Archaeological Opinions Regarding the Outer Fortification Line Of the Turkish Fortress Of Timişoara*

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ROUND MODERN Timişoara, the drainage slope of the Bega River (also called Timişul Mic) is very low. This aspect is indicated by the excessive meandering of this river before the improvement of the today canal. The clayish substratum of the basin impedes the infiltration. Thus, during massive rainy periods, the region becomes floodable, the water stagnating for a long time on the surface of the ground. These water tables determined the appearance of the so-called "swamps of Timişoara".

In the middle of this swampy area, on slightly higher ground, in fact river terraces and natural levees, the medieval town of Timişoara expanded¹. This surrounding landscape next to Timişoara is a leitmotif for the narratives of the time², being considered as a constitutive part of the fortification system.

Right before the Ottoman conquest, the city of Timişoara was strengthened with earthen walls, doubled on the northern side by a palisade³ and on the southern one by two bastions⁴. There are also references to three gates, and the thickness of the walls was estimated at four feer⁵.

About the Descriptions of the Fortifications of the Turkish City of Timişoara

FTER THE Ottoman conquest of Timişoara in 1552⁶, the fortifications of the medieval city were probably repaired and certainly enlarged, thus resisting successfully to the sieges from the 16th (1596⁷, 1597⁸) and 17th centuries (1689-1690⁹, 1696¹⁰).

According to the contemporary descriptions of this stage in Timişoara's history, dating from 1595¹¹, the fortress was considered rather small and was composed of two parts, the first one fortified with an earthen wall and the second one strengthened by

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brick walls, these two parts being separated by a trench 150 feet in length, which had one tower in the middle¹².

A further account, from 1660¹³, presents the urban area as consisting of three parts: the citadel, the inner citadel and the city¹⁴. The fortification of the citadel is described as built from wood and earth, being painted in white. The curtain had four defensive towers which, together with the inner citadel (the castle), gave to the citadel the shape of a turtle¹⁵. Outside the wall a deep moat completed the fortification system¹⁶. The thickness of the wall is estimated at approximate fifty to sixty feet¹⁷. Five gates are mentioned but only three are named: The Azaps' Gate (*Poarta Azapilor*), The Rooster's Gate (*Poarta Cocoșului*) and The Shore Gate (*Poarta Malului*)¹⁸.

Not long after Evlyia Çelebi's visit, in 1663, the Austrian Henrik Ottendorf offers a new description of Timişoara¹⁹, a depiction which concords with that of the Turkish chronicler. The curtain is presented as being made from wood and twigs netting, solid enough to bear heavy cannons²⁰. The wall was doubled by a deep ditch, fed mostly by the Timiş River. Ottendorf asserts that this ditch was not cleaned very often by the Turks²¹. Five gates are mentioned and, this time, all of them are named: the Little Gate of the Castle (*Poarta Micã a Castelului*), the Water Gate (*Poarta Apei*), the Azaps' Gate (*Poarta Azapilor*), the Rooster's Gate (*Poarta Cocoşului*) and the Blood Gate (*Poarta Sângelui*)²². From the same source comes also a graphical representation of Timişoara²³, a map which shows only one line of fortifications, composed of the curtain and the moat.

Another plan of medieval Timişoara comes from the end of the 17th century. On this map, signed by Radogna Meimar, dated to ca. 1699²⁴, the city of Timişoara appears protected by only one line of fortifications, but for the first time we see the fortifications of the Great Palanka (*Palanca Mare*) and the Small Palanka (*Palanca Mică*)²⁵, most probably built in 1696²⁶.

The detailed report made by János Tutovicz regarding Timişoara fortress, dated in August 1716, comprises the description of a second line of fortifications, playing the role of counterguard. This new fortification line, according to the source, stretched from beyond the Rooster's Gate (named the the Seghedin Gate) until the Azaps' Gate (named the Arad Gate)²⁷.

The siege of Timişoara²⁸ and its conquest during the fall of 1716 by the tropps headed by Eugene of Savoy led to the execution of the plans²⁹ drawn by engineer Captain Perette³⁰. Two of these plans have been published by the architect M. Opriş³¹ and on both of them it can be noticed the second line of fortifications, outside the fortress described by Ottendorf and Radogna, a line clearly playing the role of a counterguard. This defensive element starts from the area of the gate labeled by Perette with an S (the Blood Gate) up to the gate labeled with a Q (the Water Gate). These observations allow us to consider that the notes done by J. Tutovicz are slightly incomplete and were made most probably from the northern area of the Turkish city, an area which was not very suitable for observing the situation on the eastern and western sides of the fortress.

