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# Libya Domestica: Libyan Trade and Society on the Eve of the Invasions of Egypt

## SETH RICHARDSON

Between 1300 and 1170 B.C., Libyan peoples five times invaded New Kingdom Egypt—the only foreign people to penetrate the territorial integrity of the XIXth and XXth Dynasty state. The intrusion of these peoples occurred with bewildering variety: now as starving refugees, now as bronze-clad warriors; appearing as single bands, confederated tribes, even in alliance with the utterly foreign Sea Peoples; perhaps at the behest of fifth-columnist Libyan settlers on the Delta edge, perhaps on the initiative of tribes in conflict as far away as western Cyrenaica. These episodes, long referred to as the collective "Libyan Wars" of the New Kingdom, arguably have little in common with each other except for the fact that our primary source material derives from the somewhat homogenized pharaonic inscriptions, describing a string of conflicts against peoples in the Western Desert.

Since the 1940s, a series of discoveries in the Western Desert has added to our knowledge the existence of a string of "fortresses" maintained by Ramses II, sited as far west as Apis (modern Zawyet Umm el-Rakham. See fig. 1). The discoveries at these sites were restricted, mainly, to fragments of buildings of Ramses II, sometimes alluding to military personnel and their actions against the Libyans. Not surprisingly, these sites have traditionally been viewed by archaeologists as primarily military in function. The stations themselves, however, with the exception of Apis and el-Alamein, display almost no coherent sur-

This fragmentary state of knowledge has led to some debate over the real causes of the various "Libyan Wars." One of the more enduring theories centers on the Meshwesh, ultimately the most successful of the tribes to settle in the western Delta: many have preferred to see in them a group entirely new to the area, moving through from west to east, inciting previously peaceful tribes to action or pressuring them to settle further east in turn.<sup>5</sup> The evidence supporting a lesser antiquity for the Meshwesh, however, is equivocal. They enter the historical picture long after we know of the Tehenu and Tjemhu, the border tribes of the Western Desert—but prior

viving architecture.<sup>3</sup> The biggest of the Libyan "fortresses," moreover, is barely larger than the smallest Nubian fortress.<sup>4</sup> The full function and program of these sites, then, remains obscure, and the "fortress chain" theorum far from proven.

<sup>&</sup>lt;sup>3</sup> O'Connor (1987, p. 36) sites "possible" fortresses at regular intervals between these fragmentary ruins; thus exists the "chain" of "forts."

<sup>&</sup>lt;sup>4</sup> Apis, the only building to have a measurable footprint, is ca. 8000 m<sup>2</sup>. By comparison: Shalfak (ca. 5400 m<sup>2</sup>), Uronarti (ca. 5600 m<sup>2</sup>), Kumma (ca. 10,000 m<sup>2</sup>), Semna (ca. 15,000 m<sup>2</sup>) and Kor (ca. 18,000 m<sup>2</sup>) were already much smaller than the enormous Nubian citadel-towns like Buhen and Mirgissa. As small an enclosure as the remains at Hamu (400 m<sup>2</sup>) has been labeled a "fortress" (Rowe [1953], 134, 139). Other possible fortresses have been claimed at el-Gharbaniyat, Tell el-Abqa'in, Karm Abu Girg, Rhacotis, Marea, Khashm el-Eish, Ezbet Abu-Shawish and el-Kurum el-Tuwal.

<sup>&</sup>lt;sup>5</sup> Both Bates (46–47) and Rowe (1954, 484) place the Meshwesh as proceeding against Egypt from western Cyrenaica. el-Mosallamy, 54, more recently wrote: "In fact, constant pressures from west eastwards in the search for fertile land caused permanent movements of the tribes. So, the Meshwesh pressed the Rebu and the latter pressed the Tehenu."

<sup>&</sup>lt;sup>1</sup> Habachi, passim. See Bibliography.

<sup>&</sup>lt;sup>2</sup> The first reference to the Lebu occurs in a stele of Ramses II at el-Alamein (Rowe [1954], 485, n. 2).

to the Libu and many of the smaller bands.<sup>6</sup> A campaign chronicle that seems to indicate that the Meşhwesh fled "beyond" the territory of the Libu, i.e., further west, is inconclusive.<sup>7</sup>

Another approach has been to understand the invasions as a signal of the general collapse of the Libyan economy, ostensibly following a famine or other disaster. Other inquiries hoping to catalog the kaleidoscopic "Libyans" have depended too heavily on the attempt to draw a concordance between the 13th century tribes known to the pharaohs and the fifth century tribes known to Herodotus. The result has been the creation of certain "ethnogeographies," (see fig. 11a) each hoping to locate the ethnic "homelands" of each tribe and so coordinate specific invasions with specific domestic Libyan quarrels. The problems with this approach include a probably false supposition that these individual tribes inhabited definable, static and non-overlapping territories; and the pitfalls of anachronism inherent in laying the Herodotean template on the Libya of almost a thousand years before. More commonly, the assumption is made that the Libyan incursions were straightforwardly the invasions of one state by another: the motives, simply spoil and conquest, with fortresses the familiar accouterment of international defense. This presumes much of our scanty evidence, and strains credulity most particularly on the question of Libyan ability and intention to conduct a campaign aimed at the partial or wholesale overthrow of the Egyptian state. <sup>9</sup> No single one of these approaches is without some merit, but none by themselves explains the serial invasions.

The principal Libyan Wars of the New Kingdom took place in the century between Seti I and Ramses III-in 1288, 1208, 1180, 1177 and 1174 B.C.—although minor conflicts pepper the record before and after this "window." 10 With the exception of the Seti I war in 1288 B.C., the troubles on the western borders of Egypt cluster tightly within a 34-year timespan. Yet Ramses II is credited with having erected, prior to this time a string of fortresses, structures found between the western Delta and modern-day Zawyet Umm el-Rakham, about 200 km east of the Egypto-Libyan border. 11 The remains in far-flung Apis and el-Alamein excited a number of questions: why were these structures built? how long were they occupied? why were they abandoned? Most

These explanations seem to me to be, at their heart, too simplistic: finding new social forms or activities in antiquity, notably the issues of primary urbanization and urban destructions, it has been the first response of many scholars to postulate that the emigration of a new group of people has caused the change.

<sup>&</sup>lt;sup>6</sup> Wainwright, 93, n. 8. While the Tehenu seem to have been in close contact with the Egyptians since predynastic times, the Meshwesh are not mentioned until the 14th century B.C. in the reign of Amenhotep III (O'Connor, 1983, 272). The Libu, meanwhile, are not mentioned by name until an inscription of Ramses II, although they may have been depicted as early as Akhenaten. Aside from the major tribes in the Western Desert—the Tehenu, Tjemhu, Libu-Rebu and Meshwesh—we also know of a number of smaller bands: the Imukehek, Kehek, Keykesh, Seped, Esbet, Ekbet, Shai, Hes and Beken (Bates, 46; Rowe (1948), 11).

<sup>&</sup>lt;sup>7</sup> O'Connor (1983, 275, 277) is critical of the interpretation of the flight of the Meshwesh beyond the "Fortress of the West" as being indicative of a homeland west of the Libu on the basis of the unsupported supposition that this fortress must be Apis.

<sup>&</sup>lt;sup>8</sup> Rowe displayed a great fastidiousness in determining which "Greek" tribe name replaced which "Egyptian" tribe name, the Adyrmachidae "supplanting the earlier Thehenu," and the Tjemhu by the Libyaegyptae, the Lebu by the Giligamae and the Meshwesh by the Nasamones (Rowe [1953], 145 and [1954], 492). In a similar vein, Černý equates the Meshwesh with Herodotus' mohawk-wearing Maxyes in agreement with an earlier writing of Rowe (1948, 7–8).

<sup>&</sup>lt;sup>9</sup> No successful Libyan pretension to territorial power of consequence is known to us until "the Libyan Buyawa," the first known Great Chief of the Ma—a full century after the death of Ramses III, the last of the Libyan War pharaohs.

<sup>&</sup>lt;sup>10</sup> Interpretations of Late XXth Dynasty journal records from Deir el-Medina have led to statements that Meshwesh "marauders" continued to harass Egyptian settlements as late as the reign of Ramses XI, but these remain purely speculative (Baines & Wente, 119; Wilson, 281; O'Connor [1983], 231, 278; CAH eds., II:2 [3rd ed., xxii]; Meskell, 198, 206). Haring (73–78), however, has drawn attention to the distinct possibility that these incursions were not necessarily hostile.

