

## Recent Results on the Triangular Fortress by the Vivari Channel, Butrint



### Archaeology

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### Abstract

The archaeological site of Butrint, ancient Buthrotum, lies on the eastern side of the Straits of Corfu, in southeast Albania. It overlooks one of the great sea-routes of pre-modern times, linking the eastern Mediterranean with Venice as well as Sicily. In 1386, Butrint was purchased by the Venetians together with the island and fortress of Corfu, from the Angevin dynasty of southern Italy. In this new arrangement, it became an outpost of Corfu in mainland until 1797. During four centuries of Venetian domination in Butrint, numerous buildings and fortifications were built. A small castle consisting of one tower was built on the acropolis, which was linked to a complete renewal of the town's circuit of fortifications. A new port was put up on the west side of the city, several towers were built or improved upon and a network of villages and pathways were plotted in the surrounding area of the old site of Butrint. One of the most significant building belonging to this period is the so-called triangular fortress. In this report, we will discuss the results of trial excavations carried out at this monument during summer 2014.<sup>20</sup>

### Introduction

The triangular fortress was built on a small islet between the forked outlet of the Pavlass River, with one branch running around the western side and a second branch similarly flowed around the eastern side. A narrow artificial channel was then cut along the south-eastern wall, effectively forming a second islet to the south east, upon which a defensive *ravelin* earthwork was constructed. Previous studies of this monument have been mainly focused on describing architectural construction in and outside the fortress, dividing them into phases and trying to date referring construction techniques. The significance of the Venetian constructions were first recognised by Luigi Maria Ugolini, the Director of the inter-war Italian Mission at Butrint. He mentioned the triangular fortress along with other Venetian fortifications: “*a triangular fortress with towers at each corner against the quadratic venetian tower and the castle on the ancient acropolis*” – but adding no further details (Fig.1).<sup>21</sup>

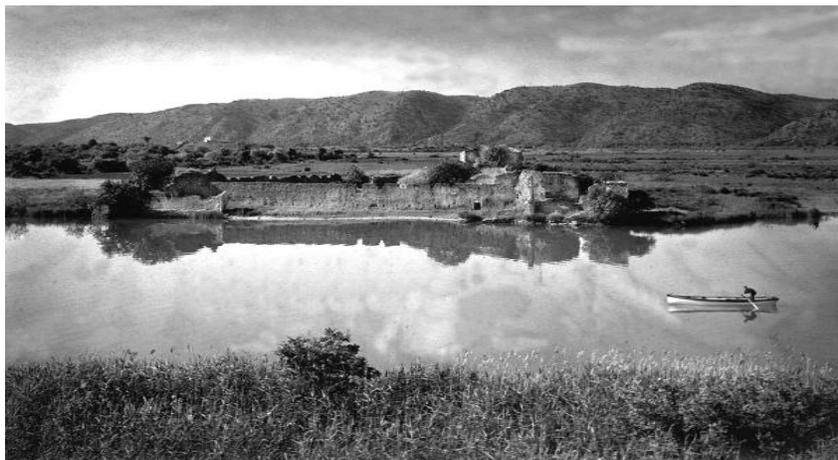


Fig. 1. View of the Triangular Fortress during Italian mission in the interwar years.

<sup>20</sup> I would like to give my generous thanks to Prof. Luan Përzhita for the opportunity he gave me to undertake this excavation in frame of my PhD research. Further, I would like to express my deep gratitude to the Butrint Foundation for funding the field research at the Triangular Fortress in 2014.

<sup>21</sup> Ugolini, Luigi. M. Butrinto: *Il Mito di Enea. gli scavi*. Roma: Istituto Grafico Tiberino, 1937.

During 1970s, the Institute of Monuments undertook a restoration program of fortifications along the Vivari Channel under the direction of Gjerak Karaiskaj. The author identified construction phases with its original shape<sup>22</sup> and placed the monument in the context of historical events.<sup>23</sup> In this material, the author sets out four main construction phases:

First phase 13 <sup>th</sup> -14 <sup>th</sup> century	Construction of the curtain wall and alignment of the foundations found inside the fortress. Two range of firing loops in the lower part of the parapet. This phase was the rectangular tower to the north on the other side of Vivari channel.
Second phase 15 <sup>th</sup> century	Construction of Tower 1 (south tower) and the porthole. In this phase the fortress in equipped with cannons.
Third phase 1537-16 <sup>th</sup> century	Construction of the two other towers both have the same technique and differing from the southern one. Opening of a gateway with the Leon head of St. Mark carved above. In the same phase are the interior constructions and numerous firing loops made of bricks on parapet and other portholes on the western curtain wall.
Fourth phase 17 <sup>th</sup> - 18 <sup>th</sup> century	Additional walls were erected to the west of the curtain wall and thus creating a baily. Ground floor of tower II is out of use and portholes are blocked with same technique as the curtain wall.