The study of the abovementioned plans shows that this improvement of the fortification system was made between the years 1699 and 1716³². Activities of maintenance and improvement of the fortifications are mentioned in the years 1704-1707³³. Thus, using the historical sources, we infer that the counterguard was built, most probably, during the 1705-1707 timespan.

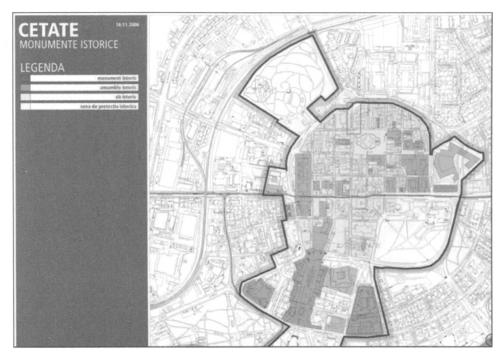


Fig. 1. The Cetate district, with its historical monuments and sites as well as their protection areas. The area of Sergent Constatin Muşat Street is marked by a rectangular red frame (source http://www.ratt.ro/forum/?showtopic=742 accessed on 22.09.2016)

A Brief History of Sergent Constantin Muşat Street

SERGENT CONSTANTIN Musat Street is situated in the centre of the modern city of Timişoara, on the northern side of the Cetate quarter, a perimeter with a high density of historical buildings, protected by law no. 422/2001 which set a protection perimeter around them (see Fig.1).

Situated in the northwestern corner of Unirii Square, Sergent Constantin Muşat Street connects this square with Măraşti Square, more precisely the south-eastern corner of it. The street is oriented approximately N-S, being 58 meters in length and 12 meters wide (Fig. 2, 6). After 1716 the urban space inside the new citadel was designed according to the Habsburg administration standards, following a regular street pattern.

Sergent Constantin Muşat Street was set above the second line of fortifications belonging to the Otoman fortress, connecting the main squares of the Austrian city (the modern Libertății and Unirii squares) to the northwestern gate of the new citadel of Tīmişoara (Wien's Gate).

In the near vicinity of Sergent Constantin Muşat Street, three historical buildings can be found. The first one, right on the intersection of the street with Univii Square,

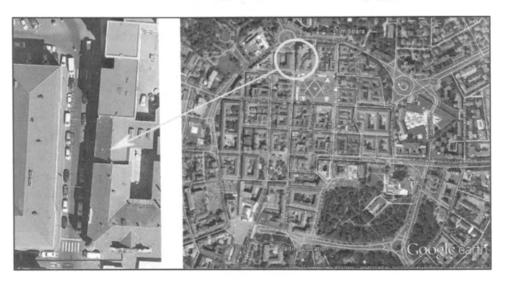


Fig. 2. Sergent Constantin Muşat Street (Google Earth capture, 2015)

called the House with Lions³⁴, was built in 1758, in the Austrian Baroque style and rebuilt in the *Szecesszió* style, typical for the 1900s³⁵. On the western side of the street, at the crossroads with *General Eremia Grigorescu* Street, is situated the second one, named *Franz Joseph Caserne*³⁶, built in 1859 and replacing the former *Wiener Caserne*³⁷. In Unirii Square, having one side on the *General Eremia Grigorescu* Street, we find the House of the Serbian Comunity, erected at the beginning of the 19th century as an Ortodox school, in Classicist style with Late Baroque influences³⁸.

The first official name of this street appears on the map drawn by Steinlein and Römmer in 1758, and it was Wienner Gasse³⁹. On the maps from the second half of the 19th century—the beginning of the 20th century we find its former names: Jäger Gasse (certainly in 1876)⁴⁰, later Török utca (certainly in the years 1889-1914)⁴¹. In 1926 we notice this street labeled as Török Street⁴² and, for the first time, we see the name Sergent Muşat Street for the current Regimentul 5 Vānātori Street⁴³, which is situated immediately to the east of the modern Sergent Constantin Muşat Street. In 1934, for the street in question, we find the name of Cotnar Street⁴⁴, the neighbouring street still bearing the name of Sergent Muşat is used for the modern Sergent Constatin Muşat Street⁴⁷, for the first time. In 1966 the street was named Muşat Gheorghe⁴⁸. In 1969, the modern Regimentul 5 Vānātori Street changed its name to 11 June Street⁴⁹, a name used also in 1980⁵⁰, when Sergent Muşat Constantin Street⁵¹ had the same name as today⁵².

