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# The castellum in Mogorjelo: A Contribution to a **Long-Lasting Debate**

Castellum u Mogorjelu doprinos jednoj dugotrajnoj raspravi

#### **ABSTRACT**

The late antique complex in Mogorjelo can be categorized as one of the prime Dalmatian late antique monuments. It has attracted considerable attention over the past hundred years and more, and its ground plan can be found in a number of reviews of late antique architecture in Dalmatia, as well as in the wider region. Still, although it has been studied for such a long time, there are many unanswered questions regarding this "puzzling" building complex. When a monument has such a long history of research, it is bound to become a subject of divergent and even conflicting opinions. The aim of this paper is to present the complex as objectively as possible, thus rectifying the conceptions about its form, function, and purpose in a wider organizational framework established in the province by Emperor Diocletian. The intention is not to explain each detail of the complex, but to offer a new and more comprehensive insight into the nature of the *castellum* itself, and to provide the scholars of late antique architecture with factography, as complete as possible, about the complex and its surroundings.

Keywords: Mogorjelo, late antique architecture, Roman non-urban landscape, Dalmatia, Emperor Diocletian

## **SAŽETAK**

Kasnoantički sklop u Mogorjelu jedan je od prvorazrednih kasnoantičkih spomenika s područja rimske Dalmacije. Tijekom proteklih nešto više od stotinu godina istraživači su mu posvetili znatnu pozornost i njegov se tlocrt nalazi u mnogim pregledima kasnoantičke arhitekture u Dalmaciji, kao i na širem području. Ipak, iako je kompleks izučavan tijekom dužeg razdoblja, preostalo je mnogo neriješenih pitanja u vezi s ovim "zagonetnim" sklopom. Kada je neki spomenik predmet tako dugotrajnog izučavanja, to nužno urađa različitim, čak i suprotstavljenim mišljenima. Cilj je ovog rada predstaviti sklop u što objektivnijem svjetlu te tako rektificirati predodžbe o njegovu izvornom izgledu, funkciji i svrsi koju je imao unutar šireg organizacijskog okvira provincije kakav je zacrtao car Dioklecijan. Cilj nije objasniti svaki pojedini detalj sklopa, već pružiti nov i sveobuhvatniji uvid u samu bit ovog kaštela, te predstaviti istraživačima kasnoantičke izvangradske arhitekture što cjelovitiju i faktografski ispravnu sliku sklopa i okoline u kojoj je funkcionirao.

Ključne riječi: Mogorjelo, kasnoantička arhitektura, rimski izvangradski krajobraz, Dalmacija, car Dioklecijan

### INTRODUCTION

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The famous complex in Mogorjelo, situated south of the town of Čapljina (2.15 km), has amazed and confused many distinguished scholars, so there has been a lot of discussion about its nature and purpose over the past hundred years. To our knowledge, Edin Veletovac was the last scholar who summarised all of the dilemmas and different conclusions that had accumulated during that time, in his excellent paper from 2018.1 Some of the conclusions are complementary, while others are quite contradictory; furthermore, some of them are based on selective uses of facts, or on comparisons and theories that have meanwhile been proven wrong. So, if Mogorjelo is indeed, as Veletovac called it, "the largest (late antique) architectural complex in the territory of Bosnia and Herzegovina," it certainly deserves our attention and another re-examination. In order to do that, it is essential to start with some general information about the complex, and the previously published conclusions and hypotheses about its nature, function, placement, and "specific" arrangement, in order to be able to assess all the facts, even the ones that were circumvented by former researchers, and then put them in the proper context.

### THE COMPLEX IN MOGORIELO BETWEEN FACTS AND FICTION

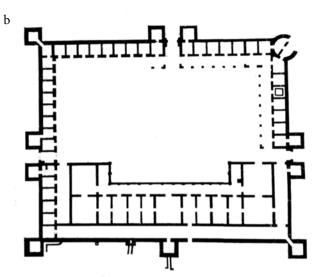
Our intention here is not to summarise and present all the details of the history of research, interpretation, and reconstruction of the complex in Mogorjelo, because, as we have already said, Veletovac did it quite well. However, some of the main preoccupations should be underlined and complemented with new conclusions about the nature and function of the fortified complex.

First and foremost, it should be noted that the hundred-year long debate has been of a much larger scope, surpassing the site of Mogorjelo itself, and is actually concerned with fundamental issues regarding late antique non-urban landscape and its architecture across the Empire. It includes a number of issues concerning the organization and way of functioning of late antique non-urban landscape, the structure and management of large estates in the provinces, and the recognition of certain general principles, common across the Empire. In that respect, the discussion about Mogorjelo around the turn of the 4th century presents a case study (and not the only one in Dalmatia) that perfectly mirrors these wider preoccupations. The hundred year-long debate about Mogorjelo, to include a comic relief, reminds us of the introductory verses of a local folk song called "Hasanaginica":

What's so white upon yon verdant forest? Snow perhaps it is or swans assembled? Snow would surely long ago have melted. And a flight of swans would have departed. No! not swans, not snow it is you see there, Tis the tent of Aga, Hasan Aga.<sup>2</sup>

The quoted verses illustrate quite well the dilemma about the nature and function of the late antique complex, as can be seen from the titles of some crucial papers written about it. Starting with Ejnar Dyggve's "Mogorjelo. Kastell oder Palast, 1. oder 4. Jahrhundert?" from 1958, followed by Ivo Bojanovski's "Mogorjelo – Rimsko Turres" in 1969, Noël Duval's "Mogorjelo: villa fortifiée ou camp militaire?" from 1991, and ending with Marin Zaninović's paper "Mogorjelo from villa to castrum." Although not all of the mentioned papers end with a question mark, their content and conclusions imply that they actually should. Basically, all of them reflect the same dilemma: what was Mogorjelo actually? Further on, the overall significance of the issue for the general research of late antique non-urban architecture was emphasized by Dyggve at a conference in Munich in 1958: "Sofort bei der Publikation Mogorilos durch





1.
Mogorjelo *castellum* –
(a) Satellite image of the castelllum; (b) Ground plan published by Karlo Patsch (Patsch /note 3/)

Castellum u Mogorjelu – (a) Satelitski snimak kaštela; (b) Tlocrt koji je objavio Karlo Patsch Patsch erregte der Grundriss das größte Aufsehen unter den Fachgenossen, und war vor allem wegen der unstreitigen Verwandtschaft des Gebäudes mit dem Diokletianspalast. Die Forscher sahen ein, daß Mogorilo ein architekturhistorischer Beitrag von allergrößtem Interesse zu der damals hochaktuellen Diskussion über den Palast von Split bedeutete."<sup>4</sup> In fact, this series of papers on Mogorjelo represent and reflect not just the discussion about one particular site, but illustrate the general outlines of the evolution of our knowledge about late antique architecture.

Considering the complex itself, the discussion seems to have progressed "one step forward, two steps back." Karlo Patsch's publication of the *Grundriss* and his interpretation of the complex as one of the military forts (*castella*, military camps) in the line of defence Burnum-Tilurium-Mogorjelo, was actually the starting point for the ensuing discussion (Fig. 1b).<sup>5</sup> Ejnar Dyggve's presentation at the *XI. Internationaler Byzantinisten-Kongress* in Munich in 1958 should be seen as a milestone in research and interpretation of Mogorjelo. However, his conclusions are very disputable. His paper was actually completely in tune with his personal vision of late antique cultural landscape, as well as the predominant perspective of Germanspeaking scholars.<sup>6</sup> Dyggve's exposition, based on his observations and works done in Mogorjelo before the Second World War, in collaboration with Rudolf Egger, certainly awakened interest in Mogorjelo once again, but the way he presented the complex is very problematic.

Although Ejnar Dyggve is widely perceived (especially in Croatia) as an archaeologist, he was actually neither an archaeologist nor an art historian by his formal education. He was an architect, and in the 1910s became a member of the student architects' group Kanonarkitekterne, which dealt intensively with questions of architectural theory. Although he is still occasionally praised as "the man who revealed to the Croats all the secrets of Salona" or "the Dane who unearthed the whole Adriatic coast, his conclusions about Dalmatian as well as Greek monuments have to be taken with utmost caution. He could be commended for his efforts as an enthusiast in archaeology, but not so much for his achievements in the interpretation of the monuments he studied. As Noël Duval almost bluntly stated in his "Hommage à Ejnar Dyggve et Ingrid Dyggve" from 2003, Dyggve belonged to the circle of "des architects qui étaient d'excellents dessinateurs" – as his small croquis drawings and his general "approach" were heavily imbued with preconceptions about "Gothic architecture," mainly focused on Ravenna.



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Corinthian capitals from Mogorjelo (Dyggve, Vetters / note 3/, T. VII, 3, 4)

Korintski kapiteli iz Mogorjela

We have to agree with Duval on the context of Mogorjelo, because Dyggve really went too far into the field of speculation when it comes to the reconstruction and interpretation of the complex. He wrote: "Eine Wandelhalle gegen die offene Landschaft gekehrt, ist ja ein wohlbekannter Zug der freigelegenen Paläste spätantiker Zeit. Da kein einziges Fragment von einem Säulenportikus an dieser ausgedehnten Seite bei der Grabung aufgefunden worden ist, habe ich mir die Fassade nicht mit Säulen, sondern mit gemauerten Pfeilern und Bogen vorgestellt."10 So, Dyggve created his own image of the façade, in spite of the fact that Hermann Vetters, for example, wrote in the same publication that the porticoes in front of the main building in Mogorjelo were formed with 14 columns at the front side, noting even the distance between them.11 He also noted that two bases had been preserved, as well as a few capitals, which, at least judging from the old photographs, indicate Diocletianic provenance (Fig. 2).12 Thus, it seems that Dyggve disregarded some finds. He himself wrote about his approach: "Wie es aber geht, wenn man eine Bauruine an Ort und Stelle analysiert: neue, erklärende Einzelheiten erscheinen. Sobald ich den Generalplan aufgezeichnet hatte, und die Teilung in Wirtschaftshof und Knechthof sich klar auffassen lies, wie auch die Erklärung des langen Korridors als Wandelhalle begründet war, musste die Funktion des Gebäudes als Kastell bezweifelt werden. Ich hatte meine Auffassung dahin zu ändern, das Mogorilo ein Herrenhaus eines Latifundiums in dieser überaus fruchtbaren Gegend gewesen ist"13 - confirming in a way Duval's "architects qui étaient d'excellents dessinateurs"?<sup>14</sup> He did not notice that the walls of an oil press and other structures in the north-west quadrant of the complex were, according to stratigraphical data, later than the rest of the complex.15 It is also quite indicative that Dyggve mentioned that Rudolf Egger, an experienced professional archaeologist, disagreed with his new interpretation.

