An Inscribed Astragalus with a Dedication to Hermes

By Guy Bar-Oz

Astragali (knuckle bones) are commonly found in many archaeological sites and scholars have debated how they were used in ancient games. Yet rarely (and never in Israel) do we find *inscribed* examples such as the caprine astragalus with Greek graffito ΕΡΜΗ "Hermes" found during the faunal analysis of the bone assemblage from the Roman-Hellenistic fortress of Sha'ar-Ha'amakim.

Dedication to Hermes on a caprine astragalus from the Hellenistic phase of Sha'ar-Ha'amakim. *Photo courtesy of the author.*

The site of Sha'ar-Ha'amakim is located to the northwest of Kibbutz Sha'ar-Ha'amakim, at the foot of the southern slope of the Lower Galilee, Israel. It was excavated by A. Segal and Y. Naor from the Zinman Institute of Archaeology, University of Haifa (Segal and Naor 1993). The bone assemblage came from an underground water cistern deposit dated to the Hellenistic period (250–150 BCE).

The inscribed caprine astragalus (sheep or goat knuckle bone) from Sha'ar Ha'amakim (Last 2000: 248, fig. 1)bears no burning signs or cut marks. In addition, four more astragali were recovered from the same locus, but none of them exhibit any kind of modification. Nor were any of them found in articulation with other skeletal elements. Other bone remains retrieved from the same locus (657 identified bones) include long bone fragments of ten domestic animals (4 cattle [*Bos taurus*], 4 sheep/goat, 1 pig [*Sus scrofa*], 1 complete skeleton of a dog [*Canis familiaris*]), and 3 complete skulls of weasel (*Mustela nivalis*; Bar-Oz in press; Bar-Oz and Dayan 2001). The accumulation of bones and ceramics within the water cistern suggests its use as secondary refuse after the cistern went out of use. The bone assemblage did not derive from animals that fell in after the site was abandoned. Nor is it likely that the astragali were washed into the cistern or thrown in deliberately.

Four unmodified astragali found at the water cistern of Sha'ar-Ha'amakim, showing the natural shape of the bone. These shapes would fall on one of four sides when dropped. *Photo courtesy of the author.*

The graffito ΕΡΜΗ found on the flat cranial side of the astragalus from Sha'ar-Ha'amakim is the dative/vocative form of the name Ἑρμῆς ("Hermes"; Last 2000: 248). Hermes, the ancient Greek herald and messenger of the gods, is known as the god of good fortune, gambling, and theft.

Previous findings of modified and unmodified astragali, predominantly from sheep and goats, have been excavated throughout the eastern Mediterranean and the Near East in several different contexts. The astragalus is an anklebone that supports the tibia. Rectangular in shape, it was widely used throughout the ancient world as a game piece and as a cult object. The use of astragali is of great

antiquity in the ancient Near East, dating from as early as the Chalcolithic (Watson 1979: 199) and continuing to the Roman period. Some astragali were modified by having their surfaces ground off (the grinding accentuated the bone's natural rectangular shape while retaining overall its natural features). Other modifications included drilling holes through the bone, and sometimes even attaching a metal fragment. (See Gilmour 1997 for a comprehensive review of the nature and function of astragali.)

Although the recovery of astragali is very common, only a few are found with incised marks. Until now, all of these were found in Anatolia and in the Aegean world. At Gordion, an astragalus with an inscription to the goddess Nike (the ancient Greek goddess of victory) came from Hellenistic levels (Young 1962:154). Two other astragali with incised inscriptions bearing the names of Achilles (the greatest Greek warrior in the Trojan War and hero of Homer's *Iliad*) and Hector (the greatest Trojan hero, killed by Achilles) were also found at the site of Gordion, but their exact provenience is unclear. A large number of modified astragali were found in the Korykeion Cave near Delphi, dated to the sixth and third centuries BCE (Amandry 1984). Of these several were engraved with lettering and carried the names of Heracles (son of Zeus), Thetis (mother of Achilles), Ajax (Greek hero of the Trojan War), and Nike, among other Greek deities. The cave also included reproductions of astragali made of precious materials such as bronze, glass, and marble. An imitation astragalus made of gold was found in the necropolis at Varna in Bulgaria dated to the fifth millennium BCE (Poplin 1991).

Astragalus bones are commonly retrieved in large numbers in ancient burials. Their presence is sometimes seen as representing cultic activities. The largest collection of astragali in the Levant comes from the tenth century BCE at Megiddo, where 684 astragali were found within a bowl together with a collection of cultic artifacts (Loud 1948: 45–46). A large number of astragali were found in the contemporary nearby site of Taanach (Lapp 1964). See Gilmour (1997) for references to other sites containing numerous astragali, occasionally in cultic and burial contexts.

In the first millennium BCE two types of pottery vessels (the *phormiskos* and the astragalus vase), mostly found in burial contexts, were developed by the Greeks to serve as containers for astragali. The astragalus vase was in the shape of large astragalus with an opening for the storing and removal of astragali. (The most famous example is that of Sotades in the British Museum.) The Greeks also practiced astragalomancy by casting five astragali, counting the total, and consulting the oracular table to determine the significance of the throw (Neils 1992).

The use of astragali for games has been ubiquitous throughout the Mediterranean region, with their specific handling varying over time and geography. Representations of astragalus games in Greek and Roman art often depict young women playing with several game pieces. The astragalus games have also been common children's activity in the Mediterranean region. In the Roman period, the game of Tali (astragalus in Latin) was very common, and was played in many versions. Usually in these games the astragalus was used as a dice. The four flat surfaces of the bone (one flat, one concave, one convex, and one sinuous side) have different names and different values. Astragali required no marks of value on them, since their four flat sides are naturally distinguishable, and it would fall on one of its four sides when dropped. This game is probably the forerunner of many "dice"games and the game young girls play today known as Jacks. One player tosses two or more

Young girls playing with astragali. Detail from Pieter Brueghel the Elder's painting "Childrens Games" (Metropolitan Museum of Art New York). *Photo courtesy of The Art Archive.*

astragali in the air and either catches them on the back of the hand, or lets them fall to the ground. As in dice games, assigned values determine the outcome of each toss.

Ethnographic records show children—and sometimes adults—playing a number of games using sheep or goat astragali. There are reports of numerous games played today with astragali, and these games vary worldwide from the Polynesian islands (Downes 1928) through the Americas (where they were introduced by the Spaniards [Lewis 1988]), and Europe to the Near East. The painting of Pieter Brueghel the Elder, "Children's Games" (ca. 1560) depicts over two hundred children engaged in over eighty play activities, of which over twenty children's games are illustrated. Among them on the bottom left of the painting two young girls are playing with astragali.

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Guy Bar-Oz received his Ph.D from Tel-Aviv University, Department of Zoology, in 2001. He holds academic degrees in Zoology, Ecology and Archaeology. His research experience in Zooarchaeology includes using taphonomic methods and techniques, and field experience in various excavations of prehistoric sites from Israel. His main research interests are subsistence activities and foraging behavior of ancient people and reconstructing their past environment from a zooarchaeological perspective. Currently, he is concluding his post-doctoral research at the Department of Anthropology, Peabody Museum, Harvard University, on the Middle Paleolithic–Upper Paleolithic hunters of the southern Caucasus, and returning to Israel to assume a faculty position at Zinman Institute of Archaeology, University of Haifa. The presented paper is part of a project that includes analyzing the bone assemblage from the Roman-Hellenistic fortress of Sh'aar-Ha'amakim.

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