The Location of the Archaeological Excavation

AP NO. 8 from Opriş 2007 together with the geo-referentiation offered by the same source⁵³ (see Fig. 3, 4) offers us the possibility to notice that the current position of Muşat Street overlaps a rectangular bastion belonging to the outer line of fortifications, labeled with the symbol 9, named the Azig Pacha Bastion⁵⁴.

The rescue excavation started with the mechanical removal of the thick (ca. 0.65 meters) layer of substructure for the modern street. The actual walking horizon removal was done for the eastern half of the street. Due to the presence in close vicinity of the buildings which line the street and given the imminent research of the defensive ditch of the outer line of fortifications of the Turkish citadel, we considered it necessary to approach the research unit (S1/2015 measuring 2x58.71 meters – see Fig. 6) in three distinct stages, from the south towards the north (meters 0-20, 20-34, 34-58,71).

The research unit was divided into squares 2x2 meters, square no. 1 being situated at the southern edge of the trench S1/2015.



FIG. 3. Map of the Turkish citadel overlaying the planimetry of modern Timişoara, with the position of Sergent Constatin Muşat Street (green frame) (after Opriş 2007, fig. 9)

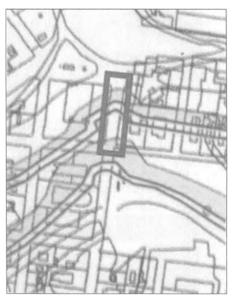


Fig. 4. Map of the Turkish citadel overlaying the planimetry of modern Timişoara, with the position of Sergent Constatin Muşat Street (green frame) detail

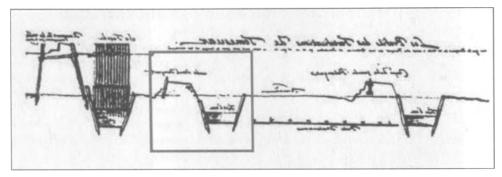


Fig. 5. Cross-section of the fortification system of the Turkish fortress of Timişoara and Great Palanka (processed after Opriş 1987, fig. 15 – the red frame marks the outer

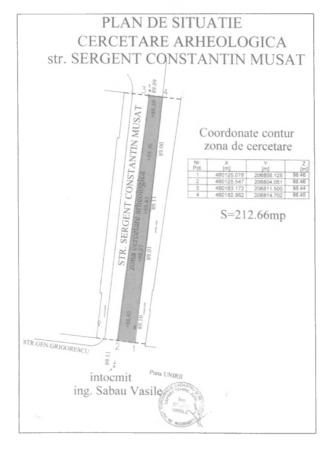


Fig. 6. The position of the research archaeological unit S.I/2015 on Sergent Constantin Muşat Street

The General Stratigraphy of the Archaeological Site (Fig. 7, 8)⁵⁵

HE STRATIGRAPHICAL sequence identified is similar to that observed on the eastern half of the northern side of Unirii Square. Thus, we can assert that on the entire length of the trench S1/2015, implicitly of Muşat Street, the base of the anthropic layers is the high terrace situated north of the Old Timiş River, a terrace also identified in the abovementioned sector of Unirii Square. The geological soil was reached, as a general observation, at ca. 1.90 m in depth, as compared to the level of the current sidewalks of Sergent Constantin Muşat Street.

The layer labeled 5 represents the upper part of the geological soil, having a dark brown color and a dense, clayish aspect. It does not contain any archaeological items.

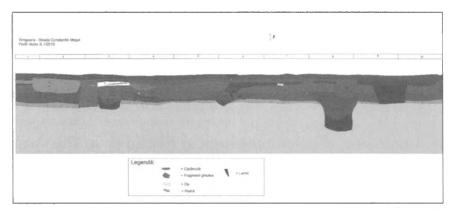


Fig. 7: The western stratigraphical profile of the 0-20 m segment of S.1/2015

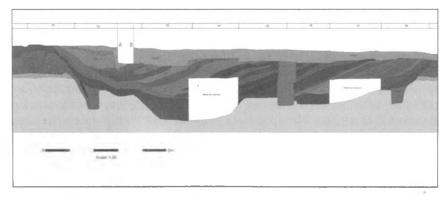


Fig. 8: The western stratigraphical profile of segment 20-36 m from S.1/2015. The filling of Vidrighin sewerage is apparently situated above the filling layers of the defensive ditch, but the modern sewerage actually cuts the fillings of the ditch, being represented here in the backround

The next upper layer (labeled 4 in Fig. 7) has a brown-greyish colour and a relative dense aspect, containing charcoal and small pieces of daub.

