

## CHAPTER XX

### THE TRANSMISSION TO GREECE

Greek culture and art were not born, like the patron goddess of the foremost hellenic city, fully grown, but developed gradually, and chief among the mentors of nascent Greece was the Orient, whose influence can be traced in every facet of early Greek life. Among the striking new movements of the Orientalizing period, the appearance of plant ornament remains a relatively minor feature, and yet it is a thread well-suited to be a guide in disentangling the devious paths by which eastern traditions reached Greece.

#### THE POSSIBLE CONNECTIONS OF LATE HELLADIC AND GREEK PLANT ORNAMENT

The problem of the transmission of plant ornament to Hellas is extremely complicated, for it involves some of the most enigmatic questions of early Greek archaeology. For example, Riegl's treatment of Mycenaean plant ornament as the first flowering of hellenic genius and the direct antecedent of later Greek decoration must be checked.<sup>1</sup> This involves the much-discussed topic of the origin of the Greek Geometric style and its relationship with earlier Helladic wares.<sup>2</sup> Early students of the problem appear to have been split into two schools of thought, one which maintained that the Geometric style was carried fully developed into Greece,<sup>3</sup> and another which considered it the fruit of the old Helladic *Bauernstile*.<sup>4</sup> The difficulty of the question has been emphasized by Pfuhl, for example, who says that "eine scharfe Grenze zwischen spätester mykenischer und früher geometrischer Keramik" does not exist.<sup>5</sup> He maintains a conservative view that the

---

<sup>1</sup> "Die mykenische Kunst erscheint uns hiernach als der unmittelbare vorläufer der hellenischen Kunst der hellen historischen Zeit. Das Dipylon und was sonst dazwischen lag, war nur eine Verdunkelung, eine Störung der angebahnten Entwicklung." (Riegl, *Stilfragen*, p. 127; cf. also p. xii).

<sup>2</sup> For summary and bibliography cf. Pfuhl, *Malerei und Zeichnung der Griechen* (Munich, 1923), p.55.

<sup>3</sup> Conze, Furtwängler, Löschcke, Rodenwaldt. On the problem of the Dorians and their culture cf. H. G. G.Payne, "Early Greek Vases from Knossos," *BSA*, XXIX (1927/28), pp. 224-299.

<sup>4</sup> Poulsen, Müller, Oelmann.

<sup>5</sup> Pfuhl, *op. cit.*, p. 55.

Revised: August 11, 1999

Copyright © 1999 Oriental Institute, University of Chicago  
<http://www-oi.uchicago.edu/OI/DEPT/RA/HJK/HJKXX.pdf>

Mycenaean style bequeathed to incoming Greek tribes technical as well as some simple but important compositional principles, and that on this basis the newcomers, possibly not unaffected by the Helladic traditions of decoration in use among the old (Achaean) Greeks settled in the peninsula since the early Second Millennium B. C., developed the new Geometric style.<sup>6</sup>

Recent statements on the subject have been more positive. Heurtley can find no break between the latest Mycenaean phase, which he terms LH IV,<sup>7</sup> and protogeometric, a term he believes should be replaced by LH V.<sup>8</sup> Furumark, in his discussion of the final phases of Mycenaean pottery, emphasizes that a process of geometricization began in LH III C, 1. In the complex ceramic remains of that phase, he distinguishes two main lines of development, one being the Close style and one the increasingly geometrical Granary series. In LH III C, 2, the Close style, which had been, according to Furumark, a reflection of LM III B, that is of the end of the LM II Palace Style tradition, dies out. On the other hand, the final phase of the Granary style, extremely geometricized, and with a simplified repertory continued and provided the source from which Protogeometric decoration emerged. It, in turn, leads to early Geometric groups.<sup>9</sup> Since Furumark sees in the increasing stylization and geometrization discernible in LH III ceramics from LH III B on the victory of “the native predilection for abstract geometrical form and tectonic syntax over intrusive Minoan features,”<sup>10</sup> his view is to a certain extent a reaffirmation of the old theory of Poulsen, Müller, and Oelmann.

Despite uncertainty as to the details of the rise of the Geometric style, it is now established that the last simplified offshoots of LH III did merge into the transitional periods preceding the Geometric phase. Plant motives, even the extremely stylized varieties in LH III C, 1 had died out long before this time. Notwithstanding the

---

<sup>6</sup> *Ibid.*, pp. 53-54.

<sup>7</sup> It consists mainly of the Granary style, equivalent to Hutchinson and Furumark's LH/ Myc. III C.

<sup>8</sup> W. A. Heurtley, “The Relationship between ‘Philistine’ and Mycenaean Pottery,” QDAP, V (1936), pp. 90f.

<sup>9</sup> Mpot, pp. 563-581.

Revised: August 11, 1999

Copyright © 1999 Oriental Institute, University of Chicago  
<http://www-oi.uchicago.edu/OI/DEPT/RA/HJK/HJKXX.pdf>

Submycenaean-protogeometric transition, it is clear that the Greeks could have received no direct heritage from the great Aegean tradition of plant ornament. However, at times the assumption has been made that a certain revival of Mycenaean traditions took place in the Orientalizing period.<sup>11</sup> One of the ornaments in question is the wavy band upon whose Mycenaean origin Riegl laid so much stress.<sup>12</sup> Rodenwaldt has denied the relationship of LH III and Greek tendrils.<sup>13</sup> Later Pfuhl suggested that this particular problem can hardly be decided definitively. On the whole he is strongly inclined to a negative conclusion.<sup>14</sup> It is quite unlikely that the intermittent wavy bands which are prominent in LH I and in the LH II Palace Style (Figs. VIII.28-31), but which dies out in Greece and never penetrated into the Orient, could have been suddenly resurrected after the long hiatus of LH III C, and Geometric styles.

Fortunately we possess a case which gives evidence concerning the probability of such a process. This is the LH III A, 2 and B drooping palm, that does reappear, not in the west or in true Orientalizing work, but only on East Greek Geometric vases which come from Rhodes. That island was, of course, exposed to oriental influences and undoubtedly acquired the motive from ivories such as Figs. XIX.40-42. Only through the intermediaryship of the East was the drooping palm preserved. It had been the sole vegetal motive to become really acclimatized in Western Asia (Figs. XV.50, XV.73, XV.81, XV.82), and was thus preserved until its brief adoption by the East Greek geometric style. The fact that this, the only distinctive LH plant motive ever used by the Greeks, reached them indirectly though the Orient, is an excellent indication that the Minoan-Mycenaean

---

<sup>10</sup> *Ibid.*, p. 581; cf. also pp. 108-109.

<sup>11</sup> Cf. the remarks of Pfuhl, *op. cit.*, p. 55. Rodeny S. Young is apparently referring to such features when he says that "the orientaling style grows from the Geometric, with the addition of new elements imported from the East, and of old ones revived from the past civilizations of the homeland" ("Late Geometric Graves and a Seventh Century Well in the Agora," *Hesperia*, Sup. II [1939], p. 3).

<sup>12</sup> Riegl, *op. cit.*, pp. 113ff.

<sup>13</sup> Rodenwaldt, *AA* (1912) p.146.

<sup>14</sup> Pfuhl, *op. cit.*, pp. 86, 55.

Revised: August 11, 1999

Copyright © 1999 Oriental Institute, University of Chicago  
<http://www-oi.uchicago.edu/OI/DEPT/RA/HJK/HJKXX.pdf>

repertory, at least in so far as plant motives are concerned, did not contribute to later Greek ornament.<sup>15</sup>

### THE DATE OF THE EARLIEST ORIENTAL CONTACTS

The date of the earliest oriental influences to be found in Greece constitutes another important problem. It is evident that eastern influences were already penetrating into Greek culture before the close of the Geometric era and the official beginning of the Orientalizing period. In 1912 Poulsen discussed a number of features of Geometric art which he considered reflections of oriental prototypes.<sup>16</sup> Even though it may be impossible to accept the validity of many of his suggestions,<sup>17</sup> he was certainly right in seeking for traces of oriental contacts at this time. The Rhodian drooping palms just cited are excellent examples of the sudden appearance of oriental motives in a completely geometric context.

