THE DISCOVERY OF 'YENI - KALE' FORTRESS NEAR TURNU MĂGURELE

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Abstract: A late medieval fortress has been uncovered under a thick forest on the left bank of the Danube, near the Turnu Măgurele port, Teleorman County. The discovery was made by the author using modern research tools, such as a new Digital Terrain Model (DTM) available for the Danube River floodplains. Further historical research followed. Using mostly online resources and digital research techniques, it was confirmed that this is the Turkish fortress called 'Kale', 'Yeni-Kale', 'Kalea', 'Turnu Nou' or 'Cetatea Nouă', probably built during the 18th century. In the final years of its existence, the citadel was fortified by the Ottomans with five towers and a moat, having a star shape, similar to the nearby Turnu fortress. It served as a bridge-head, securing the Turnu port (Schela) and the Danube crossing between Turnu and Nicopolis. It was the location of heavy fighting during the 1828-1829 Russo-Turkish War, and conquered by the Russians on 25th of January 1829. Soon after the Treaty of Adrianople the fortress was dismantled and by the end of the 19th century, when a new forest was planted on the site, almost all trace of it was lost.

Rezumat: O cetate medievală târzie a fost descoperită sub o pădure deasă, pe malul stâng al Dunării, în apropierea portului Turnu Măgurele, județul Teleorman. Descoperirea a fost făcută de autorul acestei lucrări, folosind instrumente de cercetare moderne cum ar fi un nou model digital al terenului (DTM) disponibil pentru lunca Dunării, precum și cercetarea surselor istorice. Utilizarea resurselor, în cea mai mare parte disponibile on-line, dar și a tehniciilor de cercetare digitale, au confirmat faptul că aceasta este cetatea turcă numită 'Kale', 'Yeni-Kale', 'Kalea', 'Turnu Nou' sau 'Cetatea Nouă', probabil construită în secolul al XVIII-lea. În ultimii ani de existență cetatea a fost fortificată de turci cu cinci turnuri și un șanț, având o formă de stea, similar cu cetatea Turnu din apropiere. Aceasta a avut un rol defensiv, de protejare a portului Turnu (Schela) și a zonei de traversare a Dunării între Turnu și Nicopole. În acest loc s-au dat lupte grele în timpul războiului ruso-turc din 1828-1829, cetatea fiind cucerită de rusi pe 25 Ianuarie 1829. La scurt timp după Tratatul de pace de la Adrianopol, fortificația a fost demantelată și până la sfârșitul secolului al XIX-lea, când o nouă pădure a fost plantată pe fostul amplasament, aproape orice urmă a cetății a fost pierdută.

Keywords: Kale, Yeni-Kale, Kalea, Calea, medieval fortress, bastionary citadel, Turnu Nou citadel, ottoman fortress, ruso-turkish wars, historical research.

Cuvinte cheie: Kale, Yeni-Kale, Kalea, Calea, fortificație medievală, cetate bastionară, cetatea Turnu Nou, fortificație otomană, războaiele ruso-turce, cercetare istorică.

The purpose of this paper is to highlight a long forgotten but yet very important historical site: the ‘Kale’ late medieval citadel near Turnu Măgurele, Teleorman County, Southern Romania (Plate I).

First of all, a few words about the discovery. This was not an accidental event. The discovery was made remotely on the night of 14 March 2017. Earlier that evening came news of a new tool1 that has great archeological potential. The tool is a DTM (Digital Terrain Model) available online and is part of a larger project called Danube Floodrisk Map.

Immediately after that, the ‘digital hunt for forgotten places’ (some might consider this a rather unusual hobby) near the Olt - Danube confluence began. After investigating a few other very interesting places that are not the subject of this paper, came the study of the terrain around the Turnu Citadel (Plate II.1). The Turnu Citadel is clearly visible, including the star shaped late medieval fortification2. The online tool has the option to remove the vegetation, including the forest, so this feature allows the user to see what lies under the forests on the Danube bank, specifically variations in land forms. This made visible another star shaped type of fortification (see also Plate I.2), near the Turnu Măgurele Ferryboat docks. The new fortification apparently had five towers and a ditch/moat. The north tower seems to have been affected by hydrotechnical works, specifically a flood prevention wall constructed probably around 1900. The south-east tower seems to be partially affected by the works conducted in 2007 at the Turnu Măgurele Ferryboat Docks. The remains of the other three towers seem to be well protected under the forest, as well as the walls, the ditch and the interior part of the fortress.

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Next day, the news of this find reached a number of archeologists and history enthusiasts who confirmed that the shape on the Danube shore is clearly another fortification.

