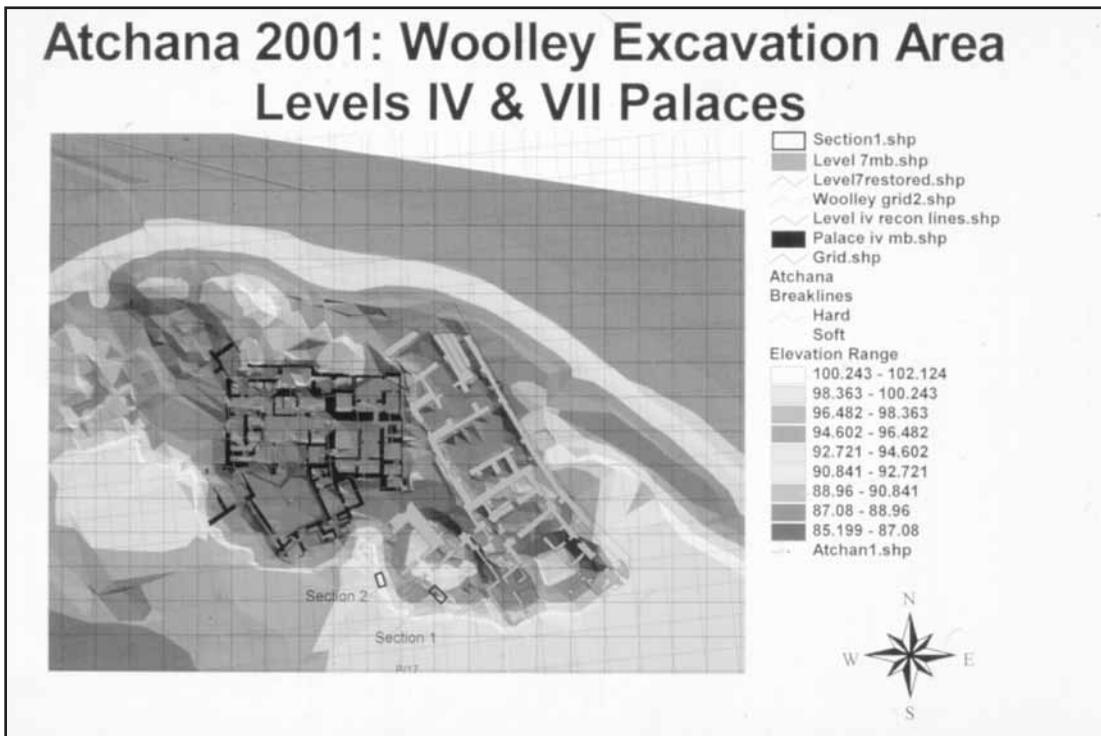




## RESEARCH



*Figure 2. A composite map with Woolley's grid system superimposed on our recently generated ArcView GIS map*

the entirety of the mound with a heavy concentration in the old excavation areas on the north-eastern tip. The points were anchored on main architecturally prominent nodes, such as the on-site column bases and staircase of the level IV Bit Hilani palace entrance and the level VII gate. When composite maps of the previously excavated architecture were created (fig. 2), it became readily apparent that the grid system as published by Woolley in 1955 contained a number of unusual and troublesome features. In an effort to align Woolley's grid system to the level IV palace architecture, the grid had to be rotated more than 6° counterclockwise, which was also the case for all the other architecture published in the preliminary reports and final publication. Since both the published maps and ours were aligned to magnetic north, the discrepancy was not the result of the difference between true and magnetic north. It was also unlikely that the unusual orientation was the result of a shift in magnetic north since the angle is too large. Furthermore, the location of the level VII palace may not correspond to the published report either, being off the original grid by approximately three meters to the east. Certainly our instrumental capabilities are more accurate, but it soon became apparent that I would have to locate Woolley's field notes, section sketches, and architectural plans before proceeding with the reactivation of excavations planned for the summer of 2003.

