DATING TROY III-V

Update on Results

In 2020 the AIA generously awarded a grant of \$8,000 from the Richard C. MacDonald Iliad Endowment for Archaeological Research to fund ¹⁴C-AMS analysis of animal bone samples collected in 1937 from the Troy excavations conducted by Carl Blegen and the University of Cincinnati.

The project is designed to test whether a hypothesised gap of c.170 years exists in Blegen's sequence between his Troy III and Troy IV periods and whether the dates for his Troy IV and V periods are the same as those of the Troy IV and V strata identified in the recent Tübingen excavations.

In 1937 N-G Gejvall collected c.6,500 specimens. The collection, preserved in Stockholm, has recently been re-housed in the Osteo-Archaeological Research Laboratory where it has been comprehensively re-ordered by Professor Jan Storå and co-ordinated with Gejvall's original documentation. A list produced by Gejvall also exists in the Troy Excavation Archive in Cincinnati (Fig. 1). This list identifies and summarises the specimens from each context, and includes annotations by the excavators which show to which phases they assigned them (Fig.2). This has made it easy to shortlist potentially useful specimens for the dating of almost all phases within Troy IIIa – VIa.

The Coronavirus pandemic prevented the project staff from visiting Stockholm in person and caused some initial delay. The final selection was very kindly carried out by Professor Storå, and 22 samples were submitted in December to the Tandem Radiocarbon Laboratory, Uppsala (Fig. 3).

We received the results in late May 2021. A full understanding of these will only be achieved once they have been subjected to appropriate stratigraphic and mathematical analysis and optimisation. But based on single-date calibration using CALIB software a preliminary assessment suggests a considerable amount of re-deposition of older material in these phases. However there are 7 samples which may have yielded usable dates. Two from Troy III appear to fall in the expected range (c.2,300-2,200 BC), and a date for Troy VIa appears consistent with recent proposals to date the beginning of this period to c.1750 BC. Two samples from each of Troy IVa and Troy Va present possibly contrasting solutions for these two phases, in each case one appearing compatible with the conventional chronology and the other with the existence of a III/IV gap.

At this stage, therefore, the results appear somewhat ambivalent. But enough funding remains to permit testing of a further 4 samples. The most critical issue is the uncertain date for the beginning of Troy IV. With a view to securing more information on this, 4 specimens have now been submitted from phases IVa-c. Once these results have been received the entire suite of dates will be studied more thoroughly.

We are very grateful to the Department of Classics, Cincinnati University, for permission to study the bones and for providing copies of much material from the Troy Archive, also to Professor Jan Storå and the Osteo-Archaeological Research Laboratory, Stockholm, for their generous collaboration.

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