The first questions that one might ask are probably 'Is this a glitch?', 'Why are there two similar star-shaped, Vauban type fortifications near Turnu Măgurele?' The distance between the Old Turnu (Turnu Vechi) citadel and this new fortification is 1.85 kilometers in straight line, probably around half an hour of walking. So this cannot be the Turnu Ottoman fortified town that developed near the Old Turnu citadel, it is too far away. Also, it does not look like a civilian fortress, it must have had a military purpose. It had to be something else.

A few comments about the neighbouring Turnu (old) Citadel: this site, despite being a National Monument (category 'A' on 'List of Historic Monuments of Romania'), is not a place that has been intensively studied by archeologists. Only the central part of the fortress (mostly around the imposing circular tower) has been investigated in a series of archeological campaigns. The origin and the builders of the circular tower are subjects of intense debate. The rest of the site has been almost completely neglected. Unfortunately, the late medieval fortifications around the old circular tower (including the five bastions and the ditch visible on the DTM) as well as the outer terrain around the star shape, where the Turkish town is believed to have been, are severely affected by human activities. Intensive agriculture is practiced, and, except for the small central part, the site is heavily disturbed by ploughing. The five bastions of the late medieval citadel are barely visible on the ground as small mounds (about 0.5-1 meters tall), and the ditch depth is only around 0.5 meters. After each ploughing season, they become less and less visible and they will probably be completely lost in a few years if the activity continues at this pace. The fact that Old Turnu citadel had a late medieval bastionary type of fortification is also a less known fact and was confirmed by modern historians only after the release of a set of aerial images in 2005.

Returning to solving the mystery of the new star shape fortification near the Turnu Măgurele Ferryboat docks, it was clear there was a need to reinvestigate some of the oldest written testimonies about this area and to start research for other historical documents in order to have a complete understanding of this site.

A very accurate description of all the historical landmarks in the Turnu Măgurele area was made by the local intellectuals that took part at the 1870's 'Odobescu Questionnaire' (Tănărea 2010: 238-9). The 1871 description only seems to contain data regarding the 'Old fortress'. But the 1873 additions made by local schoolteacher N. Angelescu are very detailed: "In the middle of the vineyards, at the place called Lunca Turnului, a state owned land, south of the commune (a.n. the modern Turnu Măgurele town), there's a big mound made of rocks of different sizes, whose founders are not known (...) called the Old Citadel (...) around it there's a ditch, also in ruins (...) where it is said that the Russian army 'tabyas' (a.n. encampment) were put, and now it is called the Old Citadel Ditch.

Also in this Turnu floodplain, at the eastern edge of the vineyards, on the Danube shore and south of the commune, there are holes and a ditch all around, more suited with the place where the Turkish Citadel was, and being assaulted by the Russian army they came into ruin, with the surface of 3 acres, when digging here one can find stones of various size, that were used for building it, this is now called the place of the New Citadel.

...At the northern edge of the vineyards and south of the commune, there's a place of around 9 acres, surrounded by an earth ditch, 1½ fathom wide and 1 fathom tall, where it is said it was the Turkish Town.”

This is a very important description and it confirms that in the second part of the 19th century one could observe the ruins of two fortresses and of another fortified civilian settlement.

Some of the first archeological investigations made in the area belong to the writer, journalist and history enthusiast Cezar Bolliac. In one of his manuscripts from 1869, he describes his journey in Teleorman County (Cândea 2009: 218). After the part where he investigated the Turnu fortress, we learn that he started digging on a different mound, not far from the Turnu fortress, on the Danube shore. He had received indications from local people that a lot of Turkish and Russian war artefacts could be found there. Bolliac did not find much of what he hoped for, but he made an amazing discovery. After digging in the center of the mound he found a broken marble commemorative plate that said: "Under the empire of Emperor of the entire Russia, Nicholas I, the hero Russian soldiers from Slisembursky polc, Ladojsky (...) Dedicated to those who died during the taking by assault of the Calea fortress and the Fortstadt Kr. Turnu - January 13th, 1829”.

This Russian marble plate is extremely important and should be properly analyzed. The Turnu ‘fortstadt’ is the fortified Ottoman town that developed around the Old Turnu citadel. But what
about 'Calea'? That is a different fortress. The name is surely a deformation of the Turkish word 'kale' that means 'fortress'. Based on the circumstances that the plate was found by Bolliac (digging a mound near the Danube shore), we can conclude that Calea Fortress (Kale) and the New Citadel described in the Odobescu Questionnaire are the same place.

