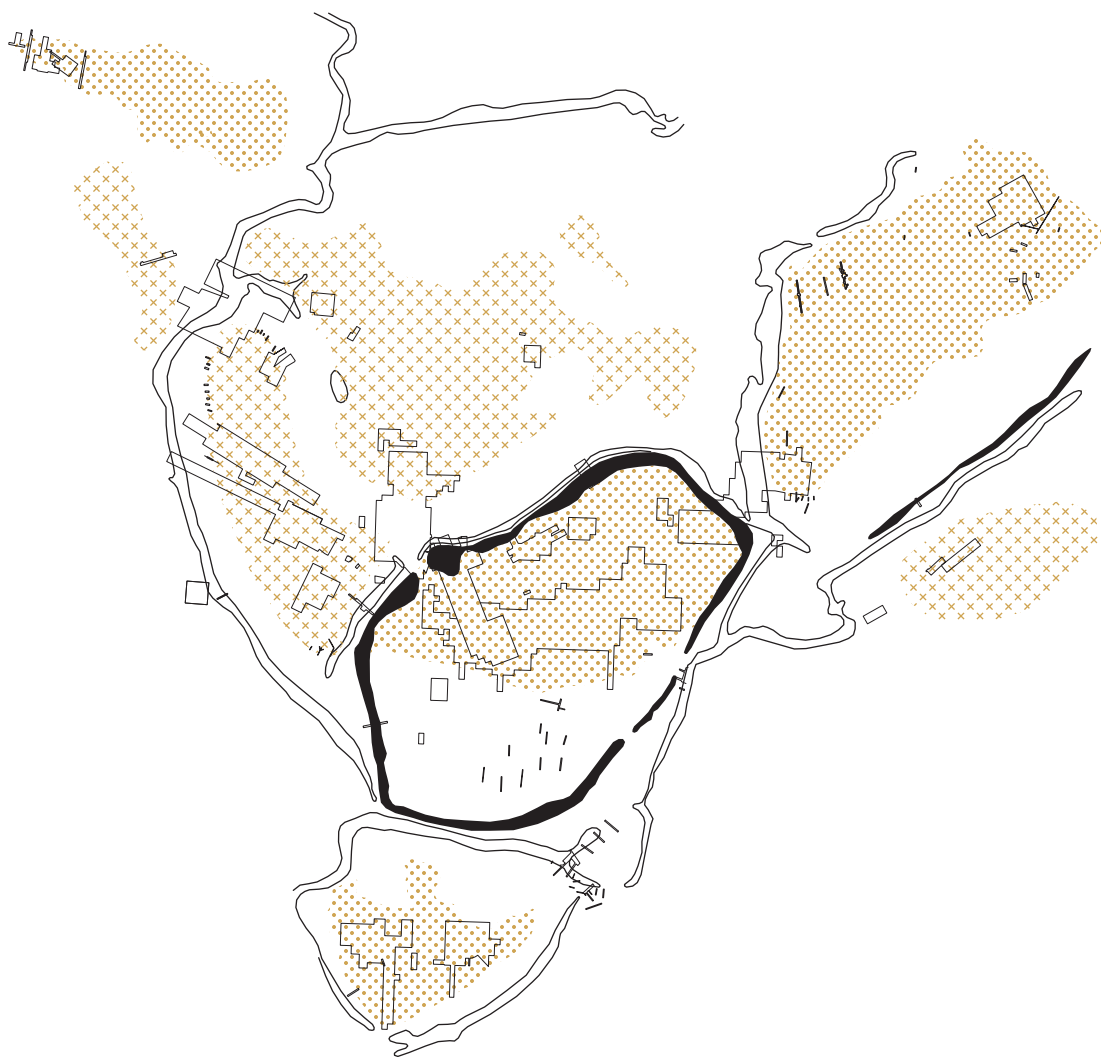
GEOLOGY, TERRAIN & WATER BODIES






In the 9th century, Mikulčice-Valy was an island stronghold on the Morava River. Following the demise of the power centre, the river branches that had surrounded and protected the early medieval fortified centre were silted up with sand and soil and levelled with the surrounding terrain. The character of the whole floodplain also changed. What used to be a diverse landscape interlaced with river branches and pools of numerous islands evolved into a floodplain with a single main watercourse. This change occurred as a result of periodic floods that would carry soil material eroded upstream before depositing it in the lower reaches of the river. The floods lasted from the 13th century to modern times until regulation of rivers and flood-protection dams was introduced.

In the Middle Ages, the most sought after settlement areas in the Mikulčice floodplain were sandy elevations of fluvial and wind-blown sand, or *hrúdy*. As well as providing a dry, permeable and warm surface, they rose above the horizon, availing of the strongest temperature inversion near the ground

and flood areas. The dunes were regularly occupied from the Mesolithic to the end of the Early Middle Ages, with the settlement culminating in the 8th/9th century. As late as the closing years of the 9th century when the population concentration peaked and the dunes were occupied by sacred churches and cemeteries, settlements started to spring up in the less favourable low-lying position on older flood loams. Among these were the north, northwest and east extramural settlements, which were occupied between the second half of the 9th and the beginning of the 10th century.

Of considerable benefit to the field of prehistoric and early medieval archaeology, the characteristic humid soil of the floodplain has preserved organic materials, including wood, much better than it has the aerated soil of regular settlement areas. The availability of these materials has been crucial for reconstructing the palaeoecological landscape, dendrochronologically dating wood finds, and generally managing archaeological matters that would be otherwise made impossible.



-  recent drains
-  excavated areas
-  circumferential bank of the acropolis
-  sand dunes (hrúdy)
-  settled areas on flood loams

1 Quaternary geological map showing the main settlement areas on sandy dunes and settled areas on flood loams.



The Morava River and Great Moravian centres

The Morava River was a notional axis of the Great Moravian territory. Situated in mid-stream at its confluence with the Dyje lie the three major centres of this 9th-century power-political formation: the central agglomeration of Staré Město-Uherské Hradiště, Mikulčice-Kopčany, and Pohansko near Břeclav. All three centres were fundamentally island strongholds.

The choice of the river islands as locations for the construction of these prominent Great Moravian centres was influenced not only by the absence of strategically more favourable elevations in close proximity to the river, but also by geopolitical and economic factors. The great advantage of the location was that the surrounding area of the river represented an important water and terrestrial route, with the crossings of the Morava and long-distance routes of particular strategic importance.

The river's direct connection with the Danube, which was a long-distance European route in 9th-century Europe, was essential for the development of these power centres. The route through the Morava River region to the Danube – and then upstream to the west or downstream to the southeast – offered an important connection between Great Moravia and the Frankish Empire, Byzantium, and other remote areas. The Morava River and the dry land leading further south to the Adriatic were part of the ancient Amber Path, which constituted an important connection with the Adriatic region and Rome. The route was used for conveying goods, cultural contacts and mounting military offensives. Navigation of the Morava at this time is attested indirectly by written sources and directly by various finds of boats and paddles in Mikulčice.

While the river provided inhabitants of the stronghold with vital foodstuffs and raw materials, it also represented a threat. And although there is no evidence of flooding in the 9th century, it is known that the banks were consistently reinforced. In front of the Great Moravian rampart, wooden structures and stone barriers were excavated. During spring thawing and at occasional higher flow rates, the river would have certainly posed a danger.



1 Floodplain in the mid-stream of the River Morava and lower stream of the River Dyje in the Lower Morava Valley. Marked: Great Moravian central agglomerations of Staré Město-Uherské Hradiště (1-2), Mikulčiče-Kopčany (3-4) and Pohansko near Břeclav (5).

Historical landscape of Great Moravian Mikulčice

Living conditions on the Morava floodplain were at their optimum in the 8th and 9th centuries, as borne out by climatology records and, especially, archaeological evidence. The river flat was interlaced with a network of channels and pools that provided enough water and fish, while also affording navigational opportunities and other benefits. The water areas also served as a means of protection from enemies, albeit often only in a symbolic sense. After all, the water in the river channels around the stronghold was slow-moving, periodically stagnant and shallow.

The landscape around the Great Moravian stronghold was heavily deforested and significantly influenced by human activity. If a forest had been preserved near the stronghold, it would have been substantially thinned. The landscape would have resembled a park, containing pastures, meadows and probably fields of different sizes. Oak, elm and ash trees prevailed in the bottomland hardwood forest and, based on the results of archaeobotanical analysis, the area had not been exposed to flooding and was of a composition similar to its current state.

The regular occurrence of floods right up until the introduction of river regulation in 1971 led to a number of incorrect conclusions about life on the river flat. The river flat had been wrongly designated an unsettled prehistoric and early medieval landscape, with villages misinterpreted as “marsh” settlements occupying an inaccessible swampy terrain. These inconsistencies stem from a misunderstanding of how the river flat developed. Today, it can be reliably stated that the flat formed part of a cultural landscape that was continuously settled from the Mesolithic to the beginning of the High Middle Ages. The periodic flooding that occurred from the Late Middle Ages to modern times suggests the space would have served as a secondary economic area containing riparian forests and meadows.

This reconstruction of the historical landscape of Great Moravian Mikulčice is set to benefit from forthcoming palaeo-environmental research involving the participation of different disciplines.



1 The acropolis bank and inundated north extramural settlement during the floods in 1962.

2 The construction of the car park on the outer bailey during the floods in 1960.

4

Buildings and burial grounds



churches



palace



wooden architectural feature



metal-casting workshop



fortification of the acropolis



fortification of the outer bailey



significant terrain boundaries



derelict gateways and bridges



silted up river branches



burial grounds



excavated areas



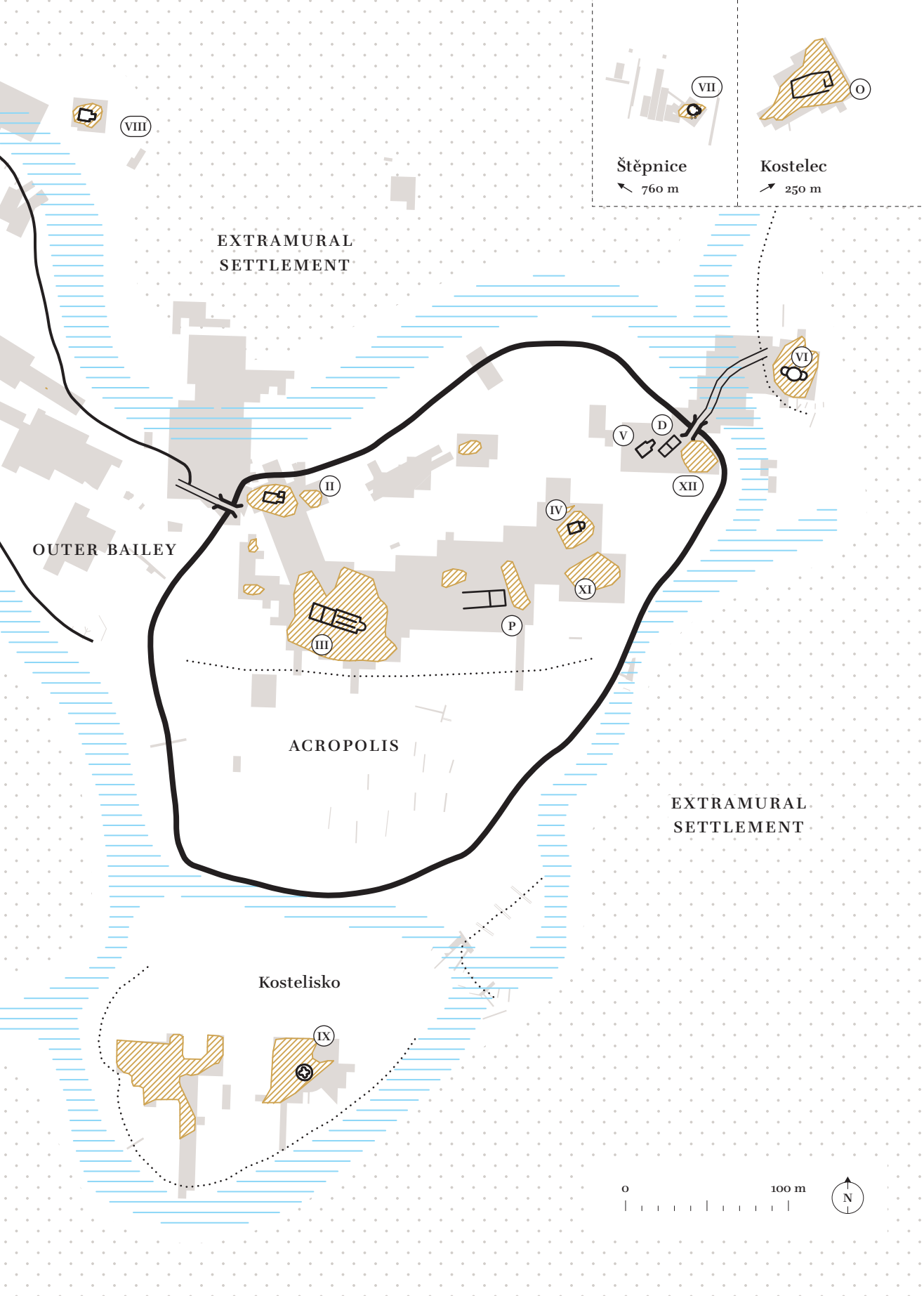
extramural settlement



Žabník

↙ 300 m





VIII

EXTRAMURAL
SETTLEMENT

Štěpnice
↖ 760 m

Kostelec
↗ 250 m

OUTER BAILEY

ACROPOLIS

EXTRAMURAL
SETTLEMENT

Kostelisko

0 100 m



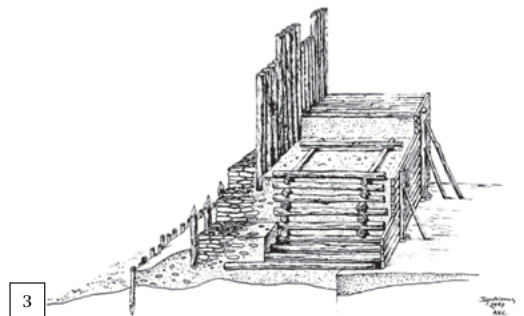
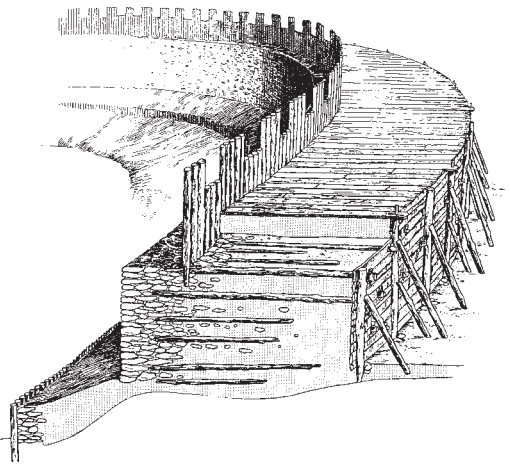
Fortification

One of the basic attributes of this early medieval power centre was fortification. As documented by historical sources, the wars with the East Frankish Empire and the Old Hungarians indirectly illustrate the functionality and resilience of the Great Moravian fortification. But although it is assumed that the pre-Great Moravian central settlement in Mikulčice was fortified, it cannot be claimed with certainty.

The fortification of the Great Moravian stronghold consisted of a rampart around the acropolis and the outer bailey. The composite rampart of the acropolis consisted of an earthen core reinforced with wooden beams to form a “grid construction”, which was laced with a 1.5 to 2 m-wide front stone wall. The overall width of the rampart was around 7 m, with a maximum height of up to 4 m. The low wall that laced it on the outside - leaning against a single or multiple stakelines at the foot of the slope - was part of an anti-erosion reinforcement of the river bank in front of the Great Moravian rampart. The 9th-century fortification of the outer bailey was similar but substantially subtler, consisting of a wood-and-soil core rampart with a dry stone wall held by a wooden stakeline.