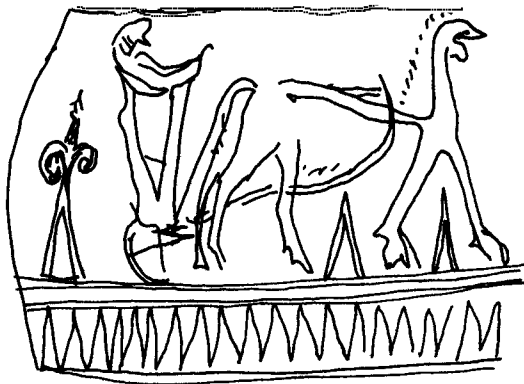


Fig. XX.1



Fig. XX.2

Fig. XX.1 illustrates a vase painting, also from East Greece, which is apparently still closely related to geometric traditions and yet is definitely based on oriental inspiration.<sup>18</sup>

An extremely interesting and pertinent bronze was found at the Samian Heraion. Below the dipterous temple said to have been built by the architect Rhoecus and burnt ca.

<sup>15</sup> Pfuhl, *op. cit.*, p. 67.

<sup>16</sup> Poulsen, *Der Orient und die frühgriechische Kunst* (Berlin, 1912), pp. 108-116.

<sup>17</sup> Cf. Kunze, *Kretische bronzerelief* (Stuttgart, 1931), p. 247, n. 1.

517 B. C., was a smaller building, a Hekatompedon, which covered a still earlier geometric Hekatompedon in which Fig. XX.2 was found. The whole object is of marked oriental character and is probably directly influenced by Phoenician metal working, as is indicated by the Egyptianizing headdress of the sphinx. The central plant motive upon which the two monsters once present had rested their forepaws is akin to those of Phoenician ivories. Figs. XIX.43-44 illustrate the two lateral upturning stems, though there they are linked with a taller median element representing the unification symbol. The arrangement of the three stems growing up from a South-flower perianth in Fig. XIX.45 is quite similar to the plant of Fig. XX.2. There can be no doubt as to its affinities.

These few examples are so definitely related to the Orient as to prove beyond a doubt that the Greeks must have begun to have contacts with the East during the geometric period.<sup>19</sup> In fact, it is possible that the Greek world was never completely cut off from the Orient even during the dark era following the close of LH III C. Sherds of two Protogeometric Thessalian pots corresponding to types possessing an approximate range of 1000-850 B. C. were found in stratum III at Tell Abu Hawam, which probably ends ca. 925 B. C.<sup>20</sup> Subgeometric sherds belonging approximately to the early part of the Eighth Century B. C. were found at Al Mina.<sup>21</sup>

This is not the proper place to collect together all the traces of the earliest contacts which exist. It is sufficient for our purpose to realize that there is no sudden break, but a gradual transition between the geometric and orientalizing periods, and that contacts with

---

<sup>18</sup> Cf. below.

<sup>19</sup> On this point cf. Kunze, "Orientalische Schnitzereien aus Kreta," AM, LX/LXI (1935/36), p. 227; "Zu den Anfängen der Griechischen Plastik," AM, LX (1930), pp. 151f., and especially *Kretische bronzerelief*, pp. 247ff. where this problem is discussed in detail. Payne, *Protokorinthische Vasenmalerei*, (Berlin, 1933), p. 11 and n. 4.

<sup>20</sup> R. W. Hamilton, "Excavations at Tell Abu Hawam," QDAP, IV (1935), p. 181; Pl. LXXXVIII. Cf. remarks of Kunze on these pots; he doubts their Thessalian origin and Protogeometric date (AM, LX/LXI [1935/36], p. 227, n.1).

<sup>21</sup> Sidney Smith, "The Greek Trade at Al Mina," AJ, XXII (1942), p. 91.

Revised: August 11, 1999

Copyright © 1999 Oriental Institute, University of Chicago  
<http://www-oi.uchicago.edu/OI/DEPT/RA/HJK/HJKXX.pdf>

the East began well before the beginning of the orientalizing phases, which developed much earlier in some areas, especially in Crete,<sup>22</sup> than in others.

### PROBLEMS OF THE ORIENTALIZING PERIOD

The orientalizing stage is of the same importance for the history of Greek culture as was the Protodynastic for that of Egypt, or the Middle Assyrian for that of Assyria. These were all formative phases in which the characteristic features of the individual cultural entities emerged. As in Middle Assyria, foreign influence played an important role in Greek development. “Der feste archaische Stil der griechischen Kunst, dessen selbst sichere Eigenart die notwendige Grundlage der klassischen Kunst darstellt, ist das Ergebnis der grossen Gärung, die der Einfluss des Orients bei den Hellenen hervorrief. So ist die Epoche zwischen der alten Eigenart des geometrische Stiles und der neuen des Archaismus - grob gesprochen, des 7. Jahr. - die kritischen Zeit der griechischen Kultur.”<sup>23</sup>

In any discussion of the Orientalizing period, two cardinal problems stand out. In the first place, with what oriental traditions did the Greeks come in contact? Secondly, is it possible to determine which of the subdivisions of regional Greek culture were the primary recipients of oriental influences and then served as intermediaries between other Greek groups and the East? These are problems that have not yet been answered in detail by classical scholars, and their solution requires the utilization of all available material of this period. Here we can only review briefly the present status of these questions before investigating the contribution which plant ornaments can make to the picture.

The most recent statement as to the identity of the oriental traditions affecting the Greeks is that of Sidney Smith. He names first the Phoenicians,<sup>24</sup> whose crafts were, on the testimony of the Greeks themselves,<sup>25</sup> one of the most powerful stimuli to which they were exposed. Although the role of the Phoenicians was at one time overestimated, and

---

<sup>22</sup> H. G. G. Payne, “Early Greek Vases from Knossos,” *BSA*, XXIX (1927/28), p. 230.

<sup>23</sup> Pfuhl, *op. cit.*, p. 97. Cf also remarks of Rodney S. Young, *op. cit.*, 1f.

<sup>24</sup> Sidney Smith, *op. cit.*, pp. 101f.

Revised: August 11, 1999

Copyright © 1999 Oriental Institute, University of Chicago  
<http://www-oi.uchicago.edu/OI/DEPT/RA/HJK/HJKXX.pdf>

thereafter unduly denied, their importance was successfully reaffirmed by Poulsen.<sup>26</sup> In addition to the Phoenicians, Sidney Smith states that “a second strand, the influence of central Syrian ivory carving, can be detected in the ivories of Ephesus, where a style developed, which became an influence in archaic Greek art.”<sup>27</sup> The “central Syrian” ivories to which he refers are apparently those which can be correlated with the Tell Halaf sculptures. The third strand coming from “Late Hittite” sculpture was felt in Asia Minor, as in reliefs of Lycian tombs and directly in Protocorinthian pottery.<sup>28</sup> The fourth tradition to which Sidney Smith devotes considerable attention is that of Urartian metal working, exemplified chiefly by votive shields, handle attachments, and tripod stands, which appear to have exerted considerable influence on the Greeks.<sup>29</sup>

It is possible to consider the second and third of Sidney Smith’s four strands as different facets of a single general north Syrian - north Mesopotamian tradition, as we have done in Chapter XIX. The Urartian bronzes still constitute a problematic series. It is not yet clear to what extent they actually form a consistent and characteristic group distinct from the Assyrian school of metal working. In any case they probably have nothing of striking importance to offer as far as plant ornament is concerned. In considering the transmission of Near Eastern vegetal decoration to orientalizing Greece, the traditions of northern Syria, of the Phoenicians, and of the Late Assyrians<sup>30</sup> are of paramount importance.