*Construction phases of the triangular fortress according to Karaiskaj*

Another important contribution to the assessment of Butrint's fortifications, including Venetian constructions, was conducted during 1994-1999. The aim was to phase the late antique and medieval circuits and to draw some conclusion on their effect on the topography of Butrint. The new information derived from this study further extended the understanding of late constructions in Butrint by adding to the Venetian period other constructions as well as the triangular fortress. In this research, there was also a revision of the Karaiskaj's original layout phase of the fortress by including the south tower.<sup>24</sup>

In 2004, the Butrint Foundation initiated a programme to record and assess the medieval (Venetian) fortifications at Butrint.<sup>25</sup> A geophysical survey was undertaken on the exterior area of the monument by Dave Bescoby using a fluxgate magnetometer instrument (Geoscan FM-36), capable of measuring the very small disturbances in the earth's magnetic field caused by the presence of buried objects. The survey was designed to map any surviving sub-surface wall structures associated with the castle, in order to further understand the historical development of the fortification. The results were satisfactory, although the longstanding technology used in the survey revealed a dense scrub vegetation predominantly of thistles.<sup>26</sup> The geophysical survey revealed a number of surviving buried wall elements relating to former building structures no longer visible. At that time, the two wall alignments to the west were believed to indicate earlier phases of settlement, predating the construction of the castle.

To the limited field research on the monument, other data were added from archives of Corfu and Venice<sup>27</sup> associated with a volume dedicated to the Venetian period in Butrint.<sup>28</sup> As the documentary sources showed, the triangular fortress was the most important construction during the Veneto-Ottoman period in Butrint and the main centre for different activities after the abandonment of the old site.

<sup>22</sup> According to Gjerak Karaiskaj, the first phase was a triangular fort without towers, with the south tower and two other towers belonging to a second phase. Karaiskaj, G. (1976). Fortifikimet mesjetare pranë kanalit të Vivarit në Butrint dhe restaurimi i tyre. *Monumentet* 11, 147-158.

<sup>23</sup> Gj. Karaiskaj, 1976. pp. 147-155.

<sup>24</sup> Andrews, R., Bowden, W., Gilkes, O., & Martin, S. (2004). The late antique and medieval fortification of Butrint. In R. Hodges, W. Bowden, & K. Lako, *Byzantine Butrint: Excavations and Surveys 1994-1999*. Oxford: Oxbow Books.

<sup>25</sup> Due to the suspension of the project for various reasons, the results remain unpublished and in a large quantity, undocumented. Some results were published in Butrint 4.

<sup>26</sup> Bescoby, D. *Geophysical investigation of the triangular Venetian castle at Butrint*, Unpublished report for the Butrint Foundation 2004.

<sup>27</sup> The results shed light to Butrint as Venetian enclave during 16<sup>th</sup>-18<sup>th</sup> century.

<sup>28</sup> Crowson. A. *Venetian Butrint*, 2007.

However, from studies carried so far we have noticed issues relating to the chronology, phasing and the context in which the triangular fortress was built. Given this, the research of the 2014 season included a structural survey of the fortress and opening of four trial trenches aiming to clarify the chronology and phasing of the monument.<sup>29</sup> The trenches were opened at the junction between the curtain wall and tower 1 (south-west), adjacent the southern entrance, and at the interior junction between the northern wall and the northern gate with St. Mark's lion head carved on the entrance (Fig.2).