Part of the fortification system of the Mikulčice Stronghold was a barrier constructed at the bottom of the riverbed, where the water moat between the outer bailey and the acropolis ran into the riverbed. This barrier consisted of a row of log caissons filled with stones for the purposes of fortification and anti-erosion protection. There may have been a narrow canal between this barrier and the outer bailey fortification closed off by a water gate, through which boats would have been able to enter the protected space of the water moat.

A precise dating of the Great Moravian rampart has yet to be determined. Contrary to earlier opinions, which date the fortification construction to the early 9th century, a substantially later dating is more probable. Detailed dendrochronological and radiocarbon data from a number of Moravian and Slovak sites have recently shown that such stronghold fortifications date to the late 9th century, at a time when Hungarian attacks were on the rise. Unfortunately, it has not been possible to dendrochronologically date the wood finds from the Mikulčice Stronghold.



1 Remains of a wooden caisson barrier filled with stones at the bottom of the river.

2 Reconstruction of the Great Moravian fortification of the acropolis (by R. Procházka).

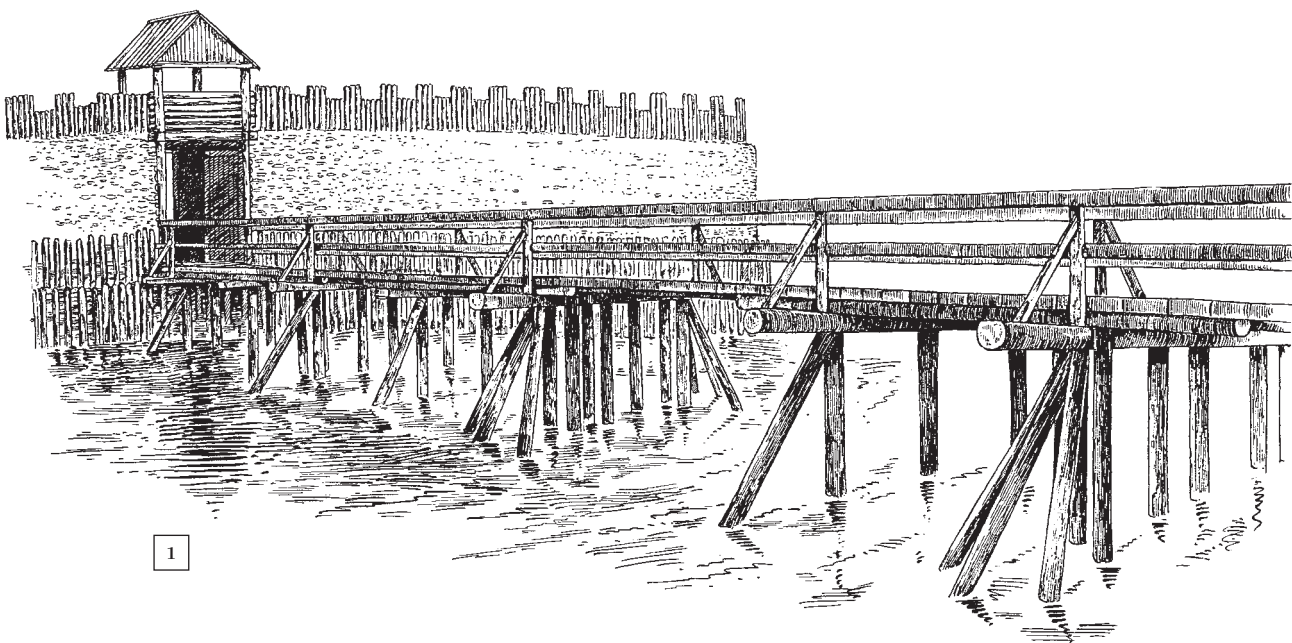
3 Reconstruction of the Great Moravian fortification of the outer bailey (by M. Hladík).

Gates and bridges

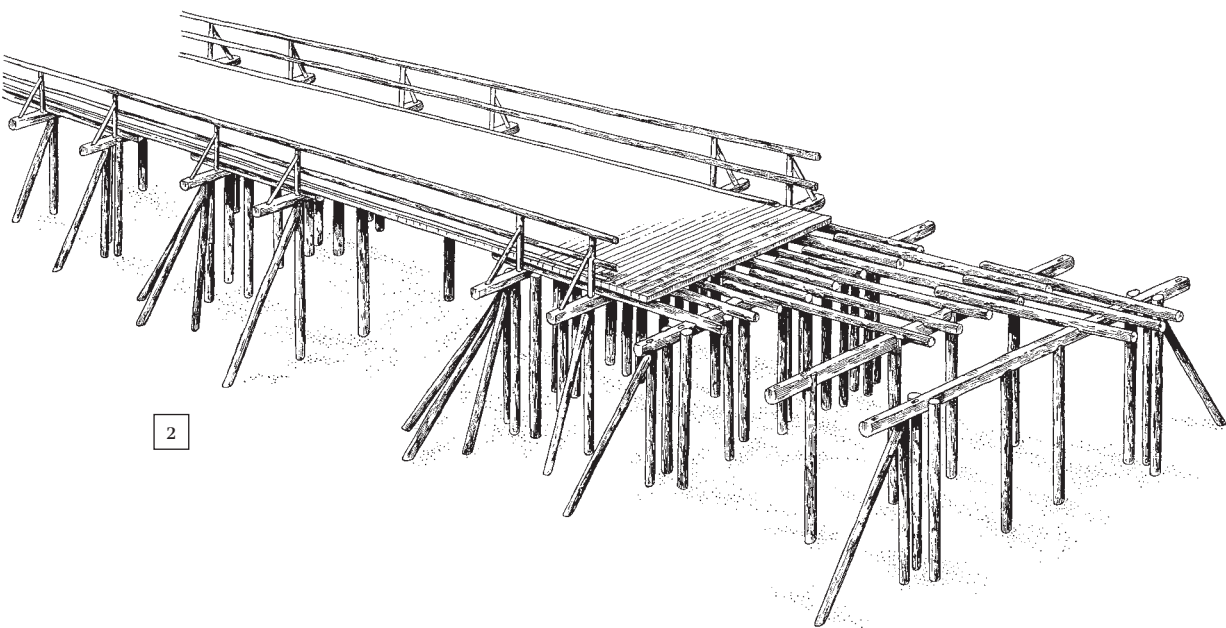
Gates and bridges were among the important defence and communication elements of the stronghold. The rampart around the Great Moravian stronghold was interrupted in several places by gates. So far, three gates with adjacent bridges have been evaluated. Their positions indicate that the main communication route of the stronghold ran along an eastwest axis. The gateways were of the frontal type: a single passage around 4 m in width running through the rampart, and laced on its sides by strong stakes to support a wooden tower-like structure.

The stronghold was naturally protected by the river arms surrounding the acropolis and the outer bailey. Bridges provided access to the stronghold gates across these channels. So far, the remains of three bridges (parts of pilots driven into the river bed or water moat) have been discovered at Mikulčice. The traditional building techniques used to construct the La Tène and Roman river bridges were employed for these constructions. The lengths of the bridges excavated at Mikulčice ranged from 30 to 50 m, with estimated widths of 3 to 5 m. They were constructed solely of oak wood.

Based on dendrochronological dating of the bridge pilots, Bridge 1 - uncovered in front of the northwest gate at the outer bailey - was constructed around the mid-9th century before being subsequently repaired and rebuilt during its second half. An assemblage of wicker fish traps was unearthed from under the bridge to which they were originally fastened. The numerous finds of axes unearthed from under the Mikulčice bridges probably attest to fights at the gates of the stronghold.



1



2

1 Reconstruction of the northwest gate of the outer bailey (by R. Skopal).

2 Reconstruction of the bridge to the northwest gate of the outer bailey (by R. Skopal).

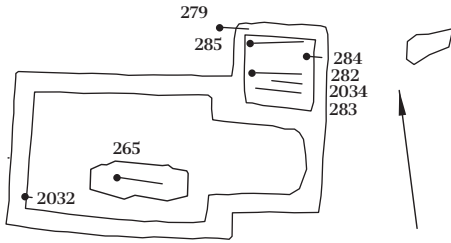
Churches

Among the Great Moravian strongholds, Valy near Mikulčice is notable for its concentration of sacred buildings, reflecting the important position of Mikulčice in the religious organisation of Great Moravia and, particularly, the centralisation of political power around the stronghold. Most of the sacred buildings at Mikulčice were discovered in the first stage of excavations in the 1950s/early 1960s. Between the years 2008 and 2013, revised excavations of most of the churches were conducted in preparation for a new presentation of the site for monument preservation purposes. The results, which are currently being evaluated, are expected to deliver critical and updated findings on the sacred architecture of Mikulčice.

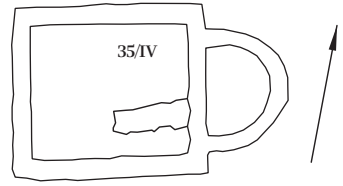
The buildings were numbered in the sequence excavated, from 1 to 12. However, not all of the buildings thus denoted can be unequivocally considered churches. For instance, the existence of Church 1 is now contested, while the existence of Churches 11 and 12 has been only hypothetically postulated. The dating of the still-standing Chapel of St. Margaret of Antioch in Kopčany (which may in fact be Church 13) to the Great Moravian period is a recent discovery. There is also the possibility that a number of wooden shrines may have disappeared without trace. The masonry churches in Mikulčice have been largely preserved as negatives of foundation walls, as they were dismantled in order to build other stone structures during late medieval and modern times.

All of the basic types of Great Moravian churches are represented in Mikulčice: longitudinal buildings with an apse (Churches 3 and 4), rectangular presbyteries (Churches 2, 8 and 10) and simple central-plan buildings, such as the rotundas (Churches 6, 7 and 9). The exceptionally small area of Church 9 (12 m²) as well as the extraordinarily large plan for the Church 3 “basilica” (130 m²) are of different status and function. Stone quarried at the slopes of the White Carpathians, at least 8 km from the Mikulčice Stronghold, was used for the masonry of the stone churches. The masonry was bilaterally plastered, while the interiors of some of the churches were adorned with coloured frescoes.

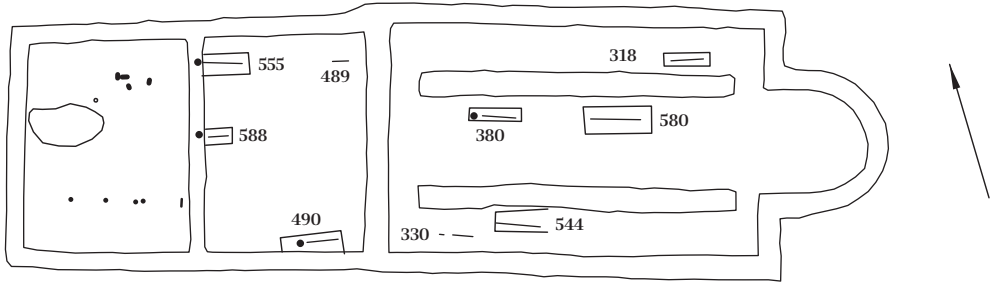
I Plans of traditionally numbered churches of Mikulčice showing the interior graves.



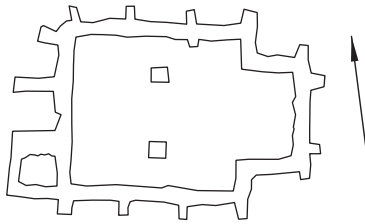
Church 2



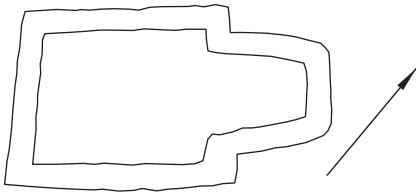
Church 4



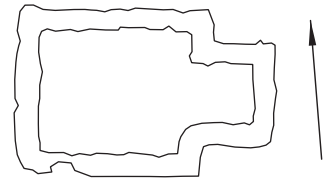
Church 3



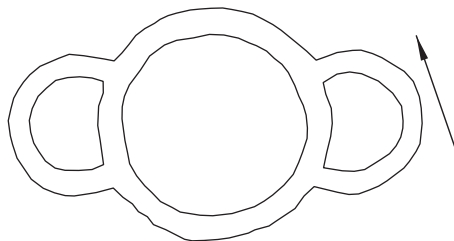
Church 10



Church 5



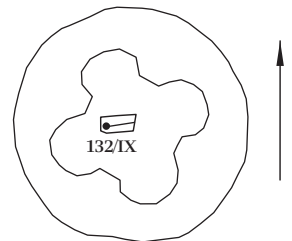
Church 8



Church 6



Church 7



Church 9



The question of the origin of the sacred architecture of Mikulčice, and of Great Moravia generally, has been addressed by many researchers, including art historians, architects and archaeologists. Although its architectural style was supposed to have been rooted in influences stemming from the Frankish Empire, the Adriatic and Byzantium, Great Moravian architecture shares most of its traits with the Old Croatian buildings of the Istrian Dalmatian region.

Mikulčice deserves special attention for its high concentration of churches. The buildings differed with regard to function, age and perhaps even liturgy, which can probably be attributed to the various church founders. For example, the buildings on the acropolis are assumed to have been built by the ruling dukes, while the neighbouring churches at the extramural settlement likely belonged to noblemen permitted to construct churches for their courts. The large number of sacred buildings would also have met the needs of the growing population of the Great Moravian stronghold, reflecting the increasingly important role of Christianity in the 9th century.

In contrast to previous datings, the latest research shows that the majority of Mikulčice's sacred buildings belong to the final settlement phase between the second half of the 9th and beginning of the 10th century. Exceptions include Church 2, which most likely dates to before the mid-9th century. The oldest buildings include the Church 3 "basilica".

[2] Fragment of a mortar floor found in Church 9.
The ornament is composed of fragments of ancient bricks.

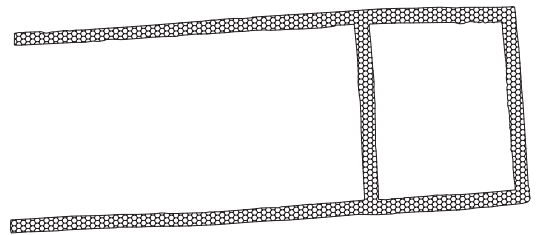
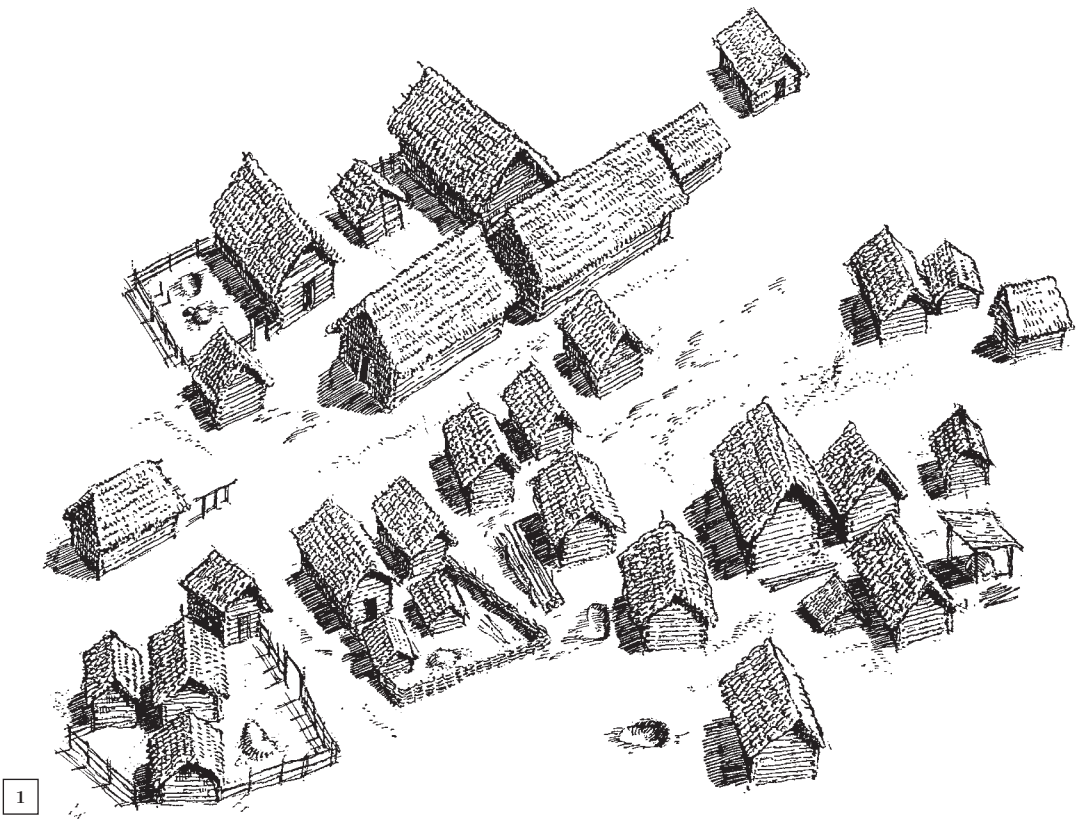
[3] Church of St. Margaret of Antioch, which now stands solitarily in the fields near Kopčany, Slovakia, less than 2 km east of the acropolis of the Mikulčice Stronghold. Its design, dimensions and construction technology resemble the Great Moravian buildings in Mikulčice. Some of the graves discovered near, parallel to the church's walls, are dated to the 9th century.