By what means did the Greeks come into contact with these oriental traditions? It is quite clear that there were two great maritime peoples at this time. The Greeks themselves during the Eight and Seventh Centuries B. C. engaged in a tremendous commercial expansion accompanied by active colonization. Aside from the Greek states of Asia Minor and the islands, colonies were established on Cyprus. The Greek settlement at Al Mina,

---

<sup>25</sup> *Odyssey*

<sup>26</sup> Poulsen, *op. cit.*

<sup>27</sup> Sidney Smith, *op. cit.*, p. 102.

<sup>28</sup> *Ibid.* Payne, *Necrocorinthia* (Oxford, 1931), pp.67-68. Poulsen, *op. cit.*, p. 104.

<sup>29</sup> Sidney Smith, *op. cit.*, pp. 102-104. Cf. Kunze, “Orientalische Schnitzereien aus Kreta,” *AM*, LX/LXI (1935/36), p. 229 and n. 1.

<sup>30</sup> Payne, *op. cit.*, p. 55. Kunze, *Kretische bronzerelief.*

Revised: August 11, 1999

Copyright © 1999 Oriental Institute, University of Chicago  
<http://www-oi.uchicago.edu/OI/DEPT/RA/HJK/HJKXX.pdf>

established early in the Eighth Century B. C.,<sup>31</sup> and Naukratis in Egypt, founded between 650 and 610 B. C. illustrate the planting of commercial settlements in the midst of oriental territories. To such emporia the Greeks took their own goods and probably returned with freights of oriental commodities. Their activity entailed a diminution in the trade of their Phoenician rivals, but the latter did continue to be a major commercial power.<sup>32</sup> Examples of the kind of wares which they carried - tridacna shells,<sup>33</sup> metal work,<sup>34</sup> and ivories<sup>35</sup> - have been found in Greece. In addition to the seaborne traffic, it is possible that Oriental influence went overland to the Greek cities located on the Anatolian periphery of Asia.

Greek culture was divided into strongly marked regional units,<sup>36</sup> and these were not all equally exposed to oriental contacts. Ionia was formerly considered to be the focal area where oriental influences were first assimilated by Greeks and then diffused to the West.<sup>37</sup> In reality the situation was far more complicated than this. In the words of Humfry Payne - "we now know enough of the early local styles of Greece to realize that there was no one prevailing influence, though there were, of course, primary and secondary, originative and adaptive forces. It would perhaps not be very far from the truth to suggest that in the early archaic period there were three primary forces at work: 1. Eastern Greece (with its center in Miletus, Samos, Ephesus and Rhodes); 2. Crete: 3. Corinth and Sicyon."<sup>38</sup>

It has long been recognized that the early culture of Crete followed an atypical development. Submycenaean elements may have been stronger there than elsewhere and to

---

<sup>31</sup> Cf. Sidney Smith, *op. cit.*, pp. 94-99.

<sup>32</sup> Kunze, "Orientalische Schnitzereien aus Kreta," *AM*, LX/LXI (1935/36), pp. 227ff.

<sup>33</sup> Christian Blinkenberg, *Lindos: Fouilles de l'acropole*, 1902-1914 (Berlin, 1931), I, Pls. XIX-XXI. Poulsen, *op. cit.*, pp. 66, Fig. 66 (Aegina; 70, Fig. 72 (Delphi).

<sup>34</sup> *Ibid.*, pp. 22-24; Fig. 12, 13. Kunze in *AM*, LX/LXI (1935/36), p. 228 and n. 1; p. 229 and n. 2.

<sup>35</sup> Poulsen, *op. cit.*, pp. 218-233; Pls LXXXIV-LXXXVII; cf. also pp. 229-230.

<sup>36</sup> This is reflected clearly in the standard classification of Greek pottery of the geometric and orientaling periods as given by Pfuhl: "die entwickelten geometrischen Stile der Griechen...spiegeln in ihrer weitgehenden Unterschiedlichkeit getreulich der kantonale Zerissenheit von Althellas" (Pfuhl, *op. cit.*, I, 54.

<sup>37</sup> Payne, *op. cit.*, pp. vii-viii. Cf. Sidney Smith, *op. cit.*, p. 101.

<sup>38</sup> Payne, *op. cit.*, p. viii.

Revised: August 11, 1999

Copyright © 1999 Oriental Institute, University of Chicago  
<http://www-oi.uchicago.edu/OI/DEPT/RA/HJK/HJKXX.pdf>



this possible heritage from Minoan times<sup>39</sup> Orientalizing influences were added in the middle of the Eighth Century B. C., substantially earlier than the rise of orientalizing traditions on the mainland.<sup>40</sup> Eastern influences made themselves directly felt in Crete. Imported ivories occur among the deposits made in the Idaean cave, presumably dedicated around 800 B. C.,<sup>41</sup> and the island was a center for the manufacture of metal objects obviously made under direct Asiatic inspiration.<sup>42</sup> Aside from such immediate contacts with the East, it has been suggested with authority that Cyprus was an important intermediary between Crete and the Orient.<sup>43</sup> This remains a debatable topic requiring further investigation.

Crete served as a secondary focus which relayed oriental influences to Western Greece. Johansen and Payne have demonstrated in detail that Eastern features did not reach Corinth from Ionia but from Crete,<sup>44</sup> and Payne has suggested that around the middle of the Eighth Century B. C. the Cycladic islands, especially Thera, may have served as the meeting places for Cretans and mainlanders.<sup>45</sup> The indirect route by which oriental features reached western Greece is even more apparent in the case of Protoattic than in Protocorinthian ware. Attica produced the highest achievements of the geometric style, the Dipylon ware.<sup>46</sup> Since the geometric tradition was very persistent there, foreign influence came to Attica comparatively late, early in the Seventh Century B. C., and, according to Rodney S. Young, by way of Corinth, Aegina, Euboea and the Cyclades. By this means

---

<sup>39</sup> Cf. Payne's remarks concerning the absence of a transition from Protogeometric to Geometric in Crete (Payne, "Early Greek Vases from Knossos," BSA, XXIX [1927/28], pp. 229f.)

<sup>40</sup> For an older view of early Cretan culture cf. Pfuhl, *op. cit.* pp. 86f: "mykenisches Altes und orientalisierendes Neues gehen in Kreta vielfach unmittelbar ineinander über." However, Pfuhl's characterization of the Cretan geometric phase was published at a time (1923) when the full extent of the development of the geometric style of that island was not yet recognized. Payne has stressed the fact that Crete did produce a fully developed geometric style; he has also indicated the early date at which orientalizing influences became prevalent on that island (Payne, *op. cit.* pp. 271f; p. 275).

<sup>41</sup> Kunze in AM, LX, LXI (1935/36), p. 227.

<sup>42</sup> Kunze, *Kretische bronzerelief.*

<sup>43</sup> Payne, *Necrocorinthia*, p. 53. Johansen, *Sikyonische Vaser* (Copenhagen, 1918), pp. 65ff.

<sup>44</sup> Payne, *op. cit.*, pp. 5, 53. Johansen, *op. cit.*, pp. 45ff.

<sup>45</sup> Payne, *op. cit.*, p. 5.

<sup>46</sup> Payne *Protokorinthische vaseenmalerei*, p. 9

Revised: August 11, 1999

Copyright © 1999 Oriental Institute, University of Chicago  
<http://www-oi.uchicago.edu/OI/DEPT/RA/HJK/HJKXX.pdf>

the sudden appearance of a variety of well-developed motives on Protoattic vessels can be explained.<sup>47</sup>

The view of the overwhelming importance of Crete in mediating oriental influence to Corinth and Attica has not completely displaced the older estimation of the importance of East Greece. For example, Wace and Blegen have considered Payne's theory "unlikely," and suggest that the same trade route which had been followed in the Mycenaean world was also used in the orientaling period. This did not go through Crete; but started from Syria and Phoenicia, went on to Cyprus and Rhodes, and reached the mainland by way of the islands.<sup>48</sup> Although the evidence demonstrating the great influence of Crete is overwhelming, it is possible that the full importance of the East Greeks in the orientaling period has not yet been worked out.<sup>49</sup> At present, despite the large amount of material available,<sup>50</sup> the history of East Greek art has not yet been submitted to the detailed attention devoted to Corinthian,<sup>51</sup> Protoattic,<sup>52</sup> or even Cretan<sup>53</sup> styles. A minute examination of the relations between these groups and their East Greek cousins remains as one of the most pressing tasks in the investigation of the orientaling period.