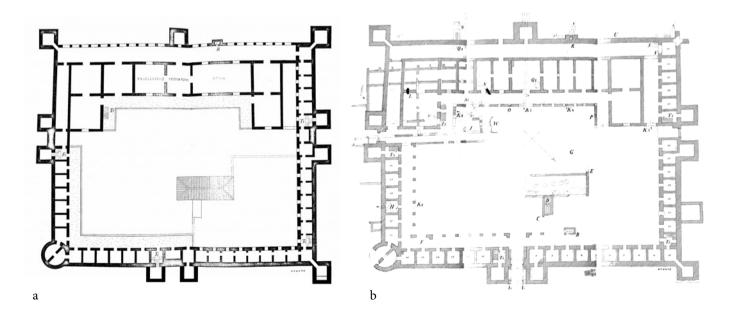
So, Dyggve concluded that Mogorjelo was a fortified manor house on a latifundium, in an exceedingly fertile region, reaching for comparisons with buildings depicted in North African mosaics, as well as with Diocletian's palace in Split and the complex in the Polače bay on the island of Mljet. 16 His ground plan and his reconstruction show considerable arbitrariness, which is quite obvious from the comparison between his ground plan from 1931 and those published in 1966 (Fig. 3).<sup>17</sup> Dyggve even disregarded the preserved remains of the walls of the main building. Further on, he attributed certain functions to the three central spaces, labelling them as triclinium, vestibulum, and aula, and he also drew some non-existent openings, elongated certain walls, included three-flight staircases in some of the towers, etc. However, the most problematic is his reconstruction of the elevation of the complex:

above the porticoes surrounding the courtyard, which he reconstructed with disregard for the actual stratigraphy, he drew the first floor, although there were no finds to corroborate such an imaginative reconstruction.18

Unfortunately, Dyggve's reconstruction of the complex, however problematic, remained widely accepted for a long time. One of the researchers who elaborated on his ideas and felt obliged to round up Dyggve's "insights" was Hermann Vetters, who published them in an extended version in 1966 (Fig. 3b). Vetters' contribution was actually pretty much in accordance with the Austrian tradition of precise and objective documentation of archaeological finds, so the chapters dealing with the measurements and descriptions of the finds in various sectors are quite meticulous and instructive. Besides, it appears that Vetters had a keen eye for measurements and ratios, as can be seen from his observations on the dimensions and proportions of the main building and the southwest corridor. 19 He also had an eye for details, and he noted even the smallest of them, such as the postholes for wooden beams at the height of 2 m in the southwest corridor, which must have supported the wooden ceiling of the portico.<sup>20</sup> In spite of his careful analysis of the remains of the complex, Vetters eventually adopted Dyggve's preconceptions and elaborated them further. Unfortunately, his interpretation went even one step back, as he concluded that the main building looked like a Porticus Villa mit Eckrisaliten, and thus could not have been a military facility.<sup>21</sup> With that preconception, he went on to repeat and elaborate on Dyggve's conclusions, contradicting himself at certain points,<sup>22</sup> most evidently when it comes to the reconstruction of the elevation of the main building.<sup>23</sup> Vetters' contradictory conclusions must have been the result of being torn between Dyggve's imagination and the reality of documented finds. He concluded that there was a balcony on the first floor, and that the arrangement of the rooms on that floor was analogous to the one on the ground floor, reaching again for parallels with Diocletian's palace in Split. However, it seems completely unconvincing that relatively frail columns and, in some instances, only 0.66 m thick partitioning walls could have supported all these rooms (the vestibule, salons, etc.) on the first floor; and that is why Vetters reached for Dyggve's assumption that the first floor must have been supported by pillars, although the finds clearly implied otherwise.

Dyggve's ground plans from 1931 - (a) ground plan with the assumed arrangement of rooms; (b) detailed ground plan of all of the documented remains published in 1966 (Dyggve, Vetters /note 3/, Tafel XIX, Beil I)

Dyggveovi tlocrti iz 1931 – (a) tlocrt s pretpostavljenim rasporedom prostorija; (b) detaljan tlocrt sa svim dokumentiranim nalazima, objavljen 1966. g. (fotografija autora)



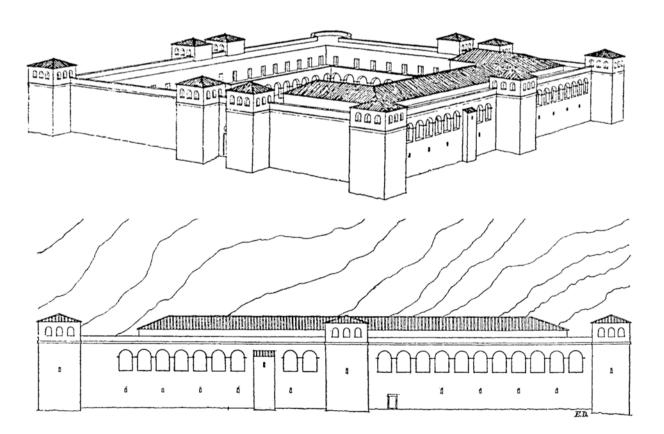
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Eventually, neither Dyggve nor Vetters drew a reconstruction of the façade of the main building. Dyggve made many sketches of the elevation from various standpoints, but not a single one with a view of that façade (Fig. 4). On the other hand, all of his sketches of the complex were "endowed" with a number of features quite illogically borrowed from Diocletian's palace in Split. So, although Vetters' analysis brought a lot of new information, his conclusions remained on the heels of Dyggve, no matter how contradictory in themselves they were.

Just about the same time, Christian churches in Mogorjelo attracted the attention of Đuro Basler, who presented his reconstruction of the whole complex in 1972, with a view of the façade of the main building (Figs. 5, 6a).24 Expectedly, he visualised what he could learn from his only source - Dyggve's and Vetters' booklet from 1966,25 and thus created his well known and most often reproduced reconstruction. In Basler's reconstruction, the ground floor of the main building is opened towards the courtyard with arched pillars, and the upper floor with columns. He also made some alterations and improvements to Dyggve's reconstruction – for example, above the porticoes he imagined a slanting, not a flat roof, although such an alteration did not make sense from the point of defensive function of the fortification, because it did not leave free space for a walkaway around the building. He eliminated some of the similarities with Diocletian's palace in Split, such as the large arched openings in the outer walls of the complex. A more significant improvement was the removal of Dyggve's division of the courtyard into two areas: a farmyard (basse-cour) on the eastern, and a formal forecourt (cour d'honneur) on the western side.26 However, in this last respect, Basler's reconstruction contradicted his conclusions that accompanied the illustration. He made an even bolder claim than Dyggve and Vetters - that the remains of an earlier structure, essentially economic in nature, were partly preserved, restored, and enveloped by the complex.27 Again, Noël Duval emphasized

Dyggve's sketches (reconstructions) of the castellum from 1931 (Dyggve, Vetters /note 3/, Abb. 24, 25)

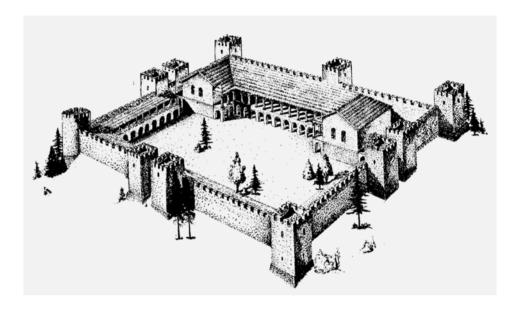
Dyggveovi crteži (rekonstrukcije) kaštela iz 1931.



5. Basler's reconstruction of the complex from 1972 (Basler /note 24/, fig. 9)

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Baslerova rekonstrukcija sklopa iz 1972.

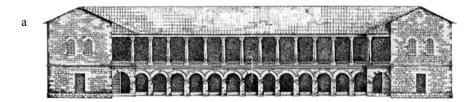


a Long-Lasting Debate

The castellum in Mogorjelo: A Contribution to

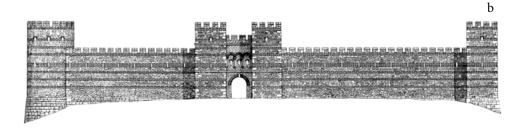
that such an interpretation was not accurate, and in fact represented "une grossière erreur d'interprétation". <sup>28</sup> Basler labelled the main building "grand palace" and used the term villa for the whole complex.<sup>29</sup> This terminology is rather confusing, and it seems as if the terms were used without properly distinguishing their meaning.<sup>30</sup> Finally, and this is quite important for our discussion, Basler concluded that the villa served to supply the town of Narona, although he did not specify what kind of supplies that would be.31

More or less about the same time, in 1969, Ivo Bojanovski presented yet another interpretation of the site. In many respects, Bojanovski's conclusions were a significant advance in understanding the form and function of the complex. He explicitly concluded that the position of the complex and its castrum-like form, with an obvious defensive function, indicate the original function of the whole complex. 32 He contested the core of Dyggve's and Vetters' logic, and presented a convincing critique of their ideas about Mogorjelo as a palatium or palatiolum, as well as of their dependency on comparisons with Diocletian's palace in Split. He contrasted the outlines of the complex in Mogorjelo with the grand complex in Višići, just 3.25 km south of Mogorjelo.



Basler's reconstruction of the complex - (a) façade of the main building; (b) northern front of the fortifications with the main gate (Basler /note 24/, figs. 10, 11)

Baslerova rekonstrukcija sklopa - (a) pročelje glavne građevine; (b) sjeverna strana fortifikacija s glavnim ulazom



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The complex in Višići, a cluster of buildings that developed over the centuries, was of a quite different character and not fortified. Bojanovski accurately noticed the discrepancy in form and function of the two interrelated complexes, as will be explained in the following text. There is another crucial difference between the two. Namely, as Basler himself noticed in 1965, and as Bojanovski restated, the complex in Mogorjelo was deprived of extensive luxury, and even of some basic installations required for everyday civilian life – baths, heating, etc.<sup>33</sup> So, Bojanovski's observation that the whole complex exuded "military simplicity" is, indeed, well founded, as well as his conclusion that the complex was certainly not a praetorium fundi.34

Bojanovski's other conclusions are less convincing and not so well grounded. For example, his dating of the complex in the second half of the 3<sup>rd</sup> century, at the time of Emperor Gallienus or Emperor Aurelianus, can be easily refuted, as there is enough evidence of the "Diocletianic" style, especially in the execution of capitals, but even in the form of the castellum itself. In that respect, all of his predecessors were right.<sup>35</sup> As for his reconsiderations of the position of the complex, it seems that he was right, although he never offered a full explanation for such a position of this kind of castellum.

It is rather strange that Bojanovski changed his opinion with time, as in 1988 he stated: "...later research did not entirely confirm Patsch's thesis, because it turned out that what was preserved was a 4th-century structure, whose function was by some interpreted as a fort (i. e. the same as Patsch) and by others as the centre of a sizeable estate, i.e. as a large villa rustica or palatium, which Mogorjelo indeed became, but in late antiquity."36 This presents an important and quite incomprehensible diversion from his previous conclusions and, despite a more accurate dating, was a step back in the interpretation of the complex.

The next and crucial milestone in the history of research of the site was Noël Duval's paper from 1991.<sup>37</sup> In the most structured manner, in three short chapters, he dismantled all of the conclusions made by Dyygve and Vetters, and brought the discussion about Mogorjelo back on track. He contested almost all of Dyggve's conclusions, regretting that Vetters had not restored the truth about Mogorjelo finishing off with Dyggve's theories.<sup>38</sup> Regardless of Duval's style when writing about Dyggve, in which there may have even been something personal, he was to the point. Imagination, arbitrariness, ad hoc comparisons based on a rather limited knowledge of comparative material, and disregard for some archaeologically confirmed facts make Dyggve's conclusions very disputable.<sup>39</sup> Duval also concluded that the cohors quingenaria equitata of Karlo Patsch made all the sense in this kind of structure, and that quite a different image of the complex emerges when cleansed from Dyggve's unfounded speculations.<sup>40</sup>

Finally, we come to the one of the latest interpretations of the complex, published by Marin Zaninović in 2002.41 Except for repeating the history of research, which makes the greatest part of the paper, his conclusions are in accordance with those of Bojanovski in 1988. According to Zaninović, the site evolved from a fertile region villa to a late antique castrum, and that happened because of the threats in the region. However, he did not offer a precise date of that transformation. Instead, he actually repeated an old hypothesis, just using the term castrum instead of the usual Dyggvean terms.42

With this we bring our introduction to a conclusion, hoping that we have provided satisfactory insight into the past discussion. The result might be compared to the typically Mediterranean bocce (Dalm. balote) game. The opposing sides that participated in the history of research of Mogorjelo made some quite interesting moves, and the "team Dyggve" seems to have made more points, but received a couple of voli, so is still far away from the pallino. As Veletovac demonstrated,43 the game is not over yet, and nobody scored full 15 points.

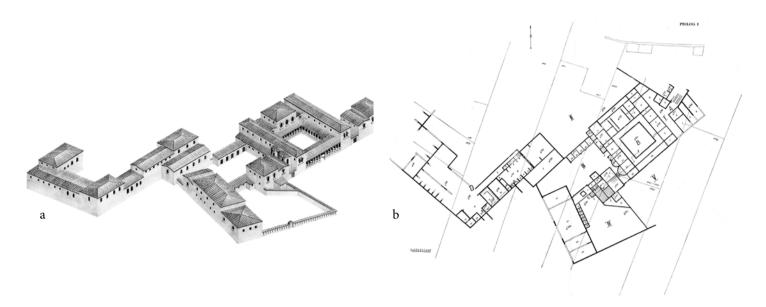
# NEGLECTED ISSUES AND UNANSWERED QUESTIONS

The whole century of discussion about Mogorjelo has left us with a number of unresolved issues. What was Mogorjelo actually and which term would best describe its function? To which category of late antique buildings does it belong? What exactly did it look like?