The palace and common buildings

The remains of the palace are approximately located in the centre of the acropolis, at its highest point. The plan of the palace is in the form of a rectangle (dimensions 26 × 10 m) and is preserved as a negative of the foundation masonry. The missing west wall might have been destroyed during a later occupation phase between the 11th and 13th centuries. But as the foundation masonry is all that has been preserved, unfortunately there are no details regarding the architecture of the palace or its interior. Based on indirect pieces of evidence such as its exposed position, masonry, large size and layout, which lacks the traits of sacred architecture, the building is considered to have been a ducal palace. According to the most recent reconstructions, it probably consisted of a ground floor and a wooden first floor. In light of the excavations of 2010, its dating has since been revised to the last third of the 9th century, which is later than previously estimated. It can only be speculated whether the palace had a wooden predecessor or whether the centre of the acropolis had been an empty space, possibly serving as an assembly area or a different type of unoccupied plot.

Like other Great Moravian strongholds, masonry buildings were only the most dominant constructions. They included churches, palaces and, sporadically, other types of buildings connected with the power centre's court. Wooden buildings prevailed in the built-up area of the stronghold and the extramural settlement. They comprised mostly residential houses, workshops, various production facilities, sheds, larger assembly or storage halls, and other structures. The characteristic built-up area in Mikulčice differed from most contemporary settlements, where sunken dwellings or "pithouses" prevailed, and probably reflects the fundamentally different social status of the inhabitants. A telling example of this difference are the settlements in Mikulčice-Trapíkov and Kopčany-Kačenáreň (near the Chapel of St. Margaret), the closest occurrences of pithouses in the wider vicinity of the power centre.



1 Residential houses with basic economic facilities, such as barns, stables and hearths, possibly fenced, as shown in this reconstruction of wooden buildings at the acropolis (by R. Skopal).

2 Plan of the palace building at the highest point of the acropolis.

3 Superposition of palace foundations and an older settlement pit excavated by the 2010 revision excavation: its contents date the palace to the last third of the 9th century.



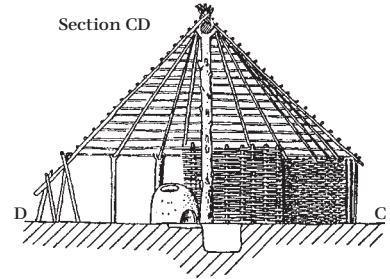
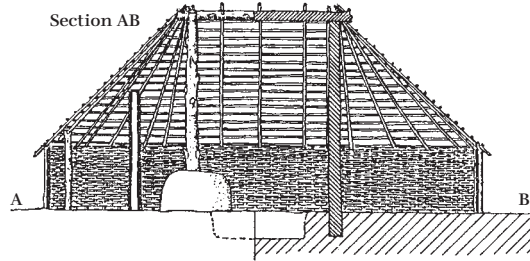
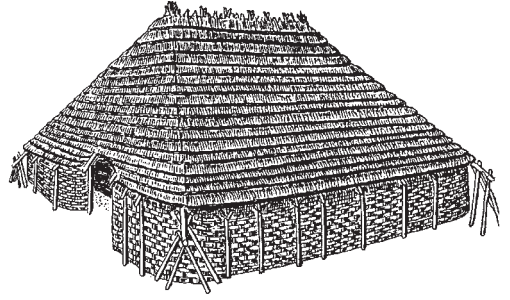
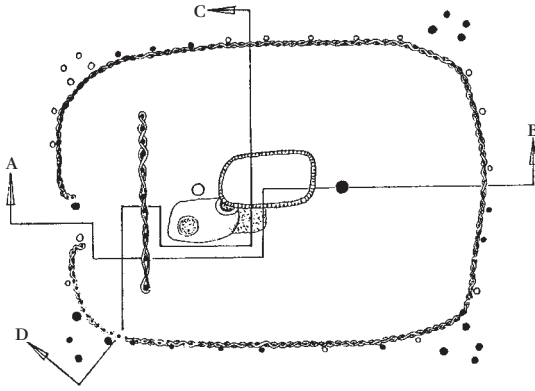
Very little is known about the construction of the wooden houses, since only scattered parts of these buildings have been preserved in the soil of Mikulčice's residential areas. Log houses are assumed to have been more common than stake houses. Among the important remains of these wooden buildings in Mikulčice are a collection of regular rectangular and square sand and clay floor backfills, whose plans correspond with the plan and size types of the original buildings. Particularly in the outer bailey and extramural settlement at Mikulčice, these houses were arranged into a densely built-up area. Many such houses also existed at the acropolis; of these, however, fewer remains have been preserved due to less favourable pedological conditions. The ground plans of these buildings were usually square (approximately 4 m on each side) or rectangular (dimensions of approximately 7 × 4 m). However, there were also larger buildings with plans of up to 11 × 5 m. Buildings with earthen floors were usually heated by hearths built in the centre at floor level.

A special type of stake house occurring in Mikulčice was large above-ground building, featuring wattle walls and a central hearth, which may have served either as assembly places for large groups of people or as storage facilities; they were probably also connected with the higher social status within the Great Moravian centre. Elsewhere, several instances of wooden houses with mortar floors found near the churches at the acropolis are understood to have had similar functions.

The internal area of the acropolis was divided into smaller units by ditches, palisade walls or fences. None of these precincts, however, are capable of being reconstructed with sufficient complexity. It is merely assumed that church areas featuring the cemeteries and residential courts of the duke/elite were enclosed in such a way.

[4] Apart from common small dwellings, several large buildings with post structure and wattle walls were excavated in Mikulčice (reconstruction by B. Kavanová).

[5] Floor backfill - the remains of regular densely built-up area - were best preserved in the outer bailey. The regularity and density is sometimes considered evidence of an urban type of the Mikulčice Stronghold.



4



— fortification of the outer bailey

≡≡≡ silted up river branches

■ floor backfill of log houses

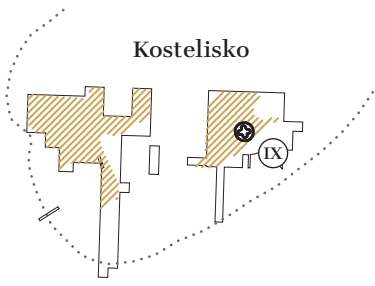
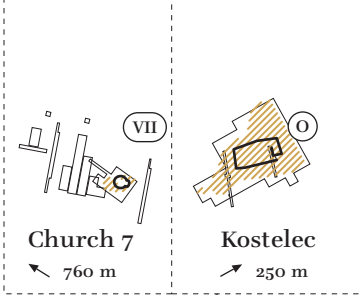
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Burial grounds

The burial grounds and their graves have produced valuable material, shedding new light on the spiritual life of the inhabitants of the agglomeration and the social structure of the time. The finds illustrate the richness and attractiveness of the Mikulčice Great Moravian court and provide a source of information on fashion, equipment and armaments. The skeletal material uncovered thus far from more than 2,500 graves has made a massive contribution to our understanding of the demographic structure of the stronghold population and its physical state of health. And thanks to new anthropological and bioarchaeological methods, researchers have been able to examine the nutrition and mobility of Great Moravian society in greater detail.

Although Mikulčice was settled as early as the 8th century, no graves have been found from that time; therefore, the methods used to dispose of the deceased remain unclear. The vast majority of the excavated graves in Mikulčice date to the late 9th century, when inhumations were practised. These graves are concentrated mainly in the church cemeteries and at the simpler burial grounds. The largest necropolises were discovered near the basilica (550 graves) and at Kostelisko's extramural settlement (450 graves). Both necropolises are significant for the proportion of inhumations containing rich grave goods, including gold and silver jewellery, swords, sumptuous gilded belt fittings and spurs. Similarly "rich" graves are also found in the necropolises near Church 2 at the acropolis and near Church 6 in the extramural settlement. The less sumptuous grave goods found in some of the cemeteries - near Church 4 and what is understood to have been Church 12 - do not necessarily indicate the lower social status of the buried. Rather, they are associated with a more advanced degree of Christianisation, which restricted the amount of goods that an individual inserted into the grave of the dead. Within Mikulčice grave archaeology, there is a special phenomenon known as the "settlement grave", which is found in occupied areas associated with either the violent fall of the stronghold or a dwindling population.

I Plan of the stronghold with the largest burial sites.



- (IV)

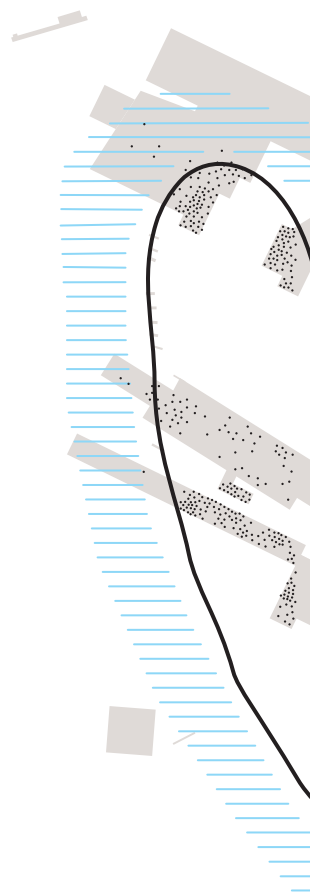
churches
- (P)

palace
- (O)

wooden architectural feature
- (D)

metal-casting workshop
- excavated areas
- fortification of the acropolis
- fortification of the outer bailey
- significant terrain boundaries
- derelict gateways and bridges
- burial grounds

5 Material culture



fortification of the acropolis



fortification of the outer bailey



significant terrain boundaries



silted up river branches



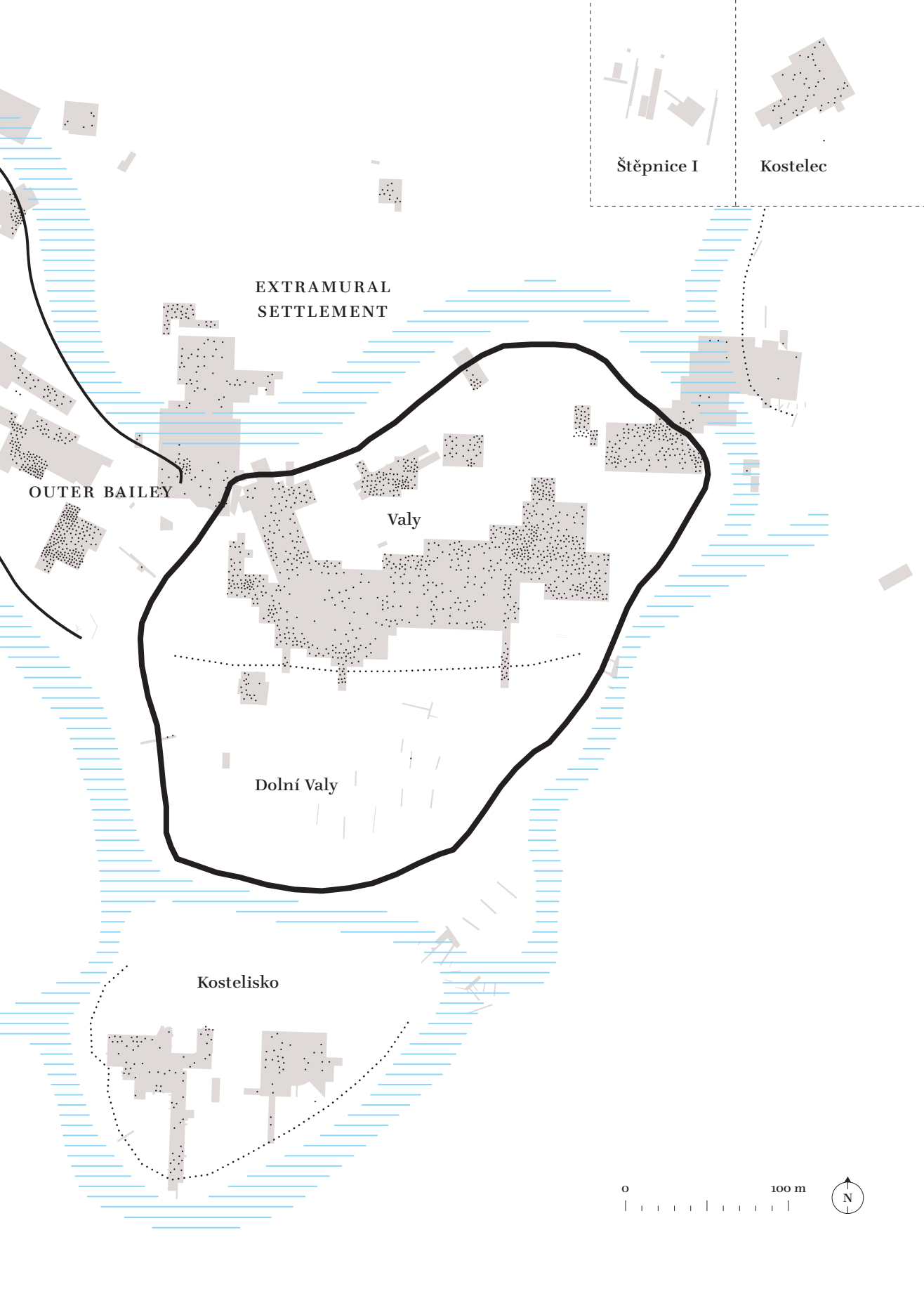
mapping of spindle whorls as indicators of common residential function of the areas



excavated areas

Žabník





Štěpnice I

Kostelec

EXTRAMURAL
SETTLEMENT

OUTER BAILEY

Valy

Dolní Valy

Kostelisko



Agriculture and livelihood

Ensuring the livelihood and other basic necessities for the life of the estimated 1,000-2,000 inhabitants of the Mikulčice agglomeration was a demanding task that was shared by the inhabitants of the stronghold, the extramural settlement and the hinterland.