Greek archaeologists have not yet settled many major points of the greatest importance for the particular problem with which we are concerned here, nor does it fall within our province to attack such questions. However, their existence must be remembered during any discussion of the penetration of oriental motives into Greece. The general manner by which such transmission occurred is quite clear, but efforts to treat the subject in a detailed and definitive manner must remain premature until classical scholars

---

<sup>47</sup> Rodney Young, *op. cit.*, pp. 220f.

<sup>48</sup> Wace and Blegen in *Klio*, XXXII (1939), pp. 141-42.

<sup>49</sup> A handbook such as that of Woermann, *Geschichte der Kunst aller Zeiten und Völker*, I, (Leipzig, 1905-1911)p. 288, states that the orientaling style spread from Crete to the Peloponnesos and from Ionia and Rhodes to the islands, Boeotia and Attica.

<sup>50</sup> Cf. Rumpf, "Zu den Klazomenischen Denkmälern," *JdI*, XLVIII (1933), pp. 55-58.

<sup>51</sup> Johansen, *op. cit.*. Payne, *Protokorinthische Vasenmalerei* (Berlin, 1933).

<sup>52</sup> J. M. Cook, "Protoattic Pottery," *BSA*, XXXV (1934/35), pp. 165-219. Rodney S. Young in *Hesperia*, Sup. II (1939), and "Graves from the Phaleron Cemetery," *AJA*, XLVI (1942), pp. 23-57.

<sup>53</sup> Payne, "Early Greek Vases from Knossos," *BSA*, XXIX (1927/28). Doro Levi, "Arkades," *Annuario*, X-XII (1927/29), pp. 1ff.

Revised: August 11, 1999

Copyright © 1999 Oriental Institute, University of Chicago  
<http://www-oi.uchicago.edu/OI/DEPT/RA/HJK/HJKXX.pdf>

work out in detail the internal development of the local Greek cultures and their relationships to one another.

Our purpose here is to look at one particular aspect of late geometric and orientalizing art from an outside, oriental viewpoint. For many years vegetal motives have been prominent among the foreign themes introduced during the orientalizing period.<sup>54</sup> Now that we have followed the history of Near Eastern plant ornament in detail and have distinguished several traditions current in the early First Millennium B. C., it is of the greatest interest to identify descendants and reflections of these types in Greek designs. Such an attempt is made difficult by the very nature of Greek art. It has been said of Alois Riegl that among his most important contributions to *Kunstwissenschaft* was his demonstration of the continuity of the history of art, and one of the most important gaps which he bridged was that between Hellas and the old Orient.<sup>55</sup> However, despite the fact that without the East, Greek art could never have developed as it did, despite the prominence of oriental contributions, both iconographic and stylistic, the rise of Greek art did bring a sharp break with the traditions of older cultures. The change is none the less far-reaching because of the existence of a transitional period in which the Greeks can be watched working out their artistic growth by means of technical skills and themes bequeathed to them by other lands. Frequently at the very moment that a foreign element was first borrowed, there began an intensive transmutation and metamorphosis, which usually produced quickly an unrecognizable new motive.

This makes the identification of these ancient oriental plant motives acquired by the Greeks far more difficult than was ever the case when we traced the migration of the South-flower hybrids or of occasional non-compound designs within the Near East itself. Despite the wide and striking variation from the original Egyptian patterns displayed by many Mitannian and Middle Assyrian compounds, or the great transformations illustrated

---

<sup>54</sup> Böhlau, "Frühgriechische Vasen," *JdI*, II (1887), p. 37f. C. Watzinger, "Griechische Grabstele," *Gnethliakon Wilhelm Schmid* (Tübingen, 1929), pp. 153f.

by Late Assyria “sacred trees,” no ancient oriental group treated vegetal ornament with the freedom and ebullient vitality of the orientalizing Greeks. The motives they inherited had already been greatly stylized in the Orient (cf. Figs. XIX.15, XIX.27-34), but in Greece the tendency to reduce solid forms to rhythmical curves and bands was tremendously accentuated. An extremely prominent characteristic of Greek ornament was the use of gracefully moving, often spiraliform, tendrils. The fundamental importance of such elements in the story of plant ornament has been recognized ever since Riegl pointed it out.<sup>56</sup>

These features become apparent almost as soon as the Greeks begin to use plant designs. Thus it is that the vegetal ornaments of the archaic black-figure style and even of later orientalizing phases are so completely hellenized as to be but rarely suggestive of oriental influence. To find plant ornaments whose dependence on eastern prototypes is more easily recognized we must turn to the latest geometric and earlier orientalizing phases. Even in the patterns of those styles, there may exist, at most, only a generalized resemblance to oriental themes as a whole. Often it is difficult or impossible to determine from which of the various oriental traditions the original stimulation came. Only with the utmost reservation can we attempt to arrange the motives of early Greek plant ornament according to the eastern traditions from which they may have been derived, rather than

---

<sup>55</sup> Max Dvorak in *Mitteilung der K. K. Zentral-Kommission für Erforschung und Erhaltung der Kunst- und historischen Denkmale*, IV (dritte Folge; 1905), pp. 263-266.

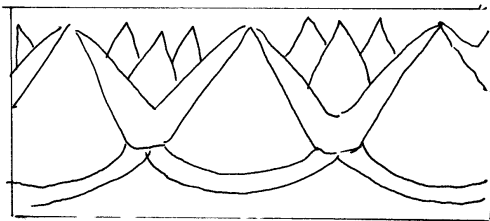
<sup>56</sup> “Die schönste und bedeutungsvollste Errungenschaft der hellenischen Ornamentik, nach der schon die Altorientalische Kunst gestrebt hatte, ist die rhythmisch bewegte Pflanzenranke; in ihr gipfelt das Verdienst der Griechen um die Entwicklung des Pflanzenornaments” (*Stilfragen*, p. 112, cf. p. xiii). Riegl went on to treat “Mycenaean” ornament as the first phase of Greek development (*Ibid.*, pp. 113-150), a procedure which, as we have already seen, cannot be justified at the present time. Furtwangler, *Antike Gemmen*, III, (Berlin, 1900), p. 20 and n. 6. Payne’s remarks, made in connection with the plant designs of the first orientalizing style of Early Protocorinthian, should be cited. “The elements of these patterns are, of course, oriental, but the Greek artists have given new form to the borrowed matter. Cretan and Protocorinthian vase-painters, particularly, developed one aspect of the subject in which the orient has never been interested - the loops and volutes which were originally simply the connecting links between the palmettes and flowers; in doing so they gave an elasticity, a suggestion of tension and relaxation to the patterns which is rarely, if ever, present in oriental work. It is, perhaps, worth remarking that the Protocorinthian vases of the early Seventh Century B. C. show no trace of the characteristic oriental patterns of lotus flowers, buds, and palemettes, linked by semi circles, which we find elsewhere at this period; the early Protocorinthian

according to the Greek styles to which they belong. If we desire to discover relatively faithful adaptations of oriental prototypes, we must turn, not to nascent Hellas, but to the imitative art of Etruria.

