

Archaeology of Conflicts II

Pavel Drnovský – Petr Hejhal – Ladislav Rytíř (eds.)



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Archaeological research in the area of former bastion VIII and cavalier XXXIII at Gayer's Barracks in Hradec Králové

Radek Bláha

Abstract: *The area of Gayer's Barracks represents an unusually well preserved complex, which resulted from the building development in the 18th to 20th centuries. Within the build-up of the fortress at the end of the 18th century, a pentagonal bastion (fortification number VIII) was built here. A likewise pentagonal cavalier (fortification number XXXIII) was built in the courtyard of this bastion. It had the form of a defensive casemate feature, originally a ground-floor building with a supply depot and the bakers' flats in its open rear part (today house No. 216). Bread ovens were located in the southern part of both wings near the present-day street třída Československé armády. The tip of the bastion was fronted by a ditch in what is now the Šimkova Street.*

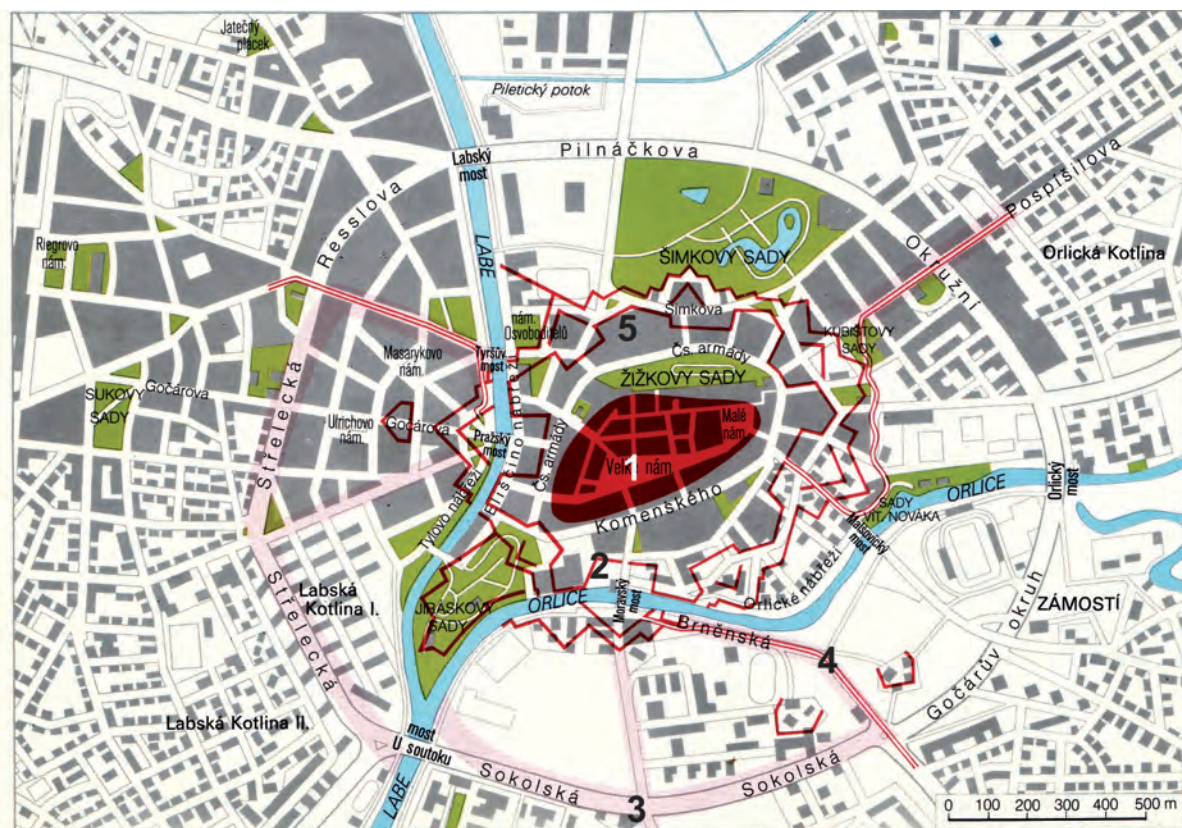
The next building phase took place at the end of the 19th century, when the fortification was dismantled and the ditch was backfilled. The preserved fortress buildings comprised the supply depot and one part of the casemate buildings, which were adapted to sheds and storerooms. Two almost identical three-winged barracks buildings, today's house numbers 333 and 334, were built at the flanks of former bastion in 1897–1898.

During the build-up of a parking house in the area of Gayer's Barracks and the subsequent reconstruction of the building of the Museum of East Bohemia in Hradec Králové, archaeologists uncovered and documented masonry parts of cavalier XXXIII and bastion VIII. It is so far the largest exposure of relics of the baroque fortification in Hradec Králové. One part of masonry construction of the flank of the bastion was left in situ to be presented to the public in the basement of a new extension of the museum building. Also preserved is the masonry of one part of the cavalier underneath the parking house, which should likewise be made accessible to the public in the future.

Key words: Hradec Králové - fortress – fortification - archaeology

The modern building development in the town of Hradec Králové, which is the capital of an eponymous region, has its origins in a baroque bastion fortress. When we take a look at the present-day town plan, we can see at first glance that it follows the principles of fortress urbanism. The outer city circle, also called Gočár's circle in honour of the famous Czech architect Josef Gočár, parallels the outer line of fortress dams. The radial dams of inundation basins still serve as a basis for the town's exit roads to this day. The streets on the northern and south-western sides of the town, particularly the Šimkova and Hradební streets, follow the route of the main ditch. In the area of these streets we can also find other relics of the former fortress. In this contribution we will pay attention to the area of Gayer's Barracks, which extends between the třída Československé armády Street and the above-mentioned Šimkova Street (**Fig. 1**).

The first building phase of the Hradec Králové Fortress took place between 1766 and 1778, after a series of wars with the aggressive Prussia, when the northern border of the Habsburg Monarchy had to be secured after secession of Silesia and Kłodzko (on the conflicts see Bělina – Kaše – Kučera 2001,



- 1  Historical centre of the city
- 2  Line of fortifications
- 3  Dams
- 4 Roads
- 5  Gayer's Barracks

Fig. 1. Schematic drawing of the fortress in the present-day town plan (after Richter – Semotanová 1998, map No. 22, supplemented and modified).

15–41, 53–70). The new fortification had an octagonal layout with bastions, ravelins and a covered way with places-of-arms. The fortress was entered through three gates – Prague Gate, Moravian Gate and Silesian Gate – which are completely defunct today. On the eastern side of the town, in the direction of an expected attack, the covered way was reinforced by two lunettes and fronted by a moat on the eastern and north-eastern sides, approximately in what is now the park Kubišřtovy sady. The defenders of the fortress intended from the very beginning to flood the whole surroundings of the fortress, including the ditches, with water. The necessary water was possibly accumulated with the help of sluice gates of the Prague bridge and the Moravian bridge and a sluice gate near the mouth of the Piletický brook. The water was then further distributed through auxiliary sluice gates and cunettes in the bottom of ditches. The fortress was later extended by two rampart fortifications in 1774. One of these fortifications was located at the confluence of Elbe and Orlice rivers in what is now the park Jiráskovy sady, the other fortification was situated on the left bank of the Elbe north of the present-day museum building. Many structures were built inside the fortress: the main guardhouse, sentry houses on ravelins and toll houses at gates, two casemate shelters near the town gates (in what are now the houses Nos. 81 and 216), two wartime gunpowder magazines, a bakery and several store buildings. The headquarters of the fortress command were situated in the urban house called Kapounovský dům, which was replaced later by