The significant concentration of settlements, which has been attested archaeologically in a 10km perimeter around the stronghold, was traditionally associated with the economic hinterland of the centre. These tended to be villages outside of the floodplain, which is over 3 km from the stronghold and were labelled agricultural settlements. However, current research is more inclined towards the hypothesis that the agricultural hinterland was immediately attached to the stronghold and that the floodplain was suitable for agriculture. This is attested by the results of the latest archaeobotanical research as well as numerous finds of agricultural tools in the stronghold. The question of agriculture is an important topic of current research.

Archaeological excavations continue to reveal evidence of a high level of agriculture in the Great Moravian centres. Among the indices are the rare but significant finds of asymmetrical shares that could have already

been parts of ploughs, thus allowing the soil to be not only cut but also turned. A typical tool for harvesting cereals was a sickle, which is attested by almost 150 finds in the area. Grass, however, was then cut with a short, so-called grass scythe. The finds also contain more specialised tools, such as a winery knife for treating grapevines.

The assortment of cultivated plants contains cereals, legumes, oil and fibre crops as well as a colourful range of fruit and vegetables. Among the cereals for making bread (wheat, rye), wheat had a higher status although the universal cereal at that time was millet. Mikulčice was outstanding due to the finds of “luxury” fruits and vegetables - such as peaches, apples, nuts, grapes and cucumbers - which were characteristic of the diet of the elite.

With regard to the meat component of the diet, pork was of the utmost importance in Mikulčice, the same as the other 9th-century Moravian centres. Due to its low maintenance, which allowed semi-wild breeding and a high reproduction rate, pigs were the most efficient solution for securing the alimentation of the growing population of Great Moravian Mikulčice.



1



2



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4



5



6

1 A share was the most important part of an ard or plough.

2 So-called coulter cut the soil in front of the share.

3 Hoes were probably universal, however, they are seldom found.

4 Spring or "sheep herders" shears for cutting sheep wool could have served other purposes, such as to cut textile and other materials.

5 Sickles were used for harvesting cereals - for cutting spikes. Its use in everyday activities was actually much broader.

6 Short (grass) scythe for mowing grass.

Supply and raw goods

There were four basic raw materials in the early Middle Ages: water, wood, iron and stone. Each was important to the functioning of the centre. However, water, both as a foodstuff and as a raw material, was the most vital. Mikulčice was an island stronghold on the River Morava and thus was surrounded by water. Paradoxically, only three wells were discovered in the area of the power centre: two stone wells that were part of the church areas and a simple wooden one at Kostelisko in the extramural settlement. This cannot be explained in any other way than that the people used the water from the river. As the rampart encircling the stronghold made access to water difficult, the people probably walked through the gates to reach it. There must also have been places where water was accessible inside the stronghold. Many items attesting the handling of water, mainly ladles and buckets, were found in the moat between the acropolis and the outer bailey protected by the wood and stone barrier at the bottom of the riverbed. Another probable place where water was drawn was the lowest but fortified south part of the acropolis, Dolní Vály. This is one of the reasons why this place has attracted the considerable attention of archaeologists.

Wood was a commonly available raw material, although the result was a substantial thinning – if not complete exhaustion – of the forest in a wide perimeter around the stronghold; the consumption of wood for construction as well as for heating and crafts was enormous.

Iron was a strategic raw material that was transported to Mikulčice in the form of semi-finished goods from production centres linked with the extraction of ores, probably from the Moravian Karst, which is approximately 70 km away.

Stone was a highly valued raw material. The building material for churches and fortifications was mined in the slopes of the White Carpathians, at least 6 km away. Raw material for the production of quernstones was transported from considerable distances, sometimes exceeding 100 km (Bohemian-Moravian Highlands, Waldviertel, Slovak Ore Mountains).



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[1-3] Wooden ladles for water called “čerpáky”. Wooden finds come solely from the silted up river channels.

[4] Wooden bucket with traces of unpreserved iron fittings. Buckets were usually made from yew wood.

[5] Iron buckets are rather rare finds; they come mostly from graves.

[6] Forged iron fittings and arched bucket handles. In the settlement context, only metal parts were preserved.

Boats and fishing

The advantage of the island position of the stronghold was the immediate proximity of the river, which was of geopolitical, economic and social importance to the Great Moravian centres. The crucial role was in the communication alternatives of the river valley, both in terms of terrestrial and river transport. The economic advantage was in the inexhaustible source of water. In addition, the branched river channels played a major role in the strategic and natural protection of the centre. In this context, the symbolic role of the islands as places reserved for the highest elite or the sacred sphere cannot be ruled out.

The River Morava was an important form of communication in early medieval times and enabled navigation to the north, to the Staré Město-Uherské Hradiště area, as well as to the south, to the Danube region. Direct connection with the Danube, a critical long-distance communication within the reach of Great Moravia, was of vital strategic, economic and cultural significance in the 9th century. The Raffelstetten customs tariff from the beginning of the 10th century concerning the water transport of Bavarian salt to the

“market of the Moravians” is indirect but important evidence of the navigability of the northern tributaries of the Danube. River navigation at Mikulčice is attested by the finds of paddles and four monoxyles - boats dug out from a single trunk.

The quiet and undisturbed waters in the river channels and pools near the stronghold abounded with fish dominated by cyprinids - carp and chub. Pikes and catfish were plentiful and somewhat less common were members of the *Sander* genus: pike-perch and sander. Catfish grew to 3 m in length. Fish were a complementary but significant foodstuff for the stronghold inhabitants. This is attested by the evidence of fishing - archaeological finds of hooks, spears, fishing net sinkers, floats and straw fish traps. Smaller log boats that were found in the riverbed could also have been used for fishing.

The environment with still or slowly moving water was home to beavers and plentiful waterfowl, such as garganey, smew, velvet scoter, Eurasian coot, great bittern, and the northern shoveler.

[1-4] Fishing hooks.

[5] Fishing net sinkers.

[6] Netting needle for making fishing nets.

[7-8] Fishing spears.

[9] Wicker loach trap. The traps were used to catch loaches that lived in the muddy sediment at the bottom of the river.



Tableware

Among the characteristic traits of the ducal environment of the Great Moravian centres is evidence of luxurious tableware, such as glass vessels, bronze bowls, small decorated buckets and pottery. These are often objects of a foreign origin. Wooden tableware certainly had its place at the court; however, it is not commonly preserved in the local conditions, which is why no details concerning its function are available.

Glass vessels, attested by numerous fragments from Mikulčice and other centres, were a distinctive group of luxury tableware. Some of the better-preserved specimens mean we know that in 9th-century Mikulčice, funnel-shaped goblets were used that were manufactured in Frankish Rhineland.

The fact that bronze vessels were used in the local environment is attested by the finds of the fragments of two or three triangular bowls from hammered bronze sheet. This unique find comes from grave 341 near the basilica; the origin of such bowls can be seen in the Khazar environment.

In addition, the so-called ancient-shaped vessels are “luxurious” in comparison with the pottery from the local workshops. These include bottles, two-handle amphoras and flasks made of fine clay that takes on a yellow or ochre colour after firing. Earlier, the origin of such items as sought in the ancient Mediterranean, later in Byzantium. In 1963, a kiln containing a similar type of pottery was excavated at the foot of the Sady Height near Uherské Hradiště under the famous church area. Although its local origin is now admitted, the idea that it was the work of foreign potters who worked for the local elite is prevalent. The kiln in Sady may have belonged to a monastery workshop.



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1 Funnel goblet from grave 398 near Church 3.

2 Bronze triangular bowl from grave 341 near Church 3.

3-4 Bottle and small amphora, in so called "Ancient-shaped pottery" style.

5 Richly decorated tricuspid antler box, perhaps a salt shaker.

6 Wooden bucket with metal openwork frame.

7-8 Metal buckets with the Christian symbols of a bird and cross recovered from graves of important individuals near Church 3.

Dress and dress accessories

The period fashion determined the character of the garment and jewellery in Great Moravia. The local clothing culture, at least when it came to the aristocracy, copied the designs originating in the Frankish Empire, Byzantium and the European South. Nevertheless, the costume of the local elite had special distinctive features. Unfortunately, the possibility of the reconstruction of the garment of the Great Moravian privileged classes are extremely limited and based more on indirect documents.

As original textiles are not preserved due to the conditions at the site, we have to make do with the imprints of textiles on artefacts or textiles corroded onto metal objects. The latter is typical for iron and bronze or copper alloy objects retrieved from graves and mostly enable to indicate the type of weave (plain, tabby, atlas and variations) and sometimes even the fibre type (linen, hemp, nettle, sheep wool, silk).

Unfortunately, the garment designs are still completely outside the realms of direct study. There are certain possibilities offered by the iconographic representation of human figures, e.g. on strap ends (orants), plaques and crosses. Written sources also help, although to a very limited extent. The knowledge of dressing culture in a wider

historical and geographic context is crucial. Archaeological sources provide more information about the accessories rather than the exact design of the clothes themselves. They take the form of metal decorations - either functional (hollow spherical buttons called *gombiky* and belt fittings) or decorative (earrings, rings, necklaces, pendants).

The reconstruction of the Great Moravian garment is the most closely linked with *gombiky* - hollow spherical metal artefacts with a loop. There is a whole shape and size scale of these buttons and they are usually made from gilded copper alloy, silver or gold and decorated with hammered vegetal, geometric, and occasionally animal motifs. Some types were decorated with filigree and granulation.

Gombiky were found almost exclusively in the elite graves at important Moravian centres, in children's, women's and men's graves, and most frequently near the clavicles of the dead. They are mostly considered to be fasteners on the upper garment. At the same time, it cannot be excluded that they served as decorative garment mounts or as necklace components.



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1] Smooth golden vertically ribbed hollow spherical button from grave 580 in Church 3. Dimensions: 2.0 × 1.7 cm.

2] Golden hollow spherical button decorated with granulation from grave 300 near Church 3. Dimensions: 1.9 × 1.4 cm.

3] Silver gilded hollow spherical button decorated with fine granulation from grave 216 for near Church 3. Dimensions: 2.5 × 2.0 cm.

4] Golden lantern-shaped hollow spherical button decorated with massive granulations found in grave 318 in Church 3. Dimensions: 2.3 × 1.7 cm.

5] Golden hollow spherical button with palmetto decoration from grave 380 in Church 3. Dimensions: 2.5 × 2.3 cm.

6] Golden two-layered hollow spherical button decorated with soldered-on bridges, filigree and granulation from grave 505 near Church 3. Dimensions: 2.6 × 2.2 cm.

7] Silver hollow spherical button decorated with granulation from grave 505 near Church 3. Dimensions: 3.2 × 2.5 cm.

8] Silver hollow spherical button with hammered palmetto decoration from grave 471 near Church 3. Dimensions: 3.3 × 3.5 cm.

9] Copper alloy gilded hollow spherical button with hammered decoration in the form of birds from grave 1314 in Kostelec. Dimensions: 3.7 × 3.6 cm.

10] Silver hollow spherical button with hammered palmetto decoration and glass cabochons from grave 216 near Church 3. Dimensions: 4.7 × 4.1 cm.

Jewellery

Jewellery - items used for bodily decoration - are represented by earrings, necklaces and rings in the Great Moravian centres. The 9th-century elite environment in Mikulčice is especially characterised by luxury jewellery known as Veligrad-type jewellery. This category of findings was originally denoted as “Byzantine/Oriental” jewellery because its origin was assumed in the area of southeast Europe. After the discovery of the “Na Valách” burial site in Staré Město at the turn of the 1940s and 1950s, this circuit of decorations was denoted as “Staré Město” or “Veligrad” jewellery.

Today, the luxurious Veligrad type jewellery is unanimously considered to be a product of domestic jewellery workshops although it was largely inspired by Byzantine and Oriental designs. Its heyday dates to the second half of the 9th and beginning of the 10th century, i.e. the climax in the development of the Great Moravian centres. Among the basic types are

grape, globe and basket earrings, less frequent are column-shaped, crescent-shaped and chainlet earrings. The most luxurious items were made from gold or silver. Sumptuous gilded copper alloy designs were also common. Craft-wise, they are perfect products that mainly use decorative techniques such as filigree, granulation and beaded wire.

Most earring finds come from graves where they were usually found near the head of the dead woman or girl. However, based on the finds of larger earring assemblages in some of the graves, we assume that other pairs of earrings were braided into the hair or hung on headbands embellishing female hairstyles.

Sumptuous rings - those corresponding with the Veligrad-type jewellery - are decorated with filigree, granulation or glass cabochons, unlike plain rings and plate rings. Compared to earrings, their occurrence is rather rare.

1 Golden grape earring from grave 680 near Church 3. Dimensions: 2.1 × 1.3 cm.

2 Silver grape earring from grave 1959 at Kostelisko. Dimensions: 2.6 × 1.3 cm.

3 Golden grape earring from grave 794 at the outer bailey. Dimensions: 2.9 × 1.7 cm.

4 Golden earring with grapes on both sides retrieved from grave 283a in Church 2. Dimensions: 2.0 × 1.5 cm.

5 Golden earring with four globes decorated with granulation from grave 505 near Church 3. Dimensions: 3.7 × 2.3 cm.

6 Golden earring with ten globes decorated with granulation from grave 505 near Church 3. Dimensions: 5.2 × 2.6 cm.

7 Silver earring with four globes decorated with granulation from grave 420 near Church 2. Dimensions: 2.8 × 1.8 cm.



[8] Golden earring with four baskets from grave 335 near Church 3. Dimensions: 2.4 × 1.6 cm.

[9] Golden earring with a pendant made of nine baskets from grave 250 near Church 3. Dimensions: 3.5 × 1.3 cm.

[10] Silver earring with chainlets decorated with granulation from the burial site near Church 3. Dimensions: 8.4 × 3.2 cm.

[11] Silver ring with a button decorated with granulation from grave 454 near Church 3. Height: 2.6 cm.

[12] Gilded silver ring with a button decorated with filigree, granulation and glass cabochons from grave 470 near Church 3. Height: 2.8 cm.

Weapons and armour

Ninth-century Mikulčice was a central place with concentrated military power. This is attested by both the fortification elements of the agglomeration and particularly the numerous finds of weaponry and equestrian equipment, which served not only fighting but also had a social significance. These were a symbol of social status, and as such, it found their way into the graves of the Great Moravian elite that yielded numerous assemblages of weapons and equestrian equipment. In the context of graves, status symbols are the key expression.

Warrior equipment and armaments are fundamental attributes of male “warrior” grave goods. Equestrian equipment found in the graves contains spurs and harness fittings: strap-guides and strap ends. Equestrian and foot-soldiers’ weapons include swords, axes, spears, arrow points and knives. Vast evidence attests a significant number of warriors present in Mikulčice and their high social status. Mikulčice was very likely the seat

of the duke’s, or more precisely the ruler’s military retinue.

The most valuable and effective weapon at the time was the sword, which was exclusive to the members of the ruling class. Seventeen graves of noblemen with swords were discovered in Mikulčice. Swords, especially the more sumptuous ones, are considered to be the products of foreign workshops - in particular, those in the Rhineland. The bow was a very effective weapon both in combat and hunting. The iron arrowheads mainly come from settlement contexts where they attest combat activities.

Spurs were part of the basic equipment of horse riding warriors. Unlike older spurs with hooks, 9th-century spurs are characteristic with plates, which were discovered in over 150 graves in Mikulčice. Stirrups and equestrian bits are important but rarely excavated parts of horse harnesses.

[1] Sword from grave 2041 at Kostelisko in the extramural settlement. Sword handles were coated with wood or leather, the sheaths were made of wood and covered with leather; the blade was further protected by textile inside.

[2] Spear from grave 1241 at Kostelec in the extramural settlement. Spears, particularly those with wings that are associated with Carolingian influence area, are rarely found in Great Moravian cemeteries and among settlement finds. This weapon was adapted to the needs of horsemen

but it could also be used for hunting. It also had symbolic meaning.

[3] Axe with original wooden handle found under the bridge in the silted up riverbed.