The quest for 'Kale' and the events during the Russo-Turkish war from January 1829 had begun. Public access to a recently digitized book that covers the Russo-Turkish 1828-1829 war, published in 1854 in New York by colonel Francis Rawdon Chesney (1789-1872) and apparently unknown to the Romanian historiography, gives a very interesting description of Nicopolis and its surroundings: "...Nicopolis occupies two steep hills on the right bank of the Danube. The town is defended by irregular lines which are revetted, and have hurdle-faced earthen parapets. The works are surrounded by a deep ditch, flanked by flat bastions. On the left bank of the river, and immediately opposite, are the forts of Yeni-Kala and Eski-Kala, both of which are commanded and protected, at the distance of about 900 yards, by the guns of the town. A garrison of 8,000 men was destined by the Sultan for the defence of this place." (Chesney 1854: 50).

This description not only confirms the co-existence of two Ottoman forts on the left bank of the Danube, opposite Nicopolis, but gives us the exact names that they had in 1829. In Turkish, 'Eski-Kale' means 'Old Fortress', while 'Yeni-Kale' means 'New Fortress'. So, Yeni-Kale is the proper Ottoman name of our star shaped place on the shore of the Danube.

Another great source of information regarding the Russo-Turkish events of 1828-1829 are the works of German field marshal Helmuth Karl Bernhard Graf von Moltke (1800-1890). In his book 'Russians in Bulgaria and Rumelia in 1828-1829; during the campaigns of the Danube...' in Chapter XI 'Military operations in Wallachia' we have a very detailed testimony of what happened in the Turnu-Nicopolis area during the 1828-1829 winter: "During the winter the tete-du-pont at Nicopolis was likewise taken. Tschapan-oglu (the Son of the Tiger), sprung from one of the noblest Asiatic families, had gone there with 12,000 horsemen. He sent Count Langeron a pouch of tobacco with a letter in which he announced his intention of driving the Russians out of the Principalities. Count Langeron replied by storming Kaleh. That place had been lately fortified with towers and a moat; but the water in the moat was frozen, and the town was taken in less than an hour on the 25th of January. 32 guns and 5 standards were taken, 250 Turks killed, and 350 taken prisoners. The commander of the place, Ibrahim Pasha, and 60 officers were likewise made prisoners. General Malinofski immediately ordered an attack to be made on the neighboring town of Turno. The suburb was taken, and the armed inhabitants cut down, but the citadel resisted. The Russians lost on that day 6 officers and 330 men. On the 11th of February the citadel capitulated. The garrison of 1500 men were allowed free exit with their baggage, but left 51 guns and 3 standards in the hands of the Russians." (von Moltke 1854: 242-3).

Moltke's extremely accurate description confirms once again what happened on 13/25 January 1829. A few comments are needed in order to see the full picture of the events. Kaleh (Yeni-Kale), on the opposite side of the Nicopolis bridge-head, was a place fortified with towers and a moat, ruled by Ibrahim Pasha. It was the first that fell under the Russian assault. Then fell the 'town of Turno' (this has to be the 'Turnu Fortstadt' from the marble plate). The combined casualties on that day rose to almost 600 Turks and Russians. We learn from the text that only the 'suburb' was conquered on that day, 'but the citadel resisted'. This is the confirmation that the Ottoman Turnu town surrounded the Old Turnu Citadel (Eski-Kale). This also explains why the marble plate only mentions 'Calea' and the Turnu fortified town. They were the ones captured with heavy fighting and losses. This was not the case of the Old Turnu Citadel, whose garrison was allowed free exit more than two weeks later.

Regarding the main purpose of Kaleh (Yeni-Kale), we can assume that this fortress was built to secure the Turnu - Nicopolis crossing of the Danube. A less known fact is that on the opposite bank of the Danube, immediately near the 'Nikopol Ferryboat Docks', and under the hill of the big Nicopolis fortress, there is another late medieval fortress, currently under a park in the modern Nikopol Bulgarian town (Mitova-Dzhonova 1979).

Regarding the fate of Kaleh (Yeni-Kale) after the war, once again we can use Moltke as the main source (1854: 452). His notes regarding the Treaty of Adrianople include: "The fortresses held by Turkey on the left bank of the Danube - namely Turnu, Kaleh, and Giurgevo - were to be given up, their fortifications, as well as those of Brailow, to be razed and not to be rebuilt; the towns incorporated with the Principalities, which were no longer to allow Turkish garrisons within their frontiers. There was no denying that the resources of these provinces were completely lost to the Turks in the event of a future war."
Another interesting observation can be made. Moltke talks first about the Turks giving up the 'fortresses' of Turnu, Kaleh and Giurgiu (Giurgevo), only then to mention the 'fortifications', that include those of Braila (Brailow). This seems to suggest that, at the end of the war, the only functional Ottoman military objectives on the left bank of the Danube were Turnu (Old Turnu, Eski-Kale Fortress), Kaleh (Yeni-Kale, New Turnu Fortress) and Giurgiu (the Island fortress). They should therefore not be mistaken with the Ottoman civilian fortified towns of Braila, Giurgiu and Turnu.