Layer no. 3 is dark grey in color, less dense than layer 4, having also a clayish aspect and containing a larger quantity of archaeological material.

This layer is overlapped by layer no. 6, a layer of variable thickness, much better visible in the first seven meters from the southern edge of the research unit.

We assert this because in this area layer no. 6 is a layer of burnt clay, combined with thin ashey layers, about 15 cm thick (these observations are available also for the area pf 9 and 10 squares). This layer corresponds most probably to the sieges of Timişoara from the end of the 17th century-beginning of the 18th century.

Above layer 6, quite noticeable is layer no. 2, dark grey in color and with a dense, clayish composition. Features C.5 and C.7 belong to this layer. Both features, but especially C.5 (based on the construction technique and assembly manner) are connected to the first improvements of the area of the future Unirii Square. These arrangements are in fact the result of the preparation of the terrain (filling, leveling) for the core of the Austrian city of Timişoara.

Layer no.1 is the upper one of grey colour with yellowish spots, containing fragments of bricks, dense and clayish in composition. This layer corresponds to the actual layout of Unirii Square⁵⁶.

Data Regarding the Archaeological Features in the Area of the Ottoman Fortification Line

HE SECOND segement of the research was dominated by the presence of the outer fortification line of the Turkish citadel of Timişoara. This line is composed of a ditch and a palisade, thus corroborating the historical sources⁵⁷ (see Fig. 5 for details and compare to Fig. 8).

The only difference is that the distance between the ditch escarp and the palisade line is much shorter in the area approached by us as compared to the plans drawn up by the Austrian engineers.

This can be explained by the fact that the archaeological trench \$1/2015 cuts across the fortification line in the area of Azig Pacha Bastion (see n. 53). We assert this because of the direction of the fortication line, namely SW-NE. Taking into account here Fig. 10, we notice that the only area where the line of fortifications has this orientation is exactly the outer side of the named bastion. Thus we can say that the modern, *Sergent Constantin Muşat* Street overlaps a part of the median side of Azig Pacha Bastion and not its NE corner, as Fig. 4 suggests.

At this point we have to discuss the accuracy of the geo-referencing provided by M. Opriş. An overlay of the topographical plan of the location of trench \$1/2015 in the area of Sergent Constantin Muşat Street on the aforementioned geo-referencing proves that the fortification line is suppose to be vertical on the area of the trench. As long as the direction is SW-NE, we consider that most probably the geo-referencing has a small devi-

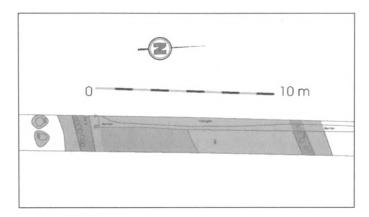


Fig. 9: The grundriss of the area covered by the outer defensive

ation of approximately 1 m towards the west (see Fig. 10).

Approximately between meters 24 and 28, the defensive ditch shows a deeper section (here the maximal depth of the ditch was recorded) situated 1 meter north of the escarp (see Fig. 8, 9 and 11 for details).

Another very important aspect should be underlined: the defensive ditch was excavated into the northern terrace of the Old Timiş River. The most reliable argument, beside the fact that layers no. 3 and 4 are crossed by the ditch, is the intersection between features C.50 (the defensive ditch) and C.53, C.51, C. 52.

It is clear that the excavation of the defensive ditch (and also the positioning of the fortification line) led to the dismantling of some

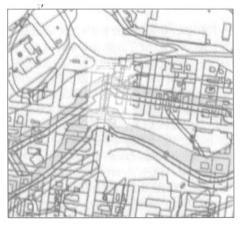


Fig. 10: Overlay of the topographical plan showing the position of S.1/2015 on the geo-referencing provided by M. Opriş

houses or additional buildings⁵⁸ represented here by the foundation ditch C.51 with the post-holes C.57 and C.53 (C.53 and C.51 are also crossed by the post-hole C.33 belonging to the palisade). The excavation technique of the foundation ditch and of the post-holes (situated on a foundation system composed of pickets hammered into clay) are identical with those identified on the southern, eastern and northern sides of the Unirii Square archaeological site, areas where were researched the substructions of some buildings represented on the Perrette map, between the fortification lines⁵⁹ (according to the archaeological report of the rescue excavation from Timişoara-Unirii Square and Fig. 8 and 23 from Opriş 2007). The only difference is that in the case of *Sergent Constantin Muşat* Street, the posts are missing, a detail that proves that they were removed deliberately.

