oi.uchicago.edu

J
OINN
75

JAN 7 1982

THE ORIENTAL INSTITUTE

News & Notes

No. 75: January, 1982

Issued confidentially to members and friends
Not for publication

DIRECTOR'S LIBRARY
ORIENTAL INSTITUTE
UNIVERSITY OF CHICAGO

THE RISE OF HORTICULTURE IN THE LEVANT*

By Lawrence E. Stager

By 7000 B.C. permanent agricultural villages were well established throughout the Near East. The hallmarks of their subsistence economies were grain-farming and stock-raising, especially sheep and goats. This pattern predominated for the next 4000 years. With the dawn of the Bronze Age (ca. 3100 B.C.), however, horticulture developed in the Levant to give agriculture there its distinctively Mediterranean character.

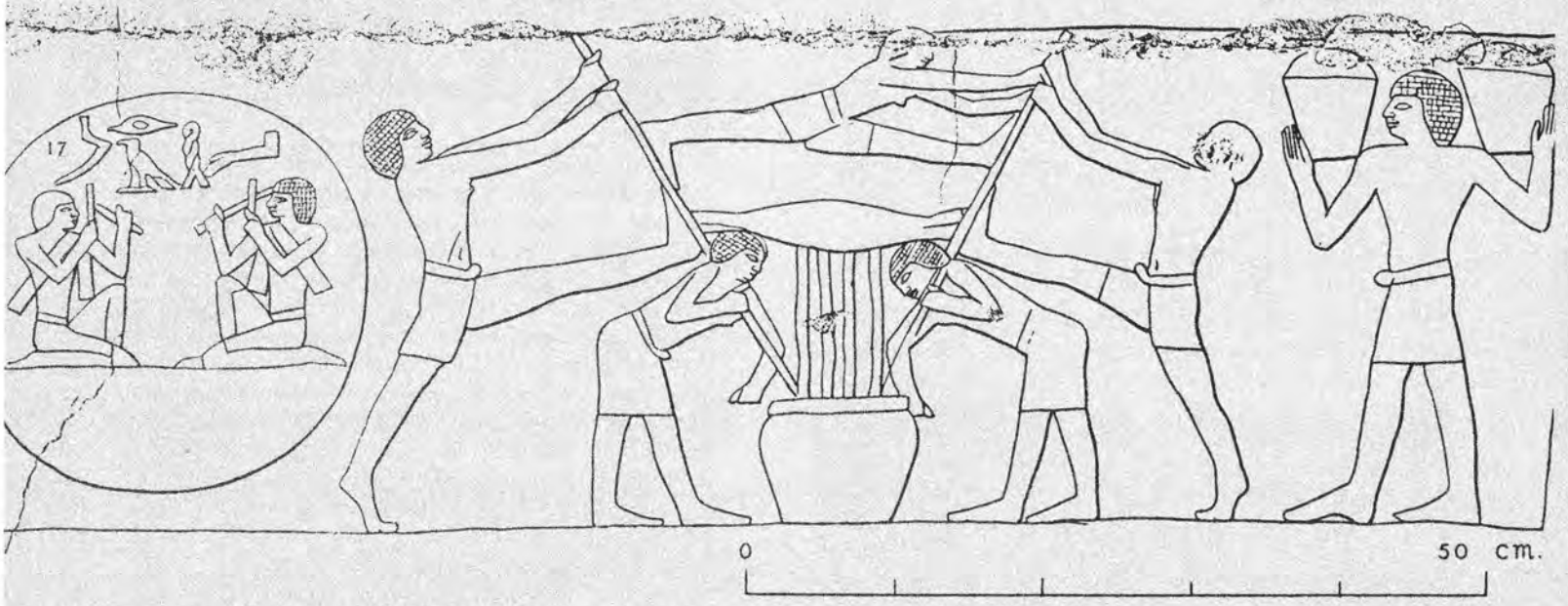
Fragmentary but conclusive botanical evidence indicates that by 3000 B.C. at least five fruits had been domesticated: olive, grape, date, fig, and pomegranate. Their appearance in the archaeological record points to the growing importance of horticultural products, especially olive oil and wine, in the third millennium B.C. economy of Palestine and western Syria.