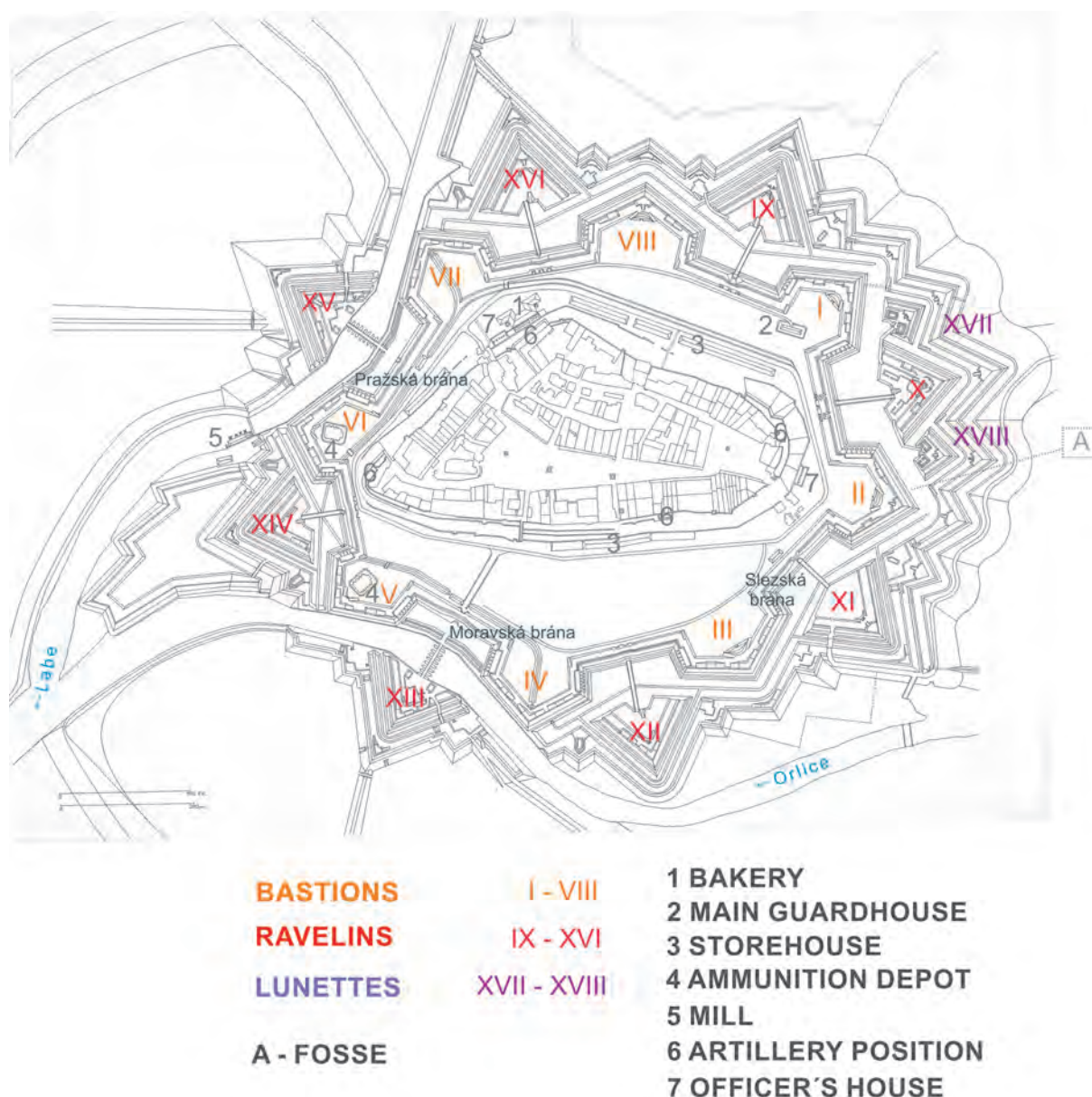


Fig. 2. The fortress as in 1766–1779 (borrowed from Slavík 2015, plan appendix between pp. 16 and 17).

a theatre in the mid 1880s (today Klicpera Theatre). In 1775, the army acquired the area of the Jesuit College (today Nové Adalbertinum) and adapted it to barracks; the neighbouring Church of the Assumption of Mary became a garrison church (**Fig. 2**). The plot of land on the north-eastern side of the levelled hill Rožberk (in what is now Slezské předměstí, or Silesian Suburb, nearby the Alessandria Hotel) was adapted to a military cemetery, which was later relocated to Pouchov in 1810. The fortification ramparts were not reinforced; the only masonry components were simple gates in the main rampart, each of them having the form of an arched carriageway with portals at the ends (Slavík 2015, 17–20, with references to older literature; briefly also Slavík – Bláha 2016, 39–40; Slavík 2017, 661–665).

During the War of the Bavarian Succession at the end of 1778 and at the beginning of the following year (basic data see Bělina – Kaše – Kučera 2001, 110, 112), Hradec Králové became the main strongpoint on the eastern defence line of the Austrian Army, which was mainly established at the upper reaches of the river Elbe. However, the sequence of war events has shown that the Hradec Králové Fortress is located too far from the frontier and the enemy is thus able to seize the border area without problems. That is

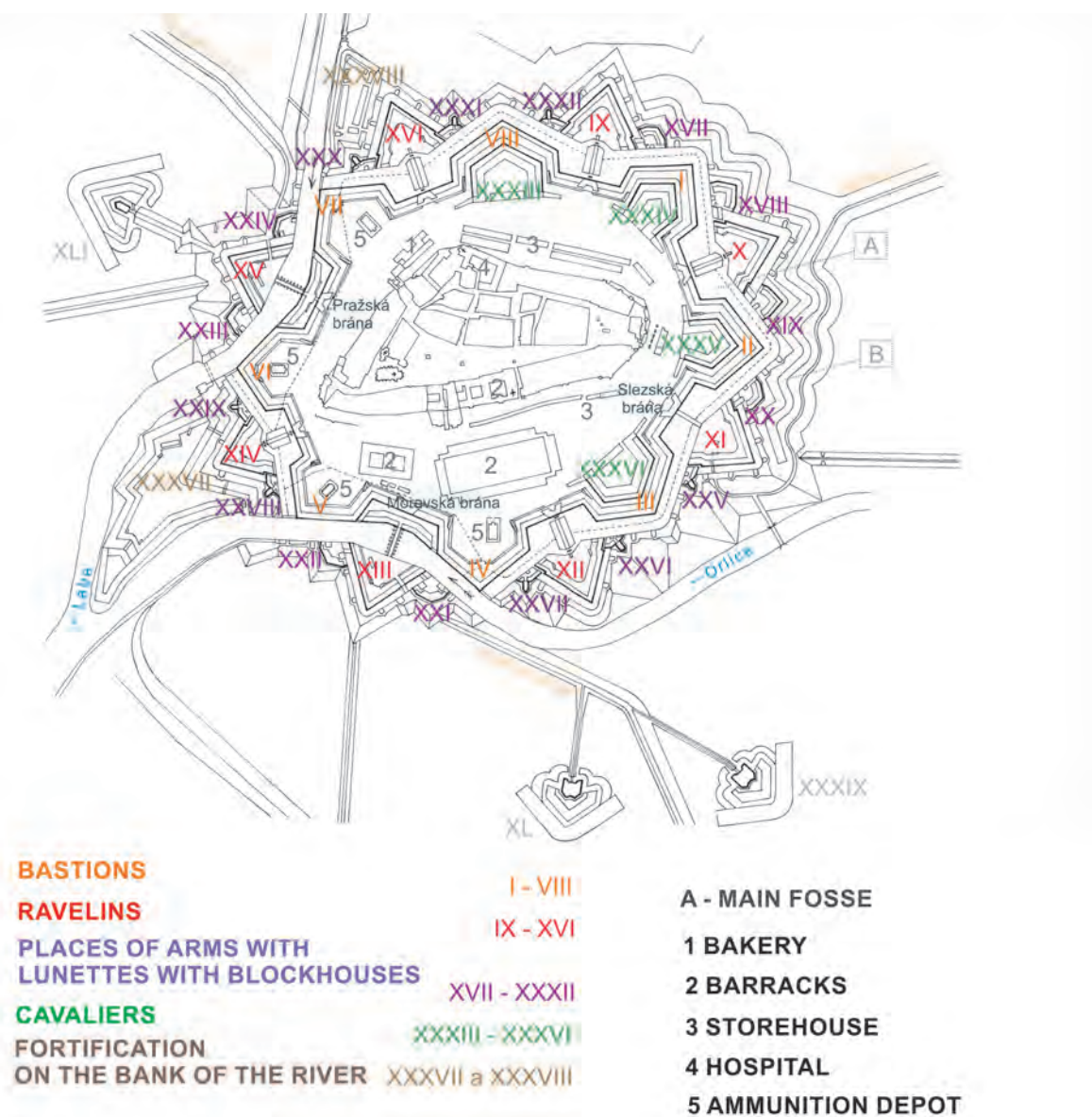


Fig. 3. The fortress as in 1780–1800 (borrowed from Slavík 2015, plan appendix between pp. 16 and 17).

why the defenders began to build a new pre-planned fortress at the place of Ples village (renamed Josefov in 1793) and the fortress Terezín in northern Bohemia near the confluence of Ohře and Elbe rivers south of Litoměřice (Slavík 2015, 20).