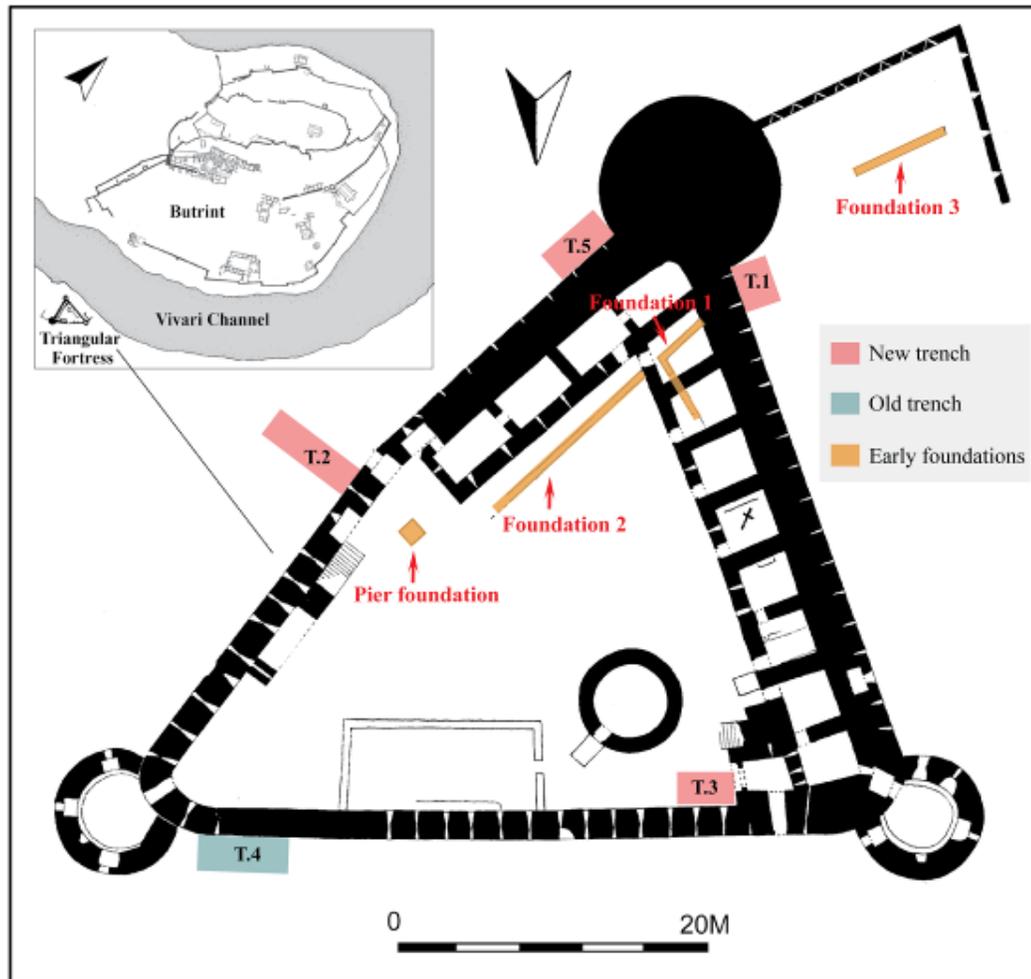


Fig. 2. Plan of the Triangular Fortress, showing the 2014 excavated pits and the re-examined trench to the northeast.

## Results

Trenches 2 and 3 reached a depth of approximately 1.5-1.7m. The foundation of the northern and southern wall was constructed with the same technique as the rest of the upper wall. The stones are placed in random courses and most of them are small in size. The mortar used in the construction is strong and often prevents accurate determination of stone shapes. Both trenches showed that the foundation of the northern and southern curtain wall was built on wooden beams placed in a crossed position (Fig.3). The timber beneath the masonry further supports the idea that the fortress was constructed on a marshy environment. Regarding the type of wood that was used for the base of erecting the masonry, it is believed to be an oak that grows around Butrint.

<sup>29</sup> During the fieldwork, it was decided to open a trench from 2004 aiming to record the stratigraphy and recovering any possible finds.

However, for a more exact result on the type, the wood was sampled by the author for further analysis at the Institute of Applied Nuclear Physics in Tirana.



Fig. 3. Showing beam cross placed on to which the southern curtain wall rises, trench 2.

Trench 2 clarified the relationship between the southern curtain wall and a possible construction of an advanced earthen bastion, *ravelin*, to the south of the main gateway which is observed on several early plans of the fortress (Fig.4). As it resulted, it was not possible to find any stratigraphic evidence of *ravelin* and that of a defensive ditch along the southern wall.<sup>30</sup> Reclamation works carried out in the Vrina plain during 1960-70s may have destroyed the remains of defensive works to the south of the main entrance.