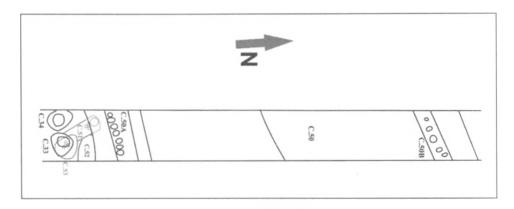


Fig. 11: The stratigraphical relation between the defensive ditch (C.50)/palisade (C.33, C.34) and the substructures of some dwellings (C.51, C.53)

Another argument for a late dating for this part of the fortification system of the Turkish citadel of Timişoara is that the palisade line is stratigraphically later than layers no. 3, 4 and 6. If the relation between the filling levels and layers no. 1 and 2 (noticeable south of the fortification line) is analysed, at first sight the ditch also cuts across these two layers. For layer no. 1 the situation can be explained by the uncovering method (done mechanically and to a depth of 0.65 m). Layer 2 overlaps the post-holes of the palisade (features C.33 and C.34). Here the situation can be clearly explained by the positioning of the filling levels of the defensive ditch (see Fig. 8), which indicates a filling of the ditch from north to south, with the exception of levels L6, L7, L8 which were set into the ditch from the south, being also the oldest ones. Besides, level L8 is the only one which contains archaeological artifacts, all the other filling levels being extremely poor from this perspective. Thus, we consider that layer no. 2 was set right before the filling of the ditch section in this area.

All these aspects offer us the opportunity to assert that the filling of the defensive ditch was done later than the arrangement of layer no. 2 and, implicitly, of the feature C.5. Analysing Fig. 27 from Opriş 2007, it is noticeable that in 1740 the outer ditch of the Turkish fortress in the area of the modern *Sergent Constantin Muşat* was already filled⁶⁰, and the Catholic Dome was built. Thereby, this year becomes a *terminus ante quem* for the arrangement of feature C.5 and of those similar in construction technique and stratigraphical position in Unirii Square, considered to be connected with the building of the Dome.

A very good dating element for the beginning of the filling of the defensive ditch was the discovery in level L.8 of feature C.50, in square 13, of a fragmentary brick embossed with the year 1716 (see Image III). Having in mind the fact that level L8 is the oldest from the filling of the ditch, we can presume that this item was deliberately thrown in as a consecration of the moment.

Thus, the filling of the ditch in the excavated area starts after the year 1716 and ends prior to 1740, most probably in 1732-1737⁶¹. Traces of the Ottoman outer fortification line are still visible in 1752⁶².

Description of the Archaological Features

Feature C.33

It constitutes the insertion pit of a circular post, observed at 0.40 m of depth. The diameter of the pit was 0.90 m and its depth was 1.10 m (Fig. 11).

The archaeological objects found in the filling are pottery sherds and animal bones. The negative of the post has received the code C.33A and its diameter was of 0.50 m.

It stratigraphically cuts across features C.51 and C.53 as well as layers no. 3 and 4. It was overlapped by layers no. 2 and 1.

Feature C.34

It is also an insertion pit of a circular post, 0.65 m in diameter and with a depth of 0.50 m (Fig. 11).

The archaeological items identified are the same as in the case of C.33. A complete canonball was discovered in the lower level of filling (Image II).

The negative of the post was named C.34A and its diameter was 0.50 m.

Feature C.33A together with C.34A represents the posts of the palisade from the outer fortification line.

Feature C.34 was overlapped by layers no. 2 and 1 and cuts across layers no. 4 and 3.

Feature C.50

This feature represents the defensive ditch of the outer fortification line of the Ottoman fortress of Timişoara. It was noticed at a depth of 0.40 m. It was researched over 2 m of its length. The width of the ditch was 13 m. The maximum depth of the ditch was 3 m (Fig. 8, 9, 11).

The filling of the ditch consisted of several levels. The upper levels are lacking in archaeological items, having a yellowish colour. The lower levels are clayish in composition and have dark colors, rich in archaeological objects and organic material.

Unlike the ditch of the first defensive line which was set into a branch of the Timişul Vechi River, the outer ditch was excavated into the northern terrace of the river, intersecting the features (C.51, C.52, C.53 şi C.57) connected with domestic structures.

Both the escarp and counter-escarp of the ditch were covered by wooden vertical posts, inserted in the narrow ditches coded as C.50A and C.50B (Fig. 8, 9, 11).