Mogorjelo was a fortified site, but we are still wondering about the reasons for its defensive function, because at the end of the 3<sup>rd</sup> and the beginning of the 4<sup>th</sup> century, there were no external threats to this or any part of coastal Dalmatia. Still, the building had thick walls, eleven three-story towers, and was in all probability provided with modern military equipment, such as the 4th-century onagra and its ammunition.44 That kind of military equipment implies that the complex could not have been a pseudo-fortified palatium like Diocletian's palace in Split, but an actual fortification. Further on, there is the question of its position. Although some of the researchers, in the first place Bojanovski, made an effort to locate Mogorjelo inside the network of Roman roads, stations, and settlements, none of them explained why the fortification had been built on that particular spot around the turn of the 4th century. As some of the scholars have already mentioned, Mogorjelo is at only 7 km air distance from ancient Narona, and until the 19th century it was in the middle of marshes and swamps, in an area plagued by malaria and always suffering from inundation and hunger. 45 That it was situated in a malaria-stricken, swampy environment can also be deduced from Patsch's project of protecting the site by planting cypress trees.<sup>46</sup> Still, this does not mean that there was no melioration in the valley in ancient times, as the prosperous estate in the neighbouring Višići testifies. In the case of Mogorjelo, considering the more than probable existence of a villa on the site (with or without an oil-press), as well as 164 agricultural tools and implements found on the site, clearly testify that Mogorjelo and its surroundings were originally suitable for agricultural exploitation.47

Further on, it is strange that nobody noticed the fact that Mogorjelo, overlooking the river of Neretva, is just 1 km north of the place called Struge, south of which the Neretva becomes sailable and from where the delta begins. Just south of Struge, the Neretva widens to about 100 m, and from that point becomes sailable even for the largest of ancient ships. If we consider all the abovementioned, it seems that the castellum was actually there for several reasons. It held a highly defendable position, as it was located on a small hilltop in the middle of the marshes. It oversaw the Neretva from one of its strongest and probably the best equipped towers (the round one), and had an excellent view across the open plains. Finally, it was just 1 km from the last stop for any large vessel moving up and down the sailable part of the river. All that points to the fact that Mogorjelo was overlooking and defending something, but not Narona. Also, it could not have been the supply centre for Narona, as Basler assumed. So, the question remains: what was so important and valuable to be defended in this way? We will return to this issue in the following passages.

Considering the position of the complex, it is quite strange that none of the researchers examined the reason for the orientation of the fortress to the northeast. In fact, the majority of published ground plans can be deceiving, as they are printed either upside down or just incorrectly.<sup>48</sup> The main gate was on the north-eastern side.<sup>49</sup> It should also be noted that the main entrance was accentuated by two *ortosthates*, one decorated with the motif of a vine tendril with grapes, and the other with an interesting depiction of a whole stem of acanthus mollis.<sup>50</sup> Both of these are signs of abundance and plenty. Furthermore, the main building, with its large central room, was oriented in the same direction. Thus, it seems very probable that somebody, or something, was expected to arrive from the north, and not from the direction of Na-



7.
The complex in Višići (Kućišta) –
(a) Reconstruction of the complex by Busuladžić (Busuladžić, /note 44/ T. 2a); (b) Ground plan of the complex in Višići (Čremošnik / note 63/)

Kompleks u Višićima (Kućišta) – (a) Busuladžićeva rekonstrukcija kompleksa; (b) Tlocrt kompleksa u Višićima rona. That something was leaving the complex through the side gates, defended by towers; and an escape exit was left in the back, southern side of the complex, which was also the least defended. That "emergency exit" was connected with the central room of the main building through a passage in one of the lateral rooms (Fig. 3b). With such an exit, there was no real threat to the complex. But, what was so valuable that it had to be so carefully defended, and was at that time coming from the north?

When discussing the surroundings of Mogorjelo, Bojanovski introduced the estate in Višići, although he did not discuss the relationship between the two complexes. They were actually complete opposites in form and function. As opposed to Mogorjelo, there are no fortifications in Višići. However, in Višići there are plenty of utilitarian facilities, which are almost non-existent in Mogorjelo (Fig. 7).<sup>51</sup> Višići was over time equipped with at least four *balnea*, *hospitia*, taverns, blacksmith's premises, etc., as opposed to Mogorjelo, in which there was no such luxury. And Višići was just 3.25 km south of Mogorjelo, on the other side of the Neretva, approximately 35 minutes of light walk. We shall return to Višići and its relation to Mogorjelo in the following section.

After explaining the position and orientation of the complex in Mogorjelo, there are also a number of things that should be said about its form and function, which was not properly explained in the past research. Basler and Bojanovski only superficially noticed that the complex gave an impression of military sternness and simplicity, but a thorough analysis of the ground plan or the relations between the structures adjacent to the main building has never been made. And although Dyygve tried to identify the functions of certain rooms in the main building, he just made a lot of rather unclear conjectures (Fig. 3a). In our opinion, it is evident that the central part of the main building could not have been a basement, storage, or anything of the kind. On both sides of a somewhat larger central room, there are spacious rooms of more or less the same size, all with entrances from the porch. Most of them communicated with each other, except maybe for the two rooms most westwards. These rooms do not look like living spaces, but rather like spacious, interconnected offices. Then, there are quite obvious differences in the thickness of walls within the main building: the walls of the central room and the corner pavilions are almost twice as thick as the majority of the partitioning walls; so, the logical conclusion would be that these parts of the building were higher than the rest. In our opinion, there was

no continuous second floor, as it has been proposed in previous research, and the staircase preserved in the south-eastern corner probably led to the upper floor of the corner pavilions. As it is visible from the ground plan, these pavilions did not communicate with the central part of the building, but probably functioned as separate entities, with their own entrances. They actually look like isolated storages to which the entrance was strictly controlled (Fig. 3b).

The first room to the east of the central room opens to the south through a back door. Thus, it could have provided access to the abovementioned back exit from the complex, as well as to the back corridor, which ensured moving freely along the back of the building. As Bojanovski suggested, the lateral corridors in the southern part of the complex, at both sides of the main building, were separated by doors from the courtyard (which is why there are protruding fragments of walls in front of both lateral corridors, as can be seen from the ground plans). So, the cubicula in the south-western quadrant of the complex could be entered only through the closed lateral corridor, and were thus for some reason probably separated from the rest of the complex. To what purpose this part of the complex might have served is a question that still needs to be answered.

#### MOGORJELO – NOTHING OF THE PREVIOUSLY PROPOSED?

Having said all the above, we should now try to answer the questions we have posed. First, we shall examine the position and orientation of Mogorjelo. As we have explained, its position was quite particular, with the main entrance on the northern (more precisely, north-eastern) side. Bojanovski was probably right when he identified Mogorjelo as a late antique Ad Turres, with convincing arguments,<sup>52</sup> and Busuladžić has demonstrated that there was a military detachment in Mogorjelo at the time when the castellum was built.<sup>53</sup> As we have mentioned above, at the time when the castellum was erected there was no outside threat in the immediate surrounding, and the only threat inside the province could have come from banditry and looting on military routes, as a consequence of the long-lasting 3<sup>rd</sup>-century crisis.<sup>54</sup> And this is the point where the cohors quingenaria equitata emphasized by Patsch and Duval becomes relevant. There may have been a cohors stationed in Mogorjelo, as these were precisely the kind of units that Diocletian used on various posts along the *limes* and elsewhere, or there could have been smaller cavalry units (turmae). A mobile unit made of a few squadrons is certainly to be expected on site.<sup>55</sup>

So, we can conclude that the military was stationed in Mogorjelo to protect something that was brought from the north. The most valuable commodity coming from the north-eastern part of the Dalmatian hinterland was - income from the taxes or valuable ores. One would assume those kind of goods were transferred by a land route, on a road connecting Salona with the eastern Dalmatian hinterland, consequently sometimes referred to as the "mining road".56 Although this may have been true for some stable times, at the end of the 3rd century it could hardly be expected that the valuable imperial cargo should be transferred 400 km towards Salona by a dangerous land route.<sup>57</sup>

In fact, the existence of a complex like Mogorjelo, with its "treasuries", fortifications and military crew, confirms that such a route did exist, and was formed by the end of the perilous 3<sup>rd</sup> century. Even if it was not exactly the one we proposed here, Mogorjelo may have been the final station for the cargo arriving from the eastern part of the Dalmatian deep hinterland.58 That the Neretva delta had always been the final destination for the transport of valuable ores from the north-eastern part of the Dalmatian hinterland, and that this route was the most logical for transport, especially of gold and silver, is confirmed by recent investments in the revitalisation of the gold

8.
Topographical map with indicated major roads, bridges, and settlements south of Mogorjelo (Yugoslav People's Army map, 1:25000, alterations by T. Turković according to Bojanovski, Sergejevski, Patsch and Ballif)

Topografska karta s označenim glavnim cestama, mostovima i naseljima južno od Mogorjela



and silver mine in Vareš, north of modern Sarajevo. (This huge investment is currently worth about 1 billion US dollars, but it will be more than profitable for the investor, as it is estimated that solely at the two activated excavation sites there is 1.01 g of gold per ton of excavated material, and 120 g of silver. Next to those, there are much larger deposits of zinc, lead, copper, baryte, etc.)<sup>59</sup> As has been announced, all of the cargo will be transferred via Sarajavo to Mostar, and from there to the harbour of Ploče (Croatia) on the Adriatic coast. 60 So, in the final stages of transport, the same route will be used as the one that was used in late antiquity. (Even the route between Mostar and Čapljina will be used, although the modern route will follow the A1 highway from Čapljina and then continue westwards, instead of proceeding southwards.) With the announced repairs of the old Sarajevo-Ploče railroad, the cargo will pass through Mogorjelo, precisely 426 m westwards from the late antique fort, towards Metković (Fig. 8). So, it seems that the basic logic of transport has remained the same over the centuries - by the fastest, most secure, and cheapest possible route to the Adriatic. The final destination for valuable cargo coming from north-eastern Dalmatia (today's eastern and central Bosnia) has always been the Neretva delta, and any cargo carried to that destination had to pass through Mogorjelo.

If silver was indeed the precious cargo transferred via Mogorjelo, it becomes clear why the *castellum* was built at that exact spot. Easily defendable, with a clear view over the open plain, equipped with a cavalry detachment that could escort the transport in its last stage, and with treasuries in which silver could be kept secure, waiting to be shipped to the other side of the Adriatic when the time came for the annual round of collection of imperial goods. From where exactly the goods were shipped away is a question for future considerations. Narona is less likely, because its harbour could never receive larger river vessels,<sup>61</sup> but there may have been a harbour somewhere around Višići, where the Neretva was always wide enough for even the largest boats to sail and manoeuvre freely.<sup>62</sup>

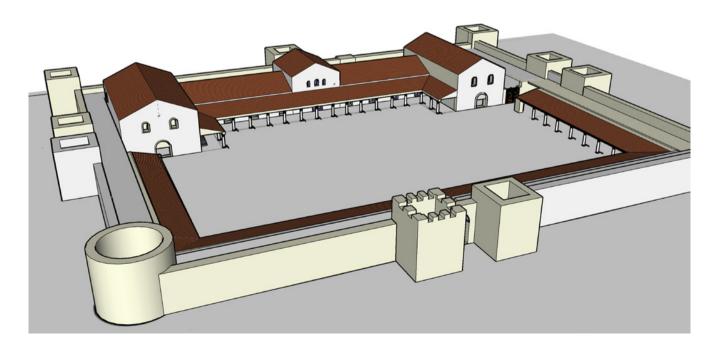
So, we suppose that the position and orientation of the *castellum* in Mogorjelo suggest that it was a collection point for valuable cargo arriving from the north. We may add that the Mogorjelo fort was at the same time, or exclusively, a collection point for the local taxes, which were stored in it until the income was shipped further. This is-

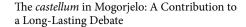
sue remains open for further considerations. Either way, the imperial officials would then operate and manage the arriving cargoes, counting the input and noting the size of the future shipment. The layout of the building complex substantiates the same conclusion. The arrangement of rooms in the main building suggests its function as an office building, with a large central room that was probably intended for the formal reception of arriving parties by some of the imperial officials. We can further speculate about the presiding official, who may have been in the service of Rationalis summarum Pannoniae secundae, Dalmatiae et Saviae, Procurator rei privatae per Dalmatiam, or Praepositus thesaurorum Salonitanorum, Dalmatiae, or one of the three officials themselves, receiving reports on the arrival of cargo, and reports from the clerks and notaries responsible for receiving, counting, and preparing of cargoes for shipment. The general outline of the building, quite surprisingly, resembles the so-called "curia" in Domavia, excavated by Vaclav Radimsky.<sup>63</sup> In both cases, there is a central area, which Radimsky called a tribunal, and lateral rooms for the clerks, as well as additional lateral rooms for storage of the same kind of goods - silver or other valuable goods. Counting and noting the incoming load was a painstaking work for several clerks, so the administrative staff of Mogorielo must have consisted of a number of clerks that worked in the main building, and may have resided in *cubicula* in the south-western quadrant, separated from the military personnel.