Now that we know more about Kale's last years of existence we need to focus our attention and try to solve the complicated problem of when Kale was built and by who.

A very recent study regarding the area, called 'Raiau Turnu'\(^2\), whose author, Liviu Maxim (2006), had access to a variety of Turkish documents, states that: "Completely new is the fact that in 1818 there were <<two Towers>> (kuleteyin), called Turnul Nou (Kule-i Çedid or Yeny Kale) and Turnul Vechi (Kule-i Atik or Halyi Kale), a fact unknown to the historians of the citadel, starting with G. Florescu." The author also says that: "During 1819, in both citadels a mosque and a minaret were to be built, and at Turnul Vechi, a quranic school (it is probably, the case of reconstructing those that existed in the Turnu Vechi Citadel)" and then he mentions that, according to R. Iosipescu and S. Iosipescu (2006): "The building of the new fortress was started by the Russians during the 1768-1774 war and finished by the Turks."

The text above show that indeed there were two separate Turnu fortresses at the beginning of the 19th century. Unfortunately, the author, Liviu Maxim, does not seem to understand what were the exact circumstances and where the Turnu Nou (Yeni-Kale) was situated. By citing and accepting the statement that the Yeni-Kale fortress construction was started by the Russians during 1768-1774, we can conclude that Maxim and Iosipescu believed the fortress was placed at some distance from the Danube and from the Nicopolis fortress. Considering the technical advance of weaponry in the 18th century and the dominant strategic position that Nicopolis fortress had over the left bank of the Danube, the Russians could not start such a complex and long term engineering process without complete control over Nicopolis fortress. No records seem to contain information about Nicopolis being ruled by Russians in the 18th century. The first time Nicopolis was conquered by the Russians was in 1810, under Marshal Kutuzov. But the Russian ruling of Nicopolis was brief, and seems to have been only during the winter, so this could not provide the time needed and or the conditions to start a big construction on the opposite side.

Therefore, considering its location and shape, most probably Yeni-Kale was built sometime in the 18th century, but only by the Ottomans. If indeed the Russians built temporary fortresses near Turnu (a very plausible thing), they must have done that at a certain distance from the Danube and from the Turnu Port, in order to be protected from the guns of Nicopolis. This more likely happened on the hills above the Turnu Măgurele town\(^13\) or in the Olt River floodplain\(^14\).

Returning to the study of Turnu Nou (Yeni-Kale) fortress and the confusion about its location, another eloquent example are the latest archeological campaigns of Turnu Vechi, performed between 2006-2008 by archeologists Ionel Cândea and Ecaterina Țănățăreanu (Cândea and Țănățăreanu 2007, 2008, 2009). The fact that they had access to the 2005 ANCPI aerial image of the Old Turnu Citadel area enabled them to observe the pentagonal late medieval fortifications around the Turnu Vechi ruins. They also successfully observed remains of the Turnu Ottoman town (the 'fortstadt'). But it seems that they could not see the full picture and realize that the Turkish had built two pentagonal Vauban type fortresses, one at Turnu Vechi (Eski-Kale) and the other at Turnu Nou (Yeni-Kale). This confusion becomes obvious in a study published by Cândea (2009: 215-21) where the author analyzes Bolliac's research at Turnu. Cândea had access to Maxim's latest study (the paper is mentioned in the article), so he knew about the existence of Turnu Vechi (Eski-Kale) and Turnu Nou (Yeni-Kale) fortresses. But, unfortunately, when commenting about a controversial 19th century plan\(^15\) assumed to belong to the Old Turnu fortress, Cândea says: "We allow not to analyze, yet, this first plan of the Turnu Citadel, but where we can observe, at a first view, the well represented outline of the round, central tower, of Mircea the Elder, then a second trapezoidal wall with the larger side to the north, and then next, on my opinion, the pentagonal wall (Turnu Nou)...." This is an important aspect and proves that because of the lack of detailed information about the area the archeologist could not completely understand how the Ottomans organized and defended the Turnu area.

