

British Mission to Tell el-Amarna

**Study season on material
excavated at M50.14-16
Spring 2020**



Anna K. Hodgkinson

March 18, 2020

Report on a study season on material excavated at site M50.14-16 at Amarna

Anna K. Hodgkinson

A study season was carried out between the 29 February and 16 March 2020 on material excavated at the domestic workshop site M50.14-16 at Amarna in the fall of 2014 and 2017 (Hodgkinson 2015 and 2019) by Dr. Anna K. Hodgkinson (project lead, Freie Universität Berlin). Early work at this site had been carried out in 1922 by C. L. Woolley (see Peet and Woolley 1923, 19). The work was carried out in collaboration with the Egyptian Ministry of Antiquities and the local inspectorate, to whom the team is most grateful.

1) Object documentation

The study season focussed on the illustration of the small finds excavated at M50.14-16 in 2014 and 2017, in particular those related to glass-working and objects made from faience. The total of 147 objects drawn during the 2.5 week season included the following:

- 57 Glass-working related items (glass rods, other working pieces, ingot fragments and inlays);
- 24 glass beads (wasters and finished beads);
- 62 faience objects (beads, amulets, ring fragments and tiles);
- 2 clay objects (female figurine: see title image (by A. Mesli, reg. Number 43242) and a jar stopper, reg. Number 43208);
- 1 bone object (probably related to textile-working, reg. Number 43266);
- 1 stone object (amulet, reg. Number 40701).

All objects except the jar stopper (which was drawn by J. Friedrichs) were illustrated by A. Hodgkinson.

Contents of the following trays were illustrated:

Tray number given by MSA	Tray number project	Contents
112/2	19	TA-MC 14 #12 Glass: beads, fragments, ingots
112/3	20	TA-MC 14 #12 Small finds: faience, metal, worked agate, worked bone
112/1	22	TA-MC 17 #12 Small Finds: metal, faience, glass, industrial, textile, modern, worked bone

Table 1: numbers of trays and object categories studied.