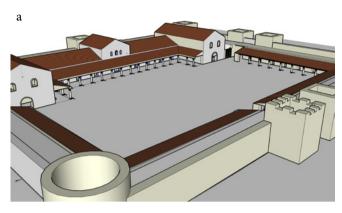
The picture of the complex in Mogorjelo becomes much clearer if we try to draw a reconstruction based on actual archaeological finds - we have to emphasize that we intentionally left some of the details of the upmost part of the elevation unfinished, as they can hardly be hypothesized from the archaeological remains (Figs. 9, 10). However, the formal and stern character of the main building clearly emerges, suggesting its official status. Instead of the previously imagined romantic piano nobile at the first floor, we see a series of ground floor offices and two lateral "treasuries". The general impression of the main building and its U-shape might recall a Zentralhof in the form of a Villa mit Eckrisaliten, on a Streuhof-like estate, but actually there are a number of differences between the two.<sup>64</sup> The outline of the main building could also be compared to various other structures built during Diocletian's reign; for example, the stern impression of the building with an accentuated central room and lateral

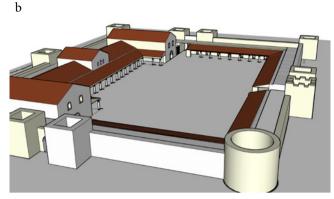
New proposed reconstruction of the complex, total (T. Turković, 2022)

Novi prijedlog rekonstrukcije kompleksa, total













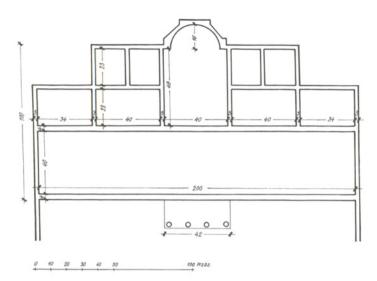
Proposed reconstruction of individual parts of the complex -(a) View from the north-eastern tower; (b) View from the east; (c) View through the portico of the main building, from the west; (d) Rear exit (T. Turković, 2022)

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Prijedlozi rekonstrukcije pojedinih dijelova kompleksa - (a) pogled sa sjeveroistočnog tornja; (b) Pogled s istočne strane; (c) Pogled kroz trijem glavne građevine, sa zapadne strane; (d) Stražnji izlaz

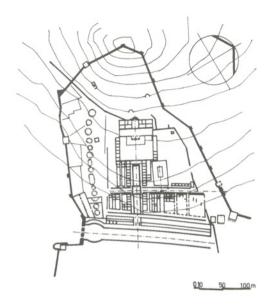
offices might bring into mind Diocletian's principium with a "Temple des Enseignes" in his camp in Palmyra (Fig. 11).65 In spite of apparent differences between the two, the logic of spatial arrangement is the same. Moreover, the complex in Mogorjelo as a whole may be pretty convincingly compared to the central part of "Diocletian's camp" in Palmyra, with its parade square surrounded by cubiculi.66 So, the square in front of the main building in Mogorjelo could be also seen as the parade square for military detachment stationed in the fortress.

The dating of the castellum in Mogorjelo is quite unquestionable, given that the shape of the complex, its organisational logic, and its building technique and decoration, are of Diocletianic origin. It is a classical so-called "Diocletianic type" of fortification, with a Diocletianic quadriburgium ground plan.<sup>67</sup> As Lander has noted, these forts look neither as "early" Roman fortifications, nor like Byzantine fortifications. 68 They are a type of their own. But, although it can be inferred that Lander defines them as a separate type, Michel Reddé has argued that they represent an evolution in relation to models inherited from the Principate, rather than a sharp break.<sup>69</sup> In many cases, Diocletian and his co-rulers indeed restored and updated the earlier forts, but there are distinctive elements which make these forts distinctively Diocletianic or Tetrarchic - the protruding towers, the multiplication of square towers, the transformation of principia, etc. Examples of this type are numerous, and so are the analogies for Mogorjelo. 70 In spite of minor divergence in internal organisation, this type follows the same scheme as Mogorjelo. Lander presented just the examples that are attested beyond doubt by inscriptions as Diocletianic. Among the examples, forts like those in Aquae Herculis, Qasr Qarun, M'doukal (Centenarium Aqua Viva), Qasr Bshir, or Deir el-Kahf are undoubtedly based on the same architectural concept.71 However, there are many more forts, rearranged at later times, which show Tetrarchic features. An interesting example is the large fort in Zeiselmauer (Cannabiaca?) whose principium



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11 Ground plan of the principium in "Diocletian's camp" in Palmyra (Gawlikowski /note 61/)

Tlocrt principija u "Dioklecijanovom kampu" u Palmiri

was structured almost in the same way as in Mogorjelo.<sup>72</sup> Though the towers were obviously reshaped in Constantine's time, the fort is undoubtedly of Tetrarchic origin.<sup>73</sup> Along the Syrian *limes* there are numerous examples of Tetrarchic/Diocletianic quadriburgia with the same distinctive features, recognisable even though these forts were restructured in later phases. For this paper, especially interesting forts are those in Qasr el-Hallabat and Qasr el-Azraq, as they are closely related to those in Deir el-Khaf and Qasr Bshir, the later one being formally a close relative to Mogorjelo.<sup>74</sup> Of course, there were simpler Diocletianic ground plans for forts than the one in Mogorjelo, but all of them were qudriburgia with protruding towers and a distinctive organisation of the inner grounds, as in such important places as Yotvata (Ad dianam)<sup>75</sup> or Mezad Tamar (Tamara?), where a quadriburgium-type Aurelianic fortification (38 × 38 m) was complemented by distinctively protruding Diocletianic square towers.<sup>76</sup> Among the smaller Diocletianic castella, evidently related in conception, especially interesting is the group around M'doukal (Centenarium Aqua Viva, Algeria), where an inscription precisely dates the fort into the time of Diocletian and Maximinian.<sup>77</sup> This 86.80 × 85.90 m fort is obviously a representative of the North African type of Diocletianic forts, such as those in Seba Mgta and Bourada.78 Although they belong to the same type of fortification, the fort in Bourada, with its distinctive U-shape of the main building, reminds again of Mogorjelo, not to mention the arrangement of the barracks along the perimeter, or the main gate with a propuganculum and protruding square towers surrounding the gate.<sup>79</sup> All of the major features found in these *castella* are also present in Mogorjelo, even in a more developed form. The only part which might not be from the time of Diocletian and the Tetrarchy is the round tower, as it does not conform with Diocletianic structures.

All these comparisons point to the conclusion that Mogorjelo was part of Diocletian's programme of reorganisation and optimisation in gathering the crucial resources in Dalmatia, as well as across the Empire. Building such a castellum with such a purpose would have been in accordance with his intent to upgrade and secure the efficiency of using all the available resources in order to counteract the economic crisis in the Empire. Mogorjelo could never have functioned as a private fortified manor house on a latifundium, as Dyggve concluded, nor could its main building be called a palatium. In that respect, Duval was quite right. Also, Mogorjelo could not have been an economic centre supplying Narona, as Basler has suggested, and it was not a villa rustica either, so this term should be avoided in further discussions.

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How the castellum functioned in its surrounding is also an interesting matter, illustrating the most probable events at the end of the 3<sup>rd</sup> century. As both Basler and Bojanovski noted, and we have mentioned above, the complex was ill equipped with utilitarian services and facilities for regular civilian life, such as blacksmithery, baths, shops, tayerns, stables, etc. 80 Nevertheless, all that could be found in the vicinity, in the complex in Višići. The history of Višići (Fig. 7) goes back to the late 1st century, when the site was obviously occupied by an estate of a wealthy proprietor, as can be deduced from the ground plan of the main and oldest edifice (B). Its dating is corroborated by the front wall, made in the technique of opus reticulatum. However, some time during the 2<sup>nd</sup> or early 3<sup>rd</sup> century, something changed in the system of management of the estate, supposedly the conductor or the owner, which was followed by considerable transformations in the main building. It may be presumed that this happened during the first decades of the 2<sup>nd</sup> century, as a number of numismatic finds from this time were found on the site.<sup>81</sup> To the north-east of the main building, an adjacent facility for the production of bricks, tiles, and possibly ceramics (A) was added, and about the same time the main building was decorated with lavish mosaics. It was still used as a reception area, as may be concluded from numerous remains of shells (oysters, spiny oysters, Saint James, les praires, murex brandaris, etc.), discarded outside of the courtyards, around the building B. Irma Čremošnik was inclined to date many of the lavish mosaics in the central building to this time; probably at the same time the hypocaust was installed, and the western wing of the main building was transformed into small baths with exedrae added to the existing rooms. It is not quite clear when the building C was added to the complex, but it could not have been before the construction of the building A and the rearrangement of the main building. Building C contained another set of baths, which must have been intended for a different kind of users than those who visited the main building. Next to the baths, around the central courtyard of the building C, there were chambers that could be interpreted as shops or tabernae by the numerous animal remains found there. Some of its structures look like stables, and in the courtyard, there was a well. So, it seems that this building was intended for more common guests. Finally, there is the building D, the third one whose dating could be established with considerable certainty. The remains of its architectural decoration could be dated to the end of the 3<sup>rd</sup> or the beginning of the 4<sup>th</sup> century, so it should be contemporary with Mogorjelo, although it could be also dated a few decades later.82 Most of the building was heated, some of its parts look like a hospitium, and in some other parts baths can be recognized, the third set in the complex.<sup>83</sup>

A lot more could be said about the complex in Višići. However, the fact that, at least at the end of the 3rd century, the complex was not a private estate living on agriculture, is crucial for the emerging picture of the transformation of Dalmatian non-urban landscape between antiquity and late antiquity. The best guess would be that the estate had found its way into imperial hands already by the middle of the 2<sup>nd</sup> century, when the system of management changed, and when also the diversification of services and the offered or produced goods occurred.<sup>84</sup> And although the management system, as well as the conductor of this multifunctional complex, changed, it must have been managed by somebody who gathered significant income for the imperial *fiscus*, and lived a lavish lifestyle. Finally, the income must have been especially high at the time of Constantine the Great, since the second, equally big lot of coins found at the site belong to that time. Judging by the numismatic finds, the good times came to an end during the second half of the 4th century, or to be more precise, at the time of Emperor Gratianus.85

In our opinion, Višići and its conductor must have had a steady and growing clientele, otherwise such a complex would be meaningless. The clientele in need of such services and commodities must have been stationed at, or arriving in Mogo-

rjelo, since Mogorjelo lacked all such facilities. The finds in Višići show a progressive growth of its size and possibilities, and it seems to have reached the peak of its capacities exactly at the time when Mogorjelo was built. At that time, the new part of the complex in Višići was decorated with new mosaics, and the walls of the main building were dressed in real marble, covering the frescoes that only imitated this kind of extravagant decoration.86

It would be hard to imagine that at the end of the 3<sup>rd</sup> century both Mogorjelo and Višići were anything else but imperial estates. When exactly they became imperial property is open for debate, but judging by the history of Višići, that might have happened already in the 2<sup>nd</sup> century. Among others, Elio Lo Cascio has most clearly presented the mechanisms of enlargement of imperial properties over the centuries, and a logical conclusion would be that the province of Dalmatia shared the same fate as the rest of the imperial provinces.87

#### CONCLUSION

Significantly more could be said about the history of research, and about the development of the complex in Mogorjelo. In this paper, we were concerned neither with the early history of the site, nor with the subsequent development of the complex following the erection of the castellum. Our intention was to differentiate facts from fiction, and to provide the most objective and most logical interpretation and reconstruction of the complex at the time when it was built, including both its appearance and its purpose.