If Cândea and Țănățăreanu had not made the mistake of assuming that 'Turnu Nou' represented the pentagonal fortifications around the circular tower of 'Turnu Vechi', then maybe 'Turnu Nou' (Yeni-Kale) would have been discovered in 2007. This is because during the constructions of the Turnu Măgurele Ferryboat docks in 2007, Ecaterina Țănățăreanu, at the time Director of the
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Teleorman County Museum, received news about stone remains found on the Danube shore. She visited the place on 6 July 2007 but, because of the advanced state of the construction works (at some areas of the docks the concrete was already poured), Mrs. Țăntăreanu could only observe the remains of a potential stone wall. She assumed that these were remains of some old constructions, perhaps related to the Turnu Port (the Port was about 500 meters east). Little did she know that those remains probably belonged to the south-east bastion of the Ottoman Yeni-Kale fortress. However, courtesy of the Teleorman County Museum, we obtained access to some photos taken that day (Plate III). They are extremely valuable and prove without any doubt that Yeni-Kale was a stone fortress. This is very important, as stone is a very rare building material in the Turnu Măgurele area and in the entire Teleorman County because it had to be brought from great distance.

It is now time to analyze some cartographic works that further confirm that the star shaped fortification on the left bank of the Danube is indeed Kale (Yeni-Kale). We found Kale on two maps. The first is the 1831 ‘Planul topografic al domeniului Turnu’ also known as the 1831 Russian plan. It was made following the reestablishment of Romanian rule over the former Turnu Ottoman nyabet. This is a very accurate map of the area and is well known by Romanian historians. On this plan (Plate IV.1), near the Olt-Danube confluence, we can observe the name ‘Ruinele Turnului’ that represents a pentagonal fortification surrounded by dots (probably meant to be ruins of the Turkish Turnu town). Further south-east and near the Danube, we can see another name, ‘Ruinele Kalei’. Unfortunately, except for the name, there are no other graphical representations on this 1831 map. This is probably because two years before ‘Kale’ has been dismantled according to the Adrianopole Treaty. Some ruins were still visible, but they were probably not worth drawing on the plan.

The second map showing Kale (Plate IV.2) is much more accurate but unfortunately it is less known to local historians. This is a very detailed graphical representation of the Russian and Turkish troops in the area during 1829 conflict. The map was created by Nikolai Alekseevich Epanchin. We can observe from this map that ‘Kale’ was a star shaped pentagonal fortress, similar to ‘Turno’ (Old Turnu Citadel). ‘Kale’ is very correctly placed, on the left Danube bank, in front of the Nicopolis fortress, in the exact same position shown by the DTM. This proves without any doubt that the discovery made with the online tool on 17 March 2017 is the Turkish ‘Kale’ fortress.

Now that we have discussed the historical aspects and demonstrated what lies under the present forest near the Turnu Măgurele port, we are going to call our place simply ‘Kale’ in the rest of this study.

It is now time to move forward to even more interesting evidence and to analyse some aerial images of the area. Because of its position so close to the strategic ports of Nikopol and Turnu Măgurele, ‘Kale’ appears in WW2 aerial images. We have found photographic evidence of Kale in two Luftwaffe surveys in this area. The first image (Plate V.1) is at a lower quality resolution but we can still observe the pentagonal shape in the forest.

With the help of the other available Luftwaffe image (Plate V.2), which is clearer and taken in a better light, we can make a lot more observations. A big mound is visible at the place of the Southern Tower. The big mound could also be the gate of the fortress. Another, smaller mound can be observed in the center of the pentagonal fortification. This smaller mound, also noticeable on the DTM, seems to have a round shape, with about the same diameter as the circular tower of Turnu Vechi. This cannot be the remains of a minaret because the round shape is way too wide. If ‘Kale’ also had a central round tower, then things get a lot more complicated, in the sense that it could have a first phase earlier than the 18th century. For now it is too early to speculate about an earlier phase, only intense archeological work could determine what lies underground in the center of the fortress.

Outside and to the south-east of the fortification, we can observe in both 1940’s images something that looks like a higher elevation path coming from the beach and going towards the big mound. These could be the remains of the docks of ‘Kale’ that lead to the south gate, and they resemble the way the modern Ferryboat docks have been built. It is very plausible that the 21st century builders have chosen to make the docks there specifically because of the elevated terrain above pre-existing structures. It could also explain why they found so much stone under the layer of river deposits, as the old docks leading to the gate of Kale were probably made of stone.