The building transformation of the Hradec Králové Fortress into a masonry form began in 1780. The height of the main rampart was increased and new cavaliers with gun platforms were built into four bastions in the north and east. Casemates for riflemen emerged in the rear part of ravelins and artillery casemates were built in exposed places. The places-of-arms in front of artillery casemates were supplemented by lunettes with artillery galleries, while elsewhere only small lunettes with blockhouse casemates for riflemen were built. The covered way was intersected by transverse ramparts protecting it from longitudinal ricochet shots. The fortification on the southern side was supplemented by two advanced lunettes, which were called “flošny” in the local dialect (the name is probably derived from the German word “Flesche” or French “flèche”). Each of these outworks consisted of an artillery casemate feature and an angled earthen bank. The casemate features are preserved in an altered form to this day (“Pajkrova flošna” and “Pivovarská flošna”). A third flèche with a casemate blockhouse was built in the west and its rear was equipped with a covered access between the banks. This defunct

feature called “Pražská flošna” was situated in the eastern part of what is now the Ulrichovo náměstí Square (its location has been long remembered by the local name Na baště, translated as “At the bastion”, which was also used as the name of a popular fast food inn). The fortification elements were numbered with Roman numerals I–XLI. The rebuilding, which continued until the early 1790s, also comprised the build-up of large Vodní Barracks (erroneously but traditionally called Vodička's Barracks) for one infantry regiment, and a smaller cavalry barracks. A peacetime military hospital was built nearby the headquarters of the fortress command, in the area of former Monastery of Minorites which declined during the Hussite period. Another two wartime gunpowder magazines were built on the western side of the fortress. The buildings of an ordnance depot and a bakers' dormitory were built in gorges of two cavaliers. The main guardhouse was established in the Jesuit Barracks in 1811 (**Fig. 3**). The two peacetime gunpowder magazines which were built west of the fortress are also preserved to this day, even though in an altered form (in summary Slavík 2015, 20–21; briefly also Slavík – Bláha 2016, 40–41; Slavík 2017, 666–668). A new fortress, Josefov, was built upstream the Elbe in 1780. It was meant to protect the important road from Náchod and Žacléř to Hradec Králové and farther to Prague. This strengthened the position of the inland fortress in Hradec Králové as the main supply depot, which was also one the reasons for the above-mentioned rebuilding (Hofman 2020, 127, 129). The large capacity of fortress depots in Hradec Králové is also documented by several narrative sources. We can name here for example the commentaries of chronicler Jan Čupík from Olešnice in Moravia, who wrote in connection with Napoleonic Wars in 1807: “Afterwards, when the Frenchmen were already withdrawn from Brno, they transported many thousand cartloads of provisions from Hradec Králové to Brno; the traffic was constant throughout the day and night; it lasted three weeks...” (Paměti starých písmáků moravských, p. 14).

The fortress began to be obsolescent at the beginning of the 2nd third of the 19th century. The headquarters of the fortress command were dissolved in 1858 and the military property administration made the first attempts to sell the facility to the town, which, however, was not yet able to use it at that time. During the Austro-Prussian War of 1866, the fortress was fully capable of defence again but it neither could nor had any chance to change the Austrian unhappy outcome of the war (most recently Dvořák 2021; see also the new edition of memories by I. Herrmann: Herrmann – Koritenská – Šrámek 2021). The lost war provided the city authorities with compelling arguments in their effort to enforce the dissolution of the fortress (Pavlík – Pokorný 2017, 393–398) but the negotiations were very complicated and long.

The fortress was definitely dissolved in 1884. The town purchased all fortress plots for about one million gold coins in 1893 (but it was allowed to deduct almost one-half of the amount to cover the demolition works and vaulting of the cunette) and pledged to completely demolish all fortress features within twenty years. The liquidation of individual fortress features, which already started with trial demolitions in 1884, was relatively fast and consistent, following the conditions of a contract between the town and the military property administration from 1893, according to which the town was obliged to remove all fortress buildings within twenty years. The majority of fortress features were thus torn down until the end of World War I. It was intended to preserve the flèches and the northern part of the fortress, i.e. above all the tip and the ditch of ravelin IX, and other elements which are still visible today near the building of present-day Faculty of Medicine of Charles University and in the adjacent part of the park Šimkovy sady (Slavík 2017, 680–681) (**Fig. 4**). Cavalier No. XXXV, which was later replaced by the Regional Court building, was still standing at that time. The necessity to preserve this cavalier was already accentuated by the art historian Alois Kubiček in 1911 (Kubiček 1911). He wrote in his work that “it is the last... monument remembering a significant period in the building development of the town, which has the same historical value as the splendid medieval and renaissance periods...”. The club Za starou Prahu (For the old Prague) “believes that the complete demolition of these fortifications would be an impoverishment of the town's history and a violent deletion of a great period of its tangible development from human memory.” The club's proposal to preserve the cavalier and to use it as a museum of the 1866 War was rejected. The general attitudes of the town towards the fortress also

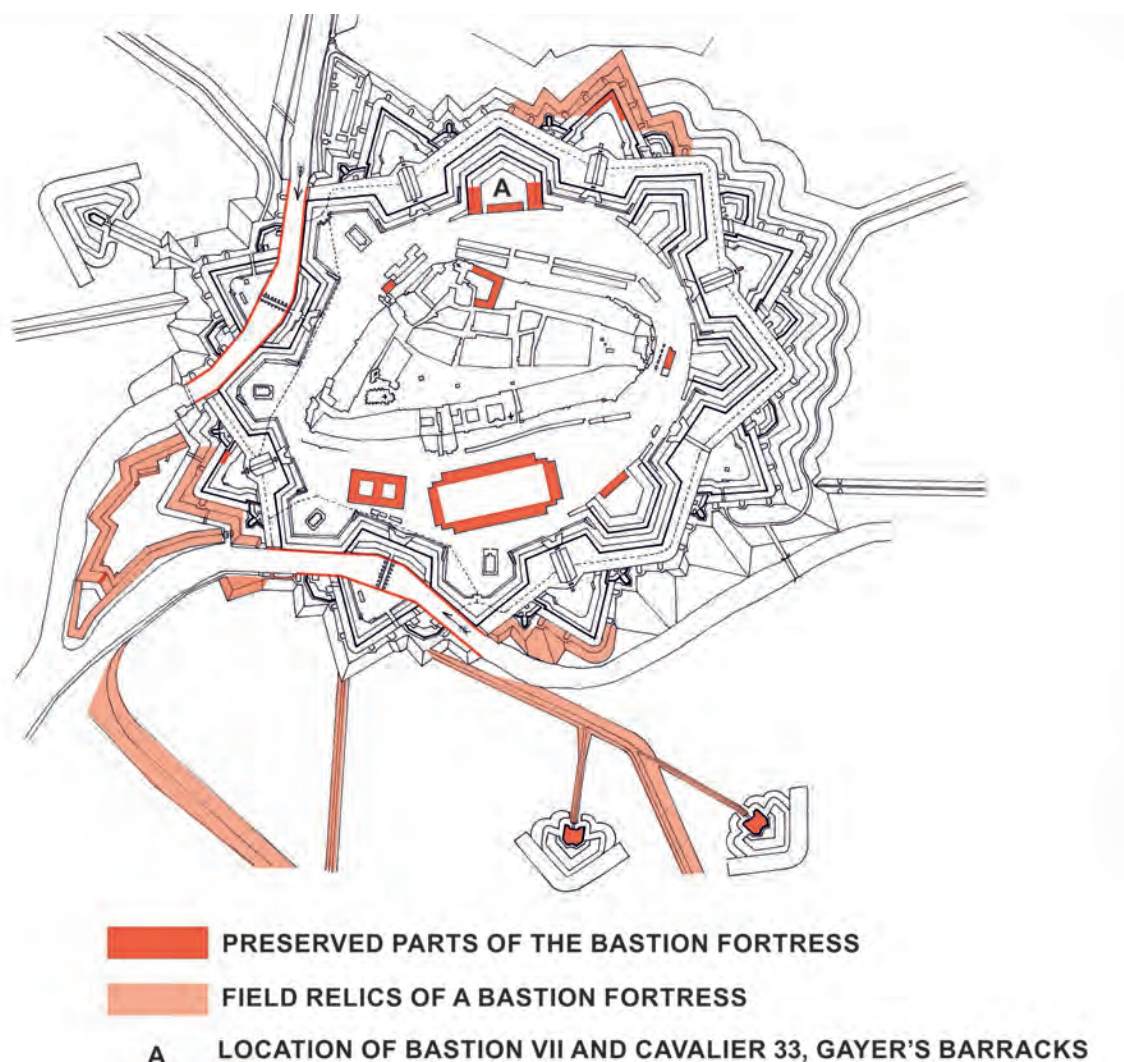


Fig. 4. Schematic drawing of preserved parts of the Hradec Králové Fortress (borrowed from Slavík 2015, 38, supplemented).

induced negative reactions to this proposal in local press (e.g. Tichý 1912, but cf. s.a. 1912a; s.a. 1912b). The structure was demolished at the turn of the 1920s and 1930s and the new Regional Court building was built at the same place, respecting the ground plan of the original fortification feature. However, the attitude of inhabitants of Hradec Králové towards the former fortress began to slowly change. Supporters of the rescue and suitable adaptation of preserved relics already appeared before the World War I (s.a. 1912c) and even more at the beginning of the second half of the 1930s in connection with commemorations of the upcoming anniversary of the Battle of Hradec Králové/Königgrätz (s.a. 1935: “However much we admire the systematic development and build-up of our Hradec, we are painfully aware, of course too late, that some parts of the fortress could be yet preserved for commemoration and gratitude. The inclusion of these preserved relics into the newly designed urban districts may have been an excellent and interesting task for those who created the regulation plans...”).