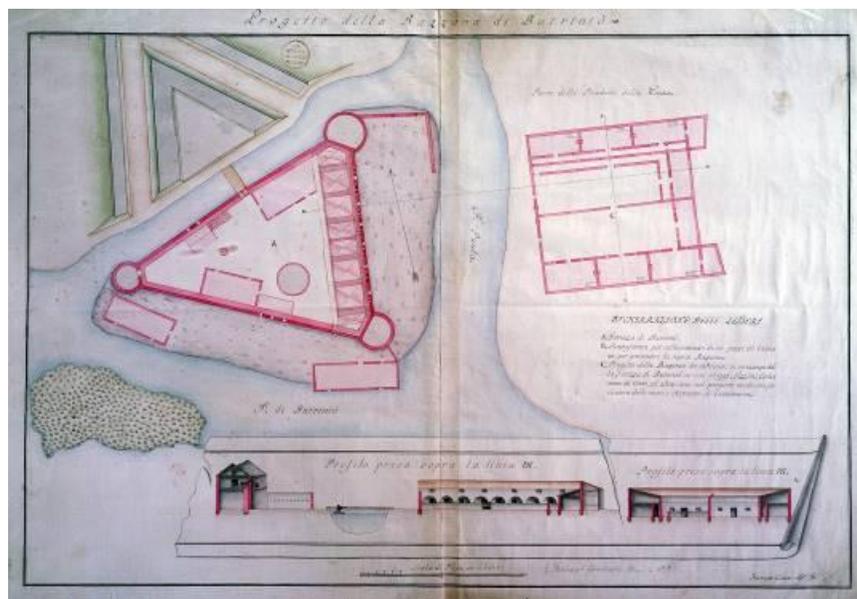


Fig. 4. Plan of the fortress in the 18th century.

<sup>30</sup> The results neither recovered any evidence of a defensive ditch nor of an advanced earthen bastion (*ravelin*) that protected the southern entrance.

Interesting results were retrieved from trenches 1 and 5 that were laid out between curtain wall and tower 1 (Fig.5 ab). They focused in clarifying the layout of the triangular fortress in relation to the southern tower. According to Karaiskaj, the first phase of the construction was a triangular fort without towers, with the southern tower belonging to a later phase.<sup>31</sup> However, Richard Andrews proposed a revision of Karaiskaj's phasing.<sup>32</sup> According to him, the southern tower was keyed in to the western wall suggesting that these two constructions belonged to the original build of the fortification.



Fig. 5a. View of junction between the western curtain wall and the southern tower



Fig. 5b. View of joint between south tower and curtain wall, trench 5.

<sup>31</sup> Gjerak Karaiskaj, 148-149.

<sup>32</sup> Richard Andrews, et. al, 144.

From 2014 excavation results, it was observed that their structural connection was not bonded. From a careful cleaning at the junction point between the two structures it was noted that the tower foundation abuts the western curtain wall, suggesting a later date for the construction of the southern tower in comparison with western curtain wall (Fig. 6).



Fig. 6. Showing the joint point between the southern tower foundation abutting the western wall, trench 1.

Regarding the foundation of the southern tower, the construction techniques did not differ from that of the overlying tower and the western curtain wall. The foundation offsets were built with small and medium limestone blocks, which had been regularly laid. The stones were bonded with strong mortar and followed the rounded shape of the tower. In total, three offsets of the foundation in the southern tower were recorded. However, it is thought that the foundation of the southern tower continued further underneath, but due to the limitation of the ground level, the continuation of excavation was not possible. This further prevented reaching the bottom of the western curtain wall in this area.

In order to complete the documentation of any other surviving structures from early phases, three foundation walls and one base of a column were recorded inside the fortress, while another range of stones was documented outside to the west of it.<sup>33</sup>

<sup>33</sup> After cleaning the inner courtyard of the fort, two foundations mentioned earlier by Karaiskaj and Bescoby were re discovered (foundation 1 and 2). Two foundations along the southern and western wall of the fort seemed to form two enclosed spaces. If we refer to the cadastral maps from Corfu, foundation 1 may have been the base of a small church built with planks, while the foundation 2 has been part of the garrison housing together with another foundations preserved to the north. On the western side outside the fort, a further foundation wall was cleaned. The foundation had an extension east-west and alignment with two rows of stone. It was noted that foundation 3 was of the same build as the courtyard-surrounding wall which Karaiskaj dates as the last phase of construction. Initially an open space with two columns, foundation 3 was used to create an enclosed area in a later date by blocking space between the two columns. This could have been the time when the courtyard-surrounding wall lost its original purpose and was probably used for other activities. If we refer to archival maps of the time, one of the contractors of fisheries could have made up this enclosed space and used it for the enclosure of the fish and shelter of the people who arrive daily with the boats.