After consulting with colleagues, I decided to search for the notebooks in London and with the kind assistance of Dominique Collon of the British Museum, I finally located multiple crates of materials at the Rare Books and Manuscripts division of the University College, London. Unfortunately, none of the field notebooks or sketch plans seem to be available (I'm still looking for them), but Atchana object cards and excavation scenes that were photographed on hundreds of prints on glass plates and negatives were carefully curated and readily available. These await processing through scanners and the creation of an excavation database in the near future.

## Operation 2: Section Cleaning

The second arm of the AVRPP field project involved a section cleaning operation at Atchana. While our renewed investigations at Atchana are not solely motivated by the desire to unravel issues of chronology and stratigraphy, understandably no investigation into regional and interregional dynamics can be accomplished without resolving these problems. To that end, we targeted a section cleaning operation at the temple IV deep sounding. In May 2001 freak heavy rainfall and massive flooding caused certain sections of the Woolley excavation trenches

to cave in, expanding the original deep sounding to over 30% its former size. A tantalizing glimpse of a hitherto-unknown wall emerged when the sides of the deep sounding collapsed. This was an opportunity not to be missed and taking advantage of this disadvantage, I initiated two section cleaning operations (grid squares N, O, P:13–15). Carefully aligning the new grid and correcting for the old, section 1 is probably located in the temple IV courtyard although the exact location must await new excavations. A combined use of an Olympus Camedia 2030 digital camera and the Leica Total Station provided an accurate rendering of the precariously perched wall stones in section 1.

The trees lining the outer edges of the trench provided Steve Batiuk with a secure anchor while he hung a mountaineering rope down the edge of the deep sounding trench, belling out at the bottom nine meters below. The rope was fitted with a series of butterfly knots to which he attached himself and hung via a standard climber's harness (fig. 3). Not only did this allow for section cleaning to be accomplished (fig. 4) within the parameters of the survey permit, but it also proved to be safer and gave greater mobility during such jobs as drawing. Ten loci were defined (fig. 5) and the combination of ceramics and radiocarbon dates confirmed a Middle Bronze Age sequence 1870 to 1600 Cal BC (2 sigma) that underlay the wall. Ceramics included early second-millennium Middle Bronze Age, Syro-Cilician painted wares, and ledge-



*Figure 3. Steve Batiuk donning mountaineering equipment in order to complete section cleanings*



*Figure 4. A section of Woolley's excavations after cleaning*

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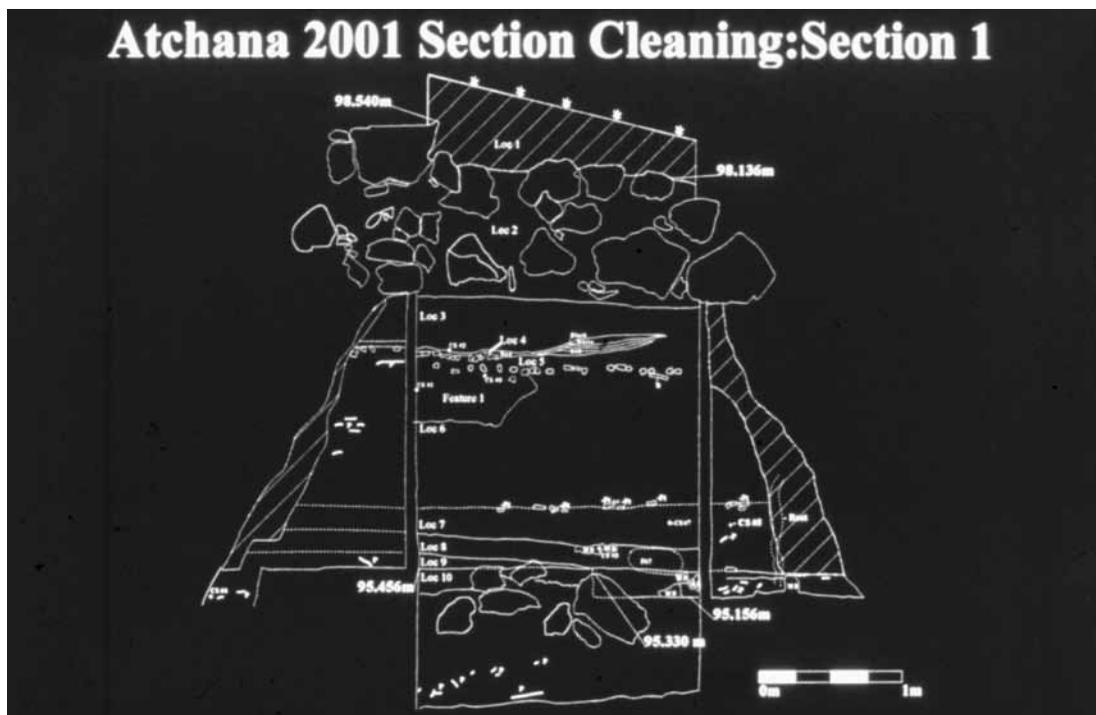