The town of Hradec Králové, managed by mayor František Ulrich and later also by his successor Josef Pilnáček, was able to pursue its development based on the fortress layout thanks to urban plans which were already made before the beginning of demolition works and were further updated in the 1st half of the 20th century. The urban and architectonic values of building development are associated with the names of prominent architects of that time, among whom the most famous (but by far not the only ones) are Jan Kotěra and Josef Gočár (Zikmund-Lender 2017, 682–702).

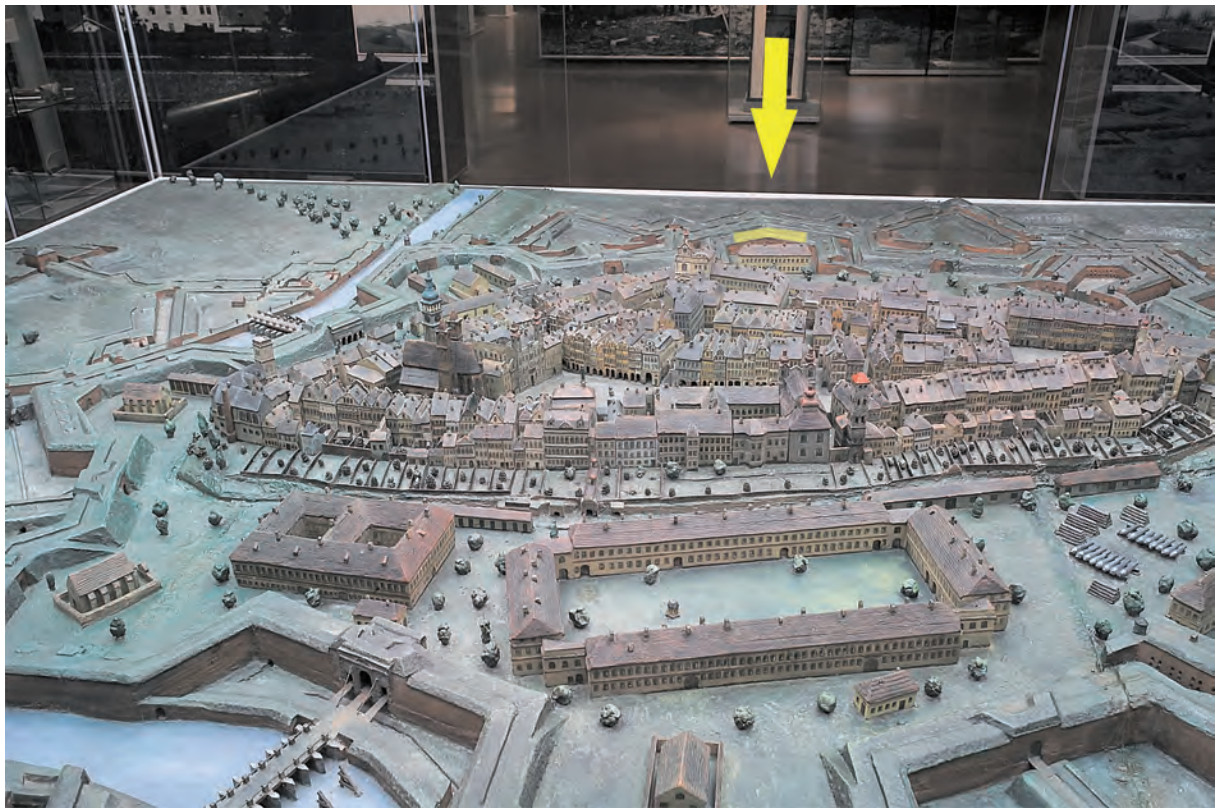


Fig. 5. A model of the Hradec Králové Fortress created by F. Žaloudek. The arrow marks the location of Gayer's Barracks (photo M. Beneš, modified).

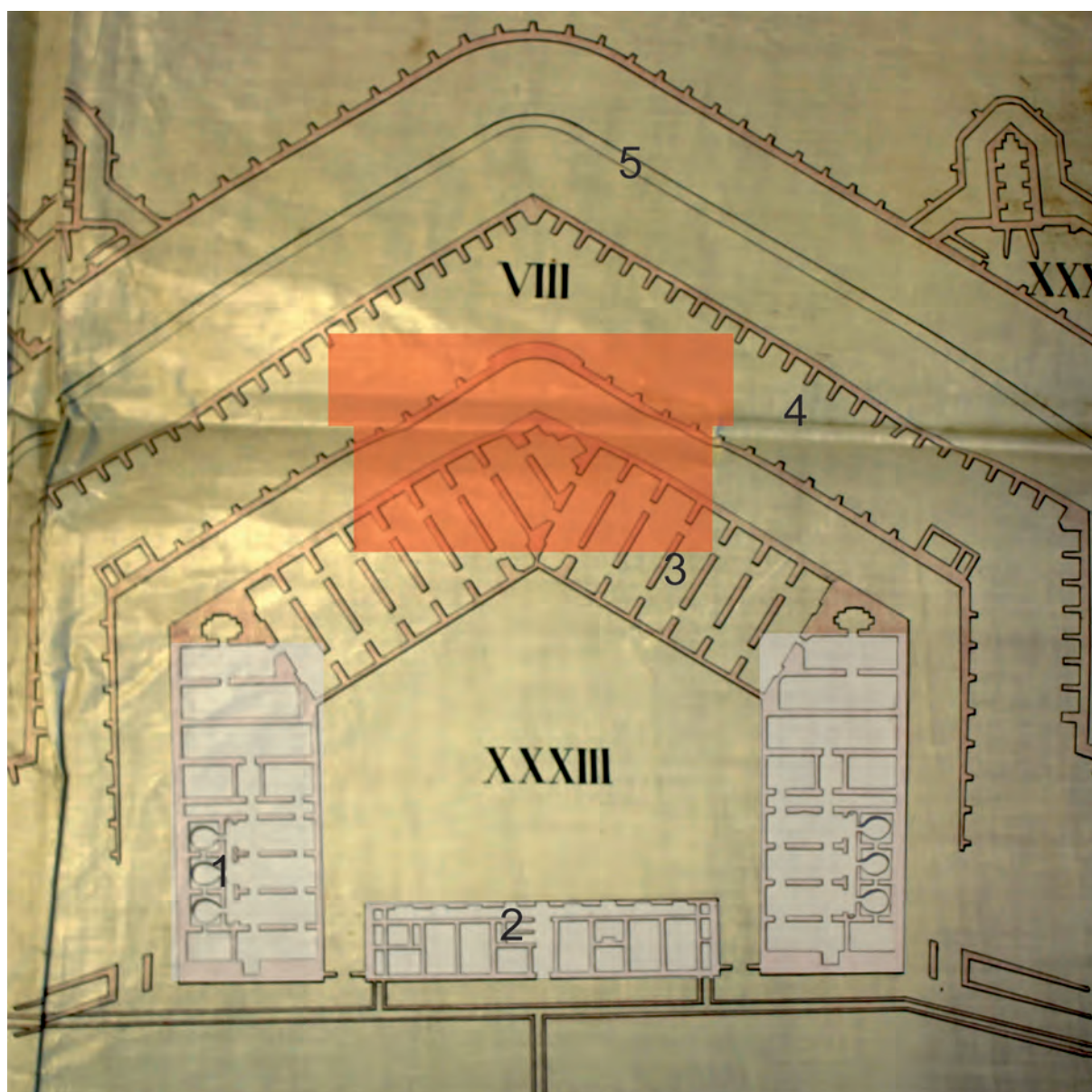
The appearance of the defunct fortress, whose demolition was for the most part already finished before the outbreak of World War I, is visualised on a model created by the museum curator František Žaloudek in 1908–1916 (on the model see Bláha – Jakl – Sigl 2009, 194–195, with older literature) (**Fig. 5**). When we compare this model, which nowadays belongs to a permanent exhibition on the history of the town, with present-day situation, it is evident that only little is preserved from the fortress structures. Among preserved isolated features are all barracks, fragments of two cavaliers (out of the original four), and the above-mentioned casemates in the southern flèches. Continuous linear relics are represented by an earthwork at the confluence of Elbe and Orlice rivers in the park Jiráskovy sady and by one part of a ravelin behind the building of the Faculty of Medicine of Charles University at the edge of the park Šimkovy sady, as already mentioned above (**Fig. 4**).

