THE NEUBAUER EXPEDITION TO ZINCIRLI: THE FIELD SEASONS OF 2012 AND 2013

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The Oriental Institute's Neubauer Expedition to Zincirli in Turkey, which is directed by David Schloen, began in 2006 and completed its eighth consecutive summer field season in August 2013. For two months each summer, a large multi-national team digs at the site with the assistance of workers hired from local villages. Zincirli (pronounced "Zin-jeer-lee") is the modern Turkish name of the 40-hectare (100-acre) ruin mound in the Gaziantep province of

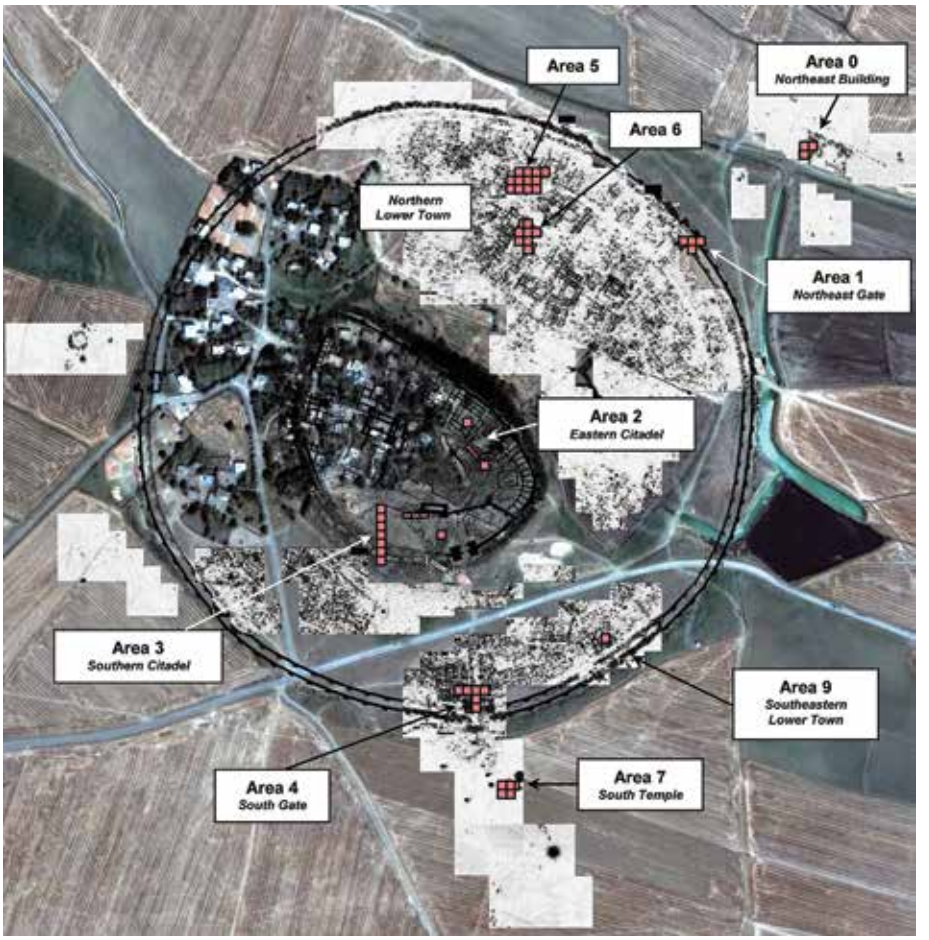

Figure 1. Excavation areas at the site of Zincirli in Turkey, where the Oriental Institute's Neubauer Expedition has been working since 2006. The 10 x 10-meter excavation squares are shown in pink, superimposed on a plan of the Iron Age city walls, which in turn is superimposed on a satellite photo of the modern site. Buried buildings detected by a geomagnetic survey are shown in black and white

southeastern Turkey that contains the remains of the Iron Age city of Sam'al — the capital of an Aramean kingdom that flourished from about 900 to 700 BC and then became a province of the Neo-Assyrian empire. This archaeological project is made possible through the generous financial support of the Neubauer Family Foundation and has also received substantial funding from the National Endowment for the Humanities, the Social Sciences and Humanities Research Council of Canada, and the Wenner-Gren Foundation. The field seasons of 2012 and 2013 were devoted to large-scale excavations in several different areas of the site (fig. 1).

