

CAMEL LABORATORY INVESTIGATES THE LANDSCAPE OF ASSYRIA FROM SPACE

JASON UR

In 1932 the Oriental Institute excavated the city of Dur-Sharrukin (modern Khorsabad), the capital of the Assyrian Empire under King Sargon II (721–705 B.C.) and the original home of the magnificent reliefs on display in the Museum's new Yelda Khorsabad Court. During the excavation, a workman relayed stories of stone blocks inscribed with cuneiform writing



Figure 1. Workmen clean Sennacherib's inscription on the north face of the aqueduct at Jerwan

reused in the houses of a village to the north. Oriental Institute epigrapher Thorkild Jacobsen was intrigued by the workman's tale and accompanied him to the village the next day, where he found that the reused blocks, inscribed with the name of Sennacherib, son of Sargon (ruled 704–688 B.C.), had been stripped out of a huge "dam," against which the village of Jerwan had been built. The next year, Jacobsen and archaeologist Seton Lloyd spent four weeks excavating this feature, which turned out not to be a dam but rather an aqueduct (fig. 1). Ultimately they were able to reconstruct the 100 km course of the canal from a dam in the Kurdish mountains all the way to Sennacherib's new capital at Nineveh on the Tigris River (opposite modern Mosul). This brief but fantastically productive "side project" (published as Thorkild Jacobsen and Seton Lloyd, *Sennacherib's Aqueduct at Jerwan*, Oriental Institute Publications 24, 1935) is one of the Oriental Institute's least recognized undertakings, although Lloyd's archaeological descriptions and Jacobsen's textual interpretations are the basis for all current reconstructions of Assyrian irrigation.

Jacobsen and Lloyd were thus pioneers of landscape archaeology, the investigation of the world beyond the site, including canals, roads, and other non-settlement traces of ancient human activity. The Oriental Institute's Center for the Archaeology of the Middle Eastern Landscape (CAMEL Laboratory) has recently turned its attention back to the Assyrian landscape. In July 2003, four Oriental Institute archaeologists presented new

research on Assyrian settlement, canals, and roads at the 49th annual meeting of the Rencontre Assyriologique Internationale at the British Museum in London, in a session organized by Tony Wilkinson, the founder of CAMEL.

My own contribution was a reassessment of Jacobsen and Lloyd's reconstruction of the course of Sennacherib's canal. They had been limited to ground observation and testimony from local residents, but I have been able to use aerial photography and declassified American intelligence satellite imagery from the 1960s and early 1970s (the CORONA program) to map the traces in a Geographic Information Systems (GIS) computer program (fig. 2). In addition to the Jerwan canal, this research has identified and mapped over 60 km of other canals across a wide swath of Assyria (fig. 3), some of which had not been recognized on the ground before.

The unexpected extent of Sennacherib's canals must be understood within the context of his other actions. Upon the death of his father, he moved the capital to the newly expanded city of Nineveh. As known from the Bible and his own inscriptions, he was a very prolific deporter of conquered populations; many of them were settled in his new capital, but many others filled in the productive agricultural hinterland of the capital. It appears that the canals were part of a grand scheme to remake the demography of Assyria: a new capital was constructed and populated, labor was imported, and an agricultural infrastructure was created to support it. Not all of the water went to mundane agriculture; Sennacherib's inscriptions also describe elaborate parks and gardens designed to

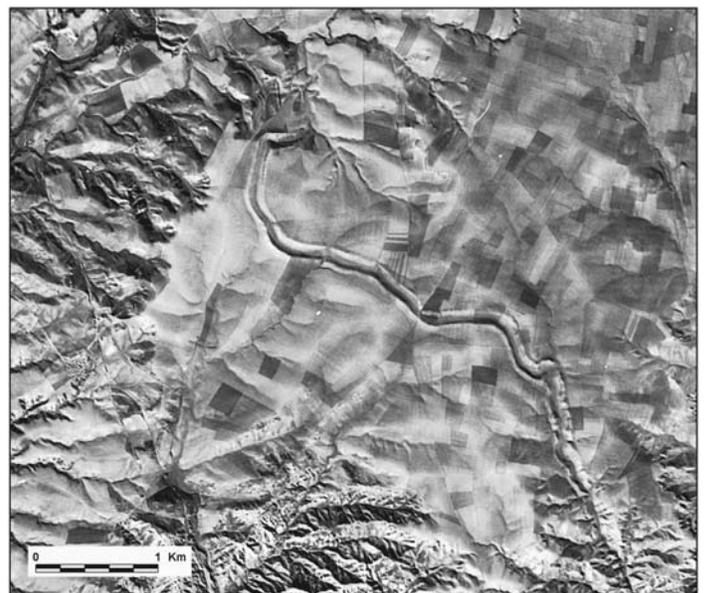


Figure 2. CORONA satellite photograph of the canal near Bandwai. Sennacherib's engineers had to excavate an 80 m wide, 20 m deep canal to take water through a watershed between river basins