The present knowledge about the development of the Hradec Králové Fortress and its appearance is mainly based on the preserved documentation plans and drawings (particularly from the State District Archive in Hradec Králové and the Central Military Archives in Prague, while the Austrian War Archives in Vienna still remain unexplored), historical depictions of the town and photographs of still standing fortress remnants or their parts (particularly from the materials of the Museum of East Bohemia in Hradec Králové or the State District Archive in Hradec Králové; the most important photographs were published in Zikmund – Pospíšilová 2000, esp. pp. 18–57 and Jakl 2005). Archaeology, for several reasons, did not yet really contribute to this problem. The building development in the area of former fortress was in principle already finished before World War II and any more extensive building activities, which would uncover the fortification remnants, were almost absent until recently. Archaeologists naturally paid attention to the rescue and documentation of older contexts, i.e. prehistoric and medieval, mainly in the town core and outside the inundation basins of the fortress. This was also due to personnel capacities and due to the large area of operation of the archaeological department of the Museum of

East Bohemia, which in fact represented the only archaeological institution in the East Bohemian Region until the beginning of the 1990s. High-quality basic pictorial sources, including the plan of the fortress and its schematic drawing in the present-day map of the town (Richter – Semotanová 1998, esp. the map sheets 5–9 and 19; the schematic plans in the booklet by O. Jaroš, which was published as a catalogue of the exhibition “Hradec Fortress” in 1968, are very illustrative as well), were also published in the 1990s. It was not until the past twenty years that the relevant archival and other materials were made accessible and the possibilities of modern documentation and reproduction techniques enabled to obtain the necessary historical plans and other pictorial documents together with other sources for further research (basic examples see Slavík 2015). Despite all this, we cannot say that the fortress relics were completely neglected by archaeologists. Already in 1973, Jiří Sigl documented masonry of the south-western part of cavalier No. XXXVI in Balbínova Street, which was disturbed by a hot water piping trench. In the following year 1974, the construction of an accessory building of the winter stadium has stumbled upon a rectangular building enclosed by another brick wall. During dismantling of the building, a dense grate construction came to light underneath. The construction consisted of massive oak beams up to 6 metres in length, which were laid at one-metre-distances from one another. The lower row was overlaid at a right angle with another row of beams. This construction was still reinforced with piles. The site director Jiří Sigl identified the relics correctly as bastion number V, in which a wartime gunpowder magazine was situated. Still in the same year, a grave was discovered behind the entrances of houses Nos. 581 and 582 in the třída SNP Street in the area of Slezské předměstí/Silesian Suburb (all these finds are published in Sigl 1978, 59–61). The grave could not be exactly dated due to absence of chronologically sensible material, but considering its location, it is very likely that it was related to a military cemetery at the place of the levelled hill Rožberk, which was mentioned above in the text. Large-scale archaeological excavation of one part of the modern fortification was carried out on the building site of a new footbridge across the river Orlice in 2011. Archaeologists uncovered here a sector of an earthen fortification (parapet of bastion No. V and rampart of the outer fortification near the so-called corridor), which was built from sandy loam, red alluvial deposits of the Elbe and marlstone. All this material was acquired from close surroundings. Apart from earthen fortifications, parts of masonry walls were also detected on both banks of the river Orlice. The relics on the left bank mainly comprised the wall of the corridor and of the outer walkway for riflemen. On the right bank, there was a masonry corner related to the facing of bastion No. V (Bláha 2012; Slavík et al. 2014, 27).

The so far most extensive excavation and documentation of fortress relics were conducted recently, more precisely in 2017–2020, in the area of the so-called Gayer’s Barracks. First of all, we will summarize in brief the local building development. A pentagonal bastion (fortification number VIII) was built here within the build-up of the fortress at the end of the 18th century, which was briefly described above in the text. A likewise pentagonal cavalier (fortification number XXXIII) was built in the courtyard of this bastion. It had the form of a defensive casemate feature, originally a ground-floor building with a supply depot and the bakers’ flats in its open rear (so-called Pekhaus, today house No. 216). Bread ovens were located in the southern part of both wings near the present-day street třída Československé armády.¹ The tip of the bastion was fronted by a ditch in what is now the Šimkova Street. The next building phase took place at the end of the 19th century, when the fortification was dismantled and the ditch was backfilled. The preserved fortress buildings comprised the supply depot and one part of the casemate buildings, which were adapted to sheds and storerooms (**Fig. 6**). Two almost identical three-winged barracks buildings, today’s house numbers 333 and 334, were built at the flanks of former bastion in 1897–1898. In the second half of the 20th century, accessory technical buildings were built on plots Nos. 1766, 1767 and 1947. The building alterations in the 1990s were carried out in connection

¹ The colloquial name of the building “Pekhaus” (baking house), which also spread to its close surroundings, was derived from the function of the building. The area of what is now the park Žižkovy sady, which was partly used as an exercising ground, was traditionally referred to as “Pod Pekhausem” (below the baking house), as named by locals (Dvořák 1927, 56–62).



Pevnostní objekty VIII (bastion) a XXXIII (kavalír). Půdorys zdiv 1. nadzemního podlaží (SOKA HK, inv. č. 5032/25).

- dodnes stojící budovy
- přibližný půdorys parkovacího domu

1 - pekařské pece, 2 - zásobárna a byty pekařů, 3 - skladiště, 4 - val, 5 - příkop s kynetou

Fig. 6. Fortress features VIII (bastion) and XXXIII (cavalier). The plan of masonry in the first aboveground floor (State District Archive in Hradec Králové, City Archive of Hradec Králové, Inv. No. 5032/25, cut-out, modified). Grey area – existing buildings, Red area – floor plan of the parking house. 1 – bread ovens, 2 – supply depot and bakers' flats, 3 - storehouse, 4 – main rampart, 5 – ditch with cunette.

with transformation of the whole area of Gayer's Barracks into an urban trade and service centre, a market hall and later also a car park. Some of the buildings on plots Nos. 1766, 1767 and 1947 were used by the veterinary clinic and city technical services (Fig. 7). And exactly this place was chosen for the construction of a parking house in the first half of the 21st century (Fig. 8:A). The planned parking



Fig. 7. Aerial view of the area of Gayer's Barracks from the north, 2015. Letter A marks the building of veterinary clinic and city technical services, where later a parking house was built (Archive of the Archaeological Department of the Museum of East Bohemia in Hradec Králové).



Fig. 8. Orthogonal aerial photo of the area of Gayer's Barracks from the north, 2018. Letter A marks the area of excavations at the parking house in 2017–2018, letter B marks the area of upcoming excavations in front of the building of the Museum of East Bohemia in 2019–2020 (Archive of the Archaeological Department of the Museum of East Bohemia in Hradec Králové).

house was designed as a two-part rectangular building oriented with its longer axis approximately in east-western direction in the tip of the original fortress bastion along the Šimkova Street. Archaeological research was divided into two basic phases. The first phase started in November 2017 and included archaeological watching brief over the demolitions of existing buildings and partial removal of the uppermost soil level. The builder laid out a trial trench at the perimeter of the building site in order to identify the route of underground utilities and the position of masonry relics of the fortress, which were expected here on the basis of available plans. This trenching still continued at the end of January and in February 2018. The exposed sections of masonry were documented by photographs and drawings and were geodetically surveyed. The excavation itself began on 26 February 2018. Masonry constructions were uncovered with the help of mechanical equipment (their infill mostly consisted of levelling and backfill layers from the end of the 19th century and the first half of the 20th century). The cleaning of exposed constructions and surfaces was made by hand with usual tools and utensils. Masonry was locally cleaned with a hand operated pneumatic drill (in places where historical masonry was adjoined by modern constructions or overlaid by concrete or asphalt blocks etc.). Topographic measurement was made with a total station. The overall ground plan was documented with the help of orthogonal and oblique drone images.