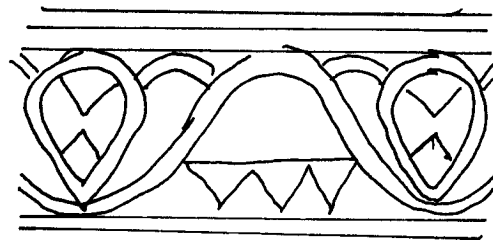
## PLANT ORNAMENTS OF PHOENICIAN ORIGIN AND POSSIBLY RELATED MOTIVES

### ARC FRIEZES

Classical scholars have devoted considerable attention to the development of the arc friezes, whose oriental origin has long been apparent. The most recent discussion has been that of Kunze,<sup>57</sup> who classifies them according to the vegetal forms which they support. Examples tipped by *Nymphaea* flowers probably constitute the largest category.



**Fig. XX.3**



**Fig. XX.4**

The earliest examples occur on Cretan shields (i. e. Fig. XX.3), which have been dated by Kunze as early as the Ninth Century B. C.,<sup>58</sup> but are in any case no later than the last half of the Eighth Century B. C.<sup>59</sup> and early orientalizing pottery (i. e. Fig. XX.4), ranging approximately from the middle to the end of the Eighth Century B. C. The clues to the origin of these and other *Nymphaea* friezes have been sought in the shape of the individual flowers. Poulsen, followed by Johansen, distinguished three types: an Egyptian form with

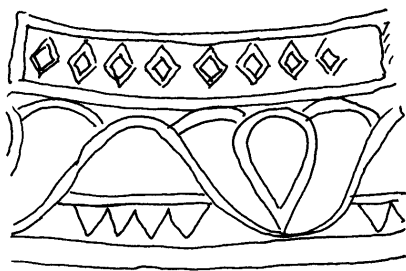
---

patterns are, indeed, more purely Hellenic than those of any contemporary school" (*Neocorinthia*, pp.9-10).

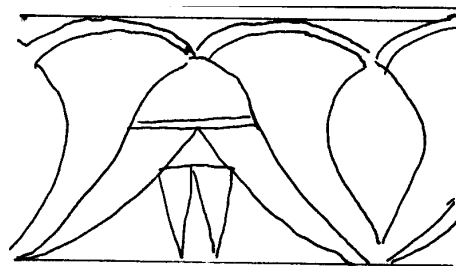
<sup>57</sup> Kunze, *op. cit.*, pp.97-107.

<sup>58</sup> *Ibid.*

three main petals, an Assyrian form in which two large petals surround a number of smaller ones, and a Phoenician type in which only small petals appear between the two outer ones.<sup>60</sup> These scholars have regarded the fact that the *Nymphaeas* tipping the arc friezes on a large number of orientalizing works belong to the last category as proof that these motives were transmitted to the Greeks by the Phoenicians. Kunze, however, has pointed out that the distinction between the Phoenician and Assyrian types does not hold. He demonstrates that a number of Greek *Nymphaea* friezes resemble Assyrian examples closely, but that much the same forms also occurred on Phoenician artifacts, and concludes, therefore, that the intermediaryship of Phoenician works between the presumptive Assyrian prototypes and Greek orientalizing designs is neither excluded nor proven.<sup>61</sup> Kunze ends his discussion on a somewhat too indecisive a note. *Nymphaea* friezes were used in Phoenician metal work, which was famous and widely marketed. In addition, many of the Cretan bronzes betray unmistakable traces of Phoenician prototypes, so it is highly likely that the friezes of the shields possess Phoenician antecedents. Many of the borders on the approximately contemporary early orientalizing Cretan ware have already become too hellenized to give any evidence on this problem (Figs. XX.4-6). In contrast to the bronzes, the ceramic designs often show buds alternating with the flowers.



**Fig. XX.5**



**Fig. XX.6**

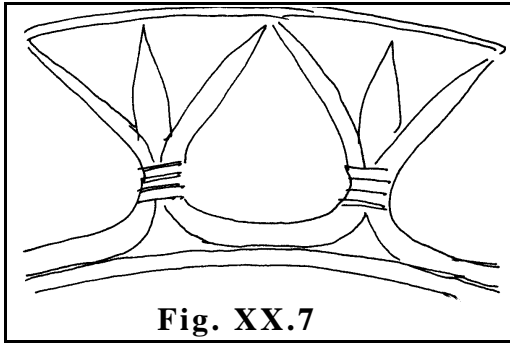
<sup>59</sup> J. D. S. Pendlebury, *The Archaeology of Crete* (London, 1939), p. 336. Payne in JHS, LIII (1933), p.122; Sylvia Benton, "The Date of Cretan Shields," BSA, XXXIX (1938/39), pp. 52-64.

<sup>60</sup> Poulsen, *op. cit.*

<sup>61</sup> Pfuhl, *op. cit.*, pp. 101-103.

Revised: August 11, 1999

Copyright © 1999 Oriental Institute, University of Chicago  
<http://www-oi.uchicago.edu/OI/DEPT/RA/HJK/HJKXX.pdf>

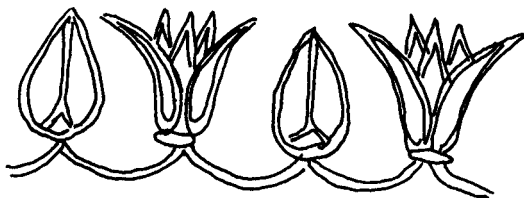


**Fig. XX.7**

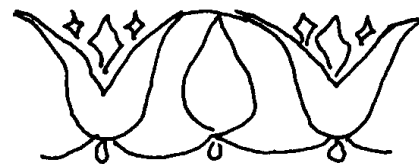
A point emphasized by Kunze is the absence of Egyptianizing Cypriote *Nymphaea* forms,<sup>62</sup> but Crete has produced some examples of *Nymphaea* with three petals only, and thus superficially akin to Cypriote patterns. Since the central element is distinguished by color from the

others (Figs. XX.7), there is probably no relationship with Cypriote forms.

The similarities and differences between the *Nymphaeas* of the Cretan bronzes and those of the earlier “Rhodian” vases are given by Kunze.<sup>63</sup> These two traditions are only indirectly related by their common Eastern origin. While we may assume Phoenician metal prototypes for Fig. XX.3 at least, the excavation at Samaria has now produced the ivories of Figs. XIX.52 and XIX.54 which must be regarded as the direct ancestors of “Rhodian” bands such as Fig. XX.8.<sup>64</sup> The *Nymphaea* friezes of the later “Rhodian” vases (Fig. XX.9) are directly developed from earlier forms.<sup>65</sup>



**Fig. XX.8**



**Fig. XX.9**

Cretan, “Rhodian,” and Cypriote orientalizing styles constitute the chief sources of early Greek *Nymphaea* friezes. A carefully drawn example occurs on a bronze plaque found at Olympia, but apparently of East Greek origin (Fig. XX.10). The theme was not favored in the early phases of the two chief styles of the Greek mainland. It is absent from

<sup>62</sup> *Ibid.*, p. 103.

<sup>63</sup> *Ibid.*, p. 102

<sup>64</sup> Cf. Reisner, *Samaria*, ((Cambridge, 1924), p. 33.

<sup>65</sup> Kunze, *op. cit.*, p. 102.