<sup>11</sup> These sites include: Apis; el-Alamein; el-Gharbaniyat; Tell el-Abqa'in; and possibly Karm Abu-Girg. Sparse evidence at several other sites, including Hamu, Marea, Khashm el-Eish, Ezbet Abu-Shawish, el-Kurum el-Tuwal and Rhacotis, led Rowe and others to list these also as Ramesside fortresses. This, in turn, gave footing to more recent speculations that the spaces in between these sites may still harbor other fortress remains. All we certainly know is that Ramses II conducted a building campaign at some sites in the Western Desert, purpose unknown. We might note, however, that no Libyan Wars occurred during his 65-year reign. In addition to Habachi, Rowe, Bates and O'Connor, cited above, refer also to Brinton, Ball and DeCosson.

tentative answers have focused on the Libyan Wars: these argue that the "fort" sites parallel the fortresses built in Nubia and Palestine in an age of imperial expansion, and as such constitute the high-water mark of Egyptian control on this their harshest frontier. The sites, marching single-file along the narrow coastal road, may superficially parallel the chain of Nubian fortresses, but seem less likely to have been arrayed for the purpose of actually controlling Libyan territory than for controlling the coastline itself. This is an important point of orientation: the Libyan "forts" were a northern, not a western, frontier. 12

Recent archaeological work at Marsa Matrouh has offered substantial insights into the indigenous economy of Marmarica in the period immediately prior to the invasion of Egypt. The existence of substantial, independent trade relations between Libyan tribesmen and Mediterranean traders prior to the New Kingdom wars is suggestive of conditions other than famine, intertribal warfare, the intrusion of new groups of settlers or an "urge to conquest." The "Libyan Wars" are known almost exclusively from Egyptian triumphal inscriptions; we know almost intuitively that these do not tell the whole story. It is possible, however, to construct a plausible "non-Egyptian" scenario: Conwell, White and O'Connor have helped to demonstrate that competition for land and resources in Late Bronze Age (1500-1200 B.C.) Marmarica could have exceeded that marginal environment's sustaining capacities because of the added burden of production for Mediterranean export via Marsa Matrouh, instigating economic distress and social conflict between groups in that region.

Marsa Matrouh is a small harbor site at the furthest western edge of Egyptian settlement, perhaps the remnant of a postulated larger inland harbor made up of a chain of lagoons. <sup>13</sup> It was once a port of call for Late Bronze Age traders carrying chiefly Cypriot and Egyptian, but also

some Minoan and Mycenean, ceramics, as well as bronze which was worked into finished product at the site. <sup>14</sup> The harbor would have constituted a convenient first landfall for ships south-bound from Crete on the counter-clockwise Late Bronze Age Mediterranean trade route. <sup>15</sup>

The presence of bronze in particular immediately sparked the interest of Egyptologists who returned to the historical problem of Libyan pastoralists suddenly in possession of bronze weapons and armor, storming the Egyptian border. It seems that the Marsa Matrouh/Apis locality marked a point of trade between the Mediterranean and Egypt, the latter having few if any viable Mediterranean ports of her own. Most interesting, perhaps, was the discovery at Marsa Matrouh of evidence reflecting the fourteenth-century seasonal encampment of native Libyans—most likely herding peoples come to the seaside for pasturage and trade—while foreign traders, probably Cypriot, lived on a small island in the harbor. 16

Further reflection, however, should temper this initial excitement: what could the Libyans possibly have had to trade in return? O'Connor,

<sup>&</sup>lt;sup>12</sup> Just as the Nubian forts did not control Nubia but rather the Nubian Nile and economy, however, the Libyan "forts" might have controlled the important economic zone of the territory, and are in this sense reminiscent.

<sup>&</sup>lt;sup>13</sup> White (1989), 94. Such an interior harbor would be similar to "lake harbors" such as the el-Bahrein site (Antiphrae) near el-Alamein (Daszewski, 403–4), and the Mareotic harbor prior to the protection afforded by Pharos (DeCosson, 131–34; also Strabo, XVII.1.6).

<sup>&</sup>lt;sup>14</sup> Hulin, 125–26; White (1989), 93 & n. 26, 105–6, 113; (1990), 3–4. The foreign traders' presence on Bates' Island, Marsa Matrouh, appears to date from the late fourteenth through thirteenth centuries, i.e., the century or so prior to the four wars of Merneptah and Ramses III. A recent survey at nearby Apis, about 25 km west of Marsa Matrouh, revealed the presence of Phoenician artifacts nearby the building of Ramses II; ongoing archaeological work there—the first since the 1950s by Habachi—may reveal more to us about pre-Ramesside remains at the site (IFAO Bulletin 1991: 3).

<sup>15</sup> Diodorus noted that there was virtually no decent landfall for ships between Paraetonium and Coele-Syria, LI.9–10. White (1986, 83–84) notes that trade ships traveling counterclockwise through these seas, would in summer months use the prevailing northwesterly winds to take them from Crete to North Africa, along which route Marsa Matrouh is the "closest as well as best protected landfall available to voyagers."

<sup>&</sup>lt;sup>16</sup> White (1986), 82: Libyan pastoralists may have "tended to use the better watered coastal strip during the hot summer months and to move south during the stormy winter season." Conwell (28), drawing a parallel with modern herding peoples in this region, suggests that the coastal presence would have lasted from April through November. Yet the rainfall in littoral Marmarica is actually arranged the other way—Bates (20) gives the November–February rainfall as 357 mm; yet June–September amounts to only 1 mm. White rearticulates the seasonal movement (1986, 84) a few paragraphs later as a function of when the seas were safe for voyagers rather than when water was available for herds; this seems more plausible.

for one, says that Egypt had been uninterested in Libya until the time of the New Kingdom invasions because it "lacked desirable resources"; Wainwright wondered that it was "difficult to see what [the Sherden] could have got in exchange from a wandering pastoral tribe such as the Meshwesh." White explained the trade in terms of the port's critical role in resupply of ships with food and water, and offered the suggestion that ostrich eggs may have been exported as a decorative piece of exotica. While these goods were undeniably in trade from this harbor, none seems by itself a compelling exchange for bronze. 17

Later classical sources, however, suggest an export item whose production was counted for several centuries as the national product of Cyrenaica: the silphium plant and its distillate, laser. Silphium is known to us from Greek sources prior to Herodotus, who mentions the plant in a manner so casual as to convey the impression that he assumes any reader should be familiar with it. 18 While the plant itself was considered a salad-like delicacy, its commercial value lay in the juice distilled from it, known variously as laser, sirpicum or laserpiticum, preserved by mixing it with a little flour. 19 Laser was reputed by various authors to have had enough medicinal properties as to virtually label it a cure-all, but the bulk of its attributes may be linked to three pharmacological powers: it operated as a digestive; a topical muscle and wound salve; and as a contraceptive/abortifacient. Pliny termed laser "one of the most precious gifts of Nature," devoting several sections to the powers of the drug, while noting that laser was also used as a base for many other medicines as well.<sup>20</sup>

From its debut in the historical record, the silphium plant was a mercantile blockbuster: its use as the insignia on Cyrenaic coins as early as the fifth century B.C., as well as depictions of the plant being weighed and stowed on board merchant ships by the King of Cyrene himself, attest to its importance. <sup>21</sup> Cyrenaic silphium is known to us as late as the letters of the bishop Synesius of Cyrene, ca. 400 A.D., though Pliny had reported it extinct in the first century A.D. <sup>22</sup> During Roman rule, silphium was purchased in North Africa with the proceeds of the Cyrenaic tax in the thousands of pounds annually; at various times, it was stored in the treasury at Rome. <sup>23</sup>

<sup>&</sup>lt;sup>17</sup> O'Connor (1983, 255); Wainwright (94, n. 11); White (1986), 84; (1990), 10–11. Ostrich eggs have been found intact in Mycenean shaft tombs and Etruscan graves, and eggshell fragments were found at the Marsa Matrouh site. As ostriches were desert creatures, with environs far to the south of the coast, these must necessarily have been long-distance trade goods and not simply local products. The Marmaric hinterland was also capable of producing other natural exports. High-grade salt was available from the region around Siwa, as well as gum ammonia, the Greek ammoniakon. Sulphur also was available from the region of Wadi Augila (Laronde, 199). It is possible also that the modern resicant plaster made from Marmaric thapsia garganica also may have been known in ancient times.