Trying to revise all of the previous imaginary and unsubstantiated interpretations, and taking into account all of the known facts, we have come to the conclusion that the castellum in Mogorjelo was neither a palace nor a villa, or simply a military installation, but an administrative centre built for a specific purpose - to serve as the collection point for valuable imperial commodities arriving from the eastern part of the Dalmatian hinterland. As such, its construction was perfectly in accordance with Diocletian's policy of optimisation of the system of harvesting all the available resources in order to push the Empire through the economic crisis of his time. In that respect, those who saw the "palace" in Split as a direct comparison to Mogorjelo were not entirely wrong, as the future Diocletian's retirement residence seems to have been built as a complex with similar function, although a much larger one.88 However, considering certain formal features and specific internal organisational logic, the comparisons are farfetched. It could only be concluded that Mogorjelo and the first complex in Split were compatible in general form and function, and belonged to the same general system of administration, control, overview and collating of imperial goods inaugurated by Diocletian. That system depended on the strict control of production, import, export, and transport of the imperial goods by imperial officials, supported by the military personnel.

There are at least two other examples of the same system in coastal Dalmatia, one related to the quarrying and the other to the collection of portorium. The first one was on the island of Brač, with its centre in Mirje, and the second one on the island of Mljet, with its centre in the Polače bay.<sup>89</sup> Those were all physical manifestations of Diocletian's economic reforms, which were implemented in a way the Emperor himself was best accustomed to - the military way. Thus, it should not be a surprise that the generation of Dyggve intuitively recognised some resemblances between Mogorjelo, Split, and Polače, although they went too far and astray with their interpretations. Still, Mogorjelo, as an administrative centre and a collection point, backed up by a military crew, fits perfectly into that system and in Diocletian's mindset. So, Mogorjelo indeed belonged to the late antique equivalent of Hasan Aga (in a broad sense: good master) - Emperor Diocletian.

#### **NOTES**

- <sup>1</sup> EDIN VELETOVAC, Osvrt na arhitektonski kompleks na Mogorjelu kao problem historiografije XIX, XX i XXI stoljeća, *Acta Illyrica. Godišnjak Udruženja BATHINVS* II/2, Sarajevo, (2018), 317-334.
- 2 "Što se bijeli u gori zelenoj? / Al su snijezi, al su labudovi? / Da su snijezi, već bi okopnuli / labudovi već bi poletjeli. / Nit su snijezi, nit su labudovi / nego šator age Hasan age." ALIJA ISAKOVIĆ, Hasanaginica: 1774-1974: prepjevi, varijante, studije, bibliografija, Svjetlost, Sarajevo, 1975, 288 (trans. William Edmondstoune Aytoun, 1844).
- <sup>3</sup> EJNAR DYGGVE, Mogorjelo. Kastell oder Palast, 1. oder 4. Jahrhundert?, reprinted as chapter II in EJNAR DYGGVE, HER-MANN VETTERS, Mogorjelo. Ein spätantiker Herrensitz im Römischen Dalmatien, Schriften der Balkan Komission, Wien-Graz-Köln, 1966, 13; IVO BOJANOVSKI, Mogorjelo Rimsko Turres, Glasnik Zemaljskog muzeja Bosne i Hercegovine u Sarajevu, n.s., vol. XXIV, (1969), 137-163; NOËL DUVAL, Mogorjelo: villa fortifiée ou camp militaire?, Starinar, n.s., book XL-XLI, 1989-1990, Beograd, (1991), 253-260; MARIN ZANINOVIĆ, Mogorjelo od vile do kastruma, Godišnjak za balkanološka ispitivanja 32, (2002), 447-456. Besides these, more papers related to Mogorjelo and ending with a question mark could be added, as for example NOËL DUVAL, Existe-t-il un type de palais du Bas-Empire de la côte dalmate?, Bulletin de Comité International d'Histoire de l'art 1V, (1969), 13.
- <sup>4</sup> EJNAR DYGGVE, HERMANN VETTERS (note 3), 14.
- The first communiqué about the finding of the complex in Mogorjelo was published by Franjo Fiala in 1893. See FRANJO FIALA, Prilozi rimskoj arhologiji Hercegovine, Glasnik Zemaljskog muzeja u Bosni i Hercegovini V, 3, (1893), 726-527; KARLO PATSCH, Zbirka rimskih i grčkih starina u bos.-herc. Zemaljskom muzeju (sa 147 slika u tekstu i 2 table), Glasnik Zemaljskog muzeja u Sarajevu XXVI, (1914), 141-220. The part concerning Mogorjelo covers pages 157 to 161.
- <sup>6</sup> Such as Karl Maria Swoboda, Franz Oelman, or Eduard Anthes. They created and propagated an image of a fortified *villa* on the basis of comparisons with residences from the northern provinces. See KARL MARIA SWOBODA, *Römische und romanische Paläste: eine architekturgeschichtliche Untersuchung*, Kunstverlag Anton Schroll, Wien, 1919. However, the most problematic is Dyggve's reference to Josef Strzygowski, whom he called a "giant who had risen above the standing water of art history," as Strzygowski was, and became, one of the major advocates of "Gothic theory" and applied it even to regions like Croatia, what naturally and quite rightly provoked many, including Ljubo Karaman. See EJNAR DYGGVE, HERMANN VETTERS (note 3), 14.
- He soon became a builder of cottages that organically fitted the area around Helsinki. At the International Architecture Exhibition in Ghent in 1921, he won a gold medal for his designs of that kind. Together with his wife Ingrid Møller Dyggve, he also designed furniture. He was a member of the Danish state Naturfredningsrådet (Nature Conservation Council) from 1924 to 1928, and developed a nature conservation plan for the city of Ghent in 1925. His engagement in archaeology started in 1922/23, with his participation in an archaeological expedition

- of the Danish National Museum in Salona, Dalmatia, financed by the state Rask-Ørsted Fondet.
- 8 See the praises in Croatian daily press: Večernji list, August 24, 2014, or Jutarnji list, October 14, 2014.
- 9 NOËL DUVAL, Hommage à Ejnar Dyggve et Ingrid Dyggve. La théorie du palais du Bas-Empire et les fouilles de Thessalonique, Antiquité Tardive 11, (2003), 273-300.
- <sup>10</sup> EJNAR DYGGVE, HERMANN VETTERS (note 3), 13.
- <sup>11</sup> In Vetters' analysis of the "small square" in front of the main building. See EJNAR DYGGVE, HERMANN VETTERS (note 3), 19.
- The two capitals were associated with the site for a good reason (the bases of the columns were found in front of the main building), and the second fragment (Fig. 2, right) is unmistakably the 1ère couronne of a Corinthian capital. Although there are numerous ways to shape a 1ère couronne in a Corinthian capital, this one distinctly reminds of a capital found at the Mediterranean institute near Split, with the obvious provenance from Diocletian's palace in Split. If we compare the capital from Split with that of Mogorjelo, there is typological resemblance, although the execution of the capital from Mogorjelo seems cruder. The connection between the two is apparent from the way the motif in between the protruding and squirming leaves (same in both cases) is formed: by three symmetrical and juxtaposed lobes touching its opposites, while at the bottom of the scheme there is a half-leaf. The same pattern is present in Split and in Mogorjelo, and its form is quite distinctive. In Split, the same motif appears in various and very similar forms. So, it is not out of the question that the model for this 1ère couronne from Mogorjelo was, in fact, a type of capital from Diocletian's palace in Spalato. See DANIELA MATETIĆ-POLJAK, Les chapiteaux du palais de Dioclétien, Dioklecijan, tetrarhija i Dioklecijanova palača. O obljetnici 1700 godina postojanja, Zbornik radova s međunarodnog simpozija održanog od 18. do 22. rujna 2005. u Splitu (eds. N. Cambi, J. Belamarić, T. Marasović), Književni krug, Split, (2009), 215-216, 218, Fig. 50, 55, 56. As to the other fragment, it is only partly preserved and documented only by a rather crude photography. Still, it is obvious that the fragment belonged to a Corinthian capital with an extremely protruding angular volute, beneath which the remains of a thick protruding leaf are visible in the photograph. It is difficult to make precise comparisons, but a similar combination of a protruding volute and a protruding leaf is present on some of the capitals from the prothyron in Split. See EJNAR DYGGVE, HERMANN VET-TERS (note 3), Tafel VII, 3, 4;
- <sup>13</sup> EJNAR DYGGVE, HERMANN VETTERS (note 3), 13.
- <sup>14</sup> NOËL DUVAL (note 9), 277.
- In this instance, we thank our reviewer for pointing to us that this conclusion of Duval's is based on information from Patsch's letter to the director of the Museum, Hörmann (from November 15, 1899), in which Patsch wrote about the construction technique of the oil-press facility (possibly misunderstood by Duval) and about "Ein- und Zubauten, die schon durch ihre nachlässige Fügung und Fundamentlosigkeit sich als ein Product der Decadence erweisen." And although he refers to the stratigraphy afterwards, it is certain that the edifice was not built with the same

quality of technique as the fort was. But, Duval's conclusion has to be taken with caution. NOËL DUVAL (note 3), 257.

- <sup>16</sup> However, Dyggve's interpretation of late antique fortification, like the one in Mogorjelo, as "fortified villae" became a recurring idea in scholarly publications. In the context of Dalmatia, the idea was still alive when Veljko Paškvalin in 2005 interpreted the late antique fortress in Karaula (the "Gromile" site) near Kakanj (modern central Bosnia and Herzegovina), as a "fortified villa rustica". He found a justification for such an interpretation of this 3th-4th century fortress in some examples from Pannonia and in the work of E.B. Tomas. But, just like in Mogorjelo, the fortress in Karaula overlooked the fertile plain of Karaula, through which one of the major roads passed, as Pašalić demonstrated, and which was agriculturally exploited even well before the Roman presence. Thus, we are more inclined towards the observations of Dorothy J. Thompson, who stressed that castella had become a common feature on imperial estates in North Africa already by the 2<sup>nd</sup> and 3<sup>rd</sup> century, protecting imperial interests and estates. Considering the number of forts in the Dalmatian hinterland, and Čremošnik lists 263 of them, it could be assumed that fortifications were a common feature of the Dalmatian hinterland. Of course, some of them were restored or rebuilt, or new ones were constructed, as the archaeological finds attest, precisely at the end of the 3rd and in the first half of the 4th century, for the same reason - to protect the imperial estates, resources (mines), provincial economy, and infrastructure such as roads, bridges, etc., just as Čremošnik has pointed out and demonstrated on examples. As to the dating of the fortress in Karaula, Paškvalin's conclusions remained somewhat ambiguous, as he at one point dated the transformation of the villa into a fortress some time between the 3rd and 4th centuries, and then went on to assume that the fortress could have been built at the time of Constantius II. However, the excavated part of the fortress, with its protruding rectangular tower and indications of inner cubicula, certainly shows features typical of the "Diocletianic type" of quadriburgium. About this type, see below. And that this was indeed primarily a military installation is confirmed by the find of spherical stone ammunition (perhaps for the organa?), similar to the one found in Mogorjelo. See VELJKO PAŠKVALIN, Zaštitna iskopavanja na antičkom lokalitetu "Gromile" u Karauli kod Kaknja, Glasnik Zemaljskog muzeja Bosne i Hercegovine u Sarajevu, 46, (2005), 131-154; EDIT B. TOMAS, Villa settlements. The Archaeology of Roman Pannonia, Akadémiai Kiadó, Budapest, (1980), 275-321; DORO-THY J. THOMPSON, Imperial Estates, The Roman World, Vol. II (ed. J. Wacher), Routledge & Kegan Paul, London-New York, (1987), 557; IRMA ČREMOŠNIK, Rimska utvrdenja u BiH s osobitim osvrtom na utvrdenja kasne antike, Arheološki vestnik, 41, Ljubljana (1990), 355-364; ESAD PAŠALIĆ, Antička naselja i komunikacije u Bosni i Hercegovini, Zemaljski muzej, Sarajevo, 1960, 47, 50.
- <sup>17</sup> EJNAR DYGGVE, HERMANN VETTERS (note 3), Beil IX.
- As if he had never read Hippolyte Taine, whose thoughts are fundamental for scholarly research, and especially for historical studies. For example, HIPPOLYTE TAINE, *Essai sur Tite-Live*, Librairie Hachette et Cie, Paris, 1896 (especially p. 49).
- 19 For example, he acknowledged that the depth of the main building and its width had the ratio of 1:3, and that the ratio of the

