

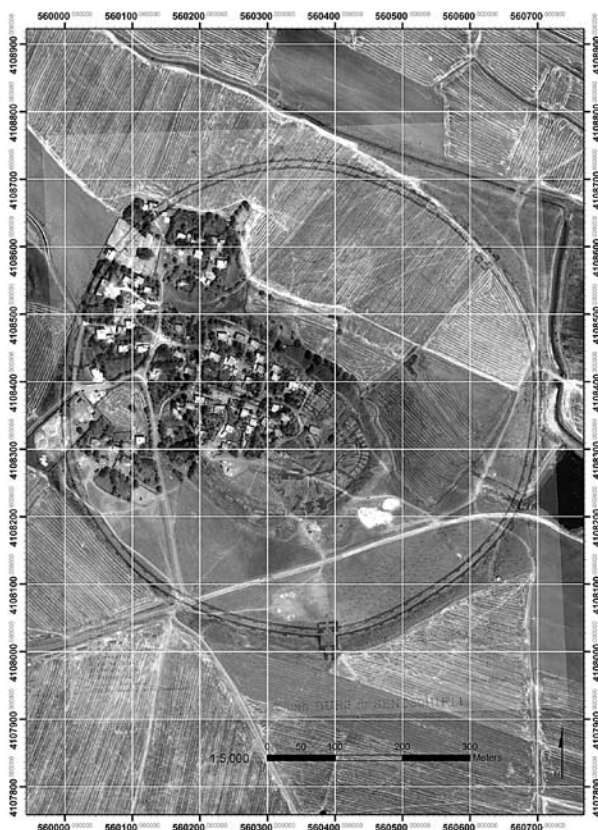
ZINCIRLI EXPEDITION

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In August and September 2006, a team from the Oriental Institute began work at Zincirli (pronounced “zin-jeer-lee”), an archaeological site in southern Turkey, on the eastern edge of the Amanus Mountains, about 100 kilometers north of Antakya (ancient Antioch). Zincirli is the site of Sam'al, a 40-hectare walled city of the Iron Age, which was ruled by an Aramaic-speaking dynasty for roughly 200 years, from the late tenth/early ninth century until the late eighth/early seventh century B.C. Zincirli was occupied much earlier, however. In the middle of the 40-hectare Iron Age mound is an 8-hectare upper mound that was settled by 2500 B.C., if not earlier, and was also occupied in subsequent periods, with occasional phases of abandonment. The upper mound was used as a royal citadel during the Iron Age, when an outer wall was constructed some distance away, forming a large lower town that encircles the upper mound. The occupation of the site spans more than two millennia, from the Early Bronze Age until the early Hellenistic period.

Zincirli was first identified as an archaeological site in 1883 and was excavated by German archaeologists in several lengthy excavation seasons from 1888 to 1902. They found impressive stone sculptures, inscriptions, palaces, and artifacts of many kinds. There were no other excavations at the site until the Oriental Institute project commenced in 2006. We are re-excavating the site in order to explore the lower town, which was not previously studied, and to clarify the stratigraphy and chronology of the upper mound and the outer fortifications. The earlier excavators uncovered and mapped a great deal of monumental architecture, but much information was lost because they did not have the benefit of modern methods of excavation and they did not understand the importance of pottery as a chronological indicator.

Our excavations are intended to date more precisely the main phases of construction at Zincirli in order to understand its political and economic role in various cultural periods. We will also excavate a large residential area in the lower town and, if possible, on the upper mound, in order to study the social and economic organization of the settlement. By applying modern archaeological methods, including the analysis of faunal and botanical remains, we hope to improve our understanding of urbanism in the region in the Bronze and Iron Ages. We will also explore the ethnic dynamics in the Zincirli region, which was exposed



A recent satellite image of Zincirli on which is superimposed Robert Koldewey's 1894 plan of the Iron Age city of Sam'al. The old city plan has been georeferenced on the basis of cornerstones still in situ in the German trenches. A modern village covers the western side of the site

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The Zincirli Expedition team placing a concrete survey marker on the site during the 2006 season. Seventeen survey markers were placed on and around the site and their precise locations — accurate to one centimeter horizontally or vertically — were determined using GPS satellite readings

to a variety of cultural influences and population movements by virtue of its location in a pivotal border zone between Syria, Anatolia, and Mesopotamia. In the Iron Age, in particular, the valley around Zincirli was home to Luwian-speaking people from Anatolia, who were in many respects the heirs of Bronze Age Hittite culture, and to Aramaic-speakers who had apparently migrated into the region from the south and east. At Zincirli, we hope to examine the cultural and political interaction of these two groups from the perspective of their art, architecture, diet, and lifestyle.