<sup>18</sup> Herodotus, Hist. IV.173, 195.

<sup>&</sup>lt;sup>19</sup> El-Athram, 24; Pliny Nat. Hist. XIX.xv.44.

<sup>&</sup>lt;sup>20</sup> Pliny, Natural History, XXII.xlviii ff. Our other great source of information on silphium comes from Theophrastus' Enquiry Into Plants, I.VI.11; II.1.6; III.II.2; IV.III.1; VI.III.1-7 and V.2; VII.III.2; IX.I.3-4 and I.7. Andrews (1941), though dated and neglected, remains a valuable source of information.

<sup>&</sup>lt;sup>21</sup> Laronde, 233ff.

<sup>&</sup>lt;sup>22</sup> Fitzgerald, Letters 106 and 134: Synesius' comments seem to indicate that silphium was somewhat rare by this time, although they are subject to interpretation. Pliny's claim concerning extinction comes in XXII.xlviii, one that most classical scholars have adopted as fact; El-Athram (25) makes note of the (presumably) valuable gift to Nero of a mere sprig of silphium as indicative of the plant's decline. Yet the fact of silphium's extinction is not proven by any means. Silphium has been associated with a variety of plants from the family Umbelliferae, especially thapsia garganica, whose medicinal properties are very similar-though menacingly nicknamed "gargan deathcarrot." (Boulos, 187, 191 and figure on 188). The known attempts to domesticate silphium seem to have been tepid successes at best (Fitzgerald, 42), noting the silphium grown in Synesius' brother's garden [Letter 106]. Fitzgerald also offers that silphium "... had no doubt been greatly destroyed by the savage tribes who were the curse of the country . . ." Yet it is clear that silphium was almost exclusively harvested (rather than destroyed) by Libyan tribesmen of the interior, not by the Greeks themselves. Pliny, Nat. Hist. XIX.xvi, believed silphium also to grow in Syria, though it appeared to be of quite a less potent nature; Theophrastus, however, in VI.III.7, explains that the Syrian magydaris "does not produce the characteristic juice; experts can also easily distinguish it by its appearance . . . some call it silphium." [emphasis mine] Umbelliferous plants are those in which the stalks above the root proceed from a common center.

<sup>&</sup>lt;sup>23</sup> Badian, 119–20; Andrews, 235. Pliny *Nat. Hist.* XIX.XIII.39–40, counts 30 pounds of silphium as the Treasury's income in 93 B.C., while the total inventory in 49 B.C. was 1500 pounds, which Caesar "produced out of the treasury together with gold and silver."

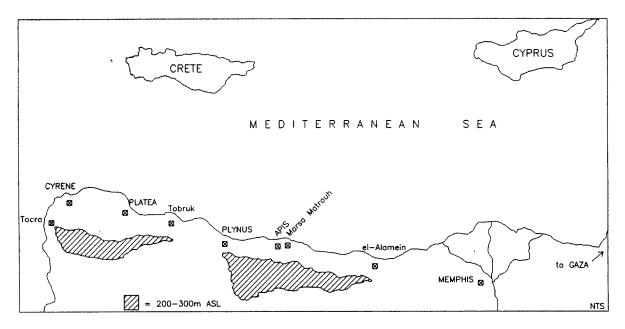


Fig. 1. The Libyo-Egyptian coast and probable silphium growth zones.

In Pliny's time, silphium was being "sold for its weight in silver denarii.<sup>24</sup>

Thus silphium is best known to us as a product of the classical Aegean and Roman world from the territory of Cyrene.<sup>25</sup> Several circumstances, however, point to the possibility of its prior cultivation nearby. The first of these proceeds from the classical sources' observations about where silphium was actually grown (fig. 1). The plant grew only in the restricted confines of the barren steppe behind the Cyrenaic plateau; as such, its cultivation in the wild could only be accomplished by Libyan tribesmen whose herds not coincidentally grazed on the plant's stubble, which supposedly fattened them and made their flesh more tender. Herodotus defined the silphium beds as extending "all the way from Platea to the mouth of Syrtis." Although Herodotus knew of settlements between Platea and Egypt, such as Plynus (modern Sollum), it is reasonable to assume that he did not know much of that non-Greek territory in the fifth century B.C.26 By

the first century of our era, Pliny was to more fully describe the silphium beds as extending about another hundred kilometers east of Platea:

The territory of Cyrene is considered good, to a depth of 15 miles from the coast, for even growing trees, but a further 15 miles inland, for growing only corn; then there is a strip of 30 miles wide and 250 miles long, suitable only for silphium.<sup>27</sup>

What Pliny is describing is the land between 200 and 300 meters above sea level, running behind the Cyrenaic highlands from south of Taucheria (modern Tocra) on the west, to Antipyrgos (modern Tobruk) on the east. East of Tobruk, the el-Diffa plateau dips down to the 180s meters ASL running about 80 km to the west, but recovers more or less around the modern Egypto-Libyan border, attaining heights around 240 meters ASL for the rest of the Libyan plateau, another 350 km or so to its point of termination south of el-Alamein. Thus the environment that sustained silphium growth in Cyrenaica terminates near the last substantial Greek settlement

<sup>&</sup>lt;sup>24</sup> Pliny, Nat. Hist. XIX.xv.39.

<sup>&</sup>lt;sup>25</sup> Bates, 28, for one, describes the product as exclusively Cyrenaic; but this remains to be shown from any evidence.

<sup>&</sup>lt;sup>26</sup> Herodotus, Hist. IV, 169ff.

<sup>&</sup>lt;sup>27</sup> Pliny, Nat. Hist. V.33.

there—but recurs a short distance away in Marmarica, continuing to a point within 100 km of the western Delta edge. Moreover, we have Theophrastus' report that the full growing zone of silphium was 4000 furlongs, about 700 km—from Tocra, therefore, to the vicinity of Marsa Matrouh. 28 This is somewhat corroborated by Pliny's retelling of the legend that a "shower of rain the color of pitch" first caused silphium to grow, and "that the effect of this rainfall extended over 500 miles [800 km] of Africa." This band is precisely the interior hinterland to which nomadic pastoralists of Marmarica would have retreated from season to season.

σιλφιον, silphion, Latin silphium is a word well-known to us in Graeco-Roman sources from Herodotus to Synesius of Cyrene, a period of a thousand years. How the lexeme itself entered the Greek language, however, remains unknown. Chamoux notes that "Le problème étymologique n'est pas résolu..."; similarly, Boisacq: "Emprunt...à une langue non indo eur[opeen]"; and Frisk: "LW aus unbekannter Quelle."<sup>30</sup> The word has a decided likeness, however, to the modern Berber word for the arid upper reaches of the Cyrenaic plateau, silbiyya, but for a shift of labial b to p.

Anthropologist Roy Behnke notes in his study of modern Cyrenaic Bedouin that folk terms for a wide variety of flora and fauna are identical to the names of the eco-zones in which they flourish.<sup>31</sup> This circumstance is paralleled in other ancient Near Eastern contexts: two of the most common lexemes in Sumerian for 'mountain,' KUR and HUR.SAG, both with slight modification also mean 'saffron': (<sup>ú</sup>HUR.SAG) = AZUKNA and <sup>ú</sup>KUR-GI-(E)RIN-NA.<sup>32</sup> A wealth of

classical sources attest to the fact that Libyan silphium grew exclusively in the interior highlands behind the territory of Cyrene, and was thus harvested not by the Greek settlers of North Africa, but by the Libyan tribesmen who controlled the interior.<sup>33</sup> Thus the suggestion by Hofmann that the root of the word comes from a common root for Berber *azlaf, aselbu* "iuncus maritimus" must necessarily be rejected as the plant in fact grew far from the coastal reaches.<sup>34</sup>

That Libyan loan-words had made their way into Greek as early as the time of Herodotus is explicit in the following passage, which also provides an excellent parallel for the use of ecotoponyms: "There are in [Libya] three kinds of mice, the two-footed, the 'zegeries' (this is a Libyan word, signifying in our language hills), and the hairy . . ."35 "Zegeries" [ζεγεριες] appears to be preserved in modern Tamazight (Moroccan) Berber in a form of the triple radical set ZGR, forming *izugarn*, ". . . plateau. Grande plaine servant de pâturage au bétail pendant la transhumance d'hiver." The same radicals form also *azgwer*, however, meaning "saffron,"36 thus demonstrating the parallels:

silbiyaa: silphion:: zegeries: azgwer plateau: silphium:: hills: saffron modern Berber: ancient Greek:: ancient Graeco-Libyan: modern Berber

The lack of available comparanda for the third relationship above, and the admitted consequent possibility of anachronism, does not, however, preclude an equal possibility of the viability of the first two expressed relationships. The earliest attested use of σιλφιον is from Solon, quoted by Pollux—"σπευδουσι δ' οι μεν ιγδιν, οι δε σιλφιον,

<sup>&</sup>lt;sup>28</sup> Andrews, 235 and Theophrastus, VI.III.2.

