

**Recycling and Secondary Use:  
Towards the Functional Analysis of the Archaeological Artifacts and Features**

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**Summary**

According to the archaeological theory, there is a difference between recycling and secondary use (e.g. Schiffer 1987, Ellison 1999, Ellis 2000). The variable definitions of recycling include either broadly modification and reuse or remanufacturing and reuse of artifacts which secondary function is different than the original one. Secondary use means change in the function but not in the morphology of the objects (Ellis 2000:43).

Balkan Prehistory gives numerous instances for testing both concepts against a rich archaeological material (Bailey 2000, 2005; Nikolova 1999; Sekime & Kamuro, 1998, 1999, 2000; Kamuro, 2006). Numerous fragmented pottery has been discovered in the prehistoric cultural layers that was obviously secondary used in a series of specific activities during the life of the villages. In particular, the pottery appears in features of house debris that underlie some house floors (e.g. Dubene-Sarovka and Dyadovo, Early Bronze Age). We will propose that the fragmented pottery had complex functions being also a record of recycling activities of the ancient people. It was used as a sustainable material and integrated both the village activity and a concept about the ancient environment. It remains unclear what was the awareness of the archaic people about processes that today we describe as recycling and secondary use.

As in the case of the Neolithic garbage pits, the prehistoric villages were used for production and reproduction of material culture, some components of which could have been visibly changed and re-incorporated with a different function. This kind of recycling possibly integrates the modern characteristics of recycling and the secondary use.

## RECYCLING AND SECONDARY USE

### **Introduction [Slide 2 – see the text in the slide]**

**[Slide 3]** Prehistory is the longest period in human history. One of the reasons this period to be so long was that the people elaborated successful reproduction strategies that obviously satisfy their everydayness and made them live as communities without willing for increasing the differences that we usually describe as social inequality. **[Slide 4]** Then, studying in depth the everydayness of prehistoric people helps not only to know better their material culture but also their way of thinking and their motivations.

Reusing the pottery is one of the most popular prehistoric social practices. There are many ways in which we document this activity. Theoretically, the problem can be defines about whether there is a difference between recycling and secondary use in Prehistory (e.g. Schiffer 1987, Ellison 1999, Ellis 2000). The variable definitions of recycling include either broadly modification and reuse or remanufacturing and reuse of artifacts which secondary function is different than the original one. Secondary use means change in the function but not in the morphology of the objects (Ellis 2000:43). None of these frameworks include the cases in which we do have reuse of pottery with the same function. Such reuse is the best documented by holes in the walls of the vessels which obviously were connected with a cord.

Using empirical data from Prehistoric Balkans we will focus on three strains of secondary/recycling use of pottery in Prehistory of the Balkans and will try to specify the role of the fragmented pottery in the everyday life of the prehistoric communities.

### **Fragmented Pottery in the Villages**

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**[Slide 5]** Balkan Prehistory gives numerous instances for fragmented pottery as one of the richest archaeological material discovered in the cultural layers of the prehistoric villages (Bailey 1999, 2000, 2005; Nikolova, 1996, 1999). In particular, the pottery appears in features of house debris that underlie some house floors (e.g. Dubene-Sarovka and Dyadovo, Early Bronze Age).

### **[Slide 6]** *Strain 1*

This sort would be with least defined functional characteristics. We include the fragmented pottery that has been discovered in the cultural layers without specific function. Usually the pottery has been attributed to the underneath layer. But the fact that for instance in Early Bronze layer can be discovered even Later Copper fragmented pottery show that the character of the pottery is complex and cannot be connected directly with the stratigraphy. Most popular case is with the pottery from Rachmani pottery at Pevakkai Mogula, which was described to Early Helladic period (Weisshaar, 1996).

. In Bulgaria beyond Later Copper fragmented pottery in the Early Bronze Age we have also instances of Neolithic pottery in Early Bronze Age layer (Vesselinovo) (Nikolova 1999: 32 and references cited there).

There are many ways to explain the earlier pottery in later layers. It could come by digging ditches, or taking soil from the periphery of the village to establish new level of the new village or for partial renovation. In the case of Dubene, it is documented a Late Copper Age village in the south part of the site (Nikolova 1999: 28), so there are no reason not to connect the Later Copper shards discovered in the Early Bronze Age levels with that village. Their amount is not considerable, so the best explanation would be

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probably to connect them with the taking soil from the periphery of the village for establishing of new level and partial renovation.

However, the fact that we have these shards in a minimal quantity shows that the intensity of the fragmented pottery from the same period to which belong the covered village level was not accidental, but purposeful. It has been offered in the specialized literature that the pottery was used because of the opportunity to absorb water.

The rain was an extremely huge problem in Prehistoric village. Because of the wattle-and-daub constructions in the Balkans, the rain and wet damaged the houses by stimulating mold and decay if the wood. We have many cases of partial renovations of the houses and one of the reasons could be the damaging effect of rain. There were searched successful social strategies and one of them was by increasing the denivelation of the village from north to south (Катинчаров et al. 1995: Annex 1). Some of the houses were also fired and rebuilt on the same place (Gheorghiu, in print, with the references cited there) and we may not in all cases document these social activities.

Then, our understanding is that the fragmented pottery was purposefully used by nivelation of the cultural levels and by renovation as a sustainable material.

### **[Slide 7** *Stain 2*

This sort would include spots and stripes that may indicate paths in the villages. Interestingly people used on the tell mostly pottery and stone was an exception - see e.g. Dyadovo (Sekime & Kamiro 2000: Pl. 5). This fact can be explained by the character of the cultural layer, which was in some cases amorphous, as well as with the hydroabsorbing function of pottery.

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### **[Slide 8]** *Strain 3*

Typical prehistoric mode is the fragmented pottery, which was placed on the floors of features like hearths and oven. The pottery could be from one or more vessels (in some cases luxury) or just secondary used shards. It is not clear in our opinion whether in the cases of whole or almost whole vessels they were purposefully broken and layered at the base of the equipments. Numerous instances of ceramic floors of ovens were published from Dyadovo (e.g. Sekine & Kamuro, 1998, 1999, 2000, 2006).

### **Conclusions**

**[Slide 9]** Based on the above instance we can formulate the hypothesis that the prehistoric fragmented pottery had complex functions being also a record of recycling activities of the ancient people. In Prehistory was not probably developed the cognitive understanding of sustainable materials as in Present (e.g. Blackburn, 2007). But our exemplary stains 1-3 are the empirical base to propose that the fragmented pottery was used a sustainable material and it integrated both the village activity and a concept about the ancient environment. **[Slide 10]** It remains unclear what was the awareness of the archaic people about processes that today we describe as recycling and secondary use. I believe that they have a syncretic view.

The prehistoric villages were used for production and reproduction of material culture, some components of which could have been visibly changed and re-incorporated with a different function. This kind of recycling possibly incorporated the modern characteristics of recycling and secondary use.

### **References [Slides 11-15]**

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**[Slide 16]**