The archaeological inventory from this feature is rather poor, but in the lowest levels were discovered fragmented pottery, fragments of bricks and animal bones. A fragmentary brick was found in the oldest level of filling, bearing the year 1716 and the letters F and W (Image III).

Stratigraphically, this feature was cut by modern construction works (e.g the so-called Vidrighin sewerage) and intersected features C.51, C.52, C.53 şi C.57.

Feature C.50A

A narrow ditch used to insert the vertical posts used to cover the escarp of the defensive ditch. Identified at 1.70 m, its width was 0.70 m. Its depth was 0.90 m (Fig. 8, 11, Photo 1, 2).

The archaeological inventory was composed of pottery sherds, fragments of cast iron canonballs, and animal bones. The posts from this small ditch were coded as C.50S, from A to H. The posts were sharpened at the lower edge and were hammered into the bottom of the ditch, approximately 0.50 m.

Feature C.50B

Similar in position and functionality with feature C.50A but connected with the counter-escarp. It was noticed at a depth of 1.50 m, being 0.60 m in width. Its depth was 0.60 m (Fig. 8, 11, Photo 1, 3).

The inserted posts were coded as C.50N, from A to D. The post C.50N.B was pulled out before the filling of the defensive ditch C.50.

Feature C.51

It represents a foundation ditch, noticed at a depth of 0.40 m. The feature preserves 1.20 m of its length, being 0.50 m in width. The depth was 0.80 m (Fig. 11).

On the bottom of the ditch were noticed wooden pickets as a base for a wooden post. At the northern edge of the ditch was researched a post-hole (feature C.57).

Stratigraphically, this feature cuts across C.52 and is intersected by the defensive ditch C.50. Feature C.51 is contemporary with C.53 and, together, can represent part of the sub-structure of a domestic building. It also cuts into layers no. 3 and 4.

Feature C.52

An oval pit, noticed at 0.50 m. Its long diameter was 1.50 m and the short one 1 m. The depth was 1.30 m (Fig. 11).

It was cut by C.50 and C.51 and intersects layers no. 3 and 4.

Complex C.53

A circular post-hole, noticed at 0.40 m. Its diameter was 0.74 m and the final depth was 1.35 m (Fig. 11).

On the bottom of the pit were noticed 6 wooden pickets.

Stratigrapically, it was crossed by feature C.33. Most probably is part of the same structure like C.51.

Conclusions

HE STRATIGRAPHICAL observations made and recorded allow us to assert that the entire length of the modern Sergent Constantin Muşat Street was located on an unflooded terrace north of the Timişul Vechi stream, which was turned by the Ottomans into the main defensive ditch of Timişoara fortress.

On this terrace was dug the defensive ditch of the outer line of fortifications, with the adjoining palisade.

The levelling layers observed belong to medieval or modern times. Layer no. 1 (the upper one) does not cover the entire researched surface and it is connected with the

arrangement of Unirii Square and the neighbouring area (most probably the end of 19th-the beginning of 20st centuries).

Layer no. 2 belongs to the 18th century and is related to the first arrangements in the area of today Unirii Square, representing the production of the first walking level (preceded by a levelling of the zone) after the year 1716. The fact that layer no. 2 covers the post-holes of the palisade (posts removed deliberately, at least in the researched sector) indicates that the walking level already mentioned was set after the dismantling of the palisade, but before the complete filling of the defensive ditch (our assertion is supported by the relation of layer no. 2 to the upper levels of the filling of the ditch).

Layer no. 6 was identified only behind the fortification line (i.e. south of the line) and it consists of ash and burnt clay, mixed with grey, clayish soil. Due to these characteristics and because it is overlapped by layer no. 2, it is considered by us as being the walking level during the siege from 1716.

Layer no. 3 had variable thicknesses (between 0.40 and 0.80 m) and can be dated, most probably in the 17th century. The purpose of this stratigraphical unit was, most likely, to level the zone from the northern area of the main fortification line of the Turkish fortress of Timişoara. Because this layer was affected by the post-holes of the palisade and also by feature C.26 (which, given its shape and the archaeological items found in it, is definetly the result of a canonball explosion into the clayish soil), we can consider as terminus ante quem for it the arrangement and the use of the outer fortification line (i.e. the beginning of 18th century).

Layer no. 4 (the lowest layer) belongs to the Medieval time. The only feature overlapped by this layer is C.84, which is very poor in archaeological objects and, consequently, very hard to be set into a relative chronological frame.

The domestic structures mentioned above were dismantled (at least some of them) due to the construction of the outer fortification line, and their planimetric distribution *extra-muros* to the main foritification line makes us ascribe them to the Christian population of Timisoara during the 17th century.

