

THE CONSERVATION STUDIES OF A DESTROYED NECROPOLIS IN THE WESTERN PART OF TURKEY BY MEANS OF VARIOUS SCIENTIFIC METHODS*

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ABSTRACT:

The Many ancient ruins have been destroyed by means of mankind and natural ways. We also studied one of the samples of them a necropolis in the western part of Turkey. This necropolis is called as Dede Mezari dated back to the II. Millenium years B.C. is located 40 km away from the Afyon province. Following the first studies it was disclosed that % 70 of this necropolis was demolished by the peasants living around the vicinity through illegal excavations. The demolishment was carried out especially by the well-known people of that region. The aim of our study is preserving the rest of the necropolis that host many important findings about the II. Millenium years B.C. of Anatolia. For this purpose, at first the methods of Engineering and architecture were applied. Then topographic map of the region was drawn and geophysics studies were carried out based on that map. Thus, pre-studies before the excavations had been performed successfully. Following the results of topographic map and geophysics studies, the archaeological excavations were started. The heavy destruction emerged after the excavations studies. The recent archaeological materials which were destroyed in a large extent were formed again by means of the conservation and restoration methods. Also the bones of human and animals were analyzed in terms of anthropologic. They were categorized as human and animal bones. Age, gender and the diseases that they were exposed were identified among the human bones. The dating of the bones were disclosed after the bones were carbon analyzed. Then we learnt the date of that necropolis. In this way, despite of much destruction, a necropolis region was emerged by the contribution of the following sciences such as geodesy, geophysics, archaeology, restoration-conservation, chemistry (carbon analysis) and physical anthropology. Also the findings such as baked earthen wares potteries and metal items and etc. were given to the Archeological Museum in order to be displayed. They both contributed to the science world in solving problems and for the local and international tourism. The importance of archeological inheritance to the villagers and their village of the importance of illegal excavation that need to be dealt with strictly. A required information was given to them in order to prevent the following illegal excavations and the importance of preservation of them around the necropolis and the other ruins. Consequently, an archeological inheritance was introduced to the world and avoided them to be perished.

1. DESTROYING THE ANCIENT SETTLEMENTS

Ancient settlement places were destroyed either naturally or by humans especially the destruction by humans are considered the worst due to their desire of obtaining treasures. This desire has directed the people towards illegal excavations since the ancient periods.



Figure 1: The destroyed graves at necropolis

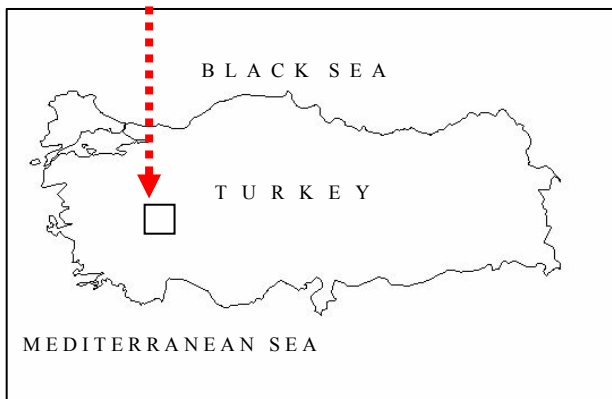
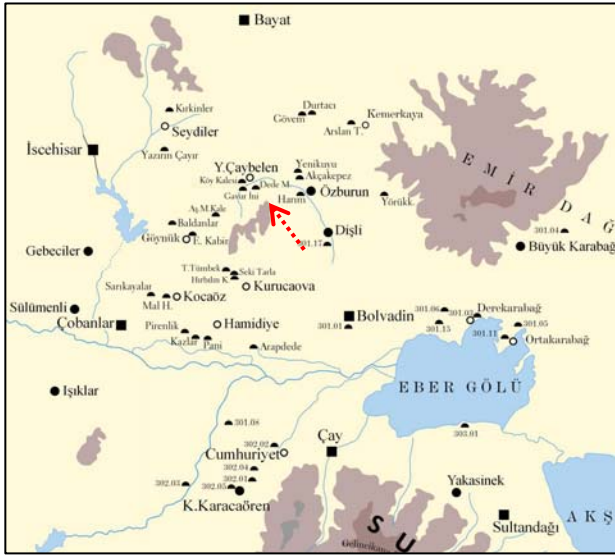