Figure 5. Drawing of section 1

rimmed vessels, dated to Amuq phases K and L. Using the same mountain climbing gear, student Toby Hartnell initiated section 2 on the opposite hump of earth above the trench, but a massive mudbrick wall emerged instead and the section was terminated until future excavations.

### Operation 3: Documenting Finds

However wonderful it was to be working on the legendary site of Atchana, what actually caught our imagination this season was the discovery of Woolley's long-forgotten and mostly inaccessible dig house depot situated on top of the mound. A rare few scholars had known that the abandoned dig house contained some of the study collections from the 1930s and



Figure 6. A copper bun ingot found in the Woolley dig house depot

1940s, but a small padlock and its remote location kept this material unavailable for decades. Looking at the ramshackle state of the two-story building that is in imminent danger of collapsing, I was reminded of Nasreddin Hodja's mausoleum in Nevsehir. The Hodja's sarcophagus there is carefully laid out in the center of a building, which has no walls and is accessible from all directions. However, it is "protected" by an impressive and totally functionless lock. The situation reflects the gentle, ironic humor of a well-known philosopher-poet living in central Turkey during the eleventh century AD and also typifies the surreal nature of Woolley's dig house depot similarly "secured" by a padlock despite gaps in walls and ceilings. To add to the irony, the depot was guarded by a one-eyed watchman who took pity on us and agreed to let us

store our heavy surveying equipment in the above, hitherto-unentered depot.

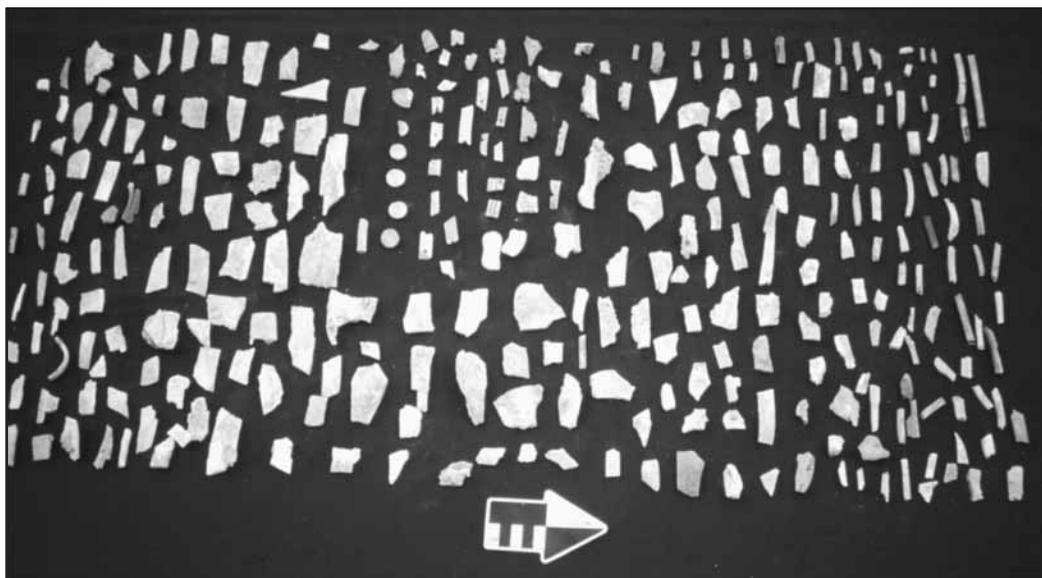
When our eyes adjusted to the dim surroundings, what we saw was quite extraordinary! Bags of carefully labeled ceramic sherds from the deep soundings were stacked up on wooden shelves from floor to ceiling and when opened, revealed unpublished Mycenaean and Cypriot wares as well as Anatolian Assyrian trading colony period and Hittite ceramics. The window sills hid multi-faceted stone molds for metal casting as well as three copper bun (fig. 6), crescent, and disk-shaped ingots, which resembled ingots from the Uluburun-Kas shipwreck. Ample seaward commerce between various coastal regions, and perhaps Alalakh, is indicated by the stylistically comparable ivory toiletries, jewelry, and metals found on the shipwreck. The appearance of copper-tin-bronze and other preciousities (fig. 7) suggest the existence of a developing or thriving exchange production in the eastern Mediterranean. Charcoal from the copper bun ingot revealed a date between 1620 and 1430 Cal BC (2 sigma).