The earliest domestication of the olive tree and the vine occurred along the eastern littoral of the Mediterranean in the same narrow zone in which their wild progenitors flourished. In fact the wild olive, which grows as far south as Palestine, can be taken as a sign of the Mediterranean plant zone. Like its wild ancestor, the cultivated olive tree prefers warm, rocky soils that are easily drained. These soils are typical of the limestone foothills and highlands that rise just behind the Mediterranean coast. Olives thrive in the hot, dry summers and wet, mild winters of the Mediterranean, although some chilling during winter months stimulates the growth of flowers and increases the fruit yield. Domesticated olives usually have larger fruits and higher oil content than their wild relatives.

The domesticated grape is also larger and sweeter than the wild type. The wild vine, unlike oleaster, is a Eurasian plant whose southern limits do not extend much below the Taurus and Amanus mountains. By Early Bronze I (3200-3100 B.C.) the wild grape had been successfully domesticated (probably first in southern Anatolia) and transplanted to Syria-Palestine and from there reached the Egyptian Delta by Dynasty I. Two of the earliest centers of grape cultivation, the Aegean and the Levant, share a common word for wine: yn (Ugaritic), yayin (Hebrew), and [w]oinos (early Greek). Apparently the word wa-en-nu, meaning "wine", is now attested in the Ebla archives. Another cognate appears in Hittite wiyanas. Perhaps the eastern Mediterranean word for wine originated in Anatolia, where the wild vine was presumably first cultivated.

Oils and wines imported to Egypt must have conferred a measure of prestige on those who could afford them and served as useful signifiers to other men and to the gods of one's status and rank. If olive oil is included among the unidentified 'sacred oils' used in Egypt as early as the third millennium B.C., we can be rather certain that it was imported either from Libya (thnw) or from the Levant, for olive oil production within Egypt has always been minimal.

(continued on page 2)



Sakkarah, tomb of Mereruka. About 2400 B.C. Five men operate a wine press while the musicians beat rhythms for the people treading grapes (left of circle, not illustrated.) Source: The Mastaba of Mereruka II (OIP 39 [1938] pls. 113-114).

oi.uchicago.edu

The Rise of Horticulture in the Levant (continued from page 1)*

Olive trees in Kidron Valley, Jerusalem.

If barley beer was the "national drink of Egypt" for king and commoner alike, then wine from the "eye of Horus" was the beverage of (class) distinction. It was a sumptuary item consumed by kings and nobles in this life and taken with them to the grave for the next one. The Egyptian deities seemed especially pleased with wine and oil offerings. But there were limits on the quantity and variety of wines that the Egyptians could produce. And production probably never equalled consumption. According to Herodotus, Egypt imported vast quantities of wine from Phoenicia and Greece. Wines from Tyre and Laodicea were especially prized by the Egyptians in classical times. Already by the early third millennium B.C. the Levant was supplying the Egyptian elite with some of these luxury products. I can imagine that these sumptuary items were in demand not for their nutritional value, but for their social and religious ones.

The distribution of Early Bronze presses, although rare on mounds themselves, does complement the botanical evidence for fruit-growing. At Samaria, in the central highlands, presses for both grapes and olives were carved into the bedrock of that Early Bronze I site. Lachish, in the foothills, probably had Early Bronze presses in the exposed bedrock of the mound. Nearby in the northeast section carbonized olive stones were found in abundance as well as some grape pips. A small courtyard press was discovered at Tell 'Areini. In the center of the press was a sunken pithos which contained carbonized olive stones. Taanach, in the Jezrael Valley, had an impressive Early Bronze II-III (ca. 2700 B.C.) grape press cut into the bedrock of the mound just outside the fortification walls. Even more impressive was the olive press unearthed at Ugarit in a late third millennium context. Twin stone slabs served as pressing platforms. The expressed oil flowed from there into two receiving basins below. Olive stones were found in one of the basins as well as a perforated stone that had probably served as a counterpoise weight for what may be the oldest example of a beam press.