<sup>&</sup>lt;sup>29</sup> Pliny, Nat. Hist. XIX.xv.42.

<sup>&</sup>lt;sup>30</sup> F. Chamoux, "Du Silphion." 165-72, BAR International Series 236 (1985), p. 166; Émile Boisacq, Dictionnaire Étymologique de la Langue Grecque. Paris: Librairie C. Klincksieck (1938), p. 55; Hjalmar Frisk, Griechisches Etymologisches Wörterbuch, Band II. Heidelberg: Carl Winter (1973), p. 707.

<sup>&</sup>lt;sup>31</sup> Roy H. Behnke, Jr., The Herders of Cyrenaica: Ecology, Economy and Kinship among the Bedouin of Eastern Libya. Illinois Studies in Anthropology No. 12. Urbana: University of Illinois Press (1980), pp. 22–24.

<sup>&</sup>lt;sup>32</sup> René Labat, Manuel d'Épigraphie Akkadienne, 4th ed. Paris: Imprimerie Nationale (1963), pp. 167-69 and 187. ú.HUR.SAG, for instance, means roughly 'plant of/at the mountaintop.'

<sup>&</sup>lt;sup>38</sup> Herodotus, *Hist.* IV.169ff.; Pliny *Nat. Hist.* V.33; Theophrastus *Enquiry Into Plants* 6.3.2; Alfred C. Andrews, "The Silphium of the Ancients." *Isis* XXXIII:2, No. 88 (June, 1941), especially p. 235.

<sup>&</sup>lt;sup>34</sup> J. B. Hofmann and A. Walde, Lateinisches Etymologisches Wörterbuch, Fünfte Auflage. Bd. II. Heidelberg: Carl Winter, 1983, p. 547. By pictorial evidence and descriptions of the plant, silphium can be identified as a member of the family Umbelliferae, a carotid plant related to asafoetida and the scrub plant thapsia garganica ("gargan deathcarrot"); rushes belong to the family Juncacaea.

<sup>35</sup> Herodotus Histories IV.192.

<sup>&</sup>lt;sup>36</sup> Miloud Taïfi, *Dictionnaire Tamazight-Français (Parlers du Maroc Central)*. Paris: L'Harmattan-Awal (1991), p. 799.

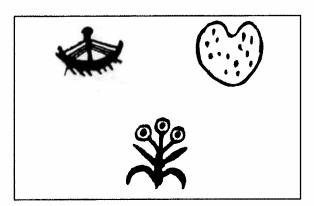


Fig. 2. MINOAN PICTOGRAMS: Sailing ship, Silphium fruit, Silphium plant (after EVANS).

oι δ' οξος"—whereafter Pollux identifies the ιγδιν as an old word for a θυειαν, an observation which suggest the early popularity of the drug.<sup>37</sup> If we can use Herodotus as any kind of index, the *latest* probable date for the entry of this word into Greek can be set in the mid-eighth century B.C.<sup>38</sup> This lends strength to the conjecture that silphium, appearing in quantity on the Greek scene form the outset, was already well-developed into an export product by that time.

The evidence for silphium production in the Late Bronze Age is fragmentary. Evans last postulated a Late Bronze Age trade in silphium in 1909, after pointing to the plant as the basis for the common Minoan pictograms represented in fig. 2, noting also their appearance in several cases in proximity to the sailing ship glyph. His surmise was that the "plant itself must evidently have played an important part in Minoan economy," the first sign representing the plant, the second sign representing its fruit.<sup>39</sup>

A further piece of evidence derives from a series of iconoclastic metal vases that appear in

<sup>37</sup> M. L. West, ed., *Iambi et Elegi Graeci ante Alexandrum Cantati*, vol. II. Oxford: Clarendon, 1992, p. 163. My thanks to Adam Becker for helping me locate this source.

<sup>38</sup> Herodotus, *Hist.* IV.158ff., if the founding of the Battid dynasty can be linked to roughly 56 years prior to the end of Apries' reign, 56 years equaling the reigns of Battus I and Arcesilaus, bringing us to a date in the mid-eighth century B.C. The basis for these dates is, of course, entirely dependent upon the validity of his chronology.

<sup>39</sup> Evans, 215, 246 and Figs. 102–3, numbers 57, 92 and 93. The silphium plants on coins of Cyrene first gained Evans' attention for this theory.

presentation scenes of Horemheb, Seti I, Ramses II and Ramses III, and perhaps are referred to in the Year 5 campaign records of Merneptah. These vases differ dramatically in form and ornament in comparison to depictions of other metal vessels before, during and after the New Kingdom period, and appear only in the art of these four kings. While their "strange" and "foreign" nature has long been noted—when identified at all, they are tentatively attributed to Syrian manufacture—these vases have otherwise been little explored. <sup>40</sup>

The vases are depicted primarily in presentation scenes suggesting a Syrian origin. A relief of Horemheb at Karnak shows the vases in a somewhat abbreviated, possibly "early" style, said to be tribute brought from Syria (fig. 3).<sup>41</sup> A scene of Ramses II, also from Karnak, differs little, although this vessel type shows some elaboration; these vases, too, were specifically said to have been brought from Syria (fig. 4).<sup>42</sup> Seti I, finally, also depicts the vessels at Karnak in connection with a city bearing a now-obliterated name that Gardiner believed to be Rafa or Gaza.<sup>43</sup>

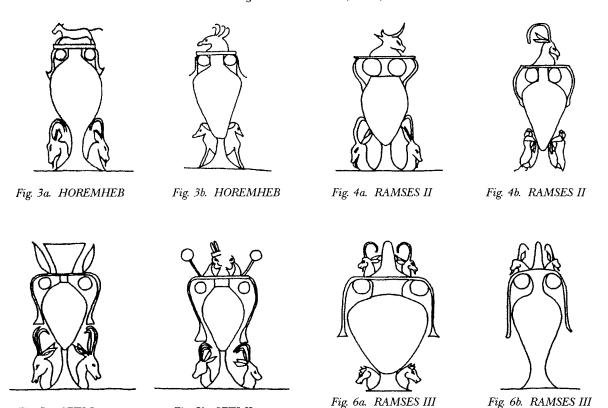
Seti I, however, also had himself depicted at Karnak presenting two rows of Libyan prisoners to the Theban Triad—along with similar vessels (fig. 5)—in a series of reliefs that are without doubt concerned exclusively with the prosecution

<sup>40</sup> Prisse d'Avennes (*Atlas* and *Texte*), (443–44 & Plate II.97, lower register): "Aucune terminologie ne peut rendre la variété innombrable des formes de vases, souvent trèsétranges, qu'on remarque à certaines époques sur les monuments égyptiens.... On attribue, généralement, ces vases aux peuples vaincus; rien ne prouve cependent que ce soient réellement des dépouilles opimes, ni des oeuvres d'artistes étrangers." Neither are these restricted to the Seti I and Ramses II victory scenes: Plate II.83 shows it is known from the depictions at Medinet Habu belonging to Ramses III. By way of comparison, no vase from scenes of Thutmose III (Plate II.74) is even vaguely reminiscent of these XIXth and XXth Dynasty vases. It goes almost without saying that no vessels of this type have ever been unearthed from the archaeological record.

<sup>41</sup> Wreszinski, Tafel 60, numbers 9–10, 12, 14, 18, 20, 22–23 and 25. In particular, compare the shortened form or omission altogether of the curving armature elements with later versions of these vessels. Figures 3–9 were all drawn by Molly Herron.

<sup>42</sup> Wreszinski, Tafel 59, numbers 2, 4, 6–7 and 10. In #4, note the extension of the armature to terminate in spherical elements

<sup>43</sup> Gardiner, 99, 104. That these are "border" cities is perhaps of interest.