## Pottery

The trial excavations at the triangular fortress in 2014, yielded considerable fragments of early modern Italian maiolica ware. From an initial analysis of pottery finds, it was possible to gain information on dates, contacts and relations of Butrint during the late period. The pottery includes, amongst others, fragments of polychrome maiolica *spiralì verdi* from Montelupo (Tuscany) of the 17<sup>th</sup> century (Fig.7).<sup>34</sup>



Fig. 7. Fragments of maioliche a *spiralì verdi* and glazed ware; *monochrome bianche*; and *painted ware* from *Grottaglie* or *Corfu*.

In addition, many pieces of monochrome white glazed wares (*monochrome bianche*) from North Italy of the 18<sup>th</sup> century and various types of later and coarse maiolica (also known as *mezzamaiolica*) from Central Italy of the 17<sup>th</sup>-18<sup>th</sup> centuries were found in Trench 5.

Finally, the pottery finds include *polychrome maiolica* and *painted ware* from *Grottaglie* or *Corfu* of the late 18<sup>th</sup> - 19<sup>th</sup> century.

<sup>34</sup> Joanita Vromm. *Corfu's right eyes, Venetian pottery in Butrint (Albania)*. In *The Heritage of the Serrenissima*. The presentation of the architectural and archeological remains of the Venetian republic. Venecia 2005. 7.

### Other findings

Other findings are coming from all trenches included metal objects. Many of these were iron items used for construction use as nails, keys and latches. The iron objects also included several cannon balls. All metal materials were found in an oxide condition, whilst other non-metal findings included a few pieces of glass (dating to 17-18<sup>th</sup> century), stone cannon balls, as well as two smoking pipes. There was no coin finds.

### Conclusion

The excavation at the triangular fortress clarified various issues related to the chronology and construction phases of this monument. Based on the results, it can be said that the initial phase of the fortress could have been a triangular shape without towers on the edges (Fig.8). Construction of the southern tower seems to belong to a later phase, which referring to the wall's construction technique and material used in both structures, suggests that the southern tower would have been built not too much later than that the southern tower would have been built not much later than the curtain wall and undoubtedly by the same users.