Moving further with the analysis of aerial images, we fast-forward to the 21st century. We have access to three editions of ANCPI (Agenția Națională de Cadastru și Publicitate Imobiliară) aerial images. The first is from 2005, the second from 2008 and last from 2010. However, not much of Kale can be seen in these images, so I decided not to include ANCPI images in this paper. Only a trained eye could maybe see in the ANCPI photos some unusual alignments of trees that might be due to the wall or ditch of Kale.
Those images are interesting from another perspective. They show how modern constructions evolved. In 2005 there was nothing south of Kale, in 2008 the Ferryboat docks were almost complete and in 2010 both the Ferryboat docks and the Kayak Center (to the West) were complete.

More recent high-quality aerial images are available on Google Maps\textsuperscript{18} and Bing Maps\textsuperscript{19}. Again, the dense and mature forest planted over Kale's site does not allow for much observation.

Surface and perimeter measurements for Kale can be made using the 'measure' tool from the Danube Floodrisk Map DTM. Some very accurate measurements can be made with this tool. Using this tool the perimeter of the main walls of 'Kale' (Plate VI.1) is around 970 meters. The surface of 'Kale', including the walls but not the moat, is around 4.5 hectares. The perimeter of the entire Kale fortification, including the moat (Plate VI.2), is around 1.040 meters. The surface of the entire Kale fortification, including the moat, is around 5.5 hectares.

The mystery surrounding the new pentagonal star shaped fortification was solved in just a few days and using only digital resources, the next step was to visit 'Kale'. The excitement was very high and so the physical visit happened as quickly as possible during the weekend of 19 March 2017.

It was a very interesting experience. We were expecting the site to be big, given the previous calculations, but being able to see it from the forest level was quite impressive. We could still observe the moat in some places and traces of the bastions (as small mounds). Probably, with a GPS they could be 100% identified.

Another thing we were happy to observe is that if archaeological digs followed by renovation works will be ever made on the site no intensive deforestation would be needed. This is because the trees are mature and rare enough so they can be successfully kept within the fortress walls and turned into a park, for example. The location so close to the Ferryboat docks could even turn the place into an attraction for the Danube cruise ship tourists.

As for archeological artefacts, we were able to notice them in around eight different places, mostly around the southern and south-eastern towers, but also in the middle of the fortress. Trash was present on the site, but rather scarce. We saw multiple chalk stones, in many places we found bricks (almost all bricks were 24 x 11 x 6 cm), a circular artefact that seems to be part of a column, rough stones with traces of severe burnings, and some very large stones, close to the Danube bank. The very large stones are close to the site of the Kayak Center, where a lot of land has been excavated with heavy machinery, so they have probably recently been dug out of the ground.

It is time to end this short first study of the recently discovered 'Kale' fortress near Turnu Măgurele. The main purpose of this paper is to raise awareness and combat the clichés that Turnu Măgurele and the Teleorman County are places where 'nothing important ever happened', or 'nothing exists here that could ever be turned into an attraction'. If one makes a little effort and searches properly, some amazing things can be discovered in unexpected places.

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Notes

\textsuperscript{*}All links below were valid in March 2017

1. The DTM tool is available at http://maps.biodiversity.ro/. It is part of an older EU project, see http://www.danube-floodrisk.eu/forum/. The link presented on that website points to http://maps.danube-floodrisk.eu/, it has been inactive for years but now redirects to the first subdomain.

2. In order to see the new fortification, in the tool, one must go to the left menu and uncheck the ‘Vegetation’ and preferably the entire ‘basemap’, and then make sure ‘Terrain’ and ‘DTM’ are checked. Then zoom out until the Danube shape is clearly visible and try to identify the Olt-Danube confluence and then the area west of the Turnu Măgurele Port and the Chemical Plant.

3. The Turnu Ottoman fortified town evolved around the Turnu Vechi citadel. It was first described by traveler Evlia Celebi in the 17th century (Celebi 1976: 704-6), it is present on the 1784 Jenei Map, also
on the 1790 Specht Map (around the Turnu citadel) and might have been drawn by Adolph Kunike in an 1825 lithograph (Plate VI).

4. The ruins of the old Turnu citadel were first described by August Treboniu Laurian in 1845 (Laurian 1846), followed by Cezar Bolliac in 1869 and by Grigore Tocilesco in 1902. First proper archeological digs were made by Grigore Florescu, between 1936 and 1943 (Florescu 1945), followed by Gheorghe Cantacuzino, between 1978 and 1980 (Cantacuzino 1980). Most recent excavations were made between 2006 and 2008 by Ionel Cândea and Ecaterina Țânțăreanu.