Dynasty XIX and XX representations of vases from presentation scenes in relief.

and celebration of a war in Libya. 44 Vercoutter labeled these vessels "asiatic," however; 45 and O'Connor offers that the vessel group is "so similar to others assigned to Asiatics that it appears to be a replication of these, and not of metal work genuinely plundered from the Tjemhu." 46 Kitchen reassigns the upper file of prisoners in the relief as Syrian. 47 While the inscription does mention Retenu above these prisoners in an oblique sense, this is clearly an error, for both rows of prisoners are quite clearly decked out in the garb of Libyan peoples, replete with ostrich feathers and penis sheaths. 48

Fig. 5b. SETI II

<sup>45</sup> Vercoutter, 358-59.

Fig. 5a. SETI I

- <sup>46</sup> O'Connor, 1990, 62-63.
- <sup>47</sup> Kitchen, KRI Translations vol. I, 17–19.

Ramses III is the last to depict this vessel type, in two reliefs at Medinet Habu, one depicting the vases in the context of a Syrian victory, the other in a scene of victory over "all nations" (fig. 6). The vases in the Syrian relief appear directly above a presentation scene of Libyan spoil of identical composition, but with the spoil restricted to a count of severed hands and phalli.<sup>49</sup> The vases in the "all nations" presentation are in a more ambiguous context, with the row of prisoners mostly obliterated by a later intrusion of a raised doorway; ironically, for we imagine that the vases are intended again to be depicted as Syrian, one of the two remaining representative prisoners is Libyan, with no Syrian prisoner visible.<sup>50</sup>

<sup>44</sup> Wreszinski, Tafel 50/52, vessels at four corners of display.

<sup>&</sup>lt;sup>48</sup> Wreszinski, Tafel 50/52; *OIP* 107, p. 101, line 25 "Retchenu (sic)" and note f, which terms the use of the words Retenu and Asiatic here as "mistaken allusions" possibly employed here in a wider sense of desert peoples, albeit from the east.

<sup>&</sup>lt;sup>49</sup> OIP 9, Plate 93 (Syrian) and Plate 78 (Libyan). Note that other Libyan presentation scenes of Ramses III are restricted to the hands-and-phalli motif, including OIP 9, Plate 75 and OIP 8, Plates 22, 23 and 26, similarly Plates 42–43 (Sea Peoples).

<sup>&</sup>lt;sup>50</sup> OIP 83, Plate 317.

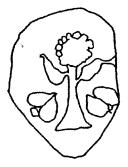






Fig. 7. n.d., with fruits

Fig. 8. c.330 B.C.

Fig. 9. c.460 B.C.

Silphium plants represented on 5th/4th c. B.C.E. coins from Cyrene.

Our inscriptional evidence confuses this "Syrian" picture, however. Seti I's Libyan scene refers only to the "tribute on their backs," nothing more specific, while his only reference to vessels in a battle relief is in a clearly Syrian context, where the stock phrase "[tribute of] silver and gold, lapis-lazuli, and turquoise and of every noble gemstone" is preceded by "every sort of precious vessel." This laconic reference is never elaborated.<sup>51</sup> Merneptah, by contrast, who nowhere depicts Libyan tribute, is famously effusive in his inscriptions of the progress and spoils of his Libyan War, referring to no fewer than eight different types of vessels in silver and bronze captured from the Ruler of the Libu himself, and from the Libu and Meshwesh tribes, totaling some 3,174 vessels, "representing a very considerable value in Egyptian terms."52 One might argue that these valuable metal vessels might not have looked like the Seti I vessels, but this argument it seems is intended to divert attention from the more challenging question: what would Libyan tribesmen be doing with 3,000 "Syrian" vases?

The question is aggravated by the inscriptional presence of vessels in the Ramses III Year 11 "poem" describing Meshwesh booty. Following a list of the slain and preceding a passage describing other booty—principally livestock—is a lacuna introduced by a reference to kt-vessels, which also appear in the Merneptah inscription; O'Connor posits that what follows is likely to be

With their highly-articulated decorative armatures and "cauliform buds,"<sup>54</sup> the bases bear a strong resemblance in design to the silphium plants depicted on Cyrenaic coins of the 5th and 4th centuries B.C.E. (Figs. 7, 8 and 9). In the context of silphium distillate produced for export, it is not unreasonable to suggest, as Merillees has suggested for a class of Cypriot jugs which he felt were modeled on the opium poppy, that the vessel resembled the product it contained.<sup>55</sup> I would suggest that an eastern Mediterranean trade in silphium that more or less bypassed Egypt was perpetuated by Cretan or Cypriot traders who fashioned vessels for the precious

a similar list of metal vessels.<sup>53</sup> Again, it seems the Libyans were in possession of a sizable number of highly valuable vases wrought in an ornate style: to believe that these instances misattribute the possession of these vessels is to discount as error both the Seti I depiction and the inscriptions of both Merneptah and Ramses III. While it would seem to run against reason to assign these vessels to Libyan manufacture, it seems equally absurd to dismiss them altogether. Can we find a plausible reason for Libyan possession of these items for over a century?

<sup>&</sup>lt;sup>51</sup> Kitchen, KRI Translations I, 9, Campaign from Sile to

 $<sup>^{52}</sup>$  O'Connor, 1990, 61–63 for a close analysis of these vessel types.

<sup>&</sup>lt;sup>53</sup> O'Connor, 1990, 61, citing KRI V.53.6-8.

<sup>&</sup>lt;sup>54</sup> Wreszinski, Tafel 50/52. Figures 7–9 are all drawn from original Cyrenaic coins in the collections of the American Numismatic Society, Catalog Numbers 1987.86.3, 1944.100.79433 and 1944.100.79440 respectively.

<sup>&</sup>lt;sup>55</sup> Merrillees' (1962) conjecture was that a distinctive "base-ring" juglet bore an "extraordinary similarity" to the incised head of an unripe opium poppy. Bisset et al. (1994), 110, found Merrillees' hypothesis "plausible," but unproven by chemical tests of residues from these vessels which failed to produce the alkaloids which fingerprint opium.

substance as a reflection of the value of the contents. It is interesting to note as well the semblance between two vessel lids—one of Horemheb, one of Seti I—to the well known horn-and-disc helmets of Sherden warriors, perhaps suggesting a transport role for these seafarers as well. <sup>56</sup>

The vessels occasionally sport Syrian captives in the place of the more predominant cattle-andgazelle motifs, clearly African references. Other vessels of this type have been embellished with integrated ankh-forms and Bes heads.<sup>57</sup> With the exception of the gazelle and bull-head motifs, however, it is unlikely that any of these forms would have appeared on actual vessels of non-Egyptian origin, appearing as they do only in Egyptian booty lists of foreign wars; it is thus likely that these are "Egyptianized" depictions of foreign vessels. We will, of course, never know to what extent Egyptian artists modified the appearance of the actual vessels, but the style shows enough congruity across time to suggest an independent and foreign manufacture. The Syrian label has been applied because the vessels appear in Egyptian booty-lists of Syrian campaigns, and because of the Syrian preeminence in metalworking. Yet we know also that bronzeworking, or at least international trade, had reached Libya via Crete or Cyprus by this time, and the presentation scenes may reflect only the purchasers of vessels that were manufactured in yet a third place. It is interesting that the elongated vessels' bodies bear a greater resemblance to known designs from Crete and Cyprus than to known Syrian ceramic forms, which we assume were often intended to mimic forms in metal.

Also suggestive of silphium is a well-known openwork bronze vase stand dated to the first half of the XVIIIth Dynasty (fig. 10) in the collection of the Field Museum of Natural History. The



Fig. 10. Dynasty XVIII openwork bronze vessel stand, Field Museum of Natural History (negative #A86290).

decorative motif on this piece has been linked by Smith and Steindorff to several other pieces, including scarab designs and other bronze vessel stands, but these other motifs demonstrably resemble the much more common lily bloom designs. Instead, the plant displayed on this piece, with its three round blooms and sheaved stems, resembles more closely the iconic silphium plant of Evans' argument.<sup>58</sup>

There is no evidence to suggest that silphium was actually in *use* in Egypt, however. Although there are two dozen or more unidentified drugs in Egyptian pharmacopoeia, few are suggestive of silphium's diverse properties.<sup>59</sup> It is possible

<sup>58</sup> Steindorff, passim; Smith, p. 242 and illustration 238, as well as p. 454 n. 18; of the "similar" designs referred to by Steindorff, which more resemble each other than they do this piece, the best example is Capart's publication of an openwork bronze vase stand, which displays the pronouncedly truncated lily blooms common to Egyptian decorative art.