In the area of the planned parking house we uncovered foundation masonry related to the northern part of the building of cavalier No. XXXIII. The inner wall of the bastion rampart, which separated the cavalier from the main ditch, was detected north of the parking house. The tip of the cavalier was damaged by the construction of the cellared building of former veterinary clinic. The remaining parts are preserved

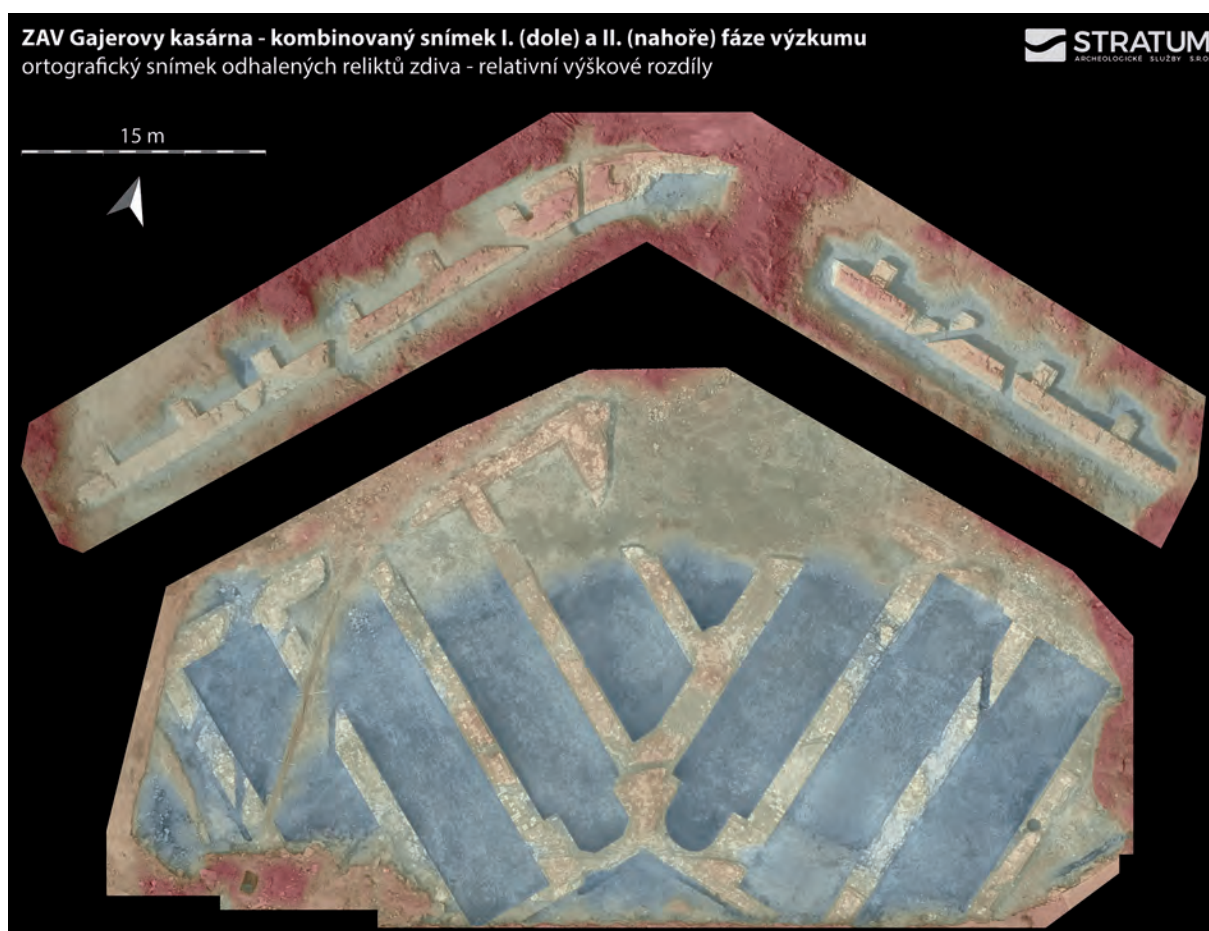


Fig. 9. Gayer's Barracks, excavation in 2018, orthographic image of uncovered masonry relics with relative height differences (elaborated by M. Pacák, Archive of the Archaeological Department of the Museum of East Bohemia in Hradec Králové).



Fig. 10. A view from a window of the building of the Museum of East Bohemia (house No. 334) on the uncovered foundations of one part of cavalier XXXIII, 2018 (Archive of the Museum of East Bohemia in Hradec Králové).

in a rare complexity (**Figs. 9, 10**). The foundation masonry was built from bricks and quarried sandstone (roughly worked ashlars). We observed that the irregular rows of bricks at some places interchanged with stone rows (**Fig. 11**). This method was used to build the faces. The space in between was filled with stones and large brick fragments bound with mortar (**Fig. 12**). The foundation masonry was unearthed to one metre in depth. Only at a few places, the builders dug deeper test pits which showed that the foundations reached a depth of about three metres but this level was already saturated with groundwater (**Fig. 14**). Several preserved sections of the original aboveground masonry were built solely of bricks (**Figs. 11 and 13**). The internal perimeter wall enclosing the courtyard was only 1.02 metres thick. The same thickness was also measured on the inner wall of the bastion rampart. The thickness of the outer perimeter wall (towards the tip of the bastion) was 2.2 metres. The transverse walls connecting the inner and outer faces of the cavalier, which corresponded to the layout of aboveground rooms, had a thickness of about 1.62–1.65 metres. The wall interconnecting the two wings had a thickness of 2.3 metres approximately in the axis of the tip.

After completion of documentation works, the unearthed masonry was covered with a protective textile fabric and overlaid again by inert material – loam and gravel. These works were performed with the aim to protect the cavalier for its future exposure and presentation to the public. The build-up of the parking house was also adapted to this plan. Building constructions were designed so that possible masonry relics can be again uncovered without affecting the structural stability and operation of the new garages.

The next phase of archaeological research in the area of Gayer's Barracks took place in connection with a reconstruction of the building of the Museum of East Bohemia in Hradec Králové in the second half of 2019 and at the beginning of 2020 (**Fig. 8:B**). The building which accommodates specialized museum departments has the house number 334. It was built as infantry barracks at the end of the 19th century,



Fig. 11. Gayer's Barracks, uncovered relics of cavalier XXXIII, a view from the north, foundation masonry from bricks and stones (mainly sandstones), in the upper part above the range pole are relics of aboveground brick masonry, 2018 (Archive of the Museum of East Bohemia in Hradec Králové).



Fig. 12. Gayer's Barracks, uncovered relics of cavalier XXXIII, detail of the core of one of the foundation walls, 2018 (Archive of the Museum of East Bohemia in Hradec Králové).



Fig. 13. Gayer's Barracks, uncovered relics of cavalier XXXIII, detail of one of the foundation walls with preserved rows of the original aboveground masonry, 2018 (Archive of the Museum of East Bohemia in Hradec Králové).



Fig. 14. Gayer's Barracks, uncovered relics of cavalier XXXIII, excavation trench touching the foundations at a depth of three metres, 2018 (Archive of the Museum of East Bohemia in Hradec Králové).

using the area of the previously demolished eastern part of the fortress bastion No. VIII, which belonged to the northern sector of the main fortification. The reconstruction of the building also included a new extension in front of the original house entrance. The available source materials clearly indicated that this extension will interfere with masonry constructions in the eastern part (flank) of the mentioned bastion (it was evidenced by test trenches in 2017). This assumption was also confirmed by earthworks during preparation of the construction pit, where the fortress masonry (the flank of the bastion and the adjacent parts of the curtain wall) was indeed uncovered and subsequently documented (**Fig. 15**).

The main studied construction was represented by the front wall facing the original ditch in the east. The face is composed of layered stretchers and headers (**Figs. 17, 18**). The wall is 0.8 metres thick (the thickness in the southern part, where the masonry line is broken and continues with the curtain wall, is 1.8 metres) and connected with perpendicular ribs with fields of simple barrel vaults in between (**Fig. 16**). The examined sector contained three such vault fields. The width of ribs (pillars) is 1 metre (the southernmost one is 1.5 metres wide), the width of vaults is 4 metres. The thickness of vault masonry (at its vertex) is 0.5 metres (**Fig. 19**). The surface of the vault is moderately sloping down to the interior of the defensive wall – rampart, in this case thus probably to the west. The total width of masonry is about 4.3 metres. The space underneath and above the vaults and towards the interior of the defensive wall was filled with earth body, which in this section mainly consisted of red malleable soil – probably alluvial deposits of the Elbe mixed with green-yellow clay. The material was maybe extracted somewhere in close surroundings. The observations which were made during the uncovering of masonry constructions allow us to suppose that the earth body of the defensive wall as well as the masonry constructions were built simultaneously.

The construction described above represents a torso of the original structure. The defensive wall itself was 11.3 metres wide (front wall, earth body, inner wall and earthen bank at the inner side) and reached a height of almost 10 metres when measured from the foot of the ditch. The front wall was 9 metres high



Fig. 15. Gayer's Barracks, extension of the building of the Museum of East Bohemia, excavation of foundations of the eastern part of bastion VIII, a view from the west, 2019 (Archive of the Museum of East Bohemia in Hradec Králové).



Fig. 16. Gayer's Barracks, extension of the building of the Museum of East Bohemia, a view from the north on the front wall of the bastion rampart with pillars connected by vault arches, 2019 (Archive of the Museum of East Bohemia in Hradec Králové).



Fig. 17. Gayer's Barracks, extension of the building of the Museum of East Bohemia, a view from the southeast on the brick face of the front part of the rampart with visible interchanging of rows of stretchers and headers, 2019 (Archive of the Museum of East Bohemia in Hradec Králové).