The 2012 Season

The 2012 field season at Zincirli took place from August 20 to October 13 with an academic staff consisting of fifty-three archaeologists and archaeology students, ranging from undergraduate beginners to professionals with decades of experience. In addition, we hired more than seventy workers from local villages. We excavated a total of 1,200 square meters in six different locations on the site, continuing the work begun in earlier seasons and expanding into new excavation areas. The largest subgroup of the expedition staff were the field supervisors who supervised the digging and recorded the finds. This subgroup included thirty-four archaeologists and archaeology students at various stages of their studies. The other main subgroup of academic staff were the specialists who examined and analyzed the finds, including four pottery specialists, one object registrar, two illustrators, one photographer, one object conservator, one animal bone specialist, one stone tool specialist, and one surveyor. We also employed a Turkish camp manager and a cook to take care of housing and feeding our large team. We were able to recruit an excellent multi-national team from several leading universities in the United States, Europe, Israel, and Turkey (e.g., the University of Chicago, Johns Hopkins University, Cambridge University, Free University of Berlin, University of Pisa, Tel Aviv University, Haifa University, and Bilkent University in Turkey). The project team included fifteen Americans, fifteen Turks, seven Italians, five Germans, three Israelis, three British, one Canadian, one French, and one from the Netherlands.

Our excavations in 2012 were mainly focused in Areas 5 and 6 in the Northern Lower Town; in Area 3 on the Southern Citadel; in Area 2 on the Eastern Citadel; and in Area 4 near the South Gate of the ancient city (fig. 1). In these excavation areas we extended and deepened the exposures achieved in previous seasons and found many more walls, floors, and artifacts dated to the latest phase of Iron Age (ca. 730 to 600 BC). One of the most interesting discoveries was the foundation of a well-built temple in the south-citadel area in Area 3 (fig. 2). It was mostly empty and the statue of the god was missing, so we do not know who was worshipped there. But now we understand much better a few artifacts that were found in an earlier excavation season in the same area, especially a stone offering tray decorated with carvings of rams' heads and tails (fig. 3). This tray showed evidence of burning, showing that it was used in sacrifices to the god who was venerated in this temple.

In other areas of the site, a number of interesting small artifacts were recovered, such as a Neo-Assyrian bronze brooch shaped like a hand (fig. 4), which was probably worn by an Assyrian soldier and by its style and shape demonstrates his cultural affiliation. But the most important discovery, in terms of our understanding of ancient history and the economic and social structure of Iron Age kingdoms, is what we did not find. Contrary to our expectations, deep probing in various areas of the site during the 2012 season failed to detect any architecture built earlier than about 750 BC. There were many buildings constructed in the final

Figure 2. Temple foundation in Area 3 (shaded in blue; the eastern half is unexcavated)

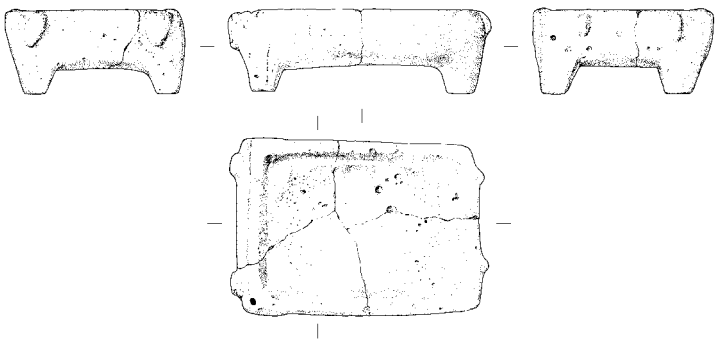

Figure 3. Stone offering tray decorated with rams' heads and tails

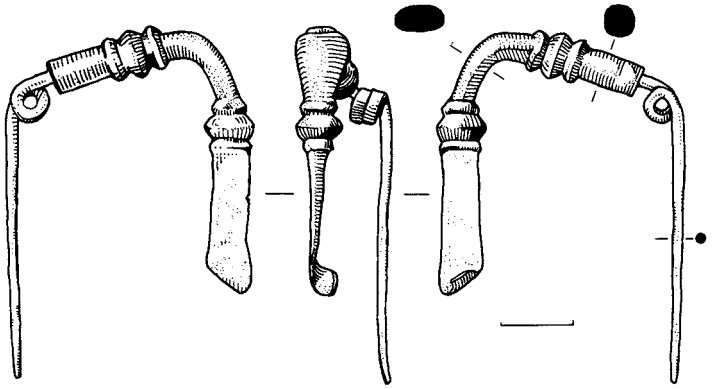

Figure 4. Neo-Assyrian fibula (brooch) in the shape of a hand

phases of the city's life after 750, as shown in our geomagnetic survey, which revealed their buried stone foundations (see fig. 1). But before this time the "lower town" occupying more than 30 hectares (75 acres) within the outer walls was left empty. The fortified zone that archaeologists had long assumed was a walled city containing thousands of people was free of buildings for more than a century after the outer walls were built — perhaps being used only seasonally to house a migratory population or serving as a large royal estate with fields and gardens spread around the central royal citadel (the 3.2-hectare/8-acre upper mound), which was for some reason protected by massive outer walls.