Ceramic finds associated with this press include sherds of metallic combed ware store jars and the rim of a vat (also combed) that was probably used as an olive oil separator.

Pruning vines at Beth Zur.

Early Bronze Age separator vats, some more than 0.50 m. in diameter, are made of coarse, heavy ware; frequently they have spouts at the rim for draining or skimming the oil off the water. Vats can be found at Ras Shamra in the north to Tell-el-Hesi in the south. They are clear indicators of oil-processing centers; whereas, combed ware oil jars (when found without vats or other evidence of oil production) indicate which communities were receiving the oil. Combed ware store jars appear on the Syrian coast, in the Orontes Valley, and in northern and southern Palestine. Most of the Early Bronze cylinder seal impressions occur on combed ware jars and cluster at sites in the Jezrael Valley and in Galilee, where olive oil was always a major product.

Permanent settlements and stable conditions are the prerequisites for the commerical production of horticultural crops. They usually require a heavy, long-term investment. Olive trees must grow for 15-20 years before they give full yield. Vineyards also take years, even generations, before they produce their best quality vintage.

Throughout history this ribbon of vineyards and orchards was firmly tied to the shores of the Mediterranean through interregional and maritime trade. When the export "markets" declined and alternative sources of wheat were not available the farmers had little choice but to meet their subsistance needs first by turning their horticultural plots into pastures and grain fields.

The picture which I have sketched bears some resemblance to what Eric Wolf called the "neotechnic ecotype" in which specialized horticulture constitutes an important component. Wolf says that this ecotype "appeared first in the Mediterranean area, fostered by the tendency towards regional specialization along the shore of a sea linked by maritime traffic, and has historic continuity there from 1000 B.C. on . . ." (Peasants, 1966, Prentice Hall) I agree completely with this position but would push back the beginning of specialized horticulture from 1000 B.C. to 3000 B.C.

Hill country.

Urbanization, commerce, and horticulture were intertwined. It took not only technological know-how to domesticate the first fruit trees but also, and more importantly, sufficient societal demands (especially from the elite) to stimulate long-term investments in growing, maintaining, and processing these fruits. In the Levant, as in the Aegean and elsewhere, specialized horticulture was an indicator of societies that had moved well beyond subsistence economies. So long as intricate exchange networks were maintained and the confidence of the fruit-grower to long-term investments sustained, horticulture flourished. But war can quickly reverse what took generations to develop. Weni, a commander of the Egyptian army during the Sixth Dynasty, boasts that his army had cut down the figs and vines of the countryside. This was wreaking devastation then, and is true, as well today.

*Taken from an address delivered on September 19, 1981, by Dr. Stager before an audience at a conference on Palestinian archaeology in Aleppo.

oi.uchicago.edu

THE INTERNATIONAL SYMPOSIUM ON BABYLON, ASSUR AND HAMRIN

By Robert Biggs

We have just finished participating in the Third International Symposium on Babylon, Assur and Hamrin in Baghdad. The symposium, which lasted two weeks, was organized by the State Organization of Antiquities and we were their guests for the whole of that time. Besides myself, John Brinkman, Walter Farber and McGuire Gibson of the Oriental Institute took part in the symposium.

While we usually meet several Iraqi colleagues at the international Assyriological meetings, the emphasis there is usually on languages, whereas at the symposium, the emphasis was on archaeology and history. Consequently, it afforded an opportunity to become acquainted with a number of Iraqi archaeologists and their work. For example, on the day's outing to Babylon, we saw the newly excavated temple of Nabu, one of the chief gods of Babylonia, and were surprised to see decorated walls preserved to a height of six feet or so. We also saw other work in progress that is likewise inaccessible to the public.

Euphrates and Anah Island.