Fig. 18. Gayer's Barracks, extension of the building of the Museum of East Bohemia, a view from the southeast on the brick face of the front part of the rampart with visible interchanging of rows of stretchers and headers, detail, 2019 (Archive of the Museum of East Bohemia in Hradec Králové).



Fig. 19. Gayer's Barracks, extension of the building of the Museum of East Bohemia, a view from the west on the front wall of the rampart reinforced with pillars connected by vault arches, 2019 (Archive of the Museum of East Bohemia in Hradec Králové).

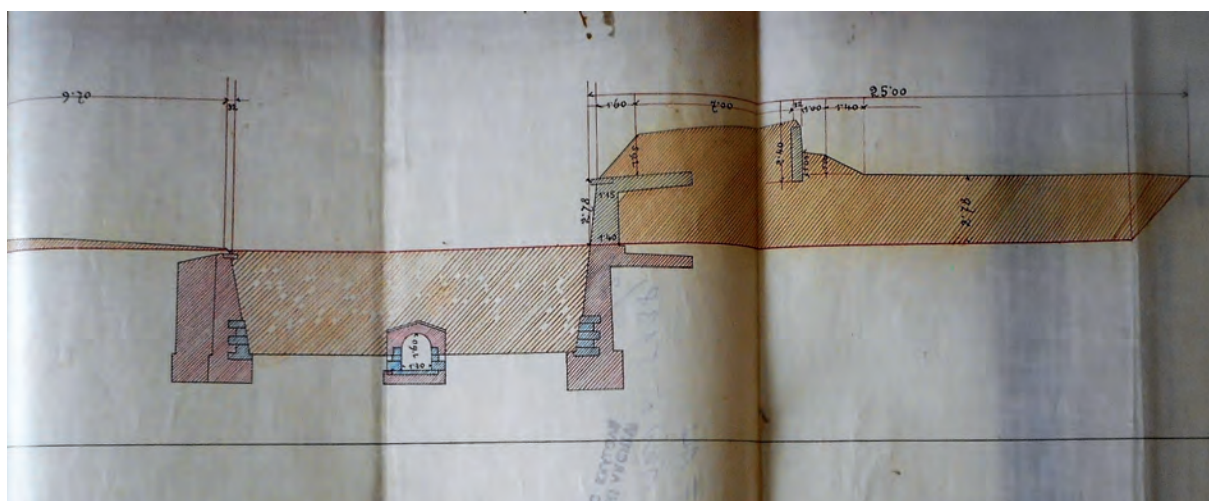


Fig. 20. Schematic cross-section through the ditch including the cunette and the face of the bastion. Red horizontal line marks the demolition level at the end of the 19th century. The author expresses gratitude towards Ing. J. Falta, head of the Department of Heritage Conservation of the Municipality of Hradec Králové, for kindly providing the plan. The drawing corresponds to findings from the excavation in front of the building of the Museum of East Bohemia in the area of Gayer's Barracks.

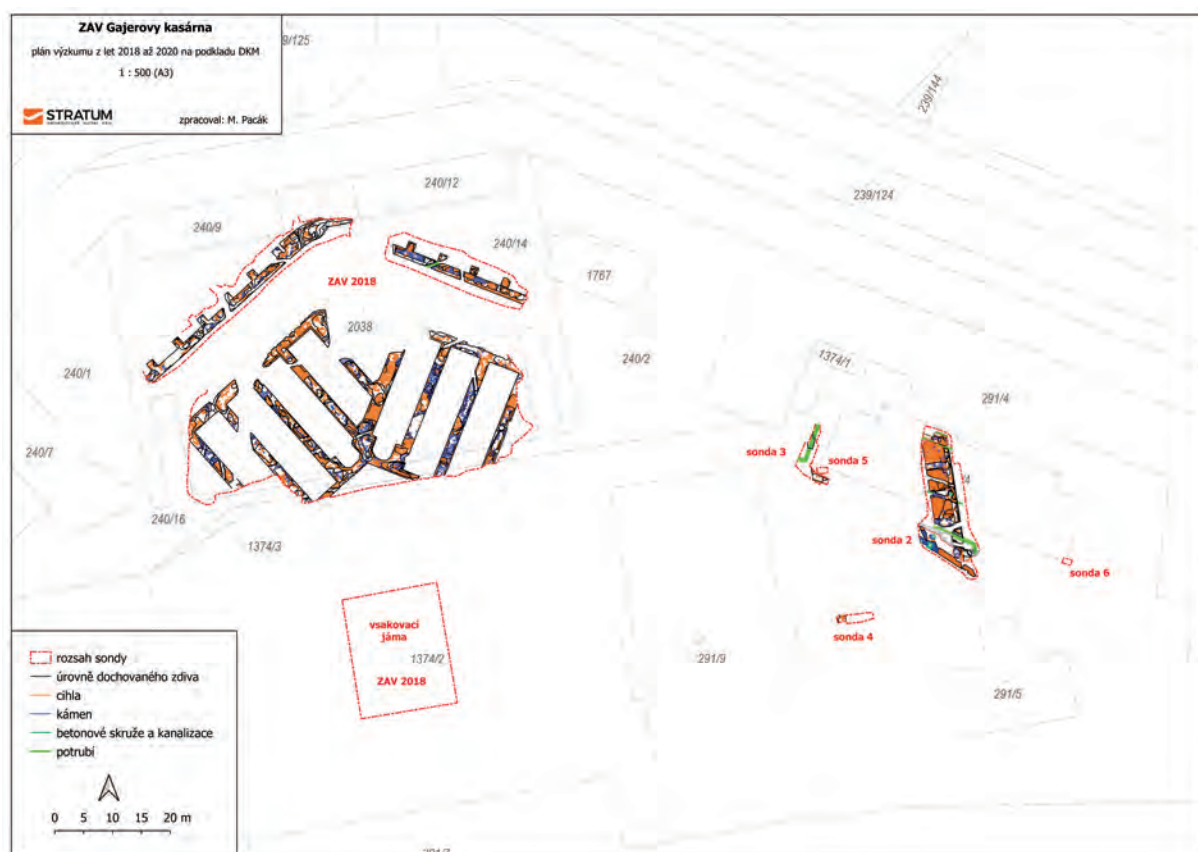


Fig. 21. Overall plan of the uncovered foundations of one part of bastion VIII and cavalier XXXIII in the area of Gayer's Barracks in 2017–2020 (elaborated by M. Pacák, Archive of the Archaeological Department of the Museum of East Bohemia in Hradec Králové).

and was laid out below the level of the ditch. It was trapezoidal in cross-section and its face sloped moderately down to the ditch and became wider by about 11 centimetres per 100 centimetres depth. The above-mentioned construction of vaults, adjoining the wall, was situated at about half-height of the defensive wall. Similar construction was also found below the level of its ledge, with the difference that the vaults were inclined towards the face of the defensive wall. However, this part was removed during demolition of the fortress before the build-up of barracks at the end of the 19th century (**Fig. 20**).

After the documentation of masonry underneath the new extension was finished, the relics were statically secured and covered. After completion of the main building works on the extension, the relics were again uncovered to be presented *in situ* in the half-basement of the building (**Fig. 21**).