[4] An absolutely unique find of part of a yew bow retrieved from the riverbed in Mikulčice.

[5-8] Iron arrowheads. Their rhombic shapes are associated with the old Hungarians.



[9] Chain mail was a rare and very expensive part of armour. A single shirt would consist of 20,000 rings.

[10] Among the most luxurious spurs found in Mikulčice were gilded bronze and iron spurs decorated with silver and copper tausia.

Prestige

Archaeological sources attest a remarkable concentration of wealth and power in 9th-century Mikulčice. This obviously has to do with the status of the agglomeration as a prominent seat of the ruling Mojmirid dynasty. The “court” culture is illustrated by numerous finds of weaponry and equestrian equipment, sumptuous belt fittings, luxury fabrics, gold and silver Veligrad type jewellery and a number of other luxury artefacts, including top-quality craftsmanship and items of foreign provenance. These artefacts were both practical and also had a symbolic function: they were attributes of the highest social class of Moravian nobility whose model and inspiration was the Frankish elite.

An important phenomenon that characterises the privileged environment of the Mikulčice stronghold is the so-called elite graves. Their highest concentration is situated at the cemeteries near Churches 2 and 3 in the acropolis and the Kostelisko cemetery in the extramural settlement. There are also singular finds and small groups of such graves in different parts of the agglomeration. Apart from weaponry, equestrian and other equipment, the elite graves often contained artistically valuable fittings that used to be part of belts, calf ties and spur straps. There are two small but outstanding groups of sumptuous belt fittings among these finds. One is represented by strap ends with the depiction of an orant and the other by the so-called codex strap ends. These are fittings made from gilded bronze or silver sheet decorated with such elements as glass cabochons, granulation and filigree. Similar to the Franks, the belts had a symbolic - ceremonial, social and protective - significance to the Moravian Slavs. Based on the limited number of sumptuous belts in the graves, it can be assumed that they were privileged belongings of the members of the ruling dynasty and the highest aristocracy.

[1] Belt fittings from grave 100 near Church 2. Strap end dimensions: 5.1 × 3.2 cm.

[2] Belt fittings from grave 248 near Church 3. Strap end dimensions: 5.3 × 3.4 cm.

[3] Belt fittings from grave 390 near Church 3. Strap end dimensions: 7.2 × 4.2 cm.

[4] Belt fittings from grave 433 near Church 3. Dimensions of the large strap end: 6.6 × 3.9 cm.



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The grave and settlement finds mean that we are well informed about the courtly culture at Great Moravian Mikulčice. This gave rise to sumptuous fine art made in the local workshops as well as numerous items of foreign provenance, luxury fabrics and evidence of a high standard of living in general. We can mention the luxury Veligrad-type jewellery made from gold, silver or gilded metal: globe, basket, column-shaped and pendant earrings, and rings decorated with granulation and characteristic hollow spherical buttons - *gombiky*. Equipment and armaments in the form of swords, axes, spears, spurs, luxury belt fittings, calf ties and other fittings were an attribute of the specific social status of high-ranking individuals. The richest graves yielded silk and other luxury textiles probably imported from Byzantium or Venice. Another substantial group of imported articles is glass, especially funnel-shaped goblets of Frankish origin as well as other shapes whose origin can be found in Venice or, more precisely, in northern Italy. The overall picture of court culture in Great Moravian Mikulčice is complemented by the evidence of a rich diet containing fruit, vegetables, herbs, wine and other delicacies.

Sumptuous sets of belt fittings usually consist of a large strap end, a buckle, clasps in the form of birds and possibly other fittings. Despite the varied, and sometimes almost fantastic, interpretations of art historians, it is probably a schematic Christian depiction of a saint.

The book-shaped strap ends, inspired by the form of religious books, attest the cultural level of the Great Moravian Mikulčice court. They were part of textile straps tied to knots, serving as part of male or female costumes.



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5 Set of three gilded bronze textile belt fittings in the form of liturgical books from grave 1735 at Kostelisko in the extramural settlement. Dimensions: ca 3.9 × 3.5 cm.

6 Bronze gilded fittings in the shape of a book from grave 505 near Church 3. Dimensions: 3.9 × 2.9 cm.

7 Gold strap end with pearls and glass almandine imitation from female grave 554 near Church 3. Dimensions: 3.3 × 1.9 cm.

8 Fittings for calf straps from grave 380 in Church 3. Strap end dimensions: 4.3 × 2.6 cm.

Religion and liturgy

Mikulčice is not just a place with a remarkable concentration of sacred buildings, it is also a site that yielded an important assemblage of movable finds associated with the Christian faith and liturgy. It contains a range of crosses, mainly simple pendant pectorals, but also a pectoral reliquary cross and a procession cross. There is a large group of functional artefacts containing the depictions of Christian symbols, e.g. cross-shaped fittings for wooden boxes (possibly reliquaries), the motif of crosses or birds on metal buckets, the depictions of a lamb and a bird on hollow spherical buttons and the motif of the tree of life on one of the sumptuous strap ends.

The depiction of orants on the Mikulčice strap ends was probably inspired by the West European Christian milieu. These figures in a praying gesture are probably schematic representations of Christ, the prophets or saints. The corresponding strap ends were a form of protective Christian amulets. The inspiration of the Mikulčice book-shaped strap ends by religious codexes is hard to dispute.

Styluses - writing implements for writing into wax tables, which are attested in Mikulčice by a number of finds - are indirectly related to Christianity, through Christian education. Like the find of a glass lamp, these finds attest the existence of church schools related to the basilica or some of the other churches in Mikulčice.

The movable finds contain liturgical objects or part of the internal equipment of the churches, such as the set of decorative fittings for a wooden pyxis (of a reliquary) from grave 300, small bronze bells, and an iron bell clapper. Sumptuous construction parts of the churches, such as countless fragments of painted plaster, windowsills and sporadic finds of stone architectural elements were also excavated.

All these items associated with the religious part of life, document the Christian milieu of the Mikulčice power centre in the 9th century.

[1] Silver cross with the figure of the Crucified from the cemetery near Church 3. Dimensions: 4.0 × 3.3 cm.

[2] Lead cross with the figure of Christ and unshapely figural engraving on the rear from grave 449 (?) near Church 3. Dimensions: 3.4 × 2.7 cm.

[3-5] Lead processional and breast crosses found in a settlement layer. Height: 8.0 to 4.2 cm.

[6] Lead reliquary cross from Mikulčice settlement layer, so far the only reliably documented Byzantine type engolpion from the Great Moravian region. Dimensions: 5.0 × 3.3 cm.



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[7-9] Metal cross-shaped fittings for wooden boxes.

[10] Part of glass lamp (polycandelon) of Byzantine origin.
Dimensions: 4.3 × 1.3 cm.

[11] Iron stylus for writing on wax tables.

[12] Gilded copper alloy fittings for a wooden box (?),
a reliquary or pyxis from grave 300 near Church 3.
Diameter: 9 cm.

Crafts and industry

Crafts played an important role in the life of the stronghold. Direct evidence of specialised production in the form of workshops and production facilities are relatively rare. The production facilities that were examined contain only a metal-casting workshop found in the vicinity of Church 5 at the acropolis and a feature interpreted as smithery, which was excavated in the north extramural settlement. Unequivocal evidence of specialised metal casting is provided by numerous finds of crucibles. Most of the other finds are only indirect evidence of the importance and development of specialised crafts (fine metalworking including metal-casting and jewellery making, smithery, building, glassmaking, processing of antlers and bones, specialised woodworking including turning).

Crucibles for melting non-ferrous and precious metals provide reliable evidence of metal-casting and jewellery making. The finds were concentrated at the acropolis and in some parts of the extramural settlement. A settlement that was, to a certain extent, specialised in metal-casting and smithery is attested in the north extramural settlement.

The most important part of this production took place at the acropolis, probably under the direct control of the duke. Great Moravian jewellery makers mastered diverse production and decorative techniques, such as casting, hammering, granulation and filigree.

Finds associated with smithing are represented by semi-finished goods, such as lenses and ingots, and waste in the form of slag. The presence of damaged and atypical artefacts in mass finds suggests the smiths concentrated on iron material for reuse. An exceptional find was made of a rotating grindstone used for the finishing, modification and maintenance of wrought iron artefacts.

In the Great Moravian times, iron was one of the most important raw materials and smithery was a trade of utmost economic and strategic importance, which agriculture, warcraft, building and a number of other crafts depended on. The ownership of expensive iron artefacts was an attribute of a certain social status. The most frequently represented iron goods are household articles.

[1] Ceramic crucibles for melting and casting non-ferrous and precious metals.

[2] Pliers used for fine metalworking.

[3] Bars, semi-finished products and production waste attest production and recycling of metal objects.

[4-7] Anvils used for fine metalworking.



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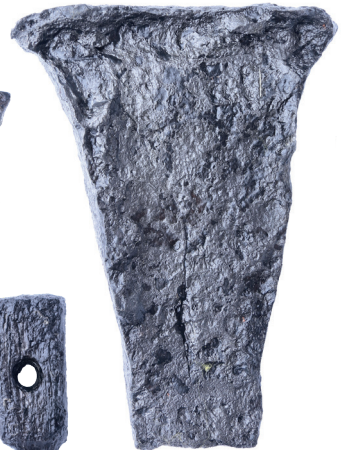
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8-9 Hammers used for fine metalworking.

10 Rotating whetstone that was used for the sharpening of sword blades, among other things. Diameter: 17 cm.

Trade

There is very little direct archaeological evidence of trade in the Great Moravian centres: coin finds are rare, no bronze “minting” weights have been discovered and the finds of weights are exceptional. The importance of assumed pre-monetary currencies - axe-shaped ingots, Silesian-type bowls and scarves - is dubious. Indirect evidence of trade, such as items of foreign provenance, is found in small quantities - units - rather than in larger series that would attest regular (established and intensive) long-distance trade contacts.

Great Moravian settlements and burial grounds occasionally yield foreign artefacts. When proving import, any other interpretation of the provenance of the artefacts, such as gifts and spoils of war, have to be ruled out. Very few proven imports have been excavated in Great Moravian centres. The current level of knowledge registers glass funnel-shaped goblets of Frankish origin and silk fabrics from rich graves whose origin is seen in Byzantium or northern Italy. Other commodities were also imported to Moravia: swords, spears and other weapons from the Frankish Empire, salt from Bavaria and

Transylvania, glass lamps from Byzantium, and very occasionally jewellery and other fine art products. Historians claim that these commodities may have been traded for slaves captured during raids on pagan regions by the Moravian dukes.

The Moravian state did not mint its own coins in the 9th century. Golden Byzantine solidus, Carolingian denier and Arab dirhams that were in circulation pertained to “international” trade. Even the use of weighted precious metal was not very common although there have been finds of gold cuttings and small lead weights. It appears that basic forms of goods exchange, such as “gifts” and simple exchange, prevailed in the 9th-century Moravia.

Mikulčice coin finds are represented by only four items: Byzantine solidus dated to 856-866 and three so-called broad deniers of north Italian origin from the turn of the 9th and 10th centuries. Mikulčice is sometimes hypothesised as the “market of the Moravians” mentioned in the Raffelstetten customs tariff from the beginning of the 10th century.



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1 Ingots and gold fragments that were put into graves, probably as Charon's obols. Dimensions: 0.2–1.5 cm.

2 Golden solidus of Michael III (Constantinople, 856–866).

3 Prism- and disk-shaped lead weights that could serve for the weighing of precious metals. Dimensions: 1.0–2.5 cm.

4 Bun-shaped lead weights whose interpretation as merchants' weight is ambiguous. Dimensions: 2.0–4.0 cm.

5 Axe-shaped ingots, basic semi-finished iron goods, which are considered pre-monetary currency.

Household-based production

The equipment in a common household at the stronghold was probably not much different from that in a village house and mainly contained the items that were essential for daily subsistence and basic production. The only finds that stand out are keys and lock components, which are associated with the security of property and are represented by very large assemblages in Mikulčice. On the other hand, it is surprising how few finds associated with grooming and personal hygiene were found in the centre. Most of the parts of these items must have been made from organic materials that are not usually preserved. The same holds true for garments and textiles in general.

Standard household equipment included fire steels, rotational grain mills, ceramic vessels for the preparation of food and storage of supplies, water buckets, wooden ladles and spoons for cooking and eating, iron knives and other simple wooden, bone, antler and stone tools for household chores.

Fire steel, together with flintstones, was used for lighting fires. A spindle whorl on a spindle served as a weight and a flywheel when spinning yarn. Several thousand spindle whorls found in Mikulčice illustrate the importance of household-based yarn production. Other common household implements were variously shaped whetstones.

Bones and antlers, together with wood, were the most common materials used for manufacturing working tools and decorative items. It is often difficult to determine the specific function of common utility tools and opinions on their use differ. The most frequently used tools were spiky bones denoted as awls or interlacers. Bone needles and antler points were also among the frequent finds. "Skates", usually made from horse metapodia, were probably used for smoothing hides and textiles and tricuspid antler boxes for storing small items or loose materials such as salt and herbs. Bone tubes and antler needle cases were used to store iron needles.



- 1 Fire steel and flint stones for lighting a fire.
- 2 Stone spindle whorls for spinning textile threads.
- 3 Spindle whorl in the operating position, on a wooden spindle.
- 4 Needle cases in the form of hollow bone and antler tubes.
- 5-6 Bone needles and tips (interlacers), universal domestic tools.
- 7 Whetstones were also part of everyday household equipment.
- 8 The interpretation of these bone “skates” is unclear: Were they smoothers or were they used for ice skating?
- 9 Tricuspid antler cases (semi-finished good), same as other bone and antler items, were made in the households.
- 10 Quern-stones were essential, vital tools for every household. Two stones - “quern” and “handstone” - formed a simple mill for the grinding of grains into flour.

Games and entertainment

Archaeological evidence of children's games and adult entertainment is generally very rare. Among the wooden artefacts found in Mikulčice, three items were identified that can be interpreted as evidence of play and games: a wooden gamepiece called *špaček*, a top, and a plain marble. A *špaček* was a cylindrical wooden pin about 12 cm long, sharpened on both ends into a cylindrical shape; the game was called *tlučení špačka* (beating the starling). The top was a 7 cm high pear-shaped artefact of turned wood; it was rotated in the same way as modern spinning tops.

Discounting hunting as a pastime of the privileged, among the evidence of adult entertainment are decorated tokens found in Mikulčice and other sites. It is assumed that these discs with a diameter of 27–42 mm made from antlers or bones were used in board games similar to draughts or nine men's morris.

The Mikulčice site yielded a whole series of tokens, most of them decorated on one side. The only exception is the famous target with the depiction of an archer on one side and "animals" on the other side that has the attributes of quality craftsmanship. All these examples come from the fortified core of the agglomeration.

Another group of potential gamepieces consists of astragals. These were slightly worked animal carpals and tarsals with a lead insert used as a weight. The oldest astragals are dated to antiquity; the game rules are unclear, though. Concerning the fact that some of them were found in graves, a protective function cannot be excluded.

Protection and children are linked with another significant category of finds – jingle bells. The sound effect of these hollow metal spheres with an eyelet and an opening on the bottom is well known. What is less known is the fact that their function in the Middle Ages was protective. A jingle bell was an amulet whose sound was supposed to protect the bearer – usually a child – from evil powers.

Among the finds of burned soil is the noteworthy assemblage of figures found in feature 400 near the palace. The assemblage of statuettes of four-legged animals, small horned animal heads, human figures and saddles is considered to be a store of votive symbols (offerings). These items may also have been used as toys.



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1-5 Antler tokens, supposedly playing counters.
Diameter: 2.7 to 4.2 cm.