In August and September 2006, we spent six weeks preparing a detailed topographical map of the site and examining the outer fortifications, which had been exposed by modern trenching in two places. By the end of the 2006 season, we had identified several promising areas for excavation and worked out the logistical details for a long-term archaeological project. In the summer of 2007, we initiated large-scale excavations in four separate areas of the site. At the time of writing, we are in the midst of a two-month season of excavation, having opened a total of 1,100 square meters with an expedition team of forty archaeologists and archaeology students.

At some point in the Iron Age, a large wall was built around the site, a few hundred meters from the central mound. This wall is unusual because it is almost perfectly circular, with a diameter of 720 meters and a circumference of 2.26 kilometers. The German excavators traced the circuit of the wall and counted 100 evenly spaced towers that project from the wall, situated approximately sixteen meters apart. Three large gates pierce the wall on the south, west, and northeast sides of the city. The southern gate in particular was extensively excavated in the 1890s. A series of sculpted basalt orthostats lined the gate passages. These orthostats are now in museums in Istanbul and Berlin.

During our 2006 season, we established seventeen precisely georeferenced inter-visible survey markers on and around the site (using differential GPS equipment) and we conducted a thorough topographical survey of the mound. In the process of doing this, we located the previously excavated corner stones of several structures around the site that are still visible in the old German trenches. This allowed us to georeference the published plans of the site within our own coordinate system. We were happy to learn that the old plans are quite accurate, with careful stone-by-



A 45-meter-wide portion of the outer city wall of Iron Age Sam'al was exposed on the northeastern side of the city during the 2006 season. The basalt stonework of the wall is 3 meters wide and 3.2 meters high. Two of the wall's 100 towers are visible in this exposure. One of the towers has partly collapsed subsequent to its initial exposure by German archaeologists in the 1890s

stone drawings that match what remains in situ. This is important because many stones were robbed from the old trenches to build the modern village on the site, which was constructed only in the twentieth century. The well-known archaeologist and architect Robert Koldewey worked at the site and drew the Zincirli plans in the 1890s, early in his career, before he moved on to his famous excavations at Babylon.

In addition to topographical mapping, in 2006 we excavated the outer city wall in two areas: near the northeast gate and on the southeast side, where a modern canal had cut across the wall. In the northeast area, we exposed 45 m of the outer face of the wall in order to examine the preserved basalt stonework, which is 3.2 m high and 3 m wide. Two of the 100 projecting towers, nos. 60 and 61 on the German excavators' plan, are visible in our exposure.

We determined that the stone portion of the outer wall is preserved to its original height in this area. Remnants of mudbrick material on top of the stones indicate the presence of a mudbrick superstructure — probably several meters high — which has long since eroded away. The top of the stonework is intentionally concave, forcing the bricks above it to tilt inward from each side toward the center of the wall, thereby supporting each other and increasing the stability of the wall.

We cut sections in the soil perpendicular to the wall face in order to reveal the original Iron Age field surface into which the wall was set. These sections showed that the bottom two courses (ca. 85 cm) of the wall were originally submerged below the surface; thus more than 2 m of the stonework originally stood above the ground, surmounted by a massive mudbrick wall of unknown height. Layers of downward-sloping mudbrick detritus are visible in our sections, showing the gradual dissolution of the mudbrick superstructure, which melted and slumped over the stonework after the abandonment and neglect of the Iron Age fortifications.

On the southeast side of the city, a modern canal has cut through one of the stone towers (no. 45 on the German plan), exposing a cross-section of the city's fortifications. We trimmed back the canal edges in order to examine this cross-section, revealing a unique double-wall design that had already been described by the earlier excavators. In addition to the outer wall, there is an inner wall, also 3 m wide, which is separated by a 7 m gap from the outer wall. Our excavation revealed a cobbled surface between the walls, along which the city's soldiers could have marched around the city from tower to tower and from gate to gate, on the same level as the streets inside the city.

The inner wall is founded at a higher level than the outer wall and its foundation consists of somewhat smaller stones, but it is otherwise very similar in its dimensions. The inner wall has 100 projecting towers that are lined up with the towers of the outer wall, providing a second line of defense for archers and spearmen defending the city. It is likely that the inner wall rose higher than the outer wall so that defenders could shoot down upon attackers who succeeded in capturing the outer wall. This was suggested long ago by Robert Koldewey. Our work at the site so far confirms his description of the city's Iron Age fortifications. What remains to be determined is the



A modern canal has cut through the Iron Age city wall on the southeastern side of the site. Although it is unfortunate that the site has been damaged by this canal, it affords an opportunity to see a cross section of the fortifications, revealing both the outer wall and a matching inner wall that forms a concentric ring 7 m inside the outer wall

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date of their construction — it is not at all clear in which century they were built — and whether there are phases or rebuildings of the fortifications. For this reason, we opened an excavation area in 2007 in the northeast gate, which the German plans indicate was only partially excavated. We hope to find intact floors inside and outside the gate chambers that will allow us to date their initial construction and to examine the stratigraphy of the city gate and the adjacent inner and outer walls. This would also allow us to determine more precisely when the fortifications and gates went out of use, which apparently occurred sometime during the middle or late seventh century B.C., toward the end of the Assyrian empire.