Although present circumstances have required that the Iraq Museum itself be closed, there was nevertheless a special exhibition of recent discoveries. Included was a hoard of gold jewelry from Babylon found in the area of the Hanging Gardens. A hoard of silver objects from Assur was also on display, as were important new finds from salvage areas.

The symposium program was a very full one, with sessions sometimes lasting from 9:00 a.m. to 9:00 p.m. Simultaneous translations were provided into English, French, and German for the papers given in Arabic and a translation into Arabic for the papers in Western languages.

Water wheel at Anah.

The final week of the symposium was devoted to extended trips. The first included a visit to the Abbasid remains in Sumarra (including the famous spiral minaret). We spent the night in Hatra. There we had a folkloric evening with Iraqi gypsies, with three women who sang and danced to the music of skin-covered clay drums and the one-stringed instrument called a rababba (made, as usual, from a one-gallon oil can). Most of us were thankful that the gypsies have not thought it necessary to provide amplification (all other music we heard was amplified far beyond the level where it could give us much pleasure).

Two nights spent in Mosul provided opportunities to visit Nimrud and Nineveh, with a brief stop at Khorsabad (Dūr-Sharru-kīn, Sargon II's capital), where the Oriental Institute excavated in the late 1920s and early 1930s. Also included was a visit to a medieval monastery, now being restored by the Iraqi Antiquities Organization, where we had a splendid lunch. On our return trip to Baghdad, we had a visit to another Assyrian capital, Assur, on the Tigris. Considerable excavation and restoration have been carried out there by the Iraqis, so there was much that we had never seen. After three cold nights in the north, we welcomed our hotel rooms and hot water.

The final part of the symposium consisted of a two-day visit to the Haditha area on the Euphrates toward the Syrian border. Much work has been done in this area soon to be flooded. On a late afternoon we visited Iraqi excavations and watched the sun set over the Euphrates. The next morning a small group of us struggled out of our tents before dawn for a private visit conducted by our Polish colleagues at the Late Assyrian fortress at Beijān, a small island in the Euphrates. Later we rejoined the larger group on another island in the Euphrates, Anah, where a British expedition is working at present. For many of us, this was the first time to see the traditional wooden water wheels on the Euphrates which are still in use.

We have felt very well cared for by our Iraqi hosts, starting with being met at the airport. Meals were sumptuous, including an evening at the Khan Marjan, a 1359 building recently splendidly restored and now used as a restaurant. We must have consumed an entire flock of sheep in the form of whole stuffed lambs (qūzi). Except in holy areas (such as where our hotel is located) there was plenty of beer ʿaraq, and imported beverages.

(continued on next page)

oi.uchicago.edu

Two views down the Euphrates from Ottoman Fortress at Rawa.

In summary, the importance of the symposium for many of us was the opportunity for informal and extensive discussions with Iraqi, Japanese, and European colleagues, including many from Eastern Europe whom we rarely have a chance to meet.

We are grateful to all those who have mailed in the Tour Survey forms. We will use the results to plan future tours.

Annual Membership fees went up to $20.00 ($25.00 for overseas) on January 1, 1982. It has been 11 years since the last increase in fees and the skyrocketing postal costs have meant that fees were no longer covering the cost of maintaining a member.

Please, help us save postage and time by sending in your renewals when you receive them.

Happy New Year from Malinda and Gretel

FEBRUARY LECTURE

John Carswell, Curator, Oriental Institute Museum and Research Associate (Professor), Oriental Institute, will present an illustrated lecture. Pottery and Porcelain - The Long Encounter Wednesday, February 10 at 8:00 P.M. in Breasted Hall. This is the fifth lecture in our series on the Technology of the Near East.

The Oriental Institute
The University of Chicago
1155 East 58th Street · Chicago, Illinois · 60637

NON-PROFIT ORGANIZATION
U.S. POSTAGE PAID
BULK RATE
CHICAGO, ILLINOIS
PERMIT NO. 1504

Dated Material

DIRECTOR'S LIBRARY
ORIENTAL INSTITUTE
UNIVERSITY OF CHICAGO