5. A.T. Laurian considered that the Turnu ruins date from the Roman era. Bolliac also considered they were Roman (2nd-3rd centuries) and identified them with the Roman city of Romula. Grigore Tocilesco and others after him proposed that the Turnu circular tower is part of the ex-Roman town of Turris, described by Byzantine historian Procopius in the 6th century (Madgearu 1992). Florescu’s digs suggested that the first fortifications might be from 4th century, probably from the time of Constantine the Great. Cantacuzino and Cândea and many modern historians are of the opinion that the first fortifications, including the tower, were built during the 14th century by Mircea the Elder. It is hard to propose a solution to such a controversial subject. The area around the circular tower is indeed strongly contaminated with medieval material. In order to solve this problem, new archeological campaigns should focus on other areas around the Turnu Citadel. For example, a very intriguing large ruin with a basilical shape (38 by 18 meters), where one can still observe remains of big rectangular stones, lays partially in the ditch of the pentagonal fortification of the Turnu Citadel. The placement of this shape so close to the walls of the pentagonal fortification confirms that the building was already in ruins when the ditch was constructed, otherwise it would have represented a big vulnerability. An investigation of that very old shape and other areas further away might help solve the problem of dating the circular tower.

6. The ANClPI aerial images are available for the public at the following link: http://geoportal.anclpi.ro/geoportal/viewer/index.html; to view the image click on the ‘Ortofot 2005’ button and zoom on the map of Romania all the way to the Turnu citadel.

7. Link pointing directly to the fragment regarding Yeni-Kala: https://books.google.nl/books?id=dqUpyge1KlwC&pg=PA50&dq=Yeni-Kala+Chesney&hl=en&sa=X&ved=0ahUKEwjW5q-8ue_SAhXDh1QKHZCJDQ6AEIHDAA#v=onepage&q=Yeni-Kala%20Chesney&f=false

8. Link to the fragment: https://archive.org/stream/russiansinbulga00gordgoog#page/n466/mode/2up/search/kaleh

9. The difference of 12 days between the commemorative plate and Motke’s book is due to the Russians not using the Gregorian calendar.

10. Information in Bulgarian about this fortress: http://bulgariancastles.com/bg/node/621

11. Link to the fragment: https://archive.org/stream/russiansinbulga00gordgoog#page/n256/mode/2up/search/kaleh

12. Raiua Turnu (1419-1829). Studiu monografic by Liviu Maxim is an interesting PhD thesis that covers the events and places around Turnu Măgurele. The most important aspect is that the author had access to a series of Ottoman archive documents. Unfortunately, the study is not public (or at least cannot be found online). However, Maxim’s study is mentioned by a lot of historians and by a wider paper: http://www.cjteleorman.ro/ro/proiect%20patz/patx.pdf

13. One of the plausible locations might be around the modern Banciu Forrest. Near this place local rumors say the Russians created a temporary fort during the 1877-1878 war. From this place they bombed Nicopolis. No available maps can help identify the exact spot. Another place where an earlier Russian fort might have existed is about 20 kilometers north, at Putineiu. On the 1790 ‘Specht Map’ we can find a rectangle fortification called ‘Russ redoute’ (Teodor 2015: 9). It is placed east of the Limes Transalutanus, so normally this cannot be a misspelling of the Putineiu Roman Fort. Also, it seems that some sort of Russian fortification also existed at the Ordia Mound, Segarcea-Deal village, about 12 kilometers north-west of Turnu Măgurele, according to L. Cocuțilă (1999) and G. Teican (2016).

14. Another plausible location for a Russian fort might be 3 kilometers north of Cetatea Turnu, in the Olt floodplain, in the place known as ‘Gropan’, near the current Turnu Măgurele Rugby Field. At this
place we can observe a pentagonal fortification drawn on the 1790 Specht Map and also a fortification drawn on the 1784 Jenei Map. On this last map there is even a description of the place ‘wohnsiz eines franzosischen renegat = noch von jungen Jahren’. This fortification and the supposed residence of a French renegade will probably be the subject of one of my future studies.

15. Another scan of the plan, color and at a better resolution can be seen at http://www.muzeulteleorman.ro/files/Habitat%20medieval.pdf. This controversial 1869 plan is supposed to represent the Turnu Vechi Citadel. It is made by topographic engineer C. Danielescu (a travel companion of Cezar Bolliac). It does not resemble at all with the reality and the plans made by Florescu and by Cantacuzino (Ţânţăreanu 2010: pl. XXI). We can see that the real circular tower has 17.4 meters in diameter and a 3 meters thick wall, while Danielescu’s circular tower seems to be only 9 meters in diameter with 1.5 meters thick walls. The North-South orientation does not match reality, the proportion between the trapeze and the tower is wrong, not to mention the outer pentagonal fortification. It is a mystery how Danielescu could make so many mistakes at Turnu, considering his other plans are legit (Zimnicea, Frumoasa etc.). Unless Bolliac and Danielescu investigated another fortification, maybe that of the French renegade described above.