6 Bone "astragals", hypothetically playing counters.
Dimensions: ca 3.0 × 1.5 cm.

7 Bronze bell as a protective amulet.

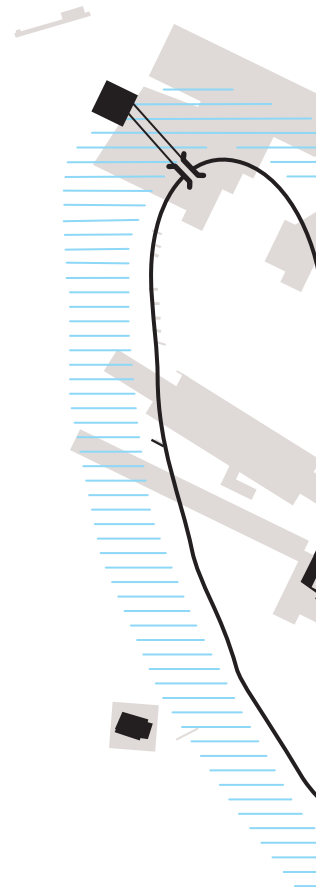
8-9 Bone whistles.








10-11 Assemblage of animal figures from pit 400 near the palace.

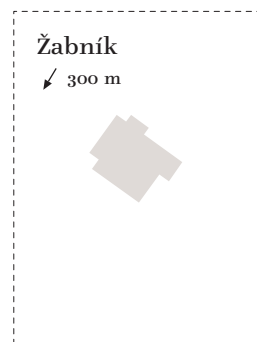
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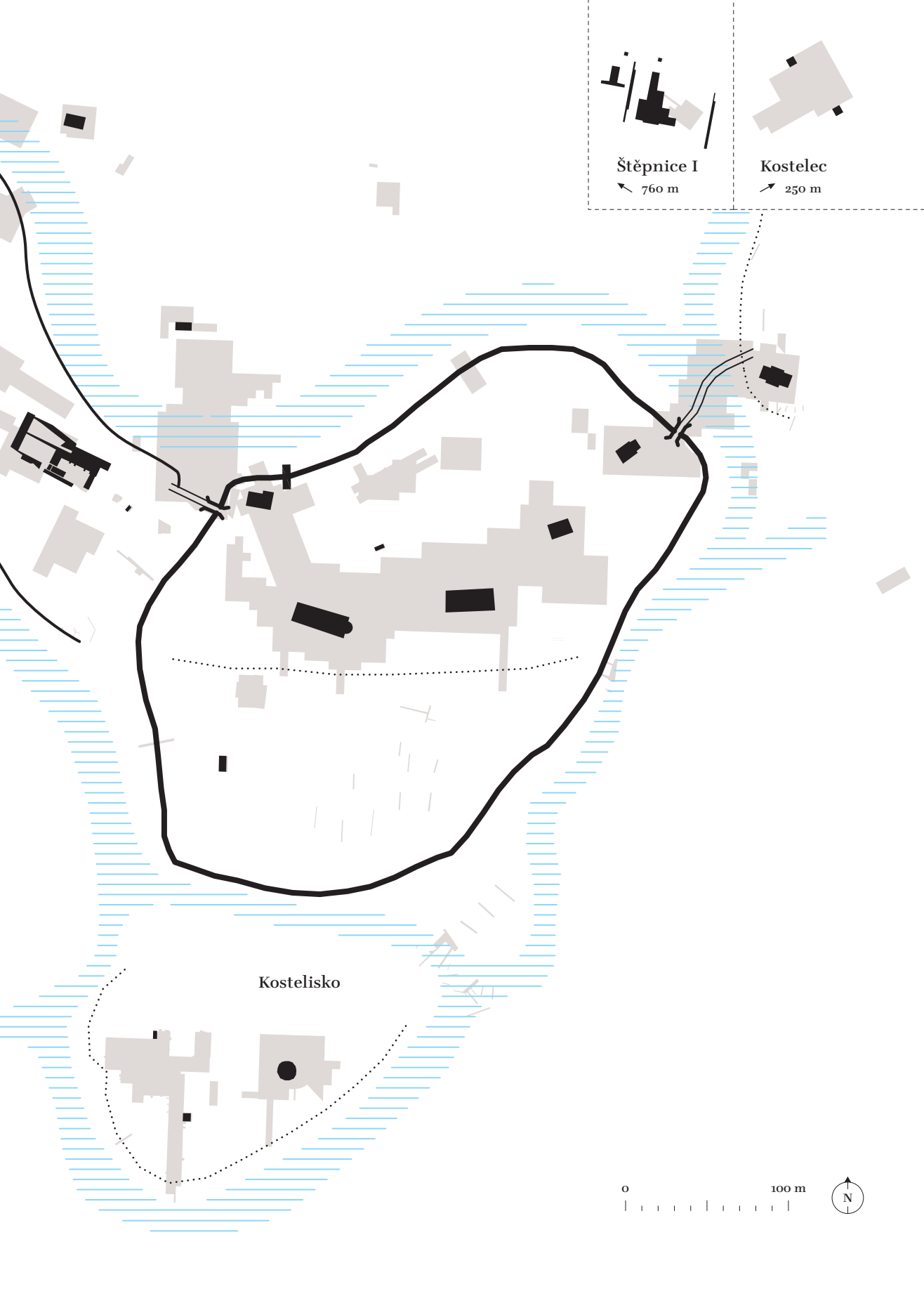


6 Excavations and non-destructive survey



-  fortification of the acropolis
-  fortification of the outer bailey
-  significant terrain boundaries
-  derelict gateways and bridges
-  silted up river branches
-  the area uncovered during the large-scale excavations between 1954 and 1992
-  areas excavated during the revision and supplementary excavations since 1993





Štěpnice I
↖ 760 m

Kostelec
↗ 250 m

Kostelisko



Excavations of settlement areas

The Mikulčice agglomeration is a complex centre that fulfilled a number of functions, which is why excavations of such a settlement organism must involve all its features. Various activities, including residential, defensive, religious, funerary, production and general economic, must be documented and then combined with all the information to present a comprehensive picture during the post-excavation analysis. The large-scale excavations conducted in the 20th century (1954–1992) had the potential to become a broad archaeological research programme studying settlement. Unfortunately, at that time, archaeology significantly overestimated the possibilities, excavating over 5 ha of complicated archaeological contexts in the most precious areas of the site in less than 40 years while failing to compile a comprehensive publication. This was the main reason why the Mikulčice excavations were limited to a minimum after 1992 and the research activities were redirected into the systematic processing of the closed stages of the large-scale excavations.

The site was subject to another twist in the new millennium, especially after 2004, when the necessity to return to field works to confirm certain theoretical questions became apparent. This is how the programme for processing sources and the verification of earlier excavations was launched: “new” excavations became part of the processing of “old” sites. This programme is still ongoing and involves small but heavily scrutinised excavation areas and trenches and the prompt publication of results. This modern interdisciplinary research involves a number of scientific and technical disciplines, with archaeobotany and geoarchaeology at the forefront of this interaction.



1 Rescue excavations of the settlement in the outer bailey with sand floor backfill of log houses (excavation P 2013-14, part of the reconstruction of the visitor centre).

2 Section of settlement stratigraphy in the outer bailey with sand layers of floor backfill of wooden houses. The dark grey layer with charcoal on clay subsoil is called “pre-Great Moravian horizon” the precise dating of which is subject to current academic discussions.

Excavations of churches and the palace

Stone buildings, particularly the churches, are the most attractive objects of study in Mikulčice, which is why they were given priority after the discovery of the site in 1954. All provably sacred buildings and Mikulčice palace were excavated by 1964. In the 1970s and 1980s, two hypothetical churches were added: no. 11 and 12. The year 2004 saw a breakthrough in Kopčany where the finds of Great Moravian graves near the Chapel of St. Margaret of Antioch were discovered, which led to the acceptance of Great Moravian dating of the building in the academic discussion. The last phase of research of the stone buildings in Mikulčice took place between 2008 and 2013: it was a revision excavation of the churches and the palace that was conducted as part of a new presentation of the monuments.

The methodology of masonry excavation was established and coined directly in Mikulčice relatively shortly after the beginning of the excavations in 1954. It was based on a procedure that is an antithesis to the current contextual archaeology. Due to the fact that the masonry remains of the churches served as a source of construction stone for the people living nearby as late as modern times where the stones were consistently taken from the foundations, the backfill of the foundation trenches is one of the latest archaeological contexts in Mikulčice. Instead of being the first to be dismantled, the trench backfill - the trench negative - was preserved, while earlier archaeological contexts - into which the foundations had been sunken - were removed instead. This process can be denoted as provident as it allows further research into the backfill of the foundations in the future. This procedure meant that it was possible to gather plenty of important findings concerning the foundation trenches of masonry buildings, especially churches. The most important findings were made due to the revision of the floor plans of the buildings and the stratigraphic relationship of the foundation trenches to earlier ("superposed") features under the construction.



1 Revision excavations of Church 4 in 2012. The complexity of archaeological contexts was linked to an older settlement feature into which the church layers collapsed.

2 Revision excavation of Church 2 in 2008. This building is one of the oldest sacred objects in Mikulčice. It is now the only church presented in the state documented by excavations, *in situ*.

Excavations of burial grounds

Cemeteries and churches were the most sought-after features of the Mikulčice excavations. Half of the Mikulčice graves discovered so far - including the most sumptuously equipped elite burials - were unearthed in the first ten years of the excavations. The following decade saw the excavation of the remaining parts of the burial ground near the basilica. The excavations of the burial sites around hypothetical churches no. 11 and 12 followed; at the same time, extensive excavations of non-church necropolises began in the extramural settlement, first in Kostelec and then in Kostelisko.

The “old” excavations were able to uncover and document the graves; however, they were not able to capture detailed stratigraphic relations to occupation layers and features. The fact that large proportion of the graves were dug into the occupation layers - not into the subsoil - means a substantial decrease in the value of the grave finds.

Together with the end of the phase of large-scale excavations in 1992, the field works concerning the larger cemetery complexes also ended; the possibilities of their exploration were exhausted to a certain degree. Thus, further excavations could focus merely on the arbitrary issues of Mikulčice grave archaeology. After 2004, peripheral parts of the already excavated necropolises in the extramural settlement, in Těšický les and Kostelisko, were explored. Attention was also paid to the settlement graves and their relation to the destruction horizon of the site.

In the last decade, new possibilities arose with the development of anthropological, or more precisely bioarchaeological, methods. Today, newly discovered graves are subject to detailed examination from the point of view of molecular genetics (DNA), stable isotopes and a series of biological characteristics of the historical population. However, this approach is only possible with the active participation of anthropologists directly at the site.



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2

1 Revision excavation of an edge of the Kostelisko burial ground in 2016; Mikulčice's 17th grave with a sword is exposed in the picture.

2 The 2016 evaluation excavation in Dolní Vály in the south part of the acropolis exposed two "settlement" graves.

Excavations of the silted up river branches

One of the characteristic components of the Mikulčice research is the excavation of silted up river branches that used to flow around the stronghold in the 9th century then ceased to exist in the centuries following the demise of the centre. The first time this kind of archaeological context was discovered in Mikulčice was in 1964. It became apparent that the basic condition on which such excavations can be conducted is a technical solution that would drain the excavation area. This is why a system of drilled wells with the continuous drawing of water was made around the perimeter of the future large-scale excavations of the silted up riverbed denoted K 1966-68. This is how the groundwater level was lowered by 2 m, which enabled “dry” excavations of the silted up riverbed.

The organic material, particularly wet wood preserved under the groundwater level in the lower part of the riverbed backfill, had to be treated properly. Without conservation, it would decompose. A suitable conservation unit using PEG was installed at the old archaeological base, through which it was possible to preserve sizeable objects such as the two 10m-long boats.

In the 1970s and 1980s, two more large-scale excavations of the river channels took place. Three wooden bridges, anti-erosion barriers, palisades as well as other water constructions were excavated. A valuable assemblage of wooden artefacts, exceptional in our milieu, was obtained. The valuable knowledge of river archaeology gained in previous Mikulčice research was used during the last excavation of the riverbed in 2012 that was aimed at completing the research into bridge no. 1. This research would not have been possible without the active participation of an interdisciplinary team that included a geologist, a pedologist, a sedimentologist, a botanist specialising in plant macroremains and a dendrochronologist.



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1 Revision and supplementary excavation of the silted up riverbed where Bridge no. 1 entered the area of the northwest extramural settlement (excavation B 2012).

2 Extraction of one of the oak bridge pilots for documentation and dendrochronological sampling (excavation B 2012).

Geophysical survey

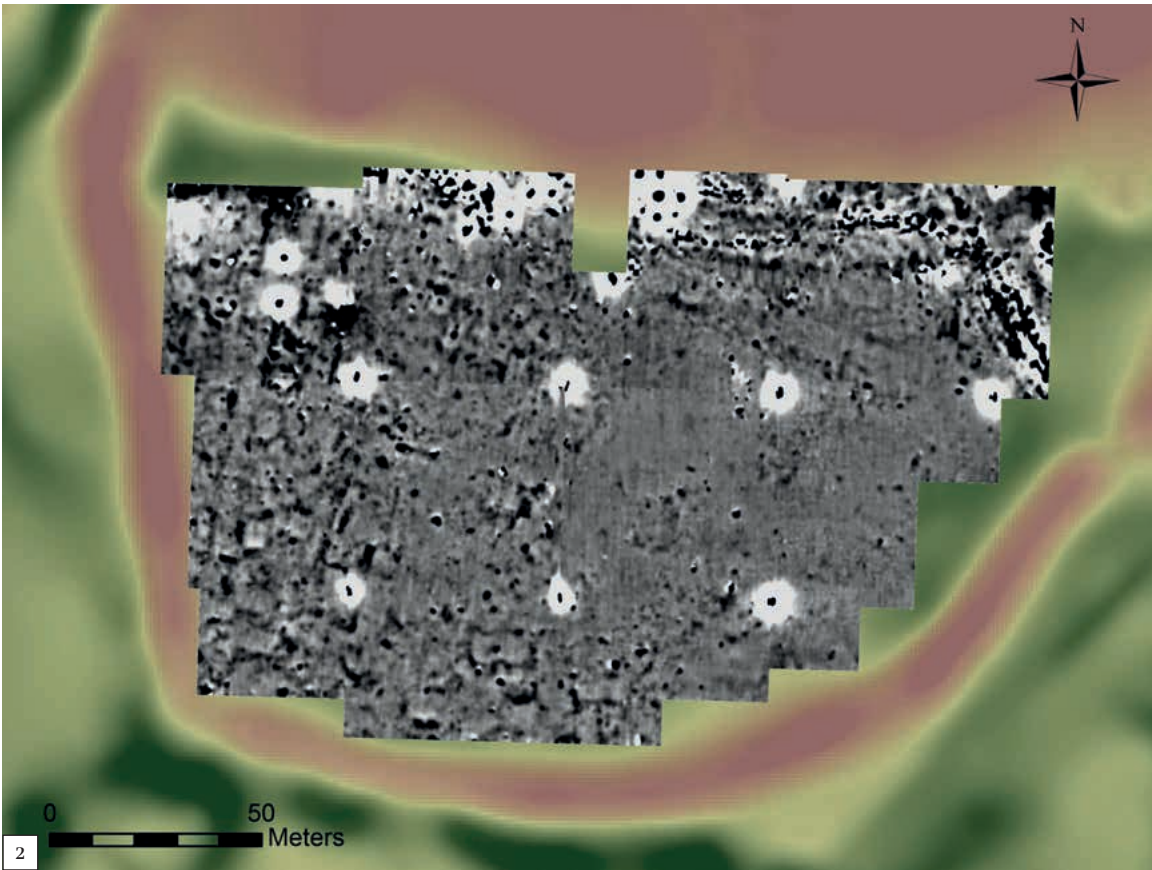
A geophysical survey is the most important non-destructive method of archaeological prospection in Mikulčice. In fact, the correct way of conducting excavations nowadays is to base them on the results of previous non-destructive research - particularly geophysical measurement. Unfortunately, the case was the opposite in Mikulčice, because at the time of the large-scale excavations in the past century, the methodology and technology were not sufficiently developed. The methods of geophysical prospection were applied more broadly only in the last decade. Naturally, these measurements were able to turn up positive results only in intact areas, i.e. outside of the scope of the old research.

