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Underneath Ranefer's floors - urban environments on the desert edge

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ABSTRACT

The city of Akhetaten, modern day Amarna, was founded by the monotheist pharoah Akhenaten as his new capital ca. 1353 BC, and abandoned within about 25 years. Much of the site has been excavated over the past century and few deposits remain undisturbed. In one house, however, that of the king's chief charioteer, Ranefer, rebuilding had sealed occupation debris beneath the final mud brick house floors and in the desiccating conditions of the desert, these preserved extensive insect faunas, which for the first time provide detailed data on living conditions and pest infestation in a major pharaonic urban centre. Pests of stored products include the grain weevil, Sitophilus granarius, the lesser grain borer, Rhizopertha dominica, and flour beetles, Tribolium castaneum, as well as more general pests, such as the lesser mealworm, Alphitobius diaperinus, and the biscuit beetle, Stegobium paniceum. Flies include the house fly, Musca domestica, and the puparia of a flesh fly, Sarcophagidae, burrowed vertically into the mud-brick floor in a room corner, perhaps beneath abandoned offal or meat. The taphonomy of the insect assemblages would suggest that much consisted of material dumped into the house plot, either during a phase of abandonment or to level up the area before the later house, that of Ranefer, was constructed. Trampled surfaces within the midden, often consolidated with desert sand, indicate foul damp conditions and also imply that the process was intermittent. Living conditions in the city of Akhenaten are likely not to have been as salubrious as contemporary tomb paintings might suggest.

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1. Introduction

Despite a long history of the study of plant and animal remains from archaeological sites in Egypt (e.g. Boessneck, 1988; Vartavan and Asensi Amoros, 1997; Panagiotakopulu, 2001), there has been little attempt to reconstruct the detail of urban living conditions, and there are perhaps few places where terminal occupation deposits remain on the floors of abandoned houses. Amarna, near modern Minya in Middle Egypt (Fig. 1), is the site of the short-lived capital of the New Kingdom heretic pharaoh Akhenaten and his successor Tutankhamun. The limited period of occupation, ca. 1353-1325 BC, the existence of a rich literary record, extent of archaeological investigation and the excellent preservation of organic remains in the desiccating desert environment make Amarna a unique site for many aspects of palaeoecological research (cf. Kemp et al., 1994). The scale of excavation of the main city (Fig. 2) since the late nineteenth century has, however, left few places where sealed sediments remain, but T. E. Peet's report of

* Corresponding author. E-mail address: eva.p@ed.ac.uk (E. Panagiotakopulu). work in the early 1920s (Peet and Woolley, 1923) identified one site, towards the south-western limit of the central part of the city, where deposits were preserved beneath a later house floor (Fig. 3). Re-excavation in 2002–2003 allowed the cutting back of Peet's sections and the recovery of samples for insect and plant macrofossil analysis, as well as the elucidation of further details of the plans of the two phases (Fig. 4; Kemp and Stevens, in press). Archaeoentomological research undertaken on the deposits from the house provides a rare insight into the life of the house and ultimately the life of Amarna itself, which can be compared with the evidence emerging from recent cemetery excavations (Rose, 2006).

The short period of occupation of Amarna lay within the lifespan of mud-brick structures (cf. Kemp, 1995, 2000), and few of them provide clear evidence of extensive rebuilding. In 1921 T. E. Peet, excavating in the central part of the city on behalf of the Egypt Exploration Fund (Peet and Woolley, 1923), was intrigued by a house which, despite the short period of occupation of the city, clearly had two phases. The later house (numbered N49.18) belonged to Ranefer, identified from inscriptions in the plaster on his door posts, as the pharaoh's overseer of stables (Peet and Woolley, 1923), and it had been constructed on the demolished remains of a previous house (N49.58), itself partly built into





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Fig. 1. Location map of Egypt.

a shallow pit in the desert surface. Changes which took place in the nearby court and granary areas appeared contemporary with the construction of the new house. An earlier excavator of Amarna, L. Borchardt (1914), had disputed Akhenaten's own statement on boundary stele that the city lay on a pristine site, and Peet realised that Ranefer's house offered the chance to test this. He cut two trenches through the floors of the later house. One, in the North Loggia, Room 1 (Fig. 4), showed over a metre of deposits sealed beneath the plastered mud-brick floor. He recorded up to seven different surfaces beneath the floor, and three of these, labelled A, B and E, appeared to be continuous across the excavated area. Observing that the depth of an archaeological stratum is not related to the duration of the time of accumulation, he concluded that the two phases of the house both belonged to the Amarna period, "The mere finding of earlier walls beneath those of a house of Akhenaten's date proves nothing, and unless Borchardt can produce from these earlier buildings pottery or other objects definitely datable to an earlier period, he is not in a position to challenge the king's own claim to have founded his city in a "clean place" (Peet and Woolley, 1923, 9-15).

Ranefer may have built his new house on a slight platform as a mark of his status, but more important from the palaeoecological viewpoint is the fact that the older structure (N49.58) had been partly covered with material other than its own demolition debris. Peet's workmen had dug two small pits through this (Fig. 4), but



Fig. 2. Location map of Amarna showing the location of the House of Ranefer.

elsewhere floors remained intact sealing the deposits. In 2002–2003, Peet's sections were cleaned back and the house re-excavated for detailed planning. With the exception of material from the floor in a corner of room 1, the material discussed here derives from samples from beneath the floors in rooms 1, 5, 6 and 7.

In the sections of the trench cut through the house floor and accumulations beneath, down into the underlying sandy gravel of the desert surface, it was evident that there were several irregular trampled surfaces, the 'floors' of Peet (Peet and Woolley, 1923), within layers of debris, rich in organic remains, sand, gravel and broken mud brick. Anthropogenic sediments extended deeper than the contemporary desert surface in Peet's trench, and indicated that the earlier house had been built into a pre-existing feature. a shallow pit, probably for the extraction of building materials, dug before the city had extended this far to the south-east. A hardened surface of mud and gravel, presumably related to the construction of the first phase house on the site, but there was little evidence of contemporary floors, the mud brick of which had been largely grubbed out for re-use in a later structure. It is difficult to be certain whether there was a significant period of abandonment before the later house was constructed, and whether the overlying material relates to casual dumping of refuse into an abandoned plot, something which can be seen on deserted lots and derelict houses today in Minya, or to the deliberate import of debris from a range of sources to make the platform into which the later house was constructed. The frequency with which deposition was interrupted by clean gravel spreads, often with a hardened surface, due to the trampling of a wet or at least damp surface, suggests that Download English Version:

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