The Ottoman citadel fell during the siege of 1716 led by Eugene of Savoy, but the main fortification line lasted longer, until the new Austrian town and its fortifications were built.

The new bastionary fortress also included within its walls the area of the northern side of the Ottoman fortress. During the first half of the 18th century the Turkish fortress was leveled, the palisades dismantled and the defensive ditches were filled with soil and clay.

Notes

- 1. Munteanu, Munteanu 2002, 9-11.
- 2. See Magina 2013, 275-277 and also the sources quoted below (e.g. Evliya Çelebi, Henrik Ottendorf).

- 3. This fortification's system was considered by Sigismondo de Prato as being in Hungarian fashion, "modo hungario" (see Magina 2013, 277).
- 4. Magina 2013, 277.
- 5. *Ibidem*. If one feet is the equivalent of 0.30 meters, the thicknes of the wall is ca. 1.20 meters.
- After a 35 days siege, according to Evliya Çelebi (see Mehmet 1976, 494). For a detailed opinion about this event see Postelnicu 1927, 26-31.
- 7. Prever 1853, 38; Hategan 2005, 114-120.
- 8. Prever 1853, 39; Hategan 2005, 125-126.
- 9. Hategan 2005, 263-264.
- 10. Prever 1853, 46-47; Hategan 2005, 282-284.
- 11. It is the description attributed to Filippo Pigafetta.
- 12. Bulgaru 1971, 557. Here we must mention the famous image of Timişoara from the beginning of the 17th century by Wathay Ferenc (see Wathay Ferenc Énekes könyve, folio 30b-31a; the original manuscript is kept at the Magyar Tudományos Akadémia, Budapest, quota K62; http://ottomanhungary.blogspot.ro/2012/02/ferenc-wathay-songbook.html, accessed on 22.09.2016) where the two parts of Timişoara city are clearly visible.
- 13. It concerns the description done by Evliva Celebi, according to Hategan 2005, 211.
- 14. Mehmet 1976, 496-501.
- 15. Mehmet 1976, 496-497.
- 16. Mehmet 1976, 497.
- 17. Mehmet 1976, 497. Again, if we equate one feet with 0.30 meters, the obtained value is 15-18 meters.
- 18. Mehmet 1976, 498-499.
- 19. Ottendorf 2006, 10-17. The same text in Hategan 2005, 221-229.
- 20. Ottendorf 2006, 11.
- 21. Ibidem.
- 22. Ottendorf 2006, 11-13.
- 23. Ottendorf 2006, photo 2.
- 24. Opris 2007, 31, the text from fig. 13.
- 25. Opris 2007, 34.
- 26. Guboglu 1974, 460 retrieved by Hategan 2005, 283; Opris 2007, 34.
- 27. Feneşan 2014, 296-297.
- 28. See Du Mont et al 1725, 110-113 for a detailed description of this siege. At p. 110 we can also find a description of the Timişoara citadel in 1716, mentioning *la Palanque*, *la Ville*, *le Chateu* and *la petite Palanque*. Therewith are named the fortifications of the Great Palanka and of the city and the two fortification lines are described.
- 29. Three versions, according to Fortiu 2014, 1-2.
- For opinions regarding the complete name of this historical character and his origin see Forţiu 2014, 1-7.
- 31. Opris 2007, fig. 7, 8.
- 32. Opriş 2007, 34-35 considers that this fortification line was built post 1663, most probably at the beginning of the 18th century; on p. 44 from the same source this work is dated in the years 1704-1708. Analysing Timisoara's map dated ca. 1699 and signed by architect Radonia (see Opriş 2007, 31, fig. 13), we see that the outer fortification line did not exist at that time. Thereby, the probability of this fortification line being built prior to the beginning of the 18th century becomes very low.