- main building to the "piazzetta" in front of it (width 39.6 m) was also about 1:3. He also noticed that the length of the southwest corridor measured exactly 279 Roman feet (83.7 m). EJNAR DYGGVE, HERMANN VETTERS (note 3), 19, 30.
- <sup>20</sup> He only documented the postholes, but did not come to the conclusion that the beams were carrying the load of the wooden ceiling. This may be interpreted as cautiousness in making judgements, but maybe also as intentional by-passing of the fact that the porticoes had wooden ceilings, so thus could have not carried the floor above (as Dyggve thought). See EJNAR DYGGVE, HERMANN VETTERS (note 3), 30.
- <sup>21</sup> EJNAR DYGGVE, HERMANN VETTERS (note 3), 53.
- Most apparent in the last two chapters (VII and VIII) of the book, written by Vetters. See EJNAR DYGGVE, HERMANN VETTERS (note 3), 53-63.
- Vetters noticed a wide staircase at the south-eastern side, in the side wing of the portico of the main building. He assumed that it led to the upper floor, but immediately afterwards he again acknowledged that the portico on the ground floor was supported by columns with diameter about 0.3 m. From that he deduced that the columns were about 3 m high, and the whole portico approximately 4.2 m high (he imagined arches over the columns, as in Diocletian's palace in Split). One thing is certain: 0.3 m thick columns could not have supported a massive upper floor. Still, the staircase had to lead somewhere, so Vetters supported the idea about the first floor. EJNAR DYGGVE, HERMANN VETTERS (note 3), 53.
- <sup>24</sup> ĐURO BASLER, Arhitektura kasnoantičkog doba u Bosni i Hercegovini, Sarajevo, 1972, 38 (Fig. 9).
- <sup>25</sup> See Basler's footnote 4 on page 36 of his book. ĐURO BASLER (note 24), 38.
- <sup>26</sup> EJNAR DYGGVE, HERMANN VETTERS (note 3), 12. Cypresses (Cupressus sempervirens L.), however, do not fit into the reconstruction, as they were the result of the intervention of Karl Patsch in 1903, who had the idea to protect the marshy and swampy site. On the protection of the site, see ĐURO BASLER, Konzervatorski zahvat na Mogorjelu. Kratak osvrt na problematiku radova (Traveaux de conservation à Mogorjelo), Naše starine I, Sarajevo, (1953), 145-150.
- <sup>27</sup> He attributed this undertaking of the restoration of oil presses etc. to "common Roman economy," i.e. practicality. ĐURO BA-SLER (note 24), 40. He also published a short review of (Dyggve's and) Vetters' book in 1970, quite illustrative of his conclusions about their work and Mogorjelo itself. Some of his claims should be subjected to criticism. For example, he scolded Vetters for being too "rigid" in documenting the archaeological remains and praised Dyggve's reconstruction, which in his opinion was unquestionable because it had been made by an "experienced architect and archaeologist." Most of his other remarks are of the same kind, especially those related to the description of the position of the complex. He stressed that there was an earlier layer beneath the edifice from the 4th century, and even made an imaginative interpretation of the natural environment of the complex at that time. He further claimed that the main gate of the complex was the western one, implying that Mogorjelo was oriented exclusively to the general direction of Narona. However, from Fig. 10 it is clearly evident that Narona was not the next

or exclusive destination from Mogorjelo. According to Patsch, Sergejevski, and Bojanovski, the network of roads in the Neretva delta was quite intricate. It seems that Basler adjusted the facts to his preconceptions. See ĐURO BASLER, Osvrti i prikazi: Ejnar Dyggve i Hermann Vetters: Mogorjelo, *Glasnik Zemaljskog muzeja*, n.s. A XXV, Sarajevo, (1970), 213-215.

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- Duval also criticizes the conclusions made by Ivo Bojanovski after the restoration campaign in this quadrant in 1963-1965. As he points out (repeating the conclusions of KARLO PATSCH, note 5), the oil press belongs to a much later period, close to the building of Christian churches. His opinion that the oil press and other installations for production are much later than the *castellum* seems right, and we agree that such installations would not be expected in a *castellum* from the late 3<sup>rd</sup> or early 4<sup>th</sup> century. See NOËL DUVAL (note 3), 257. See also IVO BOJANOVSKI, Antička uljara na Mogorjelu i rekonstrukcija njenog tlocrta (L'huilerie antique de Mogorjelo et la reconstruction de son pressoir), *Naše starine* XII, (1969), 27-53.
- <sup>29</sup> ĐURO BASLER (note 24), 42.
- When it comes to the Roman forts, fortlets, fortified manors, etc., the terminology is quite complex, and it becomes especially complex with the age of the Tetrarchy. See CONSTANTIN BAJENARU, Minor Fortifications in the Balkan-Danubian Area from Diocletian to Justinian, Editura Mega, Cluj-Napoca, 2010, 52.
- <sup>31</sup> This shall be an important point in this paper. We certainly agree that Mogorjelo served a similar purpose, but not exactly the one that Basler imagined. As we will argue, the castellum may have been in a moist environment at the end of the 19th century, but there are a lot of arguments that the surroundings of the castellum were quite different in ancient and late antique ages. Thus, considering Busuladžić's systematisation of agricultural tools (see note 43) found on the site, as well as other finds from the area, it becomes apparent that the area around the fort was more than probably cultivated and agriculturally exploited throughout the antiquity and late antiquity. Existence of an olive press, constructed either before of after the construction of the castellum (see note 15), does not change the fact that the area was intensively agriculturally exploited for the cultivation of olives, and probably wine, at least from the second half of the 1st century BC. After all, Mogorjelo is in direct vicinity of Čapljina, i.e. Tasovići, where at the second half of the 1st c. BC brothers Gaius Papius Celsus and Marcus Papius Kanus (CIL III, 14625) obviously established a profitable business of wine production. As Nenad Cambi assumed, they had even had their own production of amphorae of the Lamboglia 2 type, although this conclusion was contested in 2014 by Marie-Brigitte Carre, Patrick Monsieur, and Stefania Pesavento Mattioli. Leaving the amphorae aside, it is certain that the Papius brothers had a market-orientated estate of some extent in the area already by 36 BC. We might only wonder if they belonged to the same wealthy merchant family of Papii that established itself so well in Thessaloniki, almost at the same time. About the hydrography of the Naronitan area, see also BARTUL ŠILJEG, Neki antički lokaliteti naronitanskog agera, Izdanje Hrvatskog arheološkog društva 22, (2003), 267-276; JAKOV VUČIĆ, Topografija naronitanske biskupije, PhD dissertation, University of Zagreb, 2012, 15-19, Fig. 2. See also NENAD CAMBI, Amfore kasnorepublikanskog doba i njihova produkcija u Dalmaciji, Akademija nauka i umjetnosti BiH,

Posebna izdanja knj. XCV, Odjeljenje društvenih nauka knj. 27, Sarajevo, (1991), 55-65; MARIE-BRIGITTE CARRE, PATRICK MONSIEUR, STEFANIA PESAVENTO MATTIOLI, Transport amphorae Lamboglia 2 and Dressel 6A: Italy and/or Dalmatia? Some clarifications, Journal of Roman Archaeology 27, (2014), 417-428; GEORGE VELENIS, Συμπραγματευόμενοι Ρωμαῖοι σὲ μία νέα ἐπιγραφὴ τῆς Θεσσαλονίκης, Tekmeria 2, (1996), 8-15.

- <sup>32</sup> IVO BOJANOVSKI (note 3), 137-163. To complement his conclusions, we might add that such fortified structures, according to Bajenaru's classification, would fall into the following category: "Small castellum-type (praesidium / centenarium / castra / castellum / phrourion)... during the Late Empire, though there are different shapes of fortifications, rectangular or polygonal, that usually serve a military purpose. We consider that in this category should be included fortifications with a surface of more than 0.40 ha and up to 1 ha, which constitutes the upper limit of minor fortifications." The size of Mogorjelo was 0.977 ha, which conforms to this category. Considering the form of the complex, Bojanovski's comparisons were correct and could be further broadened by examining Bajenau's catalogue. See CONSTANTIN BAJENARU (note 30), 53, 220.
- <sup>33</sup> ĐURO BASLER, Mogorjelo, *Arhitektura*, *Urbanizam 31 [časopis za arhitekturu, urbanizam, primenjenu umetnost i industrijsko oblikovanje*], 6, (1965), 10-11; IVO BOJANOVSKI (note 3), 161.
- <sup>34</sup> IVO BOJANOVSKI (note 3), 161.
- <sup>35</sup> Here we have to add the conclusions of Irma Čremošnik about the ceramic finds from Mogorjelo. See IRMA ČREMOŠNIK, Keramika iz rimskog nalazišta Mogorjela, *Glasnik Zemaljskog* muzeja u Sarajevu, n.s., VII, Sarajevo (1952), 241-271.
- <sup>36</sup> IVO BOJANOVSKI, *Bosna i Hercegovina u antičko doba*, Centar za balkanološka ispitivanja, book 6, Sarajevo, 1988, 125. It is strange how Bojanovski used the terms *villa rustica* and *palatium*, putting them in the same line. In fact, it seems that he had taken over Dyggve's position once again. It is highly probable that he did not think over these two terms, otherwise he would have noticed that they were in direct opposition to his statement from 1969, that Mogorjelo was not a *praetorium fundi*. See above.
- <sup>37</sup> NOËL DUVAL (note 3).
- <sup>38</sup> NOËL DUVAL (note 3), 259.
- <sup>39</sup> Duval explained everything he had against Dyygve's approach in 2003. NOËL DUVAL (note 9). Dyggve really was somewhat opinionated and superficial in many respects. If we look back at his theories about Marusinac, the episcopal complex in Salona, his interpretation of the first *oratoria* in Salona, his interpretation and reconstruction of the building complex in Polače, or his preconceptions about the peristyle in Diocletian's palace in Split, etc. we will conclude that most of his theories and interpretations missed the point. Considering that Dyggve's "Gothic" theories are still taken seriously by some scholars, Duval's somewhat harsh critique seems justified.
- <sup>40</sup> NOËL DUVAL (note 3), 255.
- <sup>41</sup> MARIN ZANINOVIĆ (note 3), 447-456.
- <sup>42</sup> Similar terminological confusion, which stems from the general confusion about Mogorjelo, is reflected in the otherwise excellent work on *villae* in the territory of Bosnia and Herzegovina by

Adnan Busuladžić. He did notice that the fort, indeed, should be regarded as a *castellum* (in the sense of a fortified *villa* for him), and he even made a well justified comparison with the partly excavated remains of the fort in Karaula near Kakanj; he then reverted to calling it a *castrum*, or much more frequently a *villa* (of a developed ground plan). In all, it appears that he shared the age-old dilemma about the nature and function of Mogorjelo. See also note 15 in ADNAN BUSULADŽIĆ, *Rimske vile u Bosni i Hercegovini / Roman villas in Bosnia and Herzegovina*, Zemaljski muzej Bosne i Hercegovine, Sarajevo, 2011, 70-71.