The 2013 Season

The 2013 field season at Zincirli took place from June 30 to August 24 with an academic staff consisting of sixty-eight archaeologists and archaeology students — our largest team to date. In addition to the academic staff, we hired more than eighty workers from local villages to excavate a total of 1,500 square meters in various locations on the site. The team was delighted to be able to host our supporters, Joseph Neubauer and Jeanette Lerman-Neubauer, who visited us in Turkey and witnessed the excavations in progress (fig. 5).

The largest subgroup of the expedition staff were the excavation supervisors who supervised the digging and recorded the finds. This subgroup included forty-four archaeologists

Figure 5. Joseph Neubauer and Jeanette Lerman-Neubauer (middle row, third and fourth from left) and members of the 2013 expedition team at the mountain-top site of Nemrut Dağ in Turkey, northeast of Zincirli

and archaeology students at various stages of their studies. The other main subgroup were the specialists who examined and analyzed the finds, including four surveyors (for mapping excavated features and finds), three pottery specialists, two animal bone specialists, two object registrars, two illustrators, one photographer, one object conservator, one metal specialist, and one database manager. We also employed a Turkish camp manager and a cook to take care of housing and feeding our large team. Once again, we were able to recruit an excellent multi-national team from several leading universities in the United States, Europe, Israel, and Turkey, including the University of Chicago, the University of Pennsylvania, the University of California at Berkeley, Dartmouth College, Wake Forest University, Cambridge University, Oxford University, University of Rome, University of Pisa, Free University of Berlin, University of Freiburg, Tel Aviv University, and three different universities in Turkey. The expedition staff included twenty-two Americans, sixteen Turks, eleven Italians, seven Germans, four British, two French, two Israelis, one Canadian, one Korean, one Chinese, and one from the Netherlands.

In 2013, we expanded the excavation trenches we had opened in earlier seasons in order to obtain more data concerning the history and economy of the ancient kingdom of Sam'al, whose royal capital was at the site of Zincirli. We expanded our excavations in Area 2 on the Eastern Citadel; Area 4 near the South Gate of the ancient city; Area 6 in the Northern Lower Town; and also in "Area 0," a large Assyrian building located outside the city 100 meters north of the Northeast Gate (fig. 1). In these excavation areas we extended and deepened the exposures achieved in previous seasons and found many more walls, floors, and artifacts dated to the Iron Age II and Iron Age III (ca. 900 to 600 BC). This added considerably to our

knowledge of the city's history and the economic and social impact of the Neo-Assyrian empire during this period, when this empire was also having a dramatic impact on the biblical kingdoms of Israel and Judah a few hundred kilometers to the south.

One of the most interesting discoveries of 2013 was an ancient inscription on a piece of lead, written in the Luwian language using the Anatolian hieroglyphic script (fig. 6). Luwian is an Indo-European language related to Hittite that was spoken in the region of Zincirli during the period of the Hittite empire, which ruled the area from 1340 to 1180 BC, and for hundreds of years thereafter, when Luwian-speakers from central Turkey remained in the area as rulers and administrators. According to experts on this language at the Oriental Institute, the lead strip contains a list of names and may have been an administrative document. Lead inscriptions of this type are known at other sites but they are quite rare (and easy to miss if one is not careful during the process of excavation), so this discovery adds another valuable example of great interest to Luwian specialists.

Figure 6. An inscription written on a strip of lead in the Luwian language using an Anatolian hieroglyphic script

The 2013 season was also an opportunity to experiment with new archaeological field methods; in particular, the use of a remote-controlled quadcopter (or "drone") to take large numbers of aerial photographs of the excavation areas for the purpose of automatically combining these photos into a mosaic using photogrammetry software that creates a highly accurate orthorectified and georeferenced image, from which detailed plans of the excavated areas could be traced. This method is a big improvement on older and more labor-intensive methods of site-mapping. It proved to be a great success at Zincirli after we solved a few technological and workflow issues and integrated the procedure into our existing excavation and data-recording procedures. The youngest member of the team, 16-year-old Robert Schloen, was in charge of piloting the quadcopter and processing the aerial imagery, which other students then digitized to make the detailed maps (fig. 7).

Figure 7. Expedition team member Robert Schloen with the remote-controlled quadcopter ("drone") to which a small camera was attached to take aerial photographs used in mapping the excavation areas with the aid of photogrammetry software

Figure 8. Members of the 2013 academic staff of the Neubauer Expedition to Zincirli in the walled garden of our dig house

After several years of excavation, the expedition has accumulated a remarkable body of archaeological evidence that sheds light on the ancient culture and economy, thanks to the generous support of the Neubauer Family Foundation and the hard work of our many team members (fig. 8). The detailed analysis and publication of this evidence is ongoing and the 2014 summer season will be devoted to studying and publishing the accumulated finds.