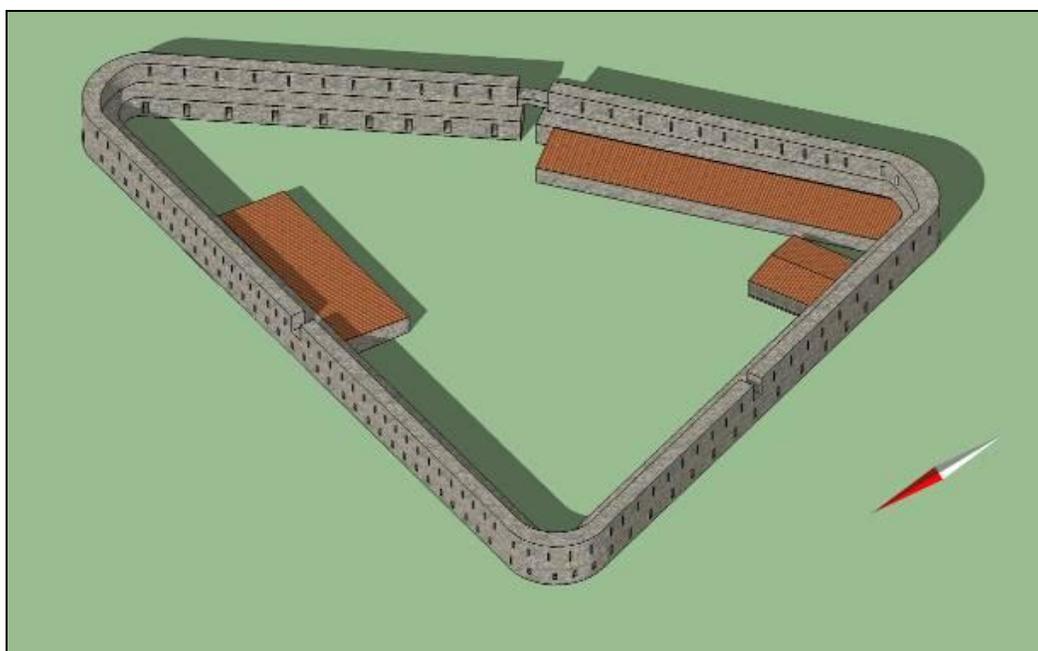


Fig. 8. Hypothetic 3D reconstruction of the first phase of the fortress.

Of four trenches there was no evidence proving that the triangular fortress was constructed on an early foundation. Foundations inside and outside the fortress are undoubtedly later than the vaulted rooms and probably can be associated with the first phase of the curtain wall. The fortress seems to have been built on swampy environment which had oriented the construction of curtain walls. As it was evidenced in Trenches 2 and 3, the curtain walls of the triangular enclosure were erected on wooden beams providing a base that was both flexible and solid enough to support a substantial structure above ground, which would not sink into the swamp.

Ceramics found in the foundations of the curtain wall and beneath the southern tower have similarities and generally dates to the end of the 16<sup>th</sup> century and the beginning of 17<sup>th</sup> century. Consequently, based on these findings, it can be suggested that the triangular fortress is a new construction *ex novo* erected to the south of the ancient site. To support this conclusion there are various archival evidences of 16-17<sup>th</sup> century inferring that

during this time defensive works were being carried out to serve the protection of fisheries.<sup>35</sup> Further, according to Andrea Marmora, the Venetian historian of Corfu, the ancient site of Butrint was officially abandoned as a fortification in 1572<sup>36</sup> though the Venetian retained a garrison in the area. The Venetian undoubtedly continued protecting the fisheries at Butrint after the abandonment of the old site through different contractors. Contractors of the fisheries took on responsibility for defence also because by the 16<sup>th</sup> century the position of the castellan was no longer filled.<sup>37</sup>

However, the defence character of this fortress seems to have been later diminished in the 19<sup>th</sup> century. To west and northeast outer part of the curtain wall were found architectural elements and other finds showing, as the engravings of the time (Fig.9), the erection of a small village at the triangular fortress which served mainly as a point of embarkation for goods (timbers, olive and fish). At this time, the fortress was not certainly a true port but rather a place of embarking local goods from Butrint. Built at the mouth of the river Pavel the area around the fort could have served as a temporary market. Many embouchures market have been spread out along south-eastern Adriatic where commerce carried out near the “the river” or “on the beach” as are demonstrated previously in cases of Shufada, (delta of river Erzeni) Spinarica (river Vjosa outlet) and Villa Bashtova (at the mouth of river Shkumbini).<sup>38</sup>

Finally, the continuous presence of imported wares dating to 16<sup>th</sup>-19<sup>th</sup> centuries from Italy and painted ware of Grottaglie/Corfu suggested that exchanges of the Late Butrint/triangular fortress were still active with north and central Italy, the region of Apulia and Corfu until the 19<sup>th</sup> century despite its political administration remained under the ottomans after the fall of Serenissima in 1797.



Fig. 9. View of the Triangular Fortress in mid-19<sup>th</sup> century, painting by Henry Cook.

<sup>35</sup> For the venetians, Butrint was important for the colonial economy and strategic advantage of having an outpost on the mainland. These two interests became combined in the sense that the contractors of fishery inevitably became closely involved with its defence.

<sup>36</sup> A. Marmora. 1672.

<sup>37</sup> S. Davies. Late Venetian Butrint: 16-18 centuries. In I. L. Hansen, R. Hodges, & S. Leppard, *Butrint 4: The Archaeology and Histories of an Ionian Town*. Oxford: Oxbow Books pp. 281.

<sup>38</sup> A. Ducellier. Fronti detar i principatës së Kastriotëve prej fundit të shekullit XIV deri në vdekjen e Skënderbeut. *Konferenca e dytë e Studimeve Albanologjike : 12-17 janar 1968*. Tiranë: Universiteti Shtetëror i Tiranës.1968, pp. 2-3.

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