- <sup>43</sup> EDIN VELETOVAC (note 1), 329.
- 44 Adnan Busuladžić cautiously concluded that the finds of stone projectiles in Mogorjelo pointed to the installation of an onagra, although of the kind that used smaller calibre projectiles. A wooden construction of that piece of military equipment was not found, but per analogiam with other, similar finds, it could be deduced that such a weapon existed in Mogorjelo. As the onagra came into standard military use in the 4th century, as the only stone-throwing weapon, this only corroborates the conclusion that Mogorjelo was indeed a complex with military presence. Busuladžić was also inclined to date some other pieces of military equipment to the period after the erection of the fortress, and his conclusion would conform to the general line of development of the site. See ADNAN BUSULADŽIĆ, Neki primjeri rimske vojne opreme iz Mogorjela, Radovi kolokvija Rimska vojska u procesu romaniziranja provincije Dalmacije Sinj, 13. listopada 2006., Izdanja Hrvatskog arheološkog društva, vol. 27 (eds. Anita Librenjak, Domagoj Tončinić), Zagreb, 2011, 345-361. His analysis of fibulae from Mogorjelo resulted, quite correctly, with the same conclusions. A number of crossbow brooches, as well as ring fibulae and penannular brooches, all from the second half of the 3<sup>rd</sup> or the first half of the 4<sup>th</sup> century, indicate military presence. As Busuladžić stressed, the type of crossbow brooches is associated with military men; so according to him, they are additional evidence that Mogorjelo functioned as a military installation between the 4th and 6th centuries. See ADNAN BUSULADŽIĆ, Zbirka fibula iz Mogorjela / The Fibulae Collection from Mogorjelo, Opuscula Archaeologica 32, Zagreb, 2008, 21-54.
- <sup>45</sup> This was overlooked by the majority of scholars. The major projects of draining the Neretva delta were started in 1881 and lasted until 1889. But, systematic and more extensive melioration of the valley was conducted from the 1950s to the 1980s, when the area finally became fertile. See NIKŠA BOŽIĆ, MARIJANA ZLODRE, Revitalizacija ruralnih naselja doline Neretve. Smjernice za integralnu zaštitu ruralnih krajolika i održivi razvoj turizma delte rijeke Neretve, Regionalna razvojna agencija Dubrovačkoneretvanske županije DUNEA, Dubrovnik, 2019.
- 46 In fact, it seems that Patsch was the only one who was aware of the quality of the surrounding terrain.
- <sup>47</sup> ADNAN BUSULADŽIĆ, Antički željezni alat i oprema sa prostora Bosne i hercegovine / Iron Tools and Implements of the Roman Period in Bosnia and Herzegovina, Univerzitet u Sarajevu, Zemaljski muzej Bosne i Hercegovine, 2015, 14-15, with a catalogue. Further still, we thank our reviewer for the suggestion that the swamps were not a completely unexploited resource, as Patsch noted in his letter about the frequent finds of deer ant-

lers and boars teeth, which would suggest that even the marshy parts were used as hunting grounds. And it should be noted, as our reviewer suggested, that there were possibly *canabae* in the vicinity of the fort, as suggested by Patsch in his letters and by Bojanovski in his review of Dyggve's and Vetters' book. See IVO BOJANOVSKI (note 28).

- <sup>48</sup> Except for Basler's publication, the majority of them are printed with incorrect orientation.
- <sup>49</sup> Not on the western side, as Basler presumed. See note 27.
- <sup>50</sup> Of course, both *ortostates* were obviously reused fragments of some older building, appropriately reused to symbolically accentuate the nature of the new edifice. See ĐURO BASLER (note 24), 40.
- <sup>51</sup> Or they were present in limited numbers, as Patsch and Bojanovski mentioned *canabae*. See note 47.
- <sup>52</sup> IVO BOJANOVSKI (note 3).
- <sup>53</sup> ADNAN BUSULADŽIĆ (note 44).
- <sup>54</sup> Lukas de Blois has vividly demonstrated the effects of the 3<sup>rd</sup>century crisis, as it affected even the military ranks, which succumbed to banditry along the main military transit routes. De Blois reminded of the complaints about military avarice and misbehaviour, which brought villagers from Takina, Skaptopare and Aragoe, places in the Balkans and Asia Minor, into misery and bankruptcy during the reign of Caracalla, Gordian III, and Philip the Arabian well before the intense military activity in the period between 249 and 284. So, looting and pillaging was that internal threat with which the emperors had to deal at the end of the 3<sup>rd</sup> century, when the crisis became even more acute after the fall of Dacia. Thus, it would be expected that Diocletian, one of the best organisers of all times, intervened and established more secure routes across the Empire. See LUKAS DE BLOIS, The Crisis of the Third Century A.D. in the Roman Empire: A Modern Myth?, The Transformation of Economic Life under the Roman Empire. Proceedings of the Second Workshop of the International Network Impact of Empire (Roman Empire, c. 200 B.C. -A.D. 476), Nottingham, July 4-7, 2001, (eds. L. de Blois, J. Rich), Brill, (2002), 204-217.
- <sup>55</sup> See, for example, JAROSLAW BODZEK et al., Results of "Archaeological Study of Dajaniya & Tuwaneh" (ArTu:DTu) 2018 survey of Dajaniya (Ma'an-Husseiniyeh), Southern Jordan, *Discovering Edom: Polish Archaeological Activity in Southern Jordan*, (ed. Piotr Kołodziejczyk), Krakow, (2018), 51-68.
- MERSIHA IMAMOVIĆ, BEGO OMERČEVIĆ, Rimska putna komunikacija Salona-Argentaria, *Historijska misao*, IV, Tuzla, (2018), 14; ESAD PAŠALIĆ, Period rimske vladavine do kraja III vijeka naše ere, *Kulturna istorija Bosne i Hercegovine*, Sarajevo, (1984), 191-236.
- 57 It should be taken into consideration that transport along military routes exerted great pressure on the local population; either because the provisions for the entourage were requisitioned from them (oxen or other beasts of burden), or simply because of plunder. Complaints of these communities against unauthorized military seizure of men, animals, waggons, and hospitality in billets and other facilities for state transport are a recurrent theme in Roman history, as Stephen Mitchell has pointed out. That is why imperial decrees regulating such affairs were issued so often. Furthermore, besides the security of transport, one should

mention the fact that the cost of transportation was, in the Roman world, as Paul Erdkamp has stressed, a part of the production costs. Thus, a longer route would not have been preferable either from the standpoint of security, or from that of economy. About the Pisidian monument and the behaviour of the military on transport routes, and on the Roman transport in general, see STEPHEN MITCHELL, Requisitioned Transport in the Roman Empire: A New Inscription from Pisidia, The Journal of Roman Studies Vol. 66 (1976), 106-131; ANNE KOLB, Transport und Nachrichtentransfer im römischen Reich, Klio: Beiträge zur alten Geschichte, Beiheft, n.F., Bd. 2. Berlin, 2000, 54-63, 71-82; About the general rules of using diplomata on Roman roads, see LUKAS LEMCKE, Status Identification on the Road: Requisitioning of Travel Resources by Senators, Equestrians, and Centurions without diplomata. A Note on the Sagalassus Inscription (SEG XXVI 1392), GEPHYRA 9, (2012), 128-142. See also PAUL ERDKAMP, The Grain Market in the Roman Empire. A Social, Political and Economic Study, Cambridge University Press, 2005, 112-113.

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- 58 The fact that the Roman route leading from central Bosnia, across the modern town of Mostar, to the Neretva delta gained in importance as the shortest route was also noticed by Ivo Bojanovski. Along the route, a significant number of new milestones were erected during the 3<sup>rd</sup> and 4<sup>th</sup> centuries. As Bojanovski has noted, it does not mean that the route was built at that time, but only that it gained in importance at that time and was probably repaired and enlarged. He explicitly writes: "The installation of milestones in honour of emperors does not only demonstrate subservient loyalty to the ruler, but also intense traffic, especially in the 3<sup>rd</sup> and 4<sup>th</sup> centuries, when mining improved the general condition of our province." Quite correctly, he associated that undertaking with the intensification of transport of valuable ores, gold and silver, by that route. That route of prime importance, as it seems, ended actually just north of Mogorjelo, at the crossroads settlement called Tasovići. The next stop, and probably the last one before the shipment, was Mogorjelo. See KARL PATSCH, Pseudo-Skylaxovo jezero. Prinos povijesti donjeg poriječja Neretve, Glasnik Zemaljskog muzeja u Bosni i Hercegovini XVIII, book 4, (1906), 367-390; IVO BOJANOVSKI, Prilozi za topografiju rimskih i predrimskih komunikacija i naselja u rimskoj provinciji Dalmaciji, Godišnjak Centra za balkanološka ispitivanja 17, (1978), 64.
- <sup>59</sup> See the daily *Dnevni Avaz*, issue of August 27, 2020.
- 60 As part of the same project, the old railroad connecting Sarajevo with Ploče will be restored. In its final stages, this railroad follows exactly the ancient route through Herzegovina (Sarajevo-Nevesinjsko polje-Mostar-Čapljina/Tasovići-Mogorjelo-Višići-(Ploče). See the daily Večernji list, issue of January 16, 2022.
- 61 The dilemma where exactly the harbour of ancient Narona was located is discussed in the next note. There are multiple indications that it was situated in or around modern Gabela. See below.
- 62 At first, it could be assumed that the ores or any other kind of valuable goods were shipped from the port of Narona. However, although that road was part of the main communication in the area, that would be highly illogical considering the lengthy land route from Mogorjelo to Narona, winding around the northern edges of the Naronitan marshes. On the other hand, we ought to bear in mind that the area between Višići and the river Ner-

etva used to be called T(e)rsana (from the word "arsenal"), the remains of which have mostly been washed away by the Neretva or destroyed during the construction of the railroad bridge across the river. T(e)rsana was located just to the southwest of the complex in Višići. The sheer toponym would imply the existence of a naval yard. As Patsch noted, its remains had been buried before they were finally destroyed by the building of the bridge, which would indicate that they belonged to an era long before the Middle Ages. The location is, indeed, quite convenient for a naval yard. If there was a naval yard (arsenal) adjacent to the complex in Višići, that would explain a lot about the disposition (baths, hospitia, shops, etc.) and development of the complex. Along with this, one should bear in mind that the medieval local Bosnian parish was called Luka ("port") and that it included both Višići and T(e)rsana. In addition, one should be reminded that the Bosnian king Tvrtko I built a shipyard and a port in the relatively nearby Opuzen, obviously respecting the logic of sailing in the Neretva delta. One of the places that belonged to the parish of Opuzen was called Lađište (literally "shipyard"). Folk stories preserve the memory that this was the place where large vessels use to anchor in the "olden days" and that this was the actual harbour of Narona. But, the main harbour during the Middle Ages was certainly the "Drijeva square" in the town of Gabela, known as the "mercatum Narenti, forum Narneti" and first identified as such by K. Jiriček back in 1879. See extensively about the issue in ĐURO TOŠIĆ, Trg Drijeva u srednjem vijeku, Biblioteka "Kulturno nasljeđe", Veselin Masleša, Sarajevo, 1987; so, there are several possible locations of the shipyard from which the goods from Mogorjelo could have been shipped. In any case, the historical continuity of the use of certain appropriate spots should not be ignored. Finally, it should be stressed that the town of Narona is the least likely candidate. KARL PATSCH (note 55), 387-388; MARIJAN SIVRIĆ, Srednjovjekovna župa Luka, Povijest hrvatskog Počitelja, (ed. Krunoslav Kordić), Općinsko poglavarstvo Čapljina, Čapljina-Zagreb (1996), 168-224; DOMAGOJ VIDOVIĆ, Pogled u toponimiju župe Opuzen, 300-ta obljetnica Župe svetoga Stjepana Prvomučenika, (eds. Zoran Curić et al.), Župa svetog Stjepana Prvomučenika Opuzen, (2016), 168.

- 63 VACLAV RADIMSKY, Prekopavanje u Domaviji kod Srebrenice, godine 1891, Glasnik Zemaljskog muzeja u Bosni i Hecegovini, IV, book 1, Sarajevo, (1892), 4.
- The majority of Villae mit Eckrisaliten (like Mehring, Berlingen-Neuhaus, Bollendorf, Wachenheim, Weinbergshof, Tittmoning and most of the other places) do have side risalites and porticos, but the porticus is mostly elevated and serves as an entrance to the rest of the building, which is usually arranged around an inner courtyard. This was certainly not the case in Mogorjelo. The only similarity between the main building in Mogorjelo and the northern Villae mit Eckrisaliten is the general impression of the façade of the building, but even there the differences are apparent - there is no central staircase in front of the main building, no elevated portico, etc.
- MICHAL GAWLIKOWSKI, Les principia de Dioclétien à Palmyre. Projet et réalisation, Le dessin d'architecture dans les sociétés antiques, Actes du Colloque de Strasbourg 26-28 janvier 1984 (Travaux du Centre de Recherche sur le Proche Orient et la Grèce Antiques 8), Strasbourg, (1985), 283-290.