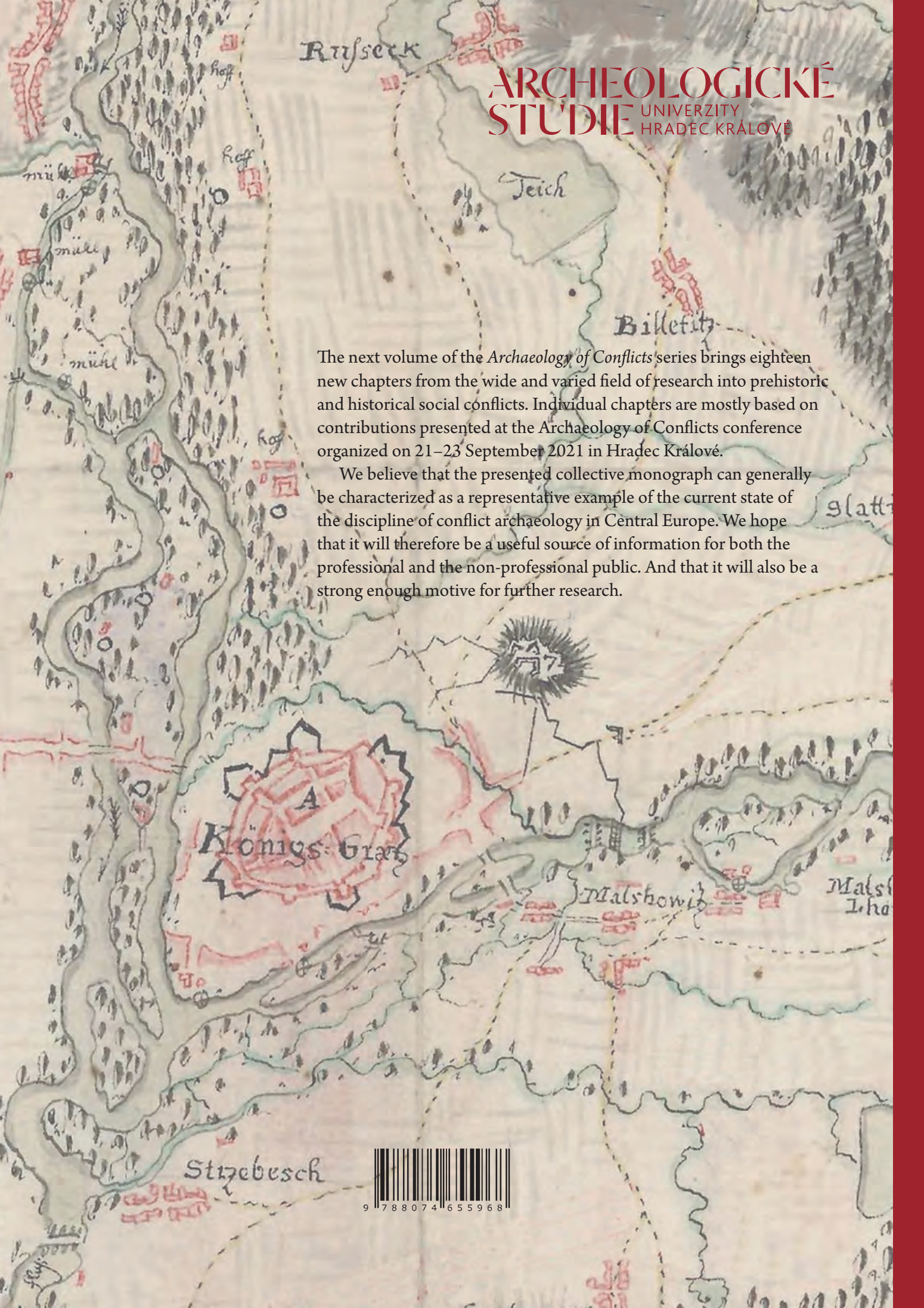
We can sum up that the excavations in 2017–2020 represent so far the largest exposure of relics of the baroque fortification in Hradec Králové. It turned out that the relics of fortress constructions are situated almost immediately below the present-day ground surface. The excavations enabled to uncover and to document the fortification relics – parts of foundations of former cavalier XXXIII and bastion VIII – on a large scale. Moreover, these relics were not destroyed by the modern-day building works but were left in place to be preserved for the future.

References

BĚLINA, P. – KAŠE, J. – KUČERA, J. P. 2001: Velké dějiny zemí Koruny české. Svazek X. 1740–1792. Praha–Litomyšl.

- BLÁHA, R. 2012: Lávka pro pěší a cyklisty přes Orlici v Hradci Králové. Závěrečná zpráva o záchranném archeologickém výzkumu. Uložena v archivu AO MVČ v Hradci Králové.
- DVOŘÁK, G. 1927: Starohradecké siluety. 1887–1927. Hradec Králové.
- DVOŘÁK, J. 2021: Velké dny hradecké pevnosti za války 1866. Červený Kostelec.
- HERRMANN, I. – KORITENSKÁ, P. – ŠRÁMEK, J. 2021: V pevnosti. Kritická reedice knihy Ignáta Herrmanna. Hradec Králové.
- HOFMAN, J. 2020: Přemýšlet pevnost. In: J. Hofman (ed.): Lidé a hradby. Bastionové pevnosti a jejich život. České Budějovice, 123–139.
- JAKL, J. 2005: Zmizelé Čechy. Hradec Králové. Praha – Litomyšl.
- JAROŠ, O. 1968: Hradec Králové. Pevnostní systém 18. století. Hradec Králové.
- K(UBIČEK, A.) 1911: Pevnostní architektura Hradce Králové zanikne beze stopy. Věstník Klubu za starou Prahu II, 39–40.
- Paměti starých písmáků moravských. Soustavné vydání starých moravských kronik rodinných, obecních atd. Pořádá redakce Selského archivu. I. vol. Velké Meziříčí (maybe 1913).
- PAVLÍK, M. – POKORNÝ, R. 2017: Město za války (1866–1867). In: Kolektiv. Hradec Králové. Historie, kultura, lidé. Praha, 660–681.
- RICHTER, M. – SEMOTANOVÁ, E. 1998: Historický atlas měst České republiky, vol. No. 5 – Hradec Králové. Praha.
- S.A. 1912a: Barokní opevnění Hradce Králové. Osvěta lidu XVII, No. 111, 14. 9. 1912, 7–8.
- S.A. 1912b: Ještě o pevnosti Hradce Králové. Osvěta lidu XVII, No. 40, 2. 4. 1912, 4.
- S.A. 1912c: Kavalír čís. 35. Osvěta lidu XVII, No. 66, 1. 6. 1912, 9.
- S.A. 1935: Starohradečan uvažuje o hradeckých hradbách a pevnosti. Osvěta lidu XXXVIII, No. 49, 26. 6. 1935, 3–4.
- SIGL, J. 1978: Drobné záchranné výzkumy a průzkumy na území Hradce Králové v letech 1970–1976. Zpravodaj KMVČ 5, No. 1, 55–65.
- SLAVÍK, J. 2015: Královéhradecká pevnost. Hradec Králové.
- SLAVÍK, J. 2017: V pevnostních hradbách (C. k. hraniční pevnost Hradec Králové 1766–1893). In: Kolektiv. Hradec Králové. Historie, kultura, lidé. Praha, 660–681.
- SLAVÍK, J. – BLÁHA R. 2016: Pevnost Hradec Králové. Historická revue 27–2, 38–41.
- SLAVÍK, J. ET AL. 2014: Bastionové pevnosti. Průzkumy a opravy. Ústí nad Labem–Terezín.
- SLAVÍK, J. 2015: Královéhradecká pevnost. Hradec Králové.
- TICHÝ, F. 1912: Zbytky fortifikací v Hradci Králové. Osvěta lidu XVII, No. 25, s. 4–5.
- ZIKMUND-LENDER, L. 2017: Urbanismus a architektura 20. století. In: Kolektiv. Hradec Králové. Historie, kultura, lidé. Praha, 682–720.
- ZIKMUND, J. – POSPÍŠILOVÁ, J. 2000: Fotoalbum města Hradce Králové 1866–1918. Hradec Králové.

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A historical map of the Hradec Králové region, showing the city of Hradec Králové (Königs-Gratz) in the center, surrounded by a river and various settlements. The map is drawn in a hand-drawn style with red and black ink. The title 'ARCHEOLOGICKÉ STUDIE' is printed in large red letters at the top right, with 'UNIVERSITY HRADEC KRÁLOVÉ' in smaller black letters below it. The text 'The next volume of the Archaeology of Conflicts series brings eighteen new chapters from the wide and varied field of research into prehistoric and historical social conflicts. Individual chapters are mostly based on contributions presented at the Archaeology of Conflicts conference organized on 21–23 September 2021 in Hradec Králové.' is printed in black. Below this, a paragraph in black text states: 'We believe that the presented collective monograph can generally be characterized as a representative example of the current state of the discipline of conflict archaeology in Central Europe. We hope that it will therefore be a useful source of information for both the professional and the non-professional public. And that it will also be a strong enough motive for further research.' At the bottom center, there is a barcode with the number 9 788074 655968 below it. The map includes labels for 'Russek', 'Teich', 'Biletitz', 'Königs-Gratz', 'Malshowitz', 'Malsch I. h.', 'Stizebesch', 'glatt', 'mühl', 'hoff', 'Roff', 'Kog', 'A', 'A7', 'A8', 'A9', 'A10', 'A11', 'A12', 'A13', 'A14', 'A15', 'A16', 'A17', 'A18', 'A19', 'A20', 'A21', 'A22', 'A23', 'A24', 'A25', 'A26', 'A27', 'A28', 'A29', 'A30', 'A31', 'A32', 'A33', 'A34', 'A35', 'A36', 'A37', 'A38', 'A39', 'A40', 'A41', 'A42', 'A43', 'A44', 'A45', 'A46', 'A47', 'A48', 'A49', 'A50', 'A51', 'A52', 'A53', 'A54', 'A55', 'A56', 'A57', 'A58', 'A59', 'A60', 'A61', 'A62', 'A63', 'A64', 'A65', 'A66', 'A67', 'A68', 'A69', 'A70', 'A71', 'A72', 'A73', 'A74', 'A75', 'A76', 'A77', 'A78', 'A79', 'A80', 'A81', 'A82', 'A83', 'A84', 'A85', 'A86', 'A87', 'A88', 'A89', 'A90', 'A91', 'A92', 'A93', 'A94', 'A95', 'A96', 'A97', 'A98', 'A99', 'A100'.

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