Revised: August 11, 1999

Copyright © 1999 Oriental Institute, University of Chicago  
<http://www-oi.uchicago.edu/OI/DEPT/RA/HJK/HJKXX.pdf>

the early Seventh Century B. C., first orientalizing style of Early Protocorinthian,<sup>66</sup> and it

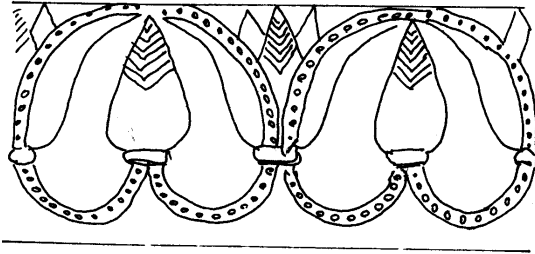


Fig. XX.10

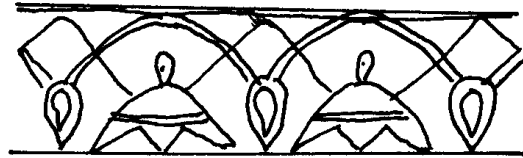


Fig. XX.11

was not, to our knowledge, used by Protoattic painters. Fig. XX.11 illustrates a Milesian *Nymphaea* band, but this style was characterized, not by simple arc friezes, but by more complicated borders formed by intermittent wavy bands of purely Greek character.<sup>67</sup> Later phases of Protocorinthian developed characteristic and elaborate interlacings, tipped by *Nymphaeas*, buds, and palmettes, but these, too, are completely Greek.<sup>68</sup> Apparently it was not until the end of the first quarter of the Sixth Century B. C. that arc friezes, possibly introduced from Ionia, appeared in the Corinthia, and also in Attica,<sup>69</sup> where they eventually became a distinctive and common ornament of Attic black-figured ware.<sup>70</sup>

The series of palmette-tipped arc friezes is less extensive than the *Nymphaea* bands just discussed. Like them, the palmette borders were undoubtedly derived from Phoenician metal work, where such patterns were commonly used (Figs. XX.12, 13).

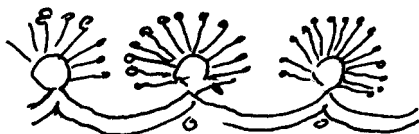


Fig. XX.12



Fig. XX.13

Fig. XIX.12 provides a particularly good parallel for Fig. XX.14, on a shield from Crete, since the Phoenician example even seems to have the thickened arcs so characteristic of Fig. XX.14. Although the palmette crown of Fig. XX.15 is not exactly matched on the

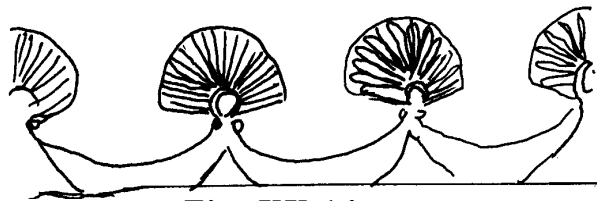
<sup>66</sup> Payne, *Necrocorinthia*, pp. 7-8.

<sup>67</sup> Johansen, *op. cit.*, p 121, Figs. 83-88.

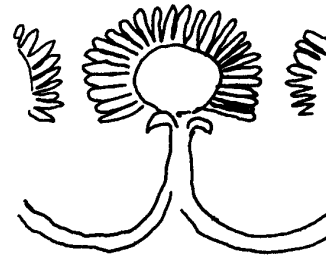
<sup>68</sup> *Ibid.*, pp. 116, Fig. 58; 119, Figs. 72-78.

<sup>69</sup> Payne, *Necrocorinthia*, p. 155.





**Fig. XX.14**



**Fig. XX.15**

Nimrud bronzes (Fig. XX.13), as on the Cretan shield, it retains a small South-flower perianth. Fig. XX.16, another example of Phoenician metal work is an excellent parallel for Fig. XX.17; they are both tipped by dotted rosettes rather than true palmettes.

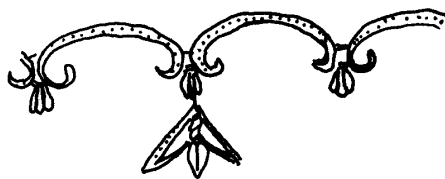


**Fig. XX.16**

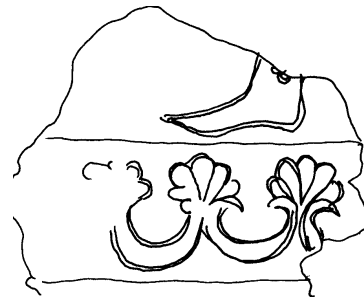


**Fig. XX.17**

Kunze has seen in the palmette friezes of Figs. XX.14, 15, 17 and 18 a series illustrating the development of freely-moving tendrils, as exemplified on the bronze mitre from Axios (Fig. XX.18) in contrast to the immovable oriental forms that still appear



**Fig. XX.18**



**Fig. XX.19**

on the bronzes (Figs. XX.14, 15).<sup>71</sup> In the shield frieze of Fig. XX.17 and others comparable to it (Fig. XX.19), the motive is in the process of freeing itself. One of the principal changes occurring in this series is the breakdown of the little that had remained of the original South-flower perianth (Figs. XX.14, 15). This was not a development lacking precedent in the East, for the distinction between perianth and connecting arcs found in an

<sup>70</sup> Jacobsthal, *Ornamente Griechischer Vasen* (Berlin, 1927) Pls. XII; XV, a; XXII; XXV, a, c; passim.

<sup>71</sup> *Ibid.*

Revised: August 11, 1999  
Copyright © 1999 Oriental Institute, University of Chicago  
<http://www-oi.uchicago.edu/OI/DEPT/RA/HJK/HJKXX.pdf>

Egyptian (CL 86)<sup>72</sup> and a Third Syrian example (Fig. XIII.31) had already disappeared in some Middle Assyrian designs (Figs. XVI.57, XVI.85, XVI.87, XVI.95, XVI.107). In oriental friezes such as Figs. XX.20, 21 the arcs begin to have the same character as in Figs. XX.18 and XX.22. However, the latter friezes may be more than just developments of the long line of oriental arc bands. A Rhodian relief amphora, with a pictorial frieze in much the same stage of development as archaic Protocorinthian painting



Fig. XX.20



Fig. XX.21



Fig. XX.22



Fig. XX.23

according to Kunze,<sup>73</sup> bears rows of geometric c's, whose adjacent ends are unexpectedly crowned by palmette foliage (Fig. XX.23). Analogies for this secondary and artificial production of palmette arc friezes by the juxtaposition of geometric curves occur in the East. Exactly the same process took place on a Phoenician rapport pattern from Khorsabad, though there the abstract c's are really descendants of the Egyptian volute (Fig. XIX.82); such combinations may have been far commoner in Western Asia than our present material indicates. It is not possible to prove without question that friezes such as Figs. XX.18, 19, 22 are genetically related to Fig. XX.23 rather than to Fig. XX.15. Nevertheless, it is clear that the palmette friezes of Figs. XX.18 and XX.19 cannot be accepted without question as simple descendants of ordinary arc bands. Their ancestry is

<sup>72</sup> CL + number = Number in Typological Check List of South-flower Hybrids in Chapter VII.

<sup>73</sup> *Ibid.*

Revised: August 11, 1999  
 Copyright © 1999 Oriental Institute, University of Chicago  
<http://www-oi.uchicago.edu/OI/DEPT/RA/HJK/HJKXX.pdf>

probably more complicated than that, and they may well represent the results of the convergent development of two different themes.

The bands illustrated in Fig. XX.24 and XX.25 need little comment since they show merely friezes tipped with more than one type of vegetal motive. Fig. XX.24 is comparable to other early orientalizing bands from Knossos (Figs. XX.4 and XX.5). The pattern on a sherd from Thera, Fig. XX.25, is interesting for the peculiar palmettes, whose

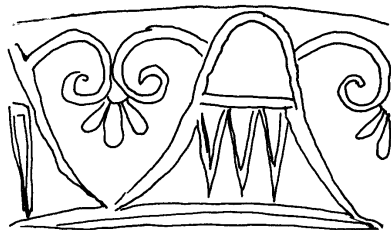


Fig. XX.24



Fig. XX.25

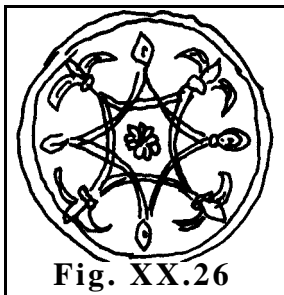


Fig. XX.26

two pairs of down-curving elements find a rather remarkable parallel in a bronze bowl design from Nineveh (Fig. XX.26).