<sup>59</sup> The best candidate of these would be *djaret*—variously thought to be opium, colocynth or, more convincingly, carob pod. Bisset, 110, recaps Germer's analysis of the known properties of *djaret*—highly reminiscent of silphium—thus: "... *d3r.t* is one of the most commonly prescribed [ancient Egyptian] drugs, as meal or as its juice or as a decoction. These dosage forms, which do not fit opium, occur in prescriptions for the same very wide range of conditions, the main areas being: (a) internally, for the treatment of coughs, the lungs and the chest; (b) as a mild laxative, in the treatment of abdominal complains; and (c) externally, for treating wounds, burns, ulcers, boils, infected sores, etc., fractures, and stiffness." I know, however, of no evidence to connect *djaret* to

 $<sup>^{56}</sup>$  Wreszinski Tafel 60 #25 (partly obliterated) and 36 #13; Sandars, ills. 68–69, 74 [all time of Ramses III].

<sup>&</sup>lt;sup>57</sup> OIP 107, 100, at pains to identify these vessels as they appear alongside *nemset*-jars and other more familiar forms, term them merely "ankh-jars" and "Bes-jars." Interestingly, however, the unmistakable floral element to the design does not escape unnoticed: the stopper of one of these jars is spoken of as "terminating in red buds with blue leaves." O'Connor (1990), 100–101, offers that the jars may have been of Egyptian design, and that the vessels could have been re-captured Tjemhu plunder.

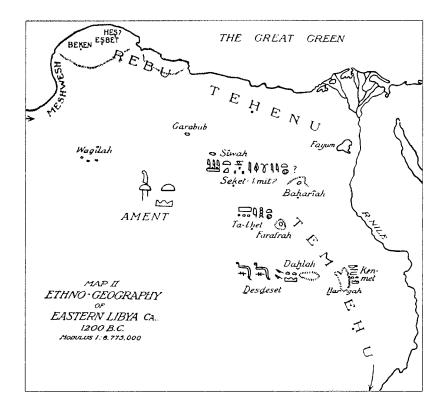


Fig. 11a. Tribal homelands of Libyan peoples as proposed by Bates, 1914.

that silphium, then, was most likely an export item for trade to Crete, Cyprus and the Syro-Palestinian littoral, gathered by herding peoples with seasonal access to the interior cultivation zone. That Libyan access to silphium was intimately connected with seasonal movements is illustrated by Behnke and Pliny. Behnke's study of Cyrenaic bedouin revealed that the winterand springtime shift of herd animals into the zone where *thapsia garganica* grew requires delicate timing: the root of the plant is poisonous to grazing animals and requires of the herdsman careful watch. <sup>60</sup> Pliny reported that:

either Libya or silphium. Among other potential candidates for silphium in the Egyptian drug repertoire are: niaia-plant, which could "cause a woman to give to earth"; gesfen, perhaps asafoetida; gengenet, for gastro-intestinal ailments; and ineb-, shenfet-, tiam-, and wam-plants, all unidentified flora, Nunn, 154–55, 159, 195.

60 Behnke, 62: "Those herds which use the plateau must move into the region before the gargan deathcarrot becomes dry in late spring"; and 17: "... the plant is poisonous and can kill herd animals which graze it." He continues here to explain that the green plant "emits a distinctive warning odor"; it is only when the plant has dried that unwitting herd

... [silphium] did not act as a purge with cattle, but if they were ailing it cured them, or else they died at once, the latter not happening in many cases.<sup>61</sup>

These seasonal movements are crucial not only to reconstruct the economic life of the Late Bronze Age Libya, but also to understand the political aspects of this society. The past attempts to reconstruct tribal "ethno-geographies" (fig. 11a) have been based on a model of tribal land-use as if individual tribes inhabited partitioned and distinct territories: micro-states, a model best described as colonialist in outlook. It is more likely, however, that the Marmaric environment sustained, as it does today, a variety of groups whose terrain was not divided by territorial boundaries, but who employed the natural resources of a common terrain in different

animals are in danger: "For those herds which fail to return in time, the area is effectively off-limits for the remainder of the year."

<sup>61</sup> Pliny, Nat. Hist. XIX.xv.46.

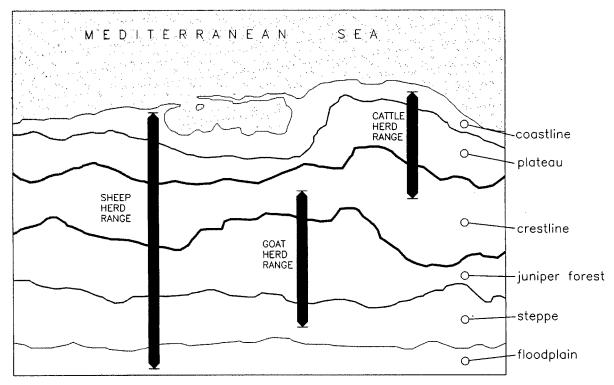


Fig. 11b. Range of pastoral land use in Marmarica according to herd type, after Behnke, 1980.

seasonal patterns, principally according to the varying needs of their herd animals (fig. 11b). These groups would have enjoyed a fragile system of shared access to resources and usufruct organized around relations of patrilineal descent. Thus, the hinterlands between Marsa Matrouh and Siwa were likely to have been populated by a number of bands occupying the same lands—not discrete "ethnic states." Nor need we believe that the Marmaric environment, situated between the more fertile western Delta and the Cyrenaic promontory, could not sustain a population capable of mounting invasions of 20–30,000 armed men: into the early part of this century, an esti-

62 Behnke, 4-5; 52-55, he notes that differences in forage and migratory abilities of different herd animals typically force Bedouin to specialize in one herd animal. Thus, Fig. 11b displays the different seasonal movements of herding groups, the most likely distinction between groups of Late Bronze Age Libyans. For an example of continued reliance on the ethnogeographic model, see Beltrami, 136 and 141: "Meshwesh, Tehenu and Temehu signify the probable territories of the Libyan tribes of those names described by the Egyptians." mated 150,000 people practiced seasonal transhumance in Marmarica.<sup>63</sup>

It is much more likely that these groups coexisted in this marginal environment than that this environment could have been subdivided between any number of economically autonomous zones. There is a strong likelihood, therefore, that the tribes known from Egyptian records were more or less ethnically homogeneous bands which competed for graze and water in the el-Diffa, divided by herd and migration concerns more than by territorial boundaries. O'Connor postulates that these peoples may have moved into the Egyptian sphere because their economic success caused enough internal strain to require them to move out of the area, i.e., to

<sup>&</sup>lt;sup>63</sup> Conwell, 28. Conwell describes a modern population that practiced what Rowton (1974) refers to as enclosed nomadism, in which a semi-sedentary group sends part of its population out for seasonal work tending herds in the hinterlands; Behnke also describes this phenomenon in Cyrenaica. Herodotus, *Hist.* iv. 174, refers to the Libyan Nasamones who "in the summer leave their cattle on the coast and go up country to a place called Augila for the date harvest."

surroundings better equipped to sustain the economic vitality of their burgeoning herds. This proto-state formation he has termed the "nomadic state," presumably culminating in the Libyan supremacy of the XXIInd and XXIIIrd Dynasties:

A typical mechanism of state formation is for nomads to conquer and then occupy regions occupied by sedentary agriculturalists, and then either become sedentary themselves, or exploit the conquered folk through tribute, taxation, and other means.<sup>64</sup>

It is significant, however, that in no instance did the Libyans appear to conquer anyone. What we know of Libyan settlement in the desert suggests a slower process of infiltration, settlement and sedentarization, after which "state formation" occurred, resulting sometime later in the so-called "Libyan dynasties." More than 325 years passed between the first major "Libyan War" and the accession of Shoshenq I; a simple model of conquest and domination cannot explain the varied events of this long epoch.

O'Connor's later, fuller exposition of this thesis, however, states that a growing nomadic group with an internally complex social structure must fully integrate with a sedentary state in order to achieve stability—in short, to become sedentary itself. The consideration I wish to add to this thesis is that this quest for stability is not a consequence of nomadism *per se*, but of *growth*: economic and social changes in tribal societies inhabiting marginal environments will tend to disenfranchise some members of that previously egalitarian society and the resulting crises will aggravate demands made on the delicate environment—prompting more crises.