16. I found the map in a recent Bulgarian study about the neighbouring Asamus fortress, by S. Torbatov: http://be-ja.org/index.php/Be-JA/article/view/135/122. The map was created by Nikolai Alekseevich Epanchin (1857-1941) and is part of Volume 3 (‘Perekhod cherez Balkany’) of ‘Ocherk pokhoda 1829 g. v Evropeiškoi Turtsii’. Only the first two volumes of the book can be found scanned online: https://ia600707.us.archive.org/29/items/ocherkpokhoda18200epan/ocherkpokhoda18200epan.pdf

17. The two complete Luftwaffe images taken during WW2 are available at:
http://www.wwii-photos-maps.com/romania/slides/Turnul%20Magurele%2020074.jpg,

18. The Google Maps link:
https://www.google.ro/maps/@43.7134626,24.8845986,388m/data=!3m1!1e3?hl=en

19. The Bing Maps link: https://binged.it/2n9pfAb

Bibliography


The discovery of ‘Yeni-Kale’ fortress near Turnu Măgurele


Teican, G. (2016), Monografia municipiului Turnu Măgurele, unpublished manuscript.


Plate I. Map of Romania showing the approximate location of the discovery, near Turnu Măgurele (1). Image taken from Nikopol in December 2015 towards the left bank of the Danube and the Turnu Măgurele ferryboat terminal (2).

Harta României, evidențînd locul aproximativ al descoperirii, lângă Turnu Măgurele (1). Fotografie făcută de la Nikopol, în decembrie 2015, către malul stâng al Dunării și terminalul feribotului Turnu Măgurele (2).
Plate II. A DTM capture showing the larger Turnu Citadel area (1). Close-up capture of the new fortress near Turnu Măgurele Ferryboat Docks (2).

Captură de imagine din DTM ilustrând zona Cetății Turnu (1). Captură de imagine mărită a zonei cu noua cetate de lângă terminalul feribotului Turnu Măgurele (2).
Plate III. Images with possible remains of the south-east bastion of Yeni-Kale, near the terminal of the Turnu Magurele ferryboat terminal (images from 6 July 2007, Teleorman County Museum archive. Imagini cu resturile posibile ale bastionului de sud-est al Cetății Turnu Nou (Yeni-Kale), lângă terminalul feribotului Turnu Măgurele (fotografii din 6 iulie 2007, arhiva fotografică a Muzeului Județean Teleorman).
Plate IV. Capture from the 1831 plan showing ‘Ruinele Kalei’ (1). Plan of Nicopolis, Kale and Turno, by N.A. Epanchin (2).

Captură a Planului de la 1831 ilustrând ‘Ruinele Kalei’ (1). Planul fortificaţiilor Nicopole, Kale şi Turnu, întocmit de N.A. Epanchin (2).
Plate V. Capture from the first WW2 source. ‘Kale’ is in the center of the image (1). Capture from the second, clearer, WW2 source. ‘Kale’ is in the center of the image (2).

Captură de pe o imagine din cel de al II-lea Război Mondial. ‘Kale’ se află în centrul imaginii (1). Captură de pe o a doua imagine, mai clară. ‘Kale’ se află în centrul imaginii (2).
Plate VI. Captures made with the ‘Measure’ tool of the DTM. They show the shape of Kale walls (1) and moat (2), with their perimeters and surface area.

Capturi făcute cu aplicația ‘Measure’ din DTM. Ele arată forma zidurilor cetății Kale (1) și a fortificației incluzând șanțul (2), împreună cu perimetrul și suprafața.
Plate VII. This capture above is from a lithography created in 1825 by Adolph Kunike. It was drawn from the hills of Nicopolis and it presents ‘Festung Turnu’. This should normally be the Turnu Ottoman town. But considering it is drawn on the Danube bank this could actually be ‘Kale’. Hopefully, future archeological works will help solve this issue.

Problemă nerezolvată: această imagine este o captură a unei litografii de Adolph Kunike din 1825. Este realizată de pe dealurile de la Nikopol și reprezintă ‘Festung Turnu’. În mod normal ar trebui să fie orașul otoman Turnu. Dar, având în vedere că este desenată pe malul Dunării, acesta ar putea fi de fapt ‘Kale’. Sperăm că cercetările arheologice viitoare vor contribui la rezolvarea acestei probleme.