Wooden drawers in the dig house depot contained other small finds including copper artifacts, beads of glass, amber, and faience, as well as implements of iron, lead, and silver. Thousands of bone and ivory fragments for inlaying furniture (fig. 8), clay spindle whorls, pieces of bitumen, and what appears to be ebony were in other boxes. After photographing as many finds as was possible in the short time available, eighty-six crates of finds were removed to the AVRP depot for processing in 2001.

The flood of unexpected finds continued unabated when I was given permission to enter the usually inaccessible Hatay Archaeological Museum depot. Scores of still-unpublished small cuneiform tablet fragments from earlier Atchana excavations were carefully wrapped in cotton (fig. 9) and when joined may contain vital information about the social, economic, and political environment of this region. Along with the Atchana finds stored there, the wooden



*Atchana inlaid faience fragment. Scale ca. 1.7:1. Amuq, Turkey*



*Figure 8. Bone and ivory fragments likely used for inlaid furniture*

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*Figure 9. Published and unpublished cuneiform tablets from the Hatay Archaeological Museum depot*

drawers in the museum depot also revealed the second half of the Chicago Oriental Institute excavation finds. Unpublished copper-based weapons, tools, and gold jewelry, as well as cylinder seals, stone pyxides, sculpture, and ceramics from the sites of Tell Tayinat, Tell Judaidah, Tell Dhahab, Chatal Höyük, and Kurdu were all photographed in bulk for future detailed processing. An elegantly made Middle Bronze Age ceramic animal-headed cup (fig. 10) found previously on the surface of Atchana, provided clues to wider networks of interaction with the Assyrian trading colony site of Kültepe (ancient Kanesh).

#### **Operation 4: Surveys and Excavations at Other Sites**

A similar mapping program at Tell Tayinat, which is located 700 meters north of Tell Atchana, was directed by Timothy Harrison from the University of Toronto. Tayinat, excavated by the Oriental Institute in the 1930s, is very likely the twin settlement of Atchana. This Iron Age capital is slated for excavations in the near future.

The excavations at Tell Kurdu continued in 2001 with new field directors, former Near Eastern Languages and Civilizations student Fokke Gerritsen and Rana Özbal of Northwestern University, who have taken the lead at this important Ubaid period Chalcolithic (ca. 4800 BC) site. Several new trenches in the northern sector of the mound revealed a major Halaf period (ca. 5500 BC) settlement with streets and buttressed multi-roomed structures.

In conclusion, the AVR program has now matured from a regional survey begun in 1995 to being poised for the reinvestigation of three major sites. Attention is now turning to full-scale excavations at Tell Atchana, Tell Tayinat, and Tell Kurdu. The results of these investigations will have compelling implications for other regions, including the rise of early complex

societies and the important transition from the Early Bronze Age and its regional states to the empires of the second and first millennium BC.

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*Figure 10. A Middle Bronze Age zoomorphic ceramic cup from Atchana*