The Egyptian stations are a good clue: Egypt could not hope to control Libyan populations and hinterlands, but it *could* control the key points of economic interaction on the coast. With this, we can see a process by which export and trade began to induce economic stratification within traditional tribal social structures. The ingressive migration of a "nomadic state" would

The "dimorphic structure" proposed by M. B. Rowton is much in evidence, then:

The richest and the poorest among the nomads tend to sedentarize, thus reinforcing social stratification within the sedentary nontribal population. While the destitute tribesmen become detribalized, the members of the tribal elite tend to retain influence among the nomads. . . . Initially the interests of the tribal elite and the tribe coincide. But in time this ceases to be the case, and tribal disintegration ensues. 67

Yet in the context of antiquity's limited documentary corpus, it is probable that the process of stratification and social deterioration would typically *already* be in process by the time tribal peoples enter the written record—what Rowton refers to as a "symbiosis" between transhumant herders and urban agriculturalists is in fact an already later stage of destructured tribal abandonment of non-urban lifeways.

Nor need we imagine this type of social conflict only emerging with the entrance of nomadic peoples into urban or agricultural settings. White contends, for instance, that Libyans "would have tended to use the better watered coastal strip during the hot summer months and to move south during the stormy winter season," implying a pristine late prehistoric setting. But Halstead, writing on the subject of (European) Mediterranean rural economies, would criticize

require an incubatory period during which prosperity—and a corresponding impoverishment of some tribal members, the "starving refugees" of the Merneptah war, for example<sup>66</sup>—might occur. With chieftaincies of nomadic peoples centering on "towns"—Egyptian records refer to Libyan settlements as *dmi*, towns—new hierarchies developed, between chieftain and pharaonic official, between chieftain and his band, and between the members of the bands themselves.

<sup>64</sup> O'Connor, Expedition 29, p. 37.

<sup>65</sup> O'Connor, (1990), esp. 106-8.

<sup>&</sup>lt;sup>66</sup> Kitchen, 20. We have also the Libyans included in a scene from Horemheb's tomb at Saqqara, depicting foreigners, "who do not know (how) they may live, are come from (?) . . . their countries are hungry, and they live like animals of the desert . . ." Martin 95–97.

<sup>&</sup>lt;sup>67</sup> Rowton (1973) and (1974), 17.

<sup>&</sup>lt;sup>68</sup> White (1986), 82.

this view of idyllic, pristine nomadism as an "extreme formulation," under which

transhumance is literally an inevitable consequence of environmental constraints and can be extrapolated back into the distant past with absolute confidence. All the common farmyard animals, however, can and do survive the heat and aridity of the lowland summers. . . . A more usual and less contentious, 'environmental' interpretation of transhumance sees such twice-yearly movements as evading the season of scarce grazing in both the lowlands and the mountains and so permitting the maintenance of larger populations of livestock (and people). In other words, transhumance is a necessary response to the Mediterranean environments if livestock are kept on a sufficiently large scale. 69

Thus, even this "traditional" transhumant way of life is itself a response to growth, and its adoption in pre-history was probably not without social disruption.

Thus environmental repercussions might ensue: expanded silphium cultivation for export could easily have overtaxed the delicate balance of rainfall and pasturage in Marmarica—silphium itself constituting a staple fodder for herd animals—prompting a series of economic crises—a "boom-and-bust" cycle of overexploitation. Reports, such as Pliny's, of unavailability or even extinction of silphium may merely represent the disappearance of a supply sufficient for export, but this may have represented an economic problem for Libyan tribespeople as well as an environmental one.<sup>70</sup>

Competition for control over the point-of-trade on the coastline, meanwhile, between cattle-herd-

ing groups occupying the coast year-round and the sheep-herding groups who shuttled between the interior low steppe where silphium grew and that same coastline, may have meant in practice that the groups we know as cattle-herders—primarily the Meshwesh-may have blocked other bands from marketing their product; or extorted a toll; or moved to become profiting middlemen; or a combination, prompting local conflict.<sup>71</sup> There is significant evidence in Egyptian records reflecting inter-tribal strain in the various Libyan coalitions.<sup>72</sup> The complex ties of kinship and resource-sharing that prevail today among Bedouin tribesmen in the same environment could easily have broken down under this strain, causing internal violence, new alliances, and the expulsion of some groups altogether.<sup>73</sup> Changing economic fortunes may have accounted for the shifting pattern of allies and enemies in the playbills of the half-dozen "Libyan Wars." We must consider the possibility that the Libyan Wars as we know them are not merely a fragmentary chapter of Egyptian history: the Libyan incursions on Egyptian soil may have been events peripheral to a major disruption in Marmarica, which occasionally spilled over into the New Kingdom state.

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<sup>71</sup> The access of pastoral people to resources in marginal environments recalls the story of Herodotus, *Hist.* III.112 about Arabian ledanon: "Still more surprising is the way of getting ledanon—or ladanon, as the Arabians call it. Sweetsmelling substance though it is, it is found in a most malodorous place; sticking, namely, like glue in the beards of he-goats who have been browsing amongst the bushes."

The Meshwesh attacked the Tehenu to get through to Egypt in the time of Merneptah (O'Connor [1983], 272–74; Bates, 216); the Meshwesh in turn seem to have been duped by their Libyan allies in their war against Ramses III, lamenting "Libya has misled us.... We hearkened to their counsels." (Bates, 223); and the coup against Meryey by his fellow tribesmen following the Merneptah war seems to have been amply factious: "All the chiefs are disgusted." (Bates, 218). The continued factional strife of the competing Libyan chieftaincies of the Late Period are more probably indicative of Libyan politics than the Egyptians' agglommerative and monolithic view of western peoples.

<sup>73</sup> It may not be altogether facile to suggest that there is some relationship between the sheep's head insignia of the inland Siwa temple, while the coastal temple at Zawyet Umm el-Rakham was that of the Apis bull—both were later styled as shrines of Jupiter Ammon.

<sup>&</sup>lt;sup>69</sup> Halstead, 79–81. Italics mine.

<sup>&</sup>lt;sup>70</sup> Theophrastus' fourth century B.C. report relates the legend that silphium originally sprang up from a rainshower, where there had been none before, *Enquiry* III.1.6; and that the Libyans kept strict regulations, VI.III.3, "in accordance with which they fix carefully the proper amount to be cut, having regard to previous cuttings and the supply of the plant." Andrews discusses at length the causes of supply depletion as a function of Roman competition during the crises of the civil wars. These are indications of the havoc heavy demands might wreak on this delicate environment.

## **Bibliography**

- Andrews, Alfred C. "The Silphium of the Ancients." Isis XXXIII, Part 2, No. 88: June, 1941.
- el-Athram, R. "The Silphium Plant in Cyrenaica." UNESCO, 1986, 23-29.
- Badian, E. "M. Porcius Cato and the Annexation and Early Administration of Cyprus," JRS 55 (1965), 110-21.
- Ball, John. Egypt in the Classical Geographers Cairo: Ministry of Finance, Survey of Egypt, 1942.
- Bates, Oric. The Eastern Libyans: An Essay. London: MacMillan and Co., 1914.
- Behnke, Roy H., Jr. The Herders of Cyrenaica: Ecology, Economy and Kinship among the Bedouin of Eastern Libya. Illinois Studies in Anthropology No. 12. Urbana: University of Illinois Press, 1980.
- Beltrami, V. "Population of Cyrenaica and Eastern Sahara before the Greek Period." 135–43, BAR International Series 236 (1985): Society for Libyan Studies, Occasional Papers I: Cyrenaica in Antiquity, ed. Graeme Barker et al.
- Bisset, Norman G., et al. "Was opium known in 18th dynasty ancient Egypt? An examination of materials from the tomb of the chief royal architect Kha." *Journal of Ethnopharmacology* 41 (1994), 99–114.
- Boisacq, Émile. Dictionnaire Étymologique de la Langue Grecque. Paris: Librairie C. Klincksieck, 1938.
- Boulos, Loutfy. Medicinal Plants of North Africa. Algonac, Mich.: Reference Publications, Inc., 1983.
- Brinton, Jasper Y. "Some Recent Discoveries at el-Alamein," *BSAA* 35 (N.S. XI:2 [1942]), 78-81, plates and addendum, 163-65.
- Buxton, R. G. A. "Imaginary Greek Mountains," JHS CXII (1992), 1-15.
- The Cambridge Ancient History, 3rd ed., II:2 (Cambridge: University Press, 1972).
- Capart, J. Documents pour servir à l'étude de l'art égyptien, II. Paris, 1931.
- Chamoux, F. "Du Silphion." 165-72, BAR International Series 236 (1985): Society for Libyan Studies, Occasional Papers I: Cyrenaica in Antiquity, ed. Graeme Barker et al.
- The Assyrian Dictionary of the Oriental Institute of the University of Chicago (CAD), vol. A<sub>2</sub>. Chicago: Oriental Institute, 1968.
- Conwell, David. "On Ostrich Eggs and Libyans: Traces of a Bronze Age People from Bates's Island, Egypt," *Expedition* 29:3 (1987), 25–34.
- Daszewski, Wiktor A. "Communication: À la Recherche d'une Égypte Peu Connue: Travaux sur la Côte Nord-Ouest, À Marina El-Alamein," *CRAIBL*, April–June 1993, Fasc. II, 401–18.
- De Cosson, Anthony. Mareotis. London: Country Life Ltd., 1935.