Among the geophysical methods used were large-scale magnetometry, which is able to measure large settlement areas, and geoelectric resistivity prospection, which was successfully applied in the area of the fortification. Georadar prospection was used to find the silted up river channels.

The best results of the geophysical survey have been obtained at the Dolní Valy area in the southern part of the acropolis. This is the least researched part of the stronghold with the least disturbing elements. The result is a quite intense occupation with a regular built-up area in the west and south of Dolní Valy. The southeast corner of the fortification probably featured another gate oriented toward the Kostelisko area in the extramural settlement. Intensive settlement and the regularly built-up area were verified by an excavation in 2016. As in the outer bailey and extramural settlement, the built-up area in Dolní Valy is characterised by the regularly spaced floor backfills of log houses.

[1] Magnetometric survey of the northern extramural settlement in 2016 carried out by the employees of the Department of Archaeology and Museology, Masaryk University.

[2] The result of the magnetometric survey in Dolní Valy in the south part of the acropolis (by P. Milo).



Research base



①

new archaeological base in Mikulčice-Trapíkov

②

visitor centre of the national cultural monument Slavonic stronghold at Mikulčice

③

old archaeological base Mikulčice-Valy

- - -

notional border between the extramural settlement and hinterland



early medieval agglomeration



residential areas in Mikulčice and Kopčany



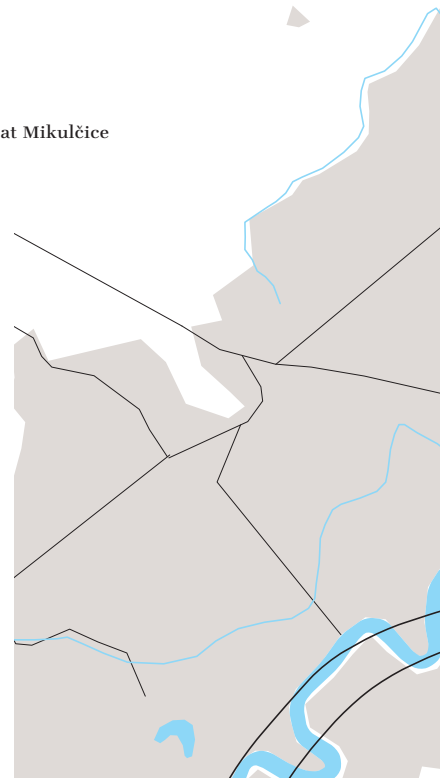
bodies of water and watercourses



riparian forest

0

1 km





1

2

3

MORAVA

KOPČANY

New archaeological base

Archaeology and its research base are part of the *genius loci* of the Mikulčice stronghold. The “old” base of the Institute of Archaeology of the Czech Academy of Sciences in Brno used to stand at the acropolis of the stronghold. It was established when the excavations began in 1954 and was replaced by a new base at the Trapíkov site in 2013. The Trapíkov sand dune is about 1 km away from the acropolis of the Great Moravian stronghold near an access road connecting the stronghold with Mikulčice. Due to the position of the new archaeological workplace on the outskirts of the monument preservation area, the modern building will not disturb the authenticity of the core area of the national treasure of the Slavonic stronghold at Mikulčice while enabling the continuation of intensive research into this archaeological site of European importance.

This workplace provides the best possible environment for activities associated with modern archaeological research. It is an oasis of peace, concentration and hard work that is in direct contact with the subject of research, the Mikulčice-Valy archaeological site, and other sources. It is a meeting place for archaeologists, historians and other experts from Central Europe.

The new building is connected with the world of Great Moravia through traditional building materials - smoothed natural plaster and raw wood used in sun blinds and avant-corps.

The new building provides good conditions for interdisciplinary archaeological research of Mikulčice, Great Moravia and Early Middle Ages in central Europe.



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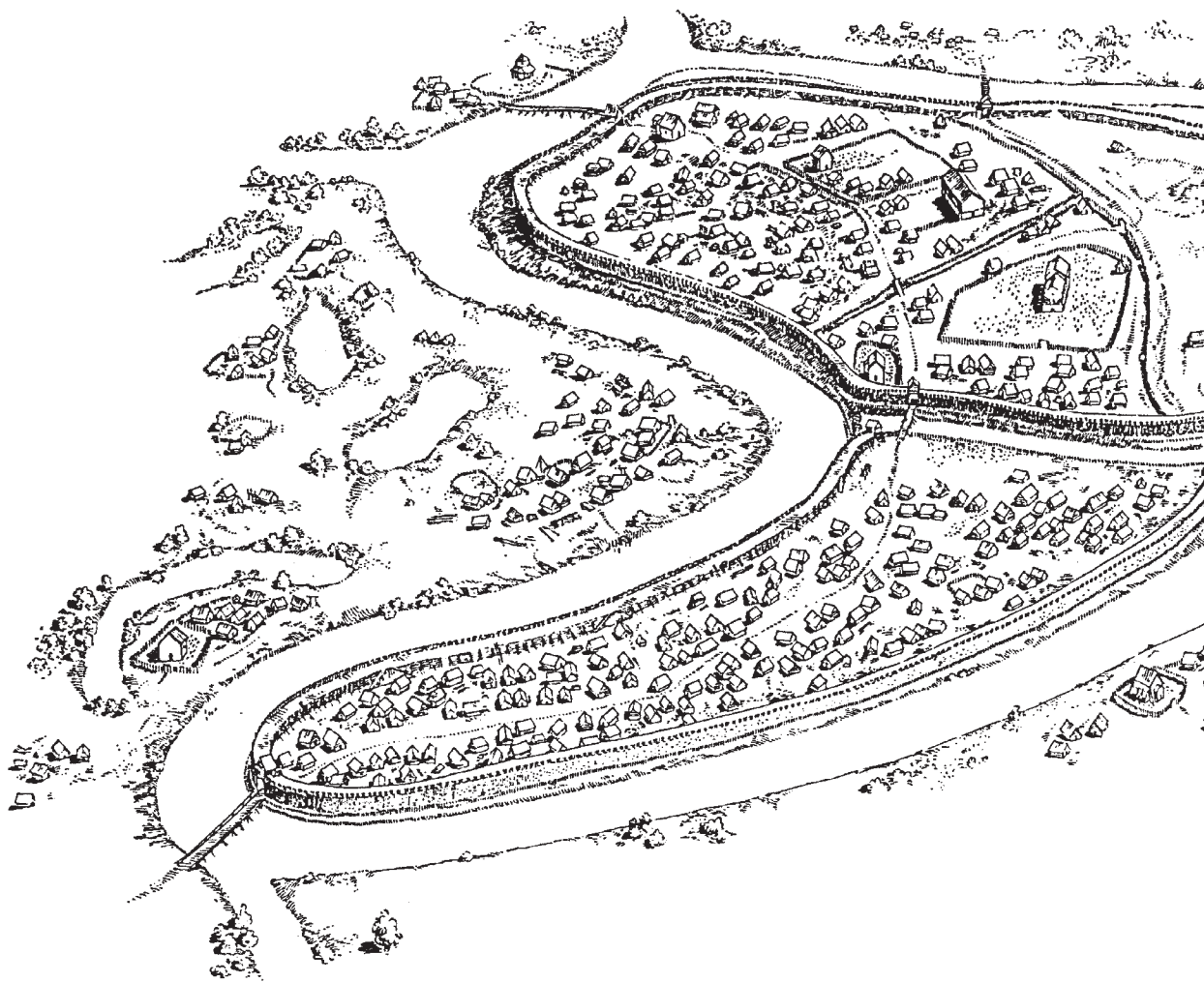
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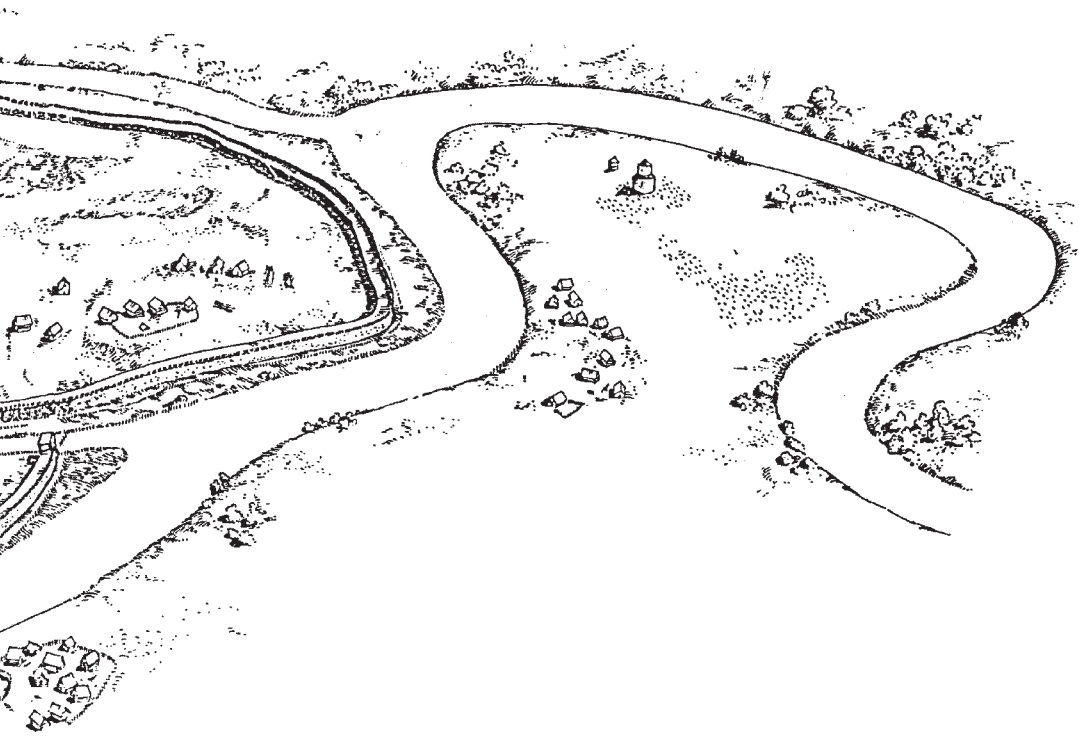
1 New archaeological base with the southeast entry atrium.

2 Multipurpose hall with conference setting.

8 Historical context

MIKULČICE AND GREAT MORAVIA





Hypothetical reconstruction of Mikulčice Stronghold at the end of 9th century (after R. Skopal, of the 2000).

MIKULČICE AND GREAT MORAVIA

Great Moravia as a power-political unit of the western Slavs played an important role in the history of 9th-century East Central Europe. From the point of view of state formation, it can be considered as a predecessor of the early medieval states of the Přemyslids in Bohemia, the Árpáds in Old Hungary and the Piasts in Poland that formed a political prototype of modern East/Central Europe a whole millennium ago.

The cores from which the Great Moravian Empire crystallised were situated in Old Moravia on both the banks of the River Morava and in the Nitra Principality. The first historically documented ruler of Old Moravia, Mojmir I, seized Nitra around 830 and annexed it to the Morava River region, thus laying the foundations for the new formation. During his reign, Mojmir accepted baptism. The increasing power of the state during the rule of Mojmir's successor Rostislav (846–870) drove Great Moravia into more and more frequent conflicts with the East Frankish Empire. To strengthen independence from the empire, Rostislav strove to build his own religious organisation. At his request, Byzantine Emperor Michael III sent a mission led by Constantine (Cyril) and Methodius, to Moravia in 863. They created a new Slavonic (Glagolitic) alphabet, thus promoting the universally understood Old Slavonic to a language that was both standard and liturgic. Great Moravia experienced the greatest boom under Duke Svatopluk (871–894). New territories were annexed and Methodius was appointed the head of the newly established Moravian Archdiocese. However, the schism between the eastern and western Christian churches escalated. After the death of Methodius in 885, his disciples were expelled from the country. The disputes with the Frankish Empire and internal conflicts during the reign of Mojmir II (894–906) exhausted Great Moravia so much that it succumbed to nomadic Hungarians in 905–906.

This might be the history of Mojmirid Moravia in a nutshell. However, its image in the light of modern historical and archaeological research is substantially more complex. In contrast to the traditional interpretation of the second half of the past century, which, to a large extent, fascinated due to the spectacular



1

- core territory under Mojmir I
- territory under Rostislav
- maximum expansion under Svatopluk

discoveries at Moravian strongholds, the evaluation of the historical position of Mojmirid Moravia by today's science is much more sober.

The time when Great Moravia was described as “the first common state of the Czechs and Slovaks” is definitely over. It is true that the Great Moravian Empire developed on the territory of both the modern states and thus became an inseparable part of the national history of both Czechs and Slovaks. However, it had little in common with the modern nations; this view was criticised by the historian Dušan Třeštík as early as the 1990s. Neither is the term “state” entirely justified in the case of Great Moravia: there has been a lively discussion underway among researchers. We can ask the same question as archaeologist Jiří Macháček whether Great Moravia was rather an advanced form of

¹ Supposed territorial scope of Great Moravia under the rule of Mojmir, Rostislav and Svatopluk.

a chiefdom or a state. Anyhow, this question is more or less academic, which is why it is usually of no interest to a common visitor.

The shortcomings concerning the knowledge of the social and economic structure of Great Moravia are more serious. Evidence provided by written sources is so scarce that it leaves plenty of space for “traditional” interpretations and speculation. In any case, Great Moravia is still a crucial topic of Czech and Slovak medieval archaeology. Let’s address the question historian Martin Wihoda asks: who were the Moravians that were first mentioned in 822 at the Imperial Diet of Frankfurt and who stood by the side of the Mojmirid rulers and dukes in the 9th century and remained part of central European events after the demise of Great Moravia? Were they old family aristocracy? We can also inquire into the fates of the Mojmirid dynasty: were all the members of the family physically eliminated at the beginning of the 10th century, together with the collapse of the main centres of the empire or did some of their relatives go on to live in seclusion? There is another crucial question: what were the economic foundations of the Great Moravian “state”, or, expressed more generally in the words of Ivo Štefan, how did Great Moravia “work”? Where did the “wealth”, evidenced by the excavations of the 9th-century Great Moravian central agglomerations, come from? How did such a prosperous society disappear from the map of Europe within such a short time?

It was certainly not only violent Hungarian invasions that caused the demise of Great Moravia at the beginning of the 10th century. Besides succession conflicts following Svatopluk’s death and other internal discords, a major role could have been played by the exhaustion of the economic extensive farming system based on long-term expansion, redistribution of spoils and perhaps also slave trade. The fate of the Mojmirid Empire was probably sealed as a result of the interruption of the important northsouth long-distance route – the south part of the amber road connecting Moravia to the Adriatic.

The above historical questions are difficult to answer unequivocally. These issues are closely linked and require a comprehensive examination. This is now in the hands of historians, archaeologists and collaborating disciplines. Archaeology itself has a vast source of material that is far from being processed

and adequately published. There is still also the possibility to return to the sites and revise the issues arising from the processing of the “old” material by means of new excavations. There are excellent conditions for such revisions due to modern methodological and technical tools. However, the much-needed dynamic picture capturing the development of Mojmirid Moravia and its material culture throughout the 9th and the beginning of the 10th century is still very difficult to achieve. The main obstacle has been the lack of exact data, i.e. an accurate chronological background obtained by using methods such as dendrochronology and radiocarbon dating.