Greece does not seem to have produced arc friezes tipped by true South-flowers. Fig. XX.27, from a Cretan early orientalizing vessel has apparently geometrical c-curves comparable to those of Fig. XX.23, except for the omission of the palmette foliage. A clay plaque from Perachora (Fig. XX.28), belonging to the beginning of the Seventh Century B. C. was, Payne said, made from the same mold as another from the Argive Heraeum.<sup>74</sup> A winged figure holds a series of scrolls, with ends bound together and supporting angular lobes. Although the resulting design can be classified as a South-flower arc frieze, there is really no direct relationship with true South-flowers. The angular lobes of Fig. XX.28 are those that were normally used by the Greeks to fill corners between spiral ends.

<sup>74</sup> ILN, July 8, 1933, p. 65.  
 Revised: August 11, 1999  
 Copyright © 1999 Oriental Institute, University of Chicago  
<http://www-oi.uchicago.edu/OI/DEPT/RA/HJK/HJKXX.pdf>



Fig. XX.27



Fig. XX.28

### PARATACTIC FRIEZES

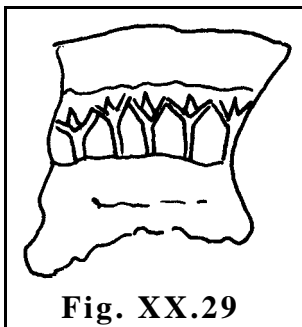


Fig. XX.29

A metal fragment so small as to leave doubt as to its Greek rather than oriental origin,<sup>75</sup> bears a register filled by paratactic *Nymphaea* stems (Fig. XX.29). The source of this simple pattern is to be found in the paratactic bands on bowls from Nimrud (Fig. XIX.59). Kinch has suggested that this feature of the Phoenician bowls may have served as the inspiration for the

groups of rays, which are presumably stylized plants, that divide the registers of Kameiran B (?) bowls into panels (Figs. XX.30, 31).<sup>76</sup> On the whole, paratactic motives never became important in Greece,<sup>77</sup> where artists had at their disposal far more elaborate and pleasing ornaments.

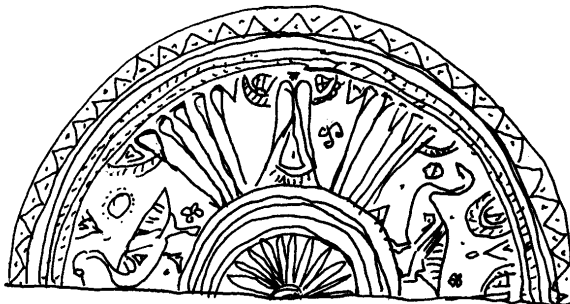


Fig. XX.30



Fig. XX.31

<sup>75</sup> Kunze, *op. cit.*, pp. 38 and n. 9; 108, no. 78.

<sup>76</sup> Karl F. Kinch, *Vroulia*, (Berlin, 1914), pp. 251-253.

<sup>77</sup> This is shown by Kunze's discussion of such motives (Kunze, *op. cit.*, pp. 108-110).

## PHOENICIAN PALMETTES

Significant of the independence of Greek ornament in its earliest, and still formative stages<sup>78</sup> is the absence of the *Schalenpalmetten* which assumed tremendous importance in Phoenician art, and was widely adopted by the Etruscans. For the Greeks, however, this motive possessed no attraction and we know of only two cases in which it appears in Greek contexts. Kunze does not accept a bronze bowl found in Afrati as a Cretan product, but believes it is more likely an oriental, Phoenician work.<sup>79</sup> This may well be true, despite the extremely debased form of the hybrid plant motive (Fig. XX.32). There remains only Fig. XX.33, a fragmentary Cretan bronze which once bore a plant built up of at least two semicircular Phoenician volutes,<sup>80</sup> the upper one possesses leaf-like drops pendant from the ends. This is the only reflection in Greek art of one of the commonest plant motives of Phoenicia.

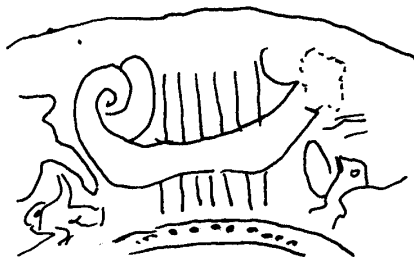


Fig. XX.32

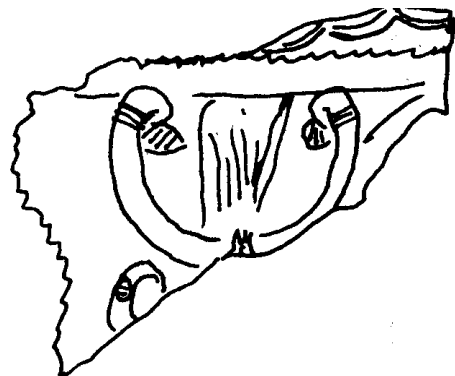


Fig. XX.33

## SPACE-FILLING PLANTS

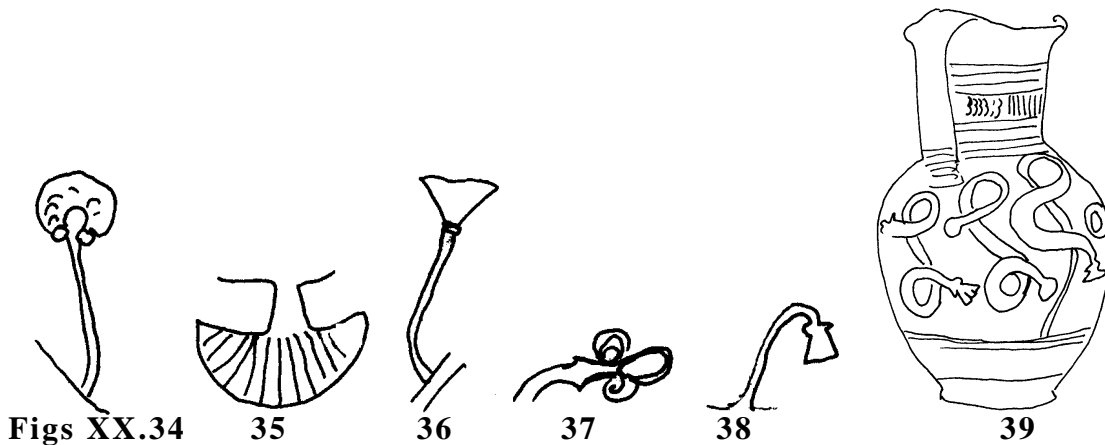
The use of irregular, space-filling vegetation is the only other certain Phoenician contribution to Greek plant ornament comparable in importance to the arc friezes. The gap between such typical Phoenician plant elements as Figs. XIX.62 and XIX.84-87 and the seemingly unoriental palmette tendrils of orientalizing art is bridged by the Cretan bronzes.

<sup>78</sup> Payne, *Protokorinthische Vasenmalerei*, p. 11.

<sup>79</sup> Kunze, *op. cit.*, p. 38.

Revised: August 11, 1999  
Copyright © 1999 Oriental Institute, University of Chicago  
<http://www-oi.uchicago.edu/OI/DEPT/RA/HJK/HJKXX.pdf>

On them there appear a variety of vegetal filling motives, whose eastern relations have been discussed in detail by Kunze.<sup>81</sup> The connection of the branching trunks<sup>82</sup> with the Phoenician “tree” of Figs. XIX.62 is clear. Single stems such as Figs. XX.34 and 35 can be compared to those on Phoenician metal bowls.<sup>83</sup>



The majority of filling plants on the Cretan bronzes are similar to their oriental ancestors. The bending stems of Figs. XX.36 and 37 are more unusual from an oriental point of view, and constitute one of the features linking Cretan and Protocorinthian designs.<sup>84</sup> More common than the simple stem of Fig. XX.38 are others in which the stalks recurve upon themselves (Figs. XX.39 and 40),<sup>85</sup> providing illuminating evidence of what was to be the fate of many an oriental plant motive in Greece. The simple vegetal stems have been transmuted into living, coiling tendrils topped by a relatively inconspicuous papyrus umbel, whose genealogy can be traced back to such Phoenician sedges as Figs. XIX.43-45.<sup>86</sup>

<sup>80</sup> *Ibid.*, p. 149.

