
Off-Site Environmental Sequences Around Aşikli H'oy'uk Ppn Site (Central Anatolia, Turkey): A Contribution to 14C Chronology of the Site Occupation on the Temporal and Spatial Scales

Catherine Kuzucuoğlu^{*1,2}, Mihriban özbaşaran , and Jean-Pascal Dumoulin

¹Laboratoire de Géographie Physique, CNRS, – Université Paris 1 CNRS-INEE, Université U-Pec – 1 Place A. Briand 92915 Meudon cedex, France

²Laboratoire de Géographie Physique (LGP) – Université Paris 1, CNRS, Université U-Pec – CNRS, 1 Place A. Briand 92195 Meudon, France

Abstract

Aşikli H'oy'uk is a Neolithic site in central Anatolia. It is positioned on the valley floor of the Melendiz river in western Cappadocia (Turkey) (Kuzucuoğlu, 2013). The site has been almost continuously occupied from ca 8400 (start of Level 5) to ca 7350 cal BC (last but eroded building remains of Level 1) (Özbaşaran, 2011; Özbaşaran et al., 2012). The archaeological accumulation below the eroded summit of the mound ("h'oy'uk") is ca 14 m thick. Level 5, equivalent to the PPNA way of living of the Levant and dated ca 8400-8300 cal BC, is rooted in Epipalaeolithic culture. Levels 4 to 2 are PPNB in Levantine terms and are dated between ca 8300 to ca 7400 cal BC. Contacts between Levels present discontinuities which are mostly archaeological (mound slopes, irregular topographies, remodeled surfaces, digs, pits) but may be natural (erosion) such as over the truncated top of the mound. Continuity in the way of life is however significant.

The latest Aşikli material culture has been also excavated at Musular, a satellite site specialized in butchery and processing of hunted animals (Özbaşaran et al., 2012). Dated ca. 7500-7300/7100 cal BC), this site is located on the other side of the river, on top of a rocky terrace out of reach of the river dynamics constrained lower in the valley. Ca 7100 cal BC, the Musular site is abandoned, while the Aşikli site had been abandoned earlier. In this context, we performed a series of:

- 4 off-site cores: in 2010 (1 exploratory core), 2011 (1 core) and 2014 (2 cores) in the area between the h'oy'uk and the rock slope bordering the valley to the East;
- 2 off-site sections (1 dug pit and 1 slope section) opened in 2012 in the same area;
- 1 in-site dug pit (2015) below the earliest human structures (earliest subterranean houses and open-air activity areas).

On the basis of our results, we propose to discuss environmental (ie non-archaeological) causes for some difficulties in confronting 14C and cultural chronologies at the site. The

*Speaker

presentation will focus on two subjects:

1) In the lowest archaeological layers at the mound, two ^{14}C dates from charcoals give ages of $\text{ca } 8970 \pm 220$ and 9010 ± 200 cal BC. Such ages are clearly older than the emergence of sedentism at Aşıklı (Stiner et al., 2014). Results from the core studies will propose an answer to the question: what kind of environmental matters may have caused the discrepancy between the $\text{ca } 9000 \text{ cal } \pm 220$ BC dates obtained and the expected 8400 cal BC age (eg. for an Epipalaeolithic occupation)?

2) During the 2nd half of the 8th mill. BC, there were relationships between the crowded Aşıklı mound in the eastern side of the river and the satellite site on the terrace on the western side of the valley. There is indeed a cultural continuity between the two sites, one ending (Aşıklı), the other one overlapping for ca two centuries with Aşıklı and continuing for two more centuries after the end layer of Aşıklı. Thanks to their space distribution around the site, our cores give a new light on these relationships. These new data may modify former interpretations, such as abandonment of Aşıklı ca 7350 ka cal BC and relocation of the site and population elsewhere in the valley. We think that they even transform our vision of the success of Aşıklı just before the abandonment of the area by the Neolithic population.

Keywords: ^{14}C chronology, central Anatolia, Pre Pottery Neolithic, Asikli, Environment