Before returning to the topic of Mikulčice, let us make a short summary. Contrary to the traditional conception of Great Moravia, we should relinquish the idea of a magnificent state formation, a rival to the Frankish and Byzantine Empires. This case was certainly different. Great Moravia was primarily the periphery of the Frankish Empire, both literally and by implication; despite frequent expressions of opposition, Moravia was politically dependent on Frankish power and the Moravian elite sought to imitate the Carolingian environment, both culturally and lifestyle-wise. This does not exclude other significant sources of inspiration. Moravia drew on the Avar Khaganate in many ways. Byzantium and its Cyril-Methodian mission had a critical impact on it in the area of education and literature, to say nothing of Christianisation. A crucial role was also played by the “south” contacts in the Adriatic – north Italy, Istria and Dalmatia. There are many links with Great Moravian material culture.

What position did Mikulčice have in the internal structure of the Mojmirid Empire? Was it a capital or just one of the significant residential and administrative places of the Moravian Mojmirids? Written sources are not very helpful in answering this question. The link between Mikulčice and the “certain unspeakable place so different from any other ancient fortresses” and “Rastislav’s old town”, mentioned in the Annals of Fulda in 869 and 871, is probable but far from confirmed. Nevertheless, these mentions can be almost certainly linked with the central part of the empire and the original Mojmirid domain in the middle part of Morava river region, somewhere between Staré Město in the north and Pohansko near Břeclav in the south, part of where

Mikulčice is. This is the territory where a concentration of finds of gold and silver jewellery and sumptuous equestrian equipment and weapons was discovered. Let us now sum up the main phenomena of the Great Moravian settlement agglomeration in Mikulčice that best attests the position of this power centre at the time in question.

ISLAND STRONGHOLD

In the 9th century, Mikulčice was an island stronghold. The Mikulčice-Kopčany agglomeration was dispersed across several river islands and was distinctively divided by the multiple branches of the River Morava. In the 9th century, the floodplain was covered with bottomland hardwood forest with natural elm and hornbeam forest that was not subject to the periodic floods that were usual in later times. The change brought about by the periodic floods in late Middle Ages and modern times was an ecological catastrophe that made the cultural landscape a secondary economic area.

The main Great Moravian centres typically occupied lowland, riparian and island positions. This is particularly true for the settlement agglomeration in the Morava River and lower Dyje River regions (Mikulčice-Kopčany, Staré Město-Uherské Hradiště, Břeclav-Pohansko, Olomouc). Similar use of river flats for the foundation of centres in the 9th century is also found in the Váh River region in Slovakia (Pobedim, Majcichov). The centre of the Pannonian duchy - Blatnohrad/Mosaburg near Zalavár - also had a similar character. The inhabitation of river islands was a civilization phenomenon that had a possible symbolic significance. However, in the case of Great Moravian centres, the main motivation was definitely the practical aspect of such a location. The River Morava was the fastest route connecting the Moravian territory with the Danube that was, in turn, a major European communication. An ancient amber road led from the Danube to the south; it was probably used by the Moravian messengers and merchants on their way to Venice, Rome, but also Byzantium and other destinations. River islands were sought after as natural strategic places in the flat landscape of southeast Moravia. While the Slavs in northeast Germany and Poland preferred the strategic position

of lake islands, Moravian Slavs preferred to found their main centres on river islands. River island strongholds are a typically Great Moravian, possibly unparalleled, phenomenon.

CONCENTRATION OF POWER AND WEALTH

One of the main attributes of the Mikulčice stronghold is the evidence of the remarkable concentration of political power. Among its manifestations are numerous sacred buildings, rich elite graves, top-quality fine art products and the overall wealth particularly evidenced by grave finds. A more detailed view uncovers further traits: continuity of the central place, a strong military component, the presence of representative buildings and “dynastic” graves, court culture and the developed economic hinterland of the centre.

Among the most important buildings that connected the representative and residential function, the foremost place is occupied by the “palace” - the only masonry building in Mikulčice of profane nature. The palace and Church 3 (basilica) stood close to each other at the two highest points of the acropolis. The notional connection of the palace and the neighbouring basilica can be seen as a personification of the ducal power. It is likely that the basilica was the building in which the duke partook in religious services and where the most important members of the ruling family found their last place of rest. More examples of a free connection of sacred and residential buildings in the Great Moravian milieu are known from the elite court in Břeclav-Pohansko and the residential area Na Dědině in Staré Město. However, the functions of the corresponding church buildings were never compared to the importance of the Mikulčice basilica. Evidence of a similar link in the Slavonic environment is found more frequently as late as the 10th century.

There is another trait typical for Mikulčice, which is not normally found at other sites: the presence of buildings (probably log houses) with mortar floors. Similar architectural features were found mainly in the vicinity of churches and served either clerics or the aristocracy. In Mikulčice, they were usually not found in an intact form but as mere fragments of the original floors or

as crushed mortar in the occupation layer. Analogies to this phenomenon are found only in closely defined residential areas of major centres such as the stronghold in Břeclav-Pohansko (the ducal court) and in Staré Město (Na Dědině area). However, in Mikulčice it is considered a typical feature of the built-up area of the acropolis.

An important phenomenon related to representations of ducal (ruling) power is the interior and the “dynastic” graves in churches. This primarily concerns the tombs in the main areas of Churches 2 and 3. Due to the lack of written sources or epigraphic evidence, it is impossible to reliably identify the buried individuals; however, based on broader analogies and thorough historical analysis, their connection with the ruling dynasty is highly likely. The grave goods did not differ significantly from the richest graves at the burial grounds around the churches; their prestige was expressed by their privileged position - inside the church. In the Great Moravian environment, there is an analogy of this phenomenon in the church complex in Uherské Hradiště - Sady. The total number of burials in the main parts of the Moravian churches indicates a possible association with the Mojmirid dynasty.

Elite graves represent another important phenomenon that characterises the privileged environment of the Mikulčice Stronghold. Apart from the finds of weapons and equestrian equipment, these graves turned up some absolutely unique assemblages of jewellery and handicraft. The phenomenon of “ducal graves” is nothing exceptional in the Slavonic world of the 9th and 10th centuries. In the Western environment of the Frankish Empire, where such sumptuous grave goods were no longer placed in graves (particularly because of religious proscriptions and the more advanced Christian milieu in general); however, in terms of historical knowledge, this is a very fortunate circumstance. Due to the fact that Moravia was culturally at the periphery of the Frankish empire, we can use the local finds to study something that is represented by isolated finds at the core territory of the Carolingian Empire. Dozens of rich elite graves at the Mikulčice cemeteries are a unique phenomenon, a 9th-century complex, which can be paralleled only by the finds from Staré Město and Slavonic sites abroad, such as Old Croatian elite graves.

The courtly culture attested in Mikulčice offers a comparison with similarly attractive early medieval assemblages. Let us first introduce the Great Moravian agglomeration at Staré Město and Uherské Hradiště where the most parallels of the rich material culture of Mikulčice have been discovered. Naturally, other strongholds also yielded similarly attractive finds to those from Mikulčice (such as the stronghold in Pohansko near Břeclav), all depending on the scope and importance of the excavations at that time. The “wealth” of the Mikulčice finds is comparable with the relatively recently discovered Slovak site of Bojná. This hilltop stronghold yielded numerous and surprisingly rich finds of metal artefacts including exclusive handicraft and items of foreign provenance. These contained an assemblage of gilded plates, possibly of north-Italian origin - probably fittings for a portable altar. However, the overall impression of these “riches” is completely different than the Mikulčice finds. The settlement context typical for Mikulčice - intensive long-term occupation, a concentration of churches and burial grounds, extensive hinterland and other traits - is attested only to a very limited extent in Bojná. All the available evidence attests a refuge-type settlement where wealth was gathered in the course of the 9th century for unknown reasons. This comparison once again confirms the uniqueness of Mikulčice because the rich and attractive material culture appears there in functional and historical contexts as a reflection of daily life in the power centre.

A further characteristic feature of Great Moravian Mikulčice is its military function supported both by the fortification and the significant numbers of weapons found there. The relatively massive fortification of the acropolis and outer bailey was built from available materials (soil, wood, stone) in a manner common with the western Slavs. The dimensions and design did not significantly diverge from the practice known in other strongholds in the Bohemian lands, Slovakia and neighbouring territories. The three attested gates of the frontal type of also represent a common design. On the other hand, the three wooden bridges are exceptional among archaeological finds in the Czech lands and the neighbouring regions, which were mainly made possible because of the conditions for the preservation of organic materials in the wet soil of the floodplain. The best preserved Bridge 1 in Mikulčice allows a more detailed reconstruction and comparison with plentiful evidence of bridges by

the northwest Slavs in Poland and northern Germany. Contrary to these mostly lake constructions, the Mikulčice bridge has a different design that can be compared to the river bridges of the Celts and Romans.

Another important feature of the Mikulčice power centre is the continuity of the central place that is typical of the intensive occupation of the area starting with the pre-Great Moravian period. Probably as early as the end of the 8th century, Mikulčice was a power centre where the future ruling class of the Great Moravian formation was able to constitute itself. Reconstruction and expansion of the settlement led to the establishment of a Great Moravian stronghold on an area of approximately 10 ha over the course of the 9th century. The long-term continuity of settlement and central functions is attested by the unusual concentration of finds, both common (pottery, animal bones etc.) and luxurious.

SACRED CENTRE

Mikulčice is characterised by a remarkable concentration of sacred buildings. Overall, ten churches - including the Chapel of St. Margaret in Kopčany - are attested, while two more buildings are hypothesised. The actual number was probably higher as the remains of some, especially wooden, buildings were not necessarily preserved and other features may be in unprocessed areas.

Most importantly, the large number of churches in Mikulčice reflects the exceptional concentration of political power in the given place and time. Due to the absence of written sources, epigraphic evidence and liturgical equipment, the exact functions of the buildings is unknown. However, the determination of the function of some of them can be inferred from the overall context. Church 2 is the oldest documented sacred building in Mikulčice, which was possibly the seat of the church authorities subordinated to the Bavarian episcopate. The basilica - the largest and most monumental construction of Great Moravia - was most probably an Episcopal church part which must have been a convent with a large number of clerics and probably also a school. Neither the seat nor the grave of Archbishop Methodius can be reliably attested

(as in anywhere else in the territory of Great Moravia), yet it is likely that Methodius resided here, at least temporarily. All the characteristics indicate the paramount importance of the basilica, both in terms of representation of the ruling power and church authorities. In this context, this building is unparalleled among the churches of Mojmirid Moravia.

Churches 2 and 3 are the most important sacred buildings in Mikulčice. This is attested by numerous facts: both the buildings and the palace are situated at the highest points of the acropolis, both the churches underwent a rather complicated architectural development, the main premises in both the buildings contained burials of important individuals (“dynastic” graves) and the adjacent cemeteries typically contain numerous elite graves with rich grave goods. In contrast to these buildings, whose construction must have been directly related to the ducal power, the churches in the extramural settlement of the Mikulčice stronghold are hypothesised to have been part of elite manors. Although the manors have not been reliably identified on the Moravian side of the agglomeration, the case of the Chapel of St. Margaret near Kopčany is telling: airborne prospection identified an enclosed formation with the characteristics of a manor.

The search of Methodius’s grave, inspired by a mention in a legend about the burial of Archbishop Methodius in a “large” Moravian church, has been the subject of attempts by many generations of researchers and an enthusiastic lay public. The grave has been searched for in Mikulčice, Uherské Hradiště-Sady and a number of other Moravian sites. Despite various hypotheses it produced, this quest can be deemed a failure. And it is no wonder: considering the religious/political situation in Moravia after 885, the remains of St. Methodius could hardly be preserved at their original place of rest; they were either retrieved by his disciples and hidden in an unknown place or were destroyed by supporters of Latin liturgy.

No adequate analogies of Mikulčice in terms of evidence of Christianity, particularly a concentration of churches, have been found in the territory inhabited by the western Slavs in the 9th century. An assemblage of sacred architecture that is part of a settlement complex, which has all basic traits

of a central place of key historical importance, is unique in the Slavonic environment of the 9th century. These two places resemble it the most: Staré Město-Uherské Hradiště and Zalavár/Mosaburg near Balaton Lake in Hungary.

The Staré Město agglomeration probably played a similar role in the political and religious structure of Great Moravia as Mikulčice and it might have served as a temporary main centre of the whole formation. However, the condition of the preservation of the monument has been strongly affected by intensive urban development dated to Early Middle Ages and the modern era. This is why not all the religious buildings are known and the picture of the sacred topography of the Staré Město-Uherské Hradiště agglomeration is incomplete. Zalavár, as the centre of Pribina's historical Pannonian duchy, was substantially more influenced by the Carolingian empire, although it was probably briefly part of Great Moravia. Three out of the 31 churches on the territory of Pribina's and Kocel's Pannonian duchy mentioned by written sources were researched in the area of the early medieval Zalavár agglomeration.

PROTO-URBAN AGGLOMERATION

Great Moravian central agglomerations are sometimes referred to as “urban” or “proto-urban” settlements or as “stronghold” or “fortified” settlements. Quoted among the main “urban” traits is a large population concentration, the presence of craftsmen and people in a servant relationship who worked for the local elite and a market, the existence of a market and long-distance trade, fortifications, a regular dense built-up area and the presence of administrative functions in the sense of territorial administration, law enforcement and religious administration. Some of these traits, especially the latter ones, are hard to evidence using archaeological sources. Separately, these traits would not make a sufficient case for denoting a settlement an “urban” or “proto-urban” formation. It is the coexistence of all these traits that enables to hypothesise the presence of early urban structures.

In the case of the Mikulčice agglomeration, all the three traits were combined although the degree to which they can be archaeologically proven differs;

what is more, the administrative function must only be assumed due to the absence of written sources. The number of inhabitants based on a demographic assessment of the Mikulčice cemeteries, 1,000-2,000 people, is very high for the 9th century and suggests a well organised economic hinterland. The presence of craftsmen is evidenced by the discoveries of workshop features and the finds of semi-finished good, raw materials, rejects and production waste. We can even use the term specialised production areas, such as the northern extramural settlement and the southern part of the acropolis (Dolní Valy). The presence of specialised workshops is typical for the whole elevated part of the acropolis (Valy) although it fulfilled a number of other functions at the same time. The “production” areas of the Great Moravian centres generally did not depend only on crafts - they also had other functions. Overall, these functions can be termed “services” that secured the running of the stronghold and possibly also production for the market. The presence of a market or a marketplace in Mikulčice or in other Great Moravian centres cannot be attested based on archaeological sources. However, it is attested by numerous pieces of indirect archaeological evidence supported by the written mention of the “market of the Moravians”.

The internal structure of the settlement agglomeration can also be viewed as one of the traits of the proto-urban character of Great Moravian Mikulčice. The most important centres of Great Moravia are typical with an extensive and diverse residential complex with one main fortified central area and secondary settlement components of the outer bailey or extramural settlement. Mikulčice differs from the picture of such centres due to two phenomena: the existence of main (“spinal”) communication, which links all the basic parts of the agglomerations and the presence of a fortified outer bailey with residential functions.

The Mikulčice “backbone” communication is the main urban element of the agglomeration. It is a road that runs through the entire stronghold and continued as a long distance communication connecting south Moravia with the Váh River Region in Slovakia. It connected the ducal stronghold at Valy with the area of the Chapel of St. Margaret to what is now the Slovak side of the agglomeration. It ran through the acropolis and the outer bailey, connected

the three gates and entered the outer bailey by means of wooden bridges. The most important buildings and prestigious areas were situated along this road. It was an element that regulated the built-up area on both sides.

The fortified outer bailey that is adjacent to the western part of the acropolis was a vast settlement area whose primary function was residential; no churches and significant evidence of burying and production were discovered there. No such element is known from any other centre in Great Moravia or a neighbouring area. There are more possibilities of a functional determination of this area while the original hypothetical interpretation as a seat of a military retinue formulated by Josef Poulík remains valid.

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