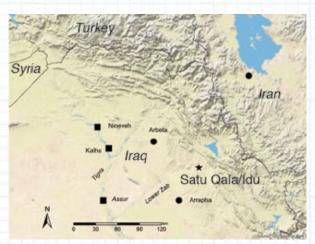
## Reports from the Field

## Illuminating a Dark Age: New Work at Satu Qala, Iraq

BY LAUREN RISTVET AND CINZIA PAPPI

n 1177 BCE, the armies of Ramses III, the pharaoh of Egypt, fought pitched battles on land and sea against a motley group of opponents that the Egyptians christened the Sea Peoples. Before reaching Egypt, the Sea Peoples had already menaced cities and kingdoms in Anatolia (modern Turkey) and up and down the Eastern Mediterranean coast, with disastrous consequences. As an Egyptian inscription records, "no country could stand before their arms. Hatti, Kode, Carchemish, Arzawa, and Alashiya... They desolated its people, and its land was like that which has never come into being." Although there is evidence for continuity in some places, the end of the Bronze Age saw the fall of the Hittite empire, the disappearance of the Mycenaeans, the loss of the Egyptian empire, and weakness and disunity in Babylonia, Elam, and the Levant. One place where life went on as usual for another century or so was Assyria (modern northern Iraq), but even here



records are sparse and archaeological evidence is minimal. From 1050–900 BCE, most of the scribes in Assyria fell silent as well.

Now excavation at a previously unknown site in Iraqi Kurdistan known as Satu Qala has the potential to illuminate this dark age. Surface collection and excavations at Satu Qala in 2010 and 2011 (directed by Cinzia Pappi of the University of Leipzig, Wilfred Soldt of Leiden University, and Ahmed Mirza of Salahaddin University) yielded 52 brick inscriptions probably dated to the period from 1050-850 BCE. These glazed bricks once decorated the palace of Idu. Before 1050, Idu was a provincial capital of the Assyrian empire, but at some point its local rulers asserted their independence and claimed the title of king of Idu. Excavations have uncovered evidence of seven kings who ruled the city, almost all of whom were previously unknown. Indeed, the only mentions of Idu available before these recent excavations were scattered references in early Neo-Assyrian inscriptions and a rare epigraphic find discovered by Penn Museum archaeologists at Hasanlu, a stone plate inscribed with the name "Baiuri, King of the Land of Idu." Soon after 900 BCE, the Assyrian empire conquered the kingdom of Idu and made the city into a provincial capital, but in the 8th century, the empire was reorganized and Idu became a small settlement, part of the province of Erbil. The final occupation at the mound, before the founding of the modern village in the 20th century, likely dates to the Parthian period, between about 200 BCE and 200 CE.

In summer 2012, a team of archaeologists from the Penn Museum joined the Satu Qala project. We spent four weeks analyzing artifacts from the site in the Erbil



ABOVE, Cinzia Pappi (Leipzig), Ahmed Mirza (Salahaddin), and Lauren Ristvet (Penn) at the Erbil Citadel. TOP RIGHT, Giulia Barella (Rome) cleans a brick inscription from Satu Qala in the Erbil Museum. RIGHT, Lara Fabian (Penn) works on the ceramic typology for Satu Qala. Satu Qala Project





Museum, using state-of-the-art technology to learn as much as possible about ancient Idu. Giulia Barella, a conservator from Rome, worked to document and consolidate the fragile brick inscriptions, while Christian Hess and Cinzia Pappi, Leipzig University, worked on reconstructing the historical information available on these important finds. We also used two additional pieces of technology to record detailed information from the bricks and other artifacts: RTI (reflectance transformation imaging) photography and 3-D laser scanning. Peter Johnson (Brown) used RTI photography to create digital images that allowed us to see features on the inscription that were not previously visible. Similarly, by using a 3-D scanner we were able to make an accurate model of artifacts that will allow us to study them in Philadelphia. Lauren Ristvet (Penn) and Lara Fabian (Penn) with the help of Christopher Kim (Brown) analyzed the more than 1,600 diagnostic pottery sherds that were uncovered during excavation. Studying this assemblage revealed that the village of Satu

Qala survived the collapse of the Assyrian empire in 612 BCE and suggests that this political collapse had limited impact on rural life along the Lower Zab. Finally, Megan Luthern (Temple) investigated burials from the Parthian period. Her work on the bone revealed new information about some of the health problems—such as respiratory infections—that people suffered from almost 2,000 years ago. Further work at Satu Qala will focus on surveying the surrounding region, in order to put the developments at this site in context.

LAUREN RISTVET is Dyson Assistant Curator in the Near East Section and Assistant Professor, Department of Anthropology, University of Pennsylvania. In June and July 2014, she conducted fieldwork in Azerbaijan. She studied the Iron Age settlement around the fortress site of Oglanqala in order to learn about the origins of urbanism in the Caucasus. CINZIA PAPPI is affiliated with the Institute for Ancient Near Eastern Studies, University of Leipzig, Germany.