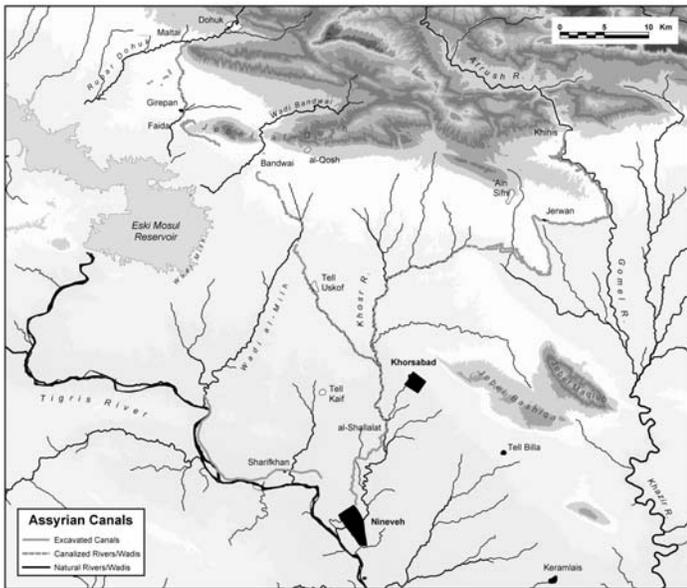


Figure 3. Map of Sennacherib's canals in northern Assyria

emulate the wetter landscapes of Anatolia and Babylonia, which were undoubtedly fed by his canal network.

The combined work of the CAMEL researchers on the archaeology of the Assyrian landscape is being prepared as a journal article by Tony Wilkinson, and with sections by Eleanor Barbanes, Mark Altaweel, and myself. My own study, entitled "Sennacherib's Northern Assyrian Canals: New Insights from Satellite Imagery and Aerial Photography," has been submitted to the journal *Iraq*.

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BISMAYA 1903: THE FIRST MESOPOTAMIAN EXCAVATION OF THE UNIVERSITY OF CHICAGO

LILIAN CROPSEY¹ AND PEGGY GRANT

The history of the first University of Chicago excavation in Mesopotamia in 1903 is filled with intrigue. The story involves heroes, villains, and corrupt officials and ends in scandal rooted in nineteenth century regional politics.

The first major American excavation in Mesopotamia was begun in 1888 under the auspices of the Babylonian Exploration Fund (BEF), a consortium of Biblical scholars, explorers, and financiers led by John Punnett Peters, a professor of Old Testament. (**where was he a professor?**) The BEF applied to the Ottoman sultan in Constantinople—for Mesopotamia was then part of the Ottoman Empire—for permission to excavate at Nippur. To facilitate the project, the BEF signed a contract with the University of Pennsylvania that stipulated that the university would provide a suitable museum building for the housing of the artifacts that the expedition hoped to recover.

From 1888 until 1900 the BEF worked at Nippur. Robert Francis Harper, then Professor of Assyriology at Yale and the younger brother of the first president of the new University of Chicago, William Rainey Harper, was part of the team during the first season as was H. V. Hilprecht of the University of Pennsylvania. The excavation did much to elevate the status of the University of Pennsylvania in the field of ancient Near Eastern studies. Not only did it offer academic programs in the discipline, but the artifacts from Nippur displayed in its museum created additional interest and excitement.

During the same year, another committee was formed in New York (**check year for est. of this committee**) to raise funds to explore Ur, the legendary home of Abraham and Sarah.

The president of this committee was William Rainey Harper.² Other influential members included Peters (the archaeologist who had excavated at Nippur), President Henry Morton of the Stevens Institute, philanthropist Isidor Straus, and other distinguished scholars. The committee was anxious to compete with the University of Pennsylvania in the search for discoveries that would shed new light on the history of the ancient Near East as well as to bring back artifacts to display to interested donors.

This committee appointed Edgar James Banks, a young American Assyriologist, as field director. Banks describes what happened next:

"In 1900 I was sent by a private committee to Constantinople to obtain permission to excavate in Babylonia. For three years I was unsuccessful, but finally obtained permission to excavate at Bismaya. The permission was obtained at a cost to the committee and myself of several thousand dollars, and was issued in my own name. However, the committee, discouraged by the delay, disorganized, but Mr. Leishman, then Minister to Turkey, offered to defray the expenses of the expedition to the extent of \$25,000. Instead, President Harper came to Constantinople about that time to obtain permission to excavate in Babylonia, and an arrangement was made that I be taken onto the staff of the university, and that I use the *irade* [permission] for its benefit. R. F. Harper was to be the home director, and I was to have full charge of the work in the field.