- 33. Opriş 1987, 197, n. 42; Haţegan 2005, 298, 302, Opriş 2007, 35-36 (this source mentiones for the year 1707 intense works for cleaning and repairing the main fortification line).
- 34. Opriș, Botescu 2014, nr. 169.
- 35. See http://www.primariatm.ro/uploads/files/cartare_cetate/15%20-%20Cvartal%2003.pdf p. 37, position 8 (accessed on 23.09.2016).
- 36. Buruleanu-Medelet 2004, 29.
- 37. See http://www.primariatm.ro/uploads/files/cartare_cetate/14%20-%20Cvartal%2002.pdf p. 33, position 6 (accessed on 23.09.2016).
- 38. See http://www.primariatm.ro/uploads/files/cartare_cetate/21%20-%20Cvartal%2010.pdf p. 72, position 52 (accessed on 23.09.2016).
- 39. Vartaciu Medelet 2015, 44, photo 5 and 80, photo 5.
- 40. Jancsó 2011, 41.
- 41. Jancsó 2011, 46, 103
- 42. Jancsó 2011, 108.
- 43. Ibidem.
- 44. According to Leşcu 2001, 27 the name of Cotnar was used in the years 1930-1943.
- 45. Jancsó 2011, 116.
- 46. Jancsó 2011, 121; see above also n. 44.
- 47. According to Leşcu 2001, 28 until 1959.
- 48. Leşcu 2001, 28.
- 49. Jancsó 2011, 138.
- 50. Jancsó 2011, 152.
- 51. Ibidem.
- 52. Leşcu 2001, 28.
- 53. Opriş 2007, 21, fig. 9.
- 54. Opris 2007, 19.
- 55. According to Diaconescu et al 2016, 208-209.
- 56. See Opriş 2007, 56, fig. 27 where the main fortification line of the Turkish fortress is still visible in the area of the future Unirii Square. Fig. 30 from the same source shows in 1752 the clearly delimited area of today's Unirii Square.
- 57. See Opriş 1987, 20, fig. 15. We consider it also important to analyse the map at https://maps.hungaricana.hu/en/MOLTerkeptar/10693/view/?bbox=-146%2C-8862%2C4420%2C-6796 (National Hungarian Archives, code S_68_XIV, no. 89), which presents, in the lower left corner, a representation of a transversal section through the fortification system of the Turkish fortress of Timisoara.
- 58. Opriş 2007, 44, n. 53. The source mentioned a document which contains data regarding the demolition of 25 houses in order to provide extra ditches to the fortification of the border fortress. The mention of the Timişoara muhafiz in this document leads M. Opriş to believe that this source is actually referring to Timişoara. The archaeological observations fully support this assumption. The dating of this document offers the opportunity to have a precise date (23 July 1 August 1705) for the start of the constructions work on this fortification line.
- 59. Opriş 2007, fig. 8, 23; Szentmiklosi et al 2015, 250 date this type of dwelling, using the argument of a coin discovery, in the years 1687-1691.
- 60. See also Opriş 2007, fig. 29, where the situation of the outer fortification line is the same, but the planimetry of the modern *Sergent Constantin Musat* Street is clear visible.

- 61. Overlapping the plans from Opriş 2007, fig. 29 where the streets' trama of the current Old Centre of Timişoara is already noticeable, with fig. 26 from the same source (a map of Timişoara from 1737), we see that the interruption of both fortification lines af the Turkish fortress situated in front of Wien's Gate of the bastionary fortress (labeled as g in fig. 26) is set right on the today Sergent Constantin Muşat Street line. Practically, the section of the outer defensive ditch archaeologically excavated was already filled in 1737. The fact that these interruptions of the fortification lines are situated on the same direction as Wien's Gate make us to consider that this work is in direct connection with the building of Wien's Gate. Because the plan from Opriş 2007, fig. 26 indicates clearly that the Austrian fortification of Timişoara started in 1732, we can propose this year as terminus post quem for the filling of the outer ditch section, excavated by us.
- 62. Opriş 2007, fig. 30.

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Abstract

Archaeological Opinions Regarding the Outer Fortification Line Of the Turkish Fortress Of Timişoara

The paper describes the results of the archaeological excavation on Sergent Constantin Muşat Street, targeting the outer fortification line of the Turkish fortress of Timişoara, in the area of the Azig Pasha Bastion. This line was built according to the ditch-palisade system. Combining the historical sources with the archaeological observations, it is clear that this line (having in fact the function of a counterguard) was built in the years 1705-1708. After the conquest of Timişoara by the troops led by Eugene of Savoy in 1716, the Turkish fortress was gradually dismantled. The outer fortification line sector approached by the archaeological research was removed, most probably in the years 1732-1737.

Keywords

Turkish period, defensive ditch, palisade, 18th century, Timişoara



РНОТО 1: Feature C.50 (the lower part of the image corresponds to the southern edge of the defensive ditch)



Рното 2: Feature C50A



Рното 3: Feature C. 50В



IMAGE I: Feature C.26 - fragmentary canon ball



IMAGE II: Feature C. 34 - canon ball



IMAGE III: Feature C.50 - fragmentary brick which bear, marked embossed, the year 1716 and the letters W and F





IMAGE IV: Feature C.50 – pedestaled ceramic bowl