Figure 2: The destroyed graves at necropolis

2. DESTROYING THE NECROPOLIS

In the west of Turkey, a necropolis is located 40 km away from Afyon province (Map). We have carried out the excavations in this necropolis (Fig. 1-2). Following the excavations studies we

have learnt that it was once used as a necropolis for 4000 years.(c.1900-1550 B.C.).This period is called as the Middle Bronze Age covering the Assyrian trade colonization in Anatolia and the emerge of Hittite Civilization (Koçak 2004; Koçak et al. 2007; Akyurt 1998; Bilgen 2005; Emre 1978; Mellink 1956).



Map: Dede Mezarı Necropolis

According to the archeological and geophysical studies and their results carried out by ourselves, the trace of illegal excavations cover 90m length towards northeast-southwest face, 50m length towards the northwest-southeast face. We suppose that there are nearly 320-350 graves here (Fig. 3-4).



Figure 3: Trench G

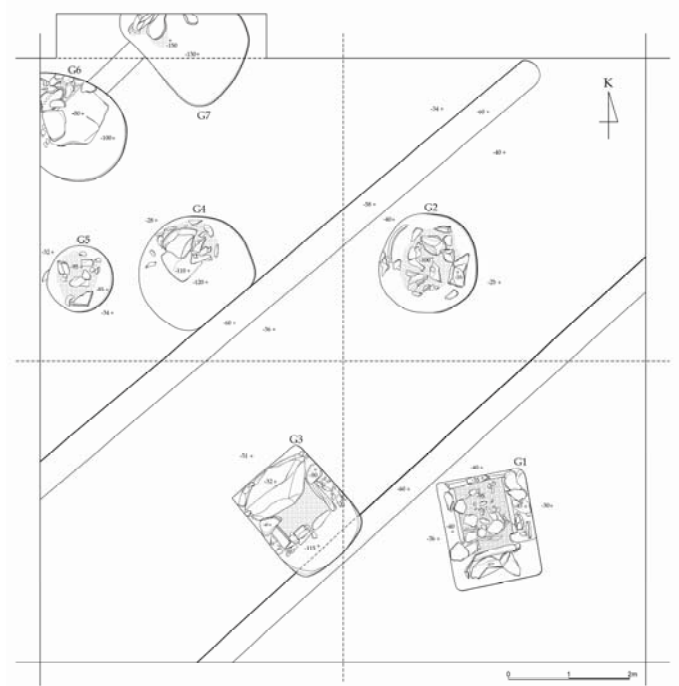


Figure 4: Trench G

The 70 % of the necropolis area were destroyed by the illegal excavators aiming at obtaining the findings in them. The second factor that destroys the necropolis is erosion because the position of the necropolis is on a sloping hillside. The agricultural activity performances carried out over the necropolis are the other reasons that have destroyed the region.

The Dede Mezarı Necropolis is an important necropolis that highlights the II. millenium B.C. Our aim is saving the rest of the findings of the necropolis after the illegal excavation remnants (Fig. 5-6).



Figure 5: A destroyed grave



Figure 6: A destroyed grave

3. EXCAVATION ACTIVITIES

In our studies we have used many different disciplines such as geodetic engineering, geophysical engineering, archaeology, ancient history, restoration-conservation and anthropology (Fig. 7-9). At the beginning of the studies, the methodologies of the engineering and architecture disciplines were applied and the topographic map of the necropolis was drawn. Then geophysics studies were performed according to that map. So the preliminary studies of the excavation region were then completed (Koçak 2004; Koçak et al. 2007).