- Diodorus Siculus. *Diodorus "On Egypt."* trans. Edwin Murphy. London: McFarland, 1985.
- The Epigraphic Survey of the University of Chicago. Medinet Habu, I (OIP 8, 1930), II (OIP 9, 132), V (OIP 83, 1957) and VII (OIP 93, 1964).
- Evans, Arthur J. Scripta Minoa. Oxford: The Clarendon Press, 1909.
- Fakhry, Ahmed. Tomb of Si-Amun from Siwa Oasis; Its History and Antiquities. Cairo: Government Press, 1944.
- Fitzgerald, Augustine. The Letters of Synesius of Cyrene. London: Oxford University Press, 1926.
- Frisk, Hjalmar. Griechisches Etymologisches Wörterbuch. Band II. Heidelberg: Carl Winter, 1973. Frisk's reference is to Hofmann's theory, see Walde-Hofmann, below.
- Gardiner, Alan H. "The Ancient Military Road between Egypt and Palestine," JEA VI (1920), 99–116.
- Habachi, Labib. "The Military Posts of Ramesses II On the Coastal Road and the Western Part of the Delta," *BIFAO* 80 (1980), 13-30 and plates.
- Halstead, P. "Traditional and Ancient Rural Economy in Mediterranean Europe: Plus Ça Change?" *JHS* cvii (1987), 77–87.
- Haring, B. "Libyans in the Late Twentieth Dynasty,"
  71-80 in Village Voices: Proceedings of the symposium Texts from Deir el-Medina and their interpretation', ed.
  R. J. Demarée and A. Egberts, Leiden: Centre of Non-Western Studies, 1991.
- Herodotus, Histories.
- Hulin, Linda. "Marsa Matruh 1987, Preliminary Ceramic Report," *JARCE* XXVI (1989), pp. 115–26.
- Institut Français d'Archéologie Orientale du Caire. "Recherches, Découvertes Archéologiques," *IFAO Bulletin d'information archéologique*, 1991 No. 3: Janvier-Juillet, 32–33.
- Kamal, Dr. Hassan. A Dictionary of Pharaonic Medicine. Cairo: National Publishing House, 1967, pp. 13 "Acacia Gum (Gum Arabic)" and 427: "Silphium?".
- Kitchen, K. A. "The Arrival of the Libyans in Late New Kingdom Egypt," pp. 15–28 in Leahy, ed.
- \_\_\_\_\_. comp. Ramesside Inscriptions: historical and biographical, v. IV-V. Oxford: Blackwell, 1975-.
- \_\_\_\_\_. trans. Ramesside Inscriptions: translated and annotated, vol. I. Oxford: Blackwell, 1993.
- Kolata, Gina. "In Ancient Times, Flowers and Fennel For Family Planning," *New York Times*, "Science Times," C1 and C10.
- Labat, René. Manuel d'Épigraphie Akkadienne, 4th ed. Paris: Imprimerie Nationale, 1963.
- Laronde, André. Cyrène et la Libye Hellénistique: Libykai Historiai de l'epoque républicaine au principat d'Auguste. Études d'Antiquités Africaines. Paris: Éditions

- du Centre National de la Recherche Scientifique, 1987.
- Leahy, Anthony, ed. Libya and Egypt, c1300–750 BC, (London: Centre of Near and Middle Eastern Studies, 1990).
- Martin, Geoffrey Thorndike. The Memphis Tomb of Horemheb, Commander-in-Chief of Tut<sup>c</sup>ankhamūn I: The Reliefs, Inscriptions and Commentary. London: Egypt Exploration Society, 1989.
- Merrillees, R. S. "Opium Trade in the Bronze Age Levant." *Antiquity* XXXVI (1962), 287–92 and Plates XLII–XLIII.
- Meskell, Lynn. "Deir el Medina in Hyperreality: Seeking the People of Pharaonic Egypt," *JMA* VII:2 (1994), 193–216.
- el-Mosallamy, A. H. S. "Libyco-Berber Relations with Ancient Egypt: the Tehenu in Egyptian Records." UNESCO 1986, 51–68.
- Nunn, John F. Ancient Egyptian Medicine. Norman: University of Oklahoma Press, 1996.
- O'Connor, David. "Egyptians and Libyans in the New Kingdom: An Interpretation," *Expedition* 29:3 (1987), 35–37.

- Prisse d'Avennes, Emile. Atlas de l'Art Égyptien. Cairo: Zeitouna, 1991 (reprint); text, Paris: Arthus Bertrand, 1879.
- Rowe, Alan. "A Contribution to the Archaeology of the Western Desert," Parts I, II and III, *BJRL*, v. 36, Nos. 1 (Sept. 1953, pp. 128–45) and 2 (March, 1954, pp. 484–500) and v. 38, No. 1 (Sept. 1955, pp. 162–63 only).
- \_\_\_\_\_\_. A History of Ancient Cyrenaica: New Light on Aegypto-Cyrenean Relations, ASAE, Supplement 12. Cairo: L'Institut Français d'Archaeologie Orientale, 1948.
- Rowton, M. B. "Enclosed Nomadism," *JESHO* XVII:1 (March 1974), 1–30.

- \_\_\_\_\_\_. "Urban Autonomy in a Nomadic Environment," *INES* 32 (1973), 201–15.
- Sandars, N. K. The Sea People: Warriors of the Ancient Mediterranean 1250–1150 BC. London: Thames & Hudson, 1978.
- Smith, W. Stevenson. The Art and Architecture of Ancient Egypt, rev. William Kelly Simpson. New York: Penguin, 1981.
- Steindorff, Georg. "Ein bronzener Gafäßuntersatz," ZÄS 73 (1937), 122–23.

Strabo.

- Taïfi, Miloud. Dictionnaire Tamazight-Français (Parlers du Maroc Central). Paris: L'Harmattan-Awal, 1991.
- Theophrastus, Enquiry Into Plants.
- UNESCO. Libya Antiqua: Report and Papers of the Symposium Organized by UNESCO in Paris, 16 to 18 January, 1984. Paris: UNESCO, 1986.
- Vercoutter, Jean. L'Égypte et le Monde Égéen préhellénique. IFAO Bibliothèque d'étude, v. 22. Cairo: 1956.
- Wainwright, G. A. "The Meshwesh," *JEA* 48 (1962), 89–99.
- Walde, A. and J. B. Hofmann. Lateinisches Etymologisches Wörterbuch. Heidelberg: Carl Winter, 1982, Fünfte Auflage. "Sirpe," Zweiter Band M-Z, p. 547.
- Wente, E. F. and J. R. Baines. "Introduction to Ancient Egyptian Civilization," *The New Encyclopedia Britannica*, v. 18, 1992, 104–23.
- White, Donald. "1985 Excavations on Bates's Island, Marsa Matrush," JARCE XXIII: 1986, pp. 51–84.
- \_\_\_\_\_. "Provisional Evidence for the Seasonal Occupation of the Marsa Matruh Area by Late Bronze Age Libyans," pp. 1–14 in Leahy ed.
- Wilson, John A. *The Culture of Ancient Egypt.* (Chicago: University of Chicago, 1951).
- Wreszinski, Walter. Atlas zur Altaegyptischen Kulturgeschichte, Zweiter Teil. Geneva: Slatkine Reprints, 1988.