During the Iron Age, the upper mound of Zincirli was separately fortified with its own wall and with larger outer and inner gates. The extensive German excavations on the upper mound exposed these fortifications and revealed much of the royal citadel on the upper mound, although many architectural and stratigraphic details were not recorded or published by the early excavators. They unearthed sculpted stone column bases and basalt orthostats with reliefs carved in the Neo-Hittite style. These are now displayed in museums in Istanbul and Berlin.

The German excavators also found stone-carved inscriptions written in alphabetic Aramaic and Phoenician and in Akkadian cuneiform, dating from the period of the Neo-Assyrian empire. Small finds were published in a separate volume, including objects of gold, silver, ivory, and other materials. The principles of pottery chronology and stratigraphic debris-layer excavation were not known by the early excavators, with the result that building levels and stratigraphic contexts that should have been kept separate were sometimes badly mixed. However, the material collected in the early excavations gives us some idea of the periods of occupation of the site. Recent examination by Prof. Gunnar Lehmann of the Zincirli pottery stored in Berlin shows that it ranges in date from the Early Bronze Age to the early Hellenistic period, with a large proportion of late third-millennium material. This indicates that the site was occupied in various periods over a span of more than 2,000 years, from the third millennium B.C. to the first millennium B.C., even though the Iron Age and especially the Assyrian period are the best known architectural phases.

In our 2007 excavations, we opened a trench 10 m wide × 40 m long on an unexcavated portion of the citadel west of the citadel gate. This trench climbs up the southern side of the upper mound, from the lower town at the base of the mound to the top of the upper mound. The purpose of this trench is, first of all, to study the final phase of Iron Age fortifications, which consisted of a stone-faced sloping rampart leading up to a large wall on the crest of the mound. In future seasons, we will excavate more deeply in this trench to determine the occupational sequence of the site and to construct a detailed pottery chronology for the site. Eventually, we will make a stratigraphic connection from this trench to the old German trenches, in order to clarify the architectural phases of the upper mound as much as possible.

Meanwhile, we will open excavation areas in the lower city, which has not been studied before. The area between the southern gate of the outer city wall and the citadel gate on the south side of the upper mound is a promising place to start, and in the summer of 2007 we opened a 400-square-meter excavation area just north of the southern gate. It is clear at this point that a major road — an Iron Age chariot road — ran through this area, from the outer wall to the citadel, bounded by seventh-century structures on either side. In this area we hope to determine the lifespan of the road, which may have been resurfaced over its period of use, and to determine the nature of the architecture in this outermost zone of the lower town.

In the coming years, we will choose one or two additional areas in the lower town in which we will excavate broad horizontal exposures in order to study the social and economic organization of the city and changes in its organization over time, through analysis of domestic architecture and faunal, botanical, and artifactual distribution patterns. To this end, we are conducting an

extensive geophysical survey in 2007 that is already revealing the outlines of buried houses and streets in the lower town. Many houses and even rooms within houses are clearly visible because their basalt foundations produce a strong magnetic signal that is picked up by the magnetic gradiometer. The geophysical survey we are conducting in 2007 will allow us to select promising areas of excavation to be opened in 2008 and subsequent years. A more detailed report on this and other aspects of the 2007 excavation season will appear in next year's *Annual Report*.

We are grateful to the Ministry of Culture and Tourism of the Republic of Turkey for making it possible for us to dig at Zincirli, and to the Ministry's representative, Ms. Aysel Çöteliöğlü, who lived and worked with us during our 2006 season. We also owe whole-hearted thanks to İsmet Ersoy, the mayor of Fevzipaşa, and other government officials in the region who visited the site and helped us in various ways: Süleyman Kamçılı, Governor of Gaziantep province; Bekir Yılmaz, Governor of the İslahiye district; and Mehmet Aykanat, Director of Culture and Tourism in Gaziantep province. Dr. Mehmet Önal, Acting Director of the Gaziantep Museum, and members of the museum staff, especially Ahmet Beyazlar, also gave us much encouragement and assistance for which we are very grateful.

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All these people contributed to a very successful first season at Zincirli, which laid the groundwork for our large-scale excavations in 2007. We look forward to many more seasons of excavation at this important site.