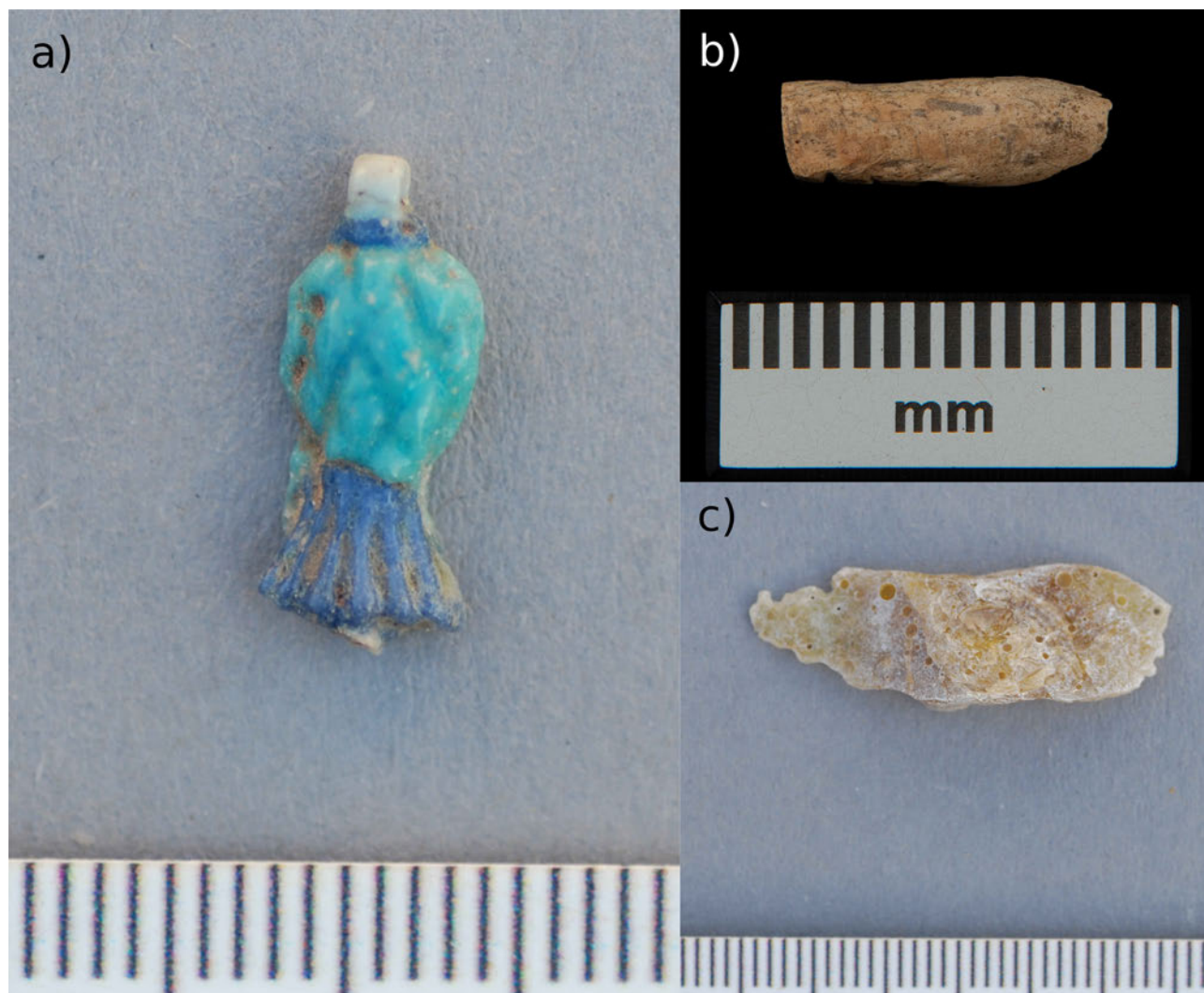


Figure 1: a) Faience collar pendant in the shape of a corn flower (reg. Number 41961), b) bone object (reg. Number 43266) and c) glass fragment (reg. Number 40648) (photos: A. Hodgkinson).

2) Experimental manufacture of glass beads

An experiment was conducted on the 14.03.2020 by A. Hodgkinson and M. Bertram, which belongs to a series of experiments concerned with the reconstruction of ancient domestic glass bead manufacture at Amarna (Hodgkinson and Bertram 2019). Due to the lack of depictions of glass-working activity in ancient Egypt, these experiments have been based on metal-working scenes, in particular those found in the Middle Kingdom rock tombs at Beni Hassan (e.g. the tombs of Amenemhat, Baqt and Khety at Beni Hassan, which show the use of blowpipes and small fireplaces (Newberry 1893 and 1894).

For this experiment, a modern metal bowl was used, which contained the fire, and which was placed upon a set of bricks in order to improve access. Wood fuel was used, which consisted mainly of acacia wood; no charcoal was used. One modern copper blowpipe was operated in order to ventilate the fire, and a modern bellow was connected to this to decrease the strain on the participants' lungs.



Figure 2: A glass bead being made and manipulated (photo: P. Docherty).

The experiment, which was carried out over a course of 3 hours (16:40–19:40), achieved a focussed flame with a maximum temperature of 940° C. This was a result of the careful stacking of fuel and the strategic placement of the blowpipe. A series of glass beads was made after c. ¾ hours, and, in contrast to previous experiments, the first beads were not affected by fly ash, presumably because the wood had not yet produced as much ash at this stage. Therefore, it can be assumed that beads were made not long after the fire had been built.

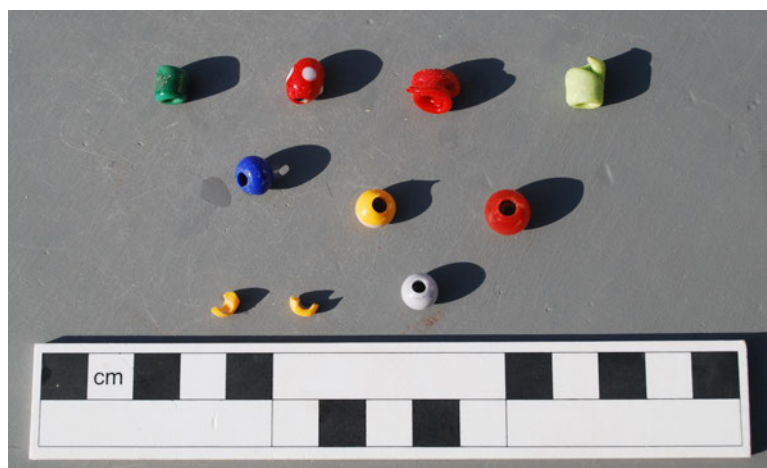


Figure 3: Glass beads made during the experiment (photo: A. Hodgkinson).

3) References

Hodgkinson, Anna K. 2015. Archaeological excavations of a bead workshop in the Main City at Tell el-Amarna. *Journal of Glass Studies* 57, 279–284.

Hodgkinson, Anna K. 2019. Preliminary Report on the work undertaken in the Main City South at Tell el-Amarna 7 October – 2 November 2017. *Journal of Egyptian Archaeology* 105:1.

Hodgkinson, Anna K. and Bertram, M. 2019. Experimental manufacture of glass beads. Amarna Project. PDF report, available on the website of the Amarna Project: <http://www.amarnaproject.com/documents/pdf/Experimental-bead-making.pdf>

Newberry, Percy E. 1893. *Beni Hasan Part 1*. Archaeological survey of Egypt 1. London: Egypt Exploration Fund.

Newberry, Percy E. 1894. *Beni Hasan Part 2*. Archaeological survey of Egypt 2. London: Egypt Exploration Fund.

Peet, Thomas E. and Woolley, C. L. 1923. *The City of Akhenaten. Part I. Excavations of 1921 and 1922 at El-'Amarneh*. EES Excavation Memoirs 38. London: Egypt Exploration Society.