Figure 7: Geodesy activities



Figure 8: Geophysics activities



Figure 9: Restoration activities

The destruction of the region emerged during the excavation studies. The destruction has started nearly 60-70 years before and it has been going on without interruption up till the present day.

The basic aim of our study is preserving the rest of the findings remained from the illegal excavations. Hence, the terra cottas and bone findings are recorded by scientific methods.

Small wares (potteries etc.) were destroyed dramatically in this pitch. Our first aim is restoring them similar to its original patterns. After collecting these materials completely, they were then sent to the laboratories for the restoration and conservation processes under the management by experienced restoration staff.



Figure 10: Restoration activities (A2)



Figure 11: Restoration activities (C1-2)



Figure 12: Restoration activities (B1-1)

The bone findings were analyzed by the anthropologists then allocated according to their species (humans or animals bones). Then the age, gender and the illnesses they had were revealed from the bones of human beings. So we have tried to learn the life conditions of a community lived nearly 4000 years ago. Some samples of the bone findings were sent to the *Beta Analytic Radiocarbon Dating Laboratory* in order to be analyzed of their exact period of that necropolis. We have observed that the carbon dating results and the analogy method results are similar.

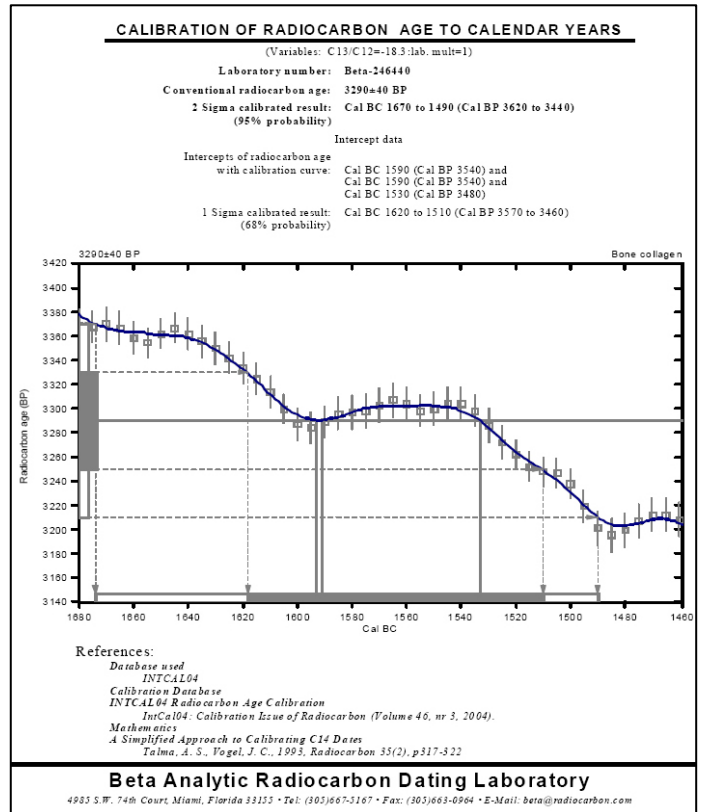


Figure 13: The result of laboratory



Figure 14: H3 grave bones

4. CONCLUSION

Most of the excavation region was destroyed. Even the destroyed findings have helped us to reach important results. This case shows us how to analyze the archeological materials even though they are merely the remaining from a completely destroyed item. The results we have obtained after the restoration studies and the bone findings contribution from the date indicated this situation. The restored and undamaged items were given to the Afyon Archeology Museum to be displayed. In this way, all of the items are putting into a position that can contribute knowledge for the science world and tourism sector. During the excavation studies, we have informed the importance of cultural heritage to the locals living there. Also we have advised the locals who had indulged in illegal

excavations that have caused the destruction of the country history and their faults.

The most permanent result of our study is our publications. In these publications, we have introduced a partly destroyed necropolis to the academic world and enlighten the Middle Bronze Age of the Anatolia with the most important documents.

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