- <sup>66</sup> MICHAL GAWLIKOWSKI, Le camp de Dioclétien. Bilan préliminaire, Palmyre, bilan et perspectives, Colloque de Strasbourg (18-20 octobre 1973) (Travaux du Centre de Recherche sur le Proche Orient et la Grèce Antique 3), Strasbourg, (1976), 153-163 (Fig. I).
- <sup>67</sup> JAMES LANDER, Typology and Late Roman Fortifications: The Case of Diocletianic Type, in *Limes 12* Stirling, III, (1980), 1051-1060; JAMES LANDER, *Roman Stone Fortifications: Variation and Change from the First Century A.D. to the Fourth*, BAR Int. Ser. 206, Oxford, 1984, 181-193; MICHEL REDDÉ, Dioclétien et les fortifications militaires de l'Antiquité tardive. Quelques considérations de méthode, *Aniquité Tardive* 3 (1995), 91-124.
- 68 JAMES LANDER (note 67, 1984), 181.
- 69 MICHEL REDDÉ (note 67), 91-124.
- Which is different from both the so-called "pre-Diocletianic" type and from the "post-Diocletianic" one.
- <sup>71</sup> JAMES LANDER (note 67, 1984), Figs. 182, 185, 173, 174, 177.
- <sup>72</sup> In this case, as in Mogorjelo, we could assume that there were "northern" influences in the design of the main building. See CONSTANTIN BAJENARU (note 30), Fig. 148.
- 73 CONSTANTIN BAJENARU (note 30), 72.
- <sup>74</sup> CONSTANTIN BAJENARU (note 30), 262, Pl. 31.
- Dated by an inscription. ISRAEL ROLL, A Latin Imperial Inscription from the Time of Diocletian found at Yotvata, *Israel Exploration Journal* 39, (1989), 239-260. Cf. ZEEV MESCHEL, A Fort at Yotvata from the Time of Diocletian, *Israel Exploration Journal* 39, (1989), 228-238; UZI AVNER et al., The Roman Fort at Yotvata: Interim Report (2003), *Journal of Roman Archaeology* 17, (2004), 405-412.
- MORDECHAI GICHON, Excavations at Mezad Tamar-Tamara, Saalburg Jahrbuch 33, (1976), 80-94; MORDECHAI GICHON, Mezad Tamar / "Tamara". Vorbericht der Grabungen 1973-1974, Studien zu den Militärgrenzen Roms II. Vorträge des 10. Internationalen Limeskongresses in der Germania Inferior, Köln-Bonn, (1977), 445-452; MORDECHAI GICHON, Developments in the Research on the Limes Palaestinae during the Last Two Decades, Limes 17 Zalău, (1999), 243; SHELAGH GREGORY, Was There an Eastern Origin for the Design of Late Roman Fortifications? Some Problems for Research on Forts of Rome's Eastern Frontier, David Kennedy (ed.), The Roman Army in the East. Journal of Roman Archaeology Supplementary Series, Ann Arbor, 1996, 169-209.
- MICHEL REDDÉ (note 67), 100-101, Fig. 19; LOUIS LESCHI, Centenarium quod Aqua Viva appelatur..., Comptes rendus des séances de l'Académie des Inscriptions et Belles-Lettres 85, (1941), 2, 163-176; LOUIS LESCHI, Le "Centenarium" d'Aqua Viva près de M'doukal (Commune mixte de Barika), Revue Afrique 87, (1943), 5-22.
- As to the date of construction of these forts, Lander is quite sure about the one in Seba Mgta, dating it to the Tetrarchic period. There has been some discussion and diverging opinions about Bourada. But, considering the resemblance to other such forts, and the lack of distinctive Constantinian towers, it is more likely that it was a part of the Tetrarchic building endeavour in North Africa. See JAMES LANDER (note 67, 1984), 208; JULIEN GUEY, Note sur le limes romain de Numidie et le Sahara au IVe

- s., Mélanges de l'École Française de Rome 56, (1939), 178-248; MICHEL REDDÉ (note 67), 101.
- <sup>79</sup> This last feature is present in all of the three mentioned examples.
- 80 Although, we are thankful to our reviewer that he conveyed to us the information that in the abovementioned letter from November 14, 1899, Patsch mentioned to the director of the Museum in Sarajevo that he had found an extensive amounts of shells (Austerschalen oyster shells) on the site of Mogorjelo. That would certainly conform to our assumption that the larger hall of the main building was indeed a reception room.
- 81 Numismatic finds could be considered as an indication that the estate had become more market-orientated and less orientated on small-scale production for the needs of residents and their labour. Since the earliest numismatic finds stem from the age of Trajan and subsequently multiply through the reigns of Hadrian and Antoninus Pius, they confirm that the owner (conductor or tenant) started to participate in monetary transactions and cash payments, and that certainly means that production on the estate had stepped up for a notch. If this was indeed so, then the improvement of production on the estate implied a couple of things. First, that fresh capital was invested in the exploitation of the estate. Secondly, that the economy of the estate had become diversified. As Paul Erdkamp wrote: "... wealthy landowners who had money to spare rather bought additional land or they invested it in the other sectors of the villa economy: primarily olive oil and wine, but also poultry and fish, and factories for pottery, brick or tiles." We cannot know in how many ways the economy of the estate in Višići was diversified to maximise exploitation, but the addition of a facility for the production of bricks, tiles, and possibly pottery was part of that process of diversification and orientation towards market. After all, it seems that over time even the oldest part of the complex (building B) became a place of negotiatio and was re-dressed to impress the negotiatores. In consequence, numismatic finds seem as evidence that something in the economy of the estate has changed in comparison to the 1st century. IRMA ČREMOŠNIK, Rimska vila u Višićima – Die römische Villa in Višići, Glasnik Zemaljskog muzeja u Sarajevu, vol. XX, (1965), 147-260; PAUL ERDKAMP (note 57), 173.
- 82 It should be pointed out that the architecture and fragmentary architectural decoration found in the building D offer just limited possibilities for determining the date of the construction of this part of the complex. Čremošnik was inclined to date it to the mid-4th century. However, her conclusion is based on limited argumentation. Of course, some of the fragments of architectural decoration from the building D are so generic that they can neither corroborate nor refute the dating to the mid-4<sup>th</sup> century. However, three capitals from the room 11D did catch the attention of Čremošnik, and those are capitals of the pilasters with acanthus leaves (T. III. 4). Čremošnik did recognise that such capitals could be found in Salona and Spalato, but in her last verdict of their provenance she reached for an, in our opinion, erroneous and farfetched conclusion of Edmund Wiegand about the existence of the "western type of acanthus capitals." But, even if there were such a type, still the capitals from Višići would not conform to it, as the lobes of the leaves touch each other on the capitals from Višići. And if the so-called "western type" is defined by rounding or softening the edges of the lobes, then there are examples of the same features on capitals from Diocletian's

palace (see Figs. 63 and 65 in DANIELA MATETIĆ-POLJAK / note 12/). The same could be said about another remark, namely that the lobes of the acanthus leaves of the "western type" extend right down to the bottom of the whole leaf. Again, the same mentioned examples from Spalato, as well as many others from the same palace, diminish the possibility of existence of the socalled "western type of the acanthus capital." Today, the array of possibilities for comparisons has significantly improved, and thus the basis for attributing the capitals from Višići to some type of capitals of dubious existence is quite weak. Thus, it seems that Čremošnik's first impressions about these capitals were more correct than her final conclusions. As a matter of fact, certain features make them more like the so-called "eastern type" - for example, that the lobes of leaves touch those of the surrounding leaves. Of course, the execution of these capitals is far cruder and rustic than the ones from Mogorjelo, not to mention Spalato. But, in general, they belong to the same group. Finally, this certainly does not mean that they were not carved in the mid-4th century, but it is equally likely that they were made well before that time. See IRMA ČREMOŠNIK (note 81), 162-163; EDMUND WIEGAND, Die Stellung Dalmatiens in der römischen Reichskunst, Strena Buliciana, Zagreb-Split, 1924, 91.

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- 83 See IRMA ČREMOŠNIK (note 81), 158-166.
- 84 The change in the management of the estate was reflected in the production on the estate. The initial residence now acquired a new part - a production facility with a furnace (building A) to the north. The rectangular shape of the furnace led Irma Čremošnik to date its construction in the 2<sup>nd</sup> or 3<sup>rd</sup> century. IRMA ČREMOŠNIK (note 82), 152-153.
- 85 IRMA ČREMOŠNIK (note 82), 199-200.
- 86 See IRMA ČREMOŠNIK, Mozaici i zidno slikarsktvo rimskog doba u Bosni i Hercegovini, Veselin Masleša, Sarajevo, 1984, 133-140, 168-178. See also ADNAN BUSULADŽIĆ, Umjetnost antičkih mozaika na tlu Bosne i Hercegovine / Ancient Mosaics on the Territory of Bosnia and Herzegovina, Zemaljski muzej u Sarajevu, 2008, 31-38, with a catalogue.
- ELIO LO CASCIO, The Imperial Property and its Development, Ownership and Exploitation of Land and Natural Resources in the Roman World (eds. Paul Erdkamp, Koenraad Verboven, Arjan Zuiderhoek), Oxford University Press, (2015), 62-70. The change in ownership may also have happened later, in Diocletian's time. His reforms, when contrasted with the economic mores of the earlier ages, are best described in J.W. Ermatinger's dissertation: "The two most important were the change in land holding patterns and the continuing involvement of the state in the lives of the private citizen. This is best seen in the papyri from Panopolis from 298 and 300 A. D. Archaeological evidence serves as another major source of information for the ancient historian. The extensive building activities all over the empire, dating from Diocletian's reign, point to a revival in municipal rebirth, in contrast to the earlier period." Indeed, Ermatinger's dissertation thoroughly examines and describes the pattern of Diocletian's reforms. See JAMES WILLIAM ERMATINGER, The Economic Reforms of Diocletian, PhD dissertation, Indiana University, 1988, 19.
- 88 We have to agree with Joško Belamarić and Goran Nikšić in that the so-called Diocletian's palace had a phase before it was turned into the Emperor's retirement residence. Their arguments

that the complex had an earlier phase are compelling, especially when compared with the development of the complex in Gamzigrad. However, whether it had the proposed function of the gynaeceum is a topic open for discussion. It certainly was an imperial installation, and it certainly was rather hastily transformed into the imperial residence, just like Goran Nikšić explained. However, in view of the relatively recent discoveries of a macellum (2013) and a harbour equipped with a dry dock and a protruding platform in front of the "palace" (2006/2007), it seems that the complex had more functions than it had been supposed. The fact that there was a macellum north of the complex suggests that the place was much more developed than previously assumed. As Armando Cristilli has eloquently explained, the criteria for building macella had changed by the late antique period. To quote Cristilli: "... the macellum had to be built only in urbanized sites with good economic development, with a location capable of connecting with the outside world, with a fair number of inhabitants and, finally, with a high civic rank." Thus, it can be concluded that the complex and its surroundings had all of these properties. When we take into consideration the analysis of ceramic finds from the "palace" conducted by Ivančica Dvoržak Schrunk, which shows that the complex was from the beginning inhabited by residents of higher social status, it is not out of question that the complex had an administrative function before it was turned into the Emperor's retirement palace. If that was indeed the case, the parallels between Mogorjelo and Split are justified. See GORAN NIKŠIĆ, Diocletian's Palace - design and construction, Bruckneudorf und Gamzigrad. Spätantike Paläste und Großvillen im Donau-Balkan-Raum. Akten des Internationalen Kolloquiums in Bruckneudorf vom 15. bis 18. Oktober 2008, (eds. Gerda v. Bülow, Heinrich Zabehlicky), Bonn, (2011), 187-202; JOŠKO BELAMARIĆ, GYNAECEUM IOVENSE DALMA-TIAE - ASPALATHO, Prilozi povijesti umjetnosti u Dalmaciji, Vol. 40, No. 1, (2005), 5-33; JOŠKO BELAMARIĆ, Diocletian's Palace, PhD dissertation, University of Zagreb, 2009; KATJA MARASOVIĆ, Luka Dioklecijanove palače, Pomorski Split do početka XX. stoljeća - Zbornik radova, Biblioteka knjiga Mediterana 108, (ed. Nenad Cambi), Književni krug, Split, (2019), 77-96; ARMANDO CRISTILLI, Macellum and Imperium. The Relationship between the Roman State and the Market-Building Construction, Analysis Archaeologica. An International Journal of Western Mediterranean Archaeology, vol. 1, Edizioni Quasar, Roma, (2015), 69-86; IVANČICA DVORŽAK SCHRUNK, Dioklecijanova palača od 4. do 7. stoljeća u svijetlu keramičkih nalaza, Vjesnik Arheološkog muzeja u Zagrebu, 3rd s., XXII, (1989), 91-105.

89 See VANJA KOVAČIĆ, Kasnoantička vila s portikom na Mirju kod Postira, Klesarstvo i graditeljstvo, Vol. XXI, No. 3-4, (2010), 25-37; TIN TURKOVIĆ, The Late Antique "Palace" in Polače Bay (Mljet) - Tetrarchic "Palace"?, Hortus Artium Medievalium 17, (2011), 211-233.