<sup>81</sup> *Ibid.*, pp. 133-143.

<sup>82</sup> *Ibid.* Pl. VIII,5

<sup>83</sup> The prototypes of Kunze's Fig. 18, he finds in Egyptian triple papyrus groups, but this appears to be a rather rash hypothesis (*Ibid.*, p. 139).

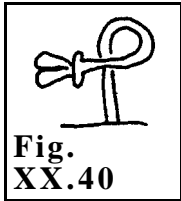
<sup>84</sup> Johansen, *op. cit.*, p. 60.

<sup>85</sup> *Ibid.*, p. 59.

<sup>86</sup> Kunze, *op. cit.*, p. 138.

Revised: August 11, 1999

Copyright © 1999 Oriental Institute, University of Chicago  
<http://www-oi.uchicago.edu/OI/DEPT/RA/HJK/HJKXX.pdf>



The significance of the change which the Greeks produced in the plants inherited from the Orient is clearly illustrated by these Protocorinthian motives. It would be impossible to trace them to Phoenician works if the Cretan bronzes had not survived.

Space-filling palmette tendrils were used by Protoattic painters. Fig. XX.41 illustrates a straight-stemmed palmette on an early Protoattic amphora. Curved stems more akin to the Protocorinthian ones of Fig. XX.38 occur on middle Protoattic vessels belonging to the “Black and White” style (Figs. XX.42, 43), a phase marked by its imaginative use of rampant plant ornament.<sup>87</sup> Far more prominent than such simple

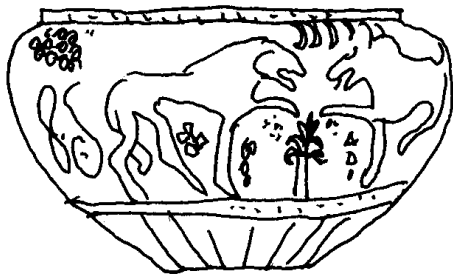
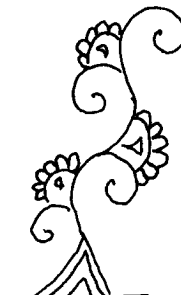


Fig. XX.41



XX.42



XX.43

designs are the interlacing palmette patterns in which the individuality of the Protoattic artists is fully revealed. A stem in Fig. XX.44 bends in somewhat the same curves as the Protocorinthian Fig. XX.45, but the Attic tendril is evidently part of a rapport design similar to that of a hydria in the Vlasto collection (Fig. XX.92).

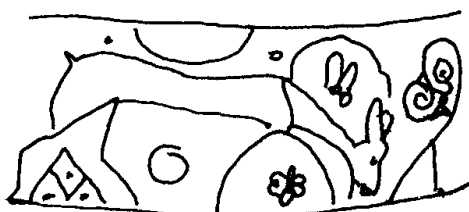


Fig. XX.44

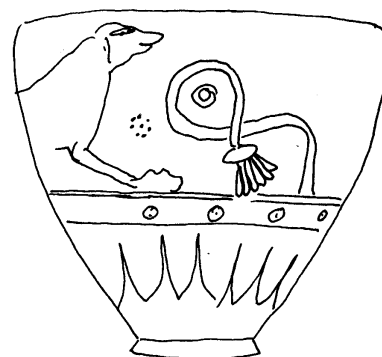
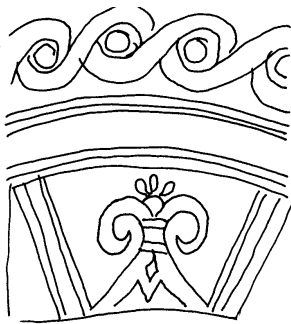


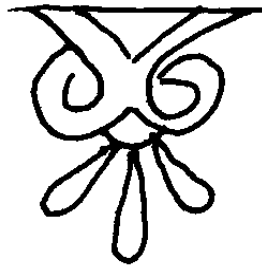
Fig. XX.45

<sup>87</sup> Rodney Young, “Graves from the Phaleron Cemetery,” *AJA*, XLVI (1942).  
 Revised: August 11, 1999  
 Copyright © 1999 Oriental Institute, University of Chicago  
<http://www-oi.uchicago.edu/OI/DEPT/RA/HJK/HJKXX.pdf>

The space-filling plants cited so far constitute one related group. The Cretan examples provided the basis for those used in Protocorinthian decoration, and these, in turn, must be related to the Protoattic tendrils. In addition, rare examples of comparable stems appear in the collateral, East Greek branch of Hellenic art, on developed examples of Kameiran pottery. Gracefully curving spiraliform stems bear palmette crowns (Figs. XX.46-48). There are no transitional forms between these hellenized patterns and their presumptive oriental ancestors, but we may assume by analogy with the West Greek series that the Kameiran motives, too, are ultimately descended from Phoenician prototypes.



**Fig. XX.46**



**Fig. XX.47**



**Fig. XX.48**

#### PALMETTES AND DESIGNS INVOLVING PALMETTES

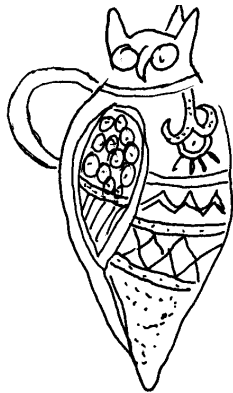
Palmette patterns assumed an important place in the repertory of both Western and East Greek painters. To a certain extent simple palmettes as in Figs. XX.46-48 are comparable to some space-filling palmettes, as for example, Figs. XX.34 and 36. It is possible that the designs of Fig. XX.46-48 may be simply space-filling motives isolated from any representative context,<sup>88</sup> and that the accessory vegetation used by the Phoenicians are their oriental prototypes. However, there is no way in which this can be proved, for the palmettes are thoroughly hellenized, and applied in completely non-oriental manners. We can say only that they represent motives certainly derived from the East, but reduced to

---

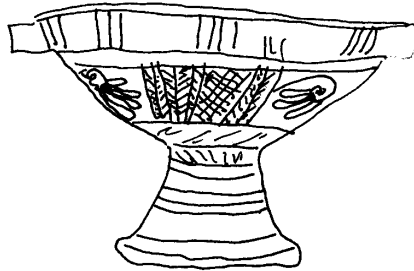
<sup>88</sup> Kunze puts this interpretation upon Fig. XX.51 (Kunze, *op. cit.*)  
Revised: August 11, 1999  
Copyright © 1999 Oriental Institute, University of Chicago  
<http://www-oi.uchicago.edu/OI/DEPT/RA/HJK/HJKXX.pdf>



simplified and generalized forms that do not possess any pronounced characters referring them to a specific oriental source. We have placed them here, among the features derived from Phoenicia, only because they do sometimes seem to be related to Greek reflections of space-filling plants, not because these palmettes can be directly compared with any Phoenician examples. In fact, it is possible that such early Cretan patterns as Figs. XX.46-48 may have been derived from north Syrian antecedents. Despite the limited materials available, we possess one example of a north Syrian palmette, of Assyrianizing form (Fig. XIX.2), which could well have served as models for the early orientalizing palmettes of Crete, especially for Figs. XX.48, 49. The bifurcated bases of Figs. XX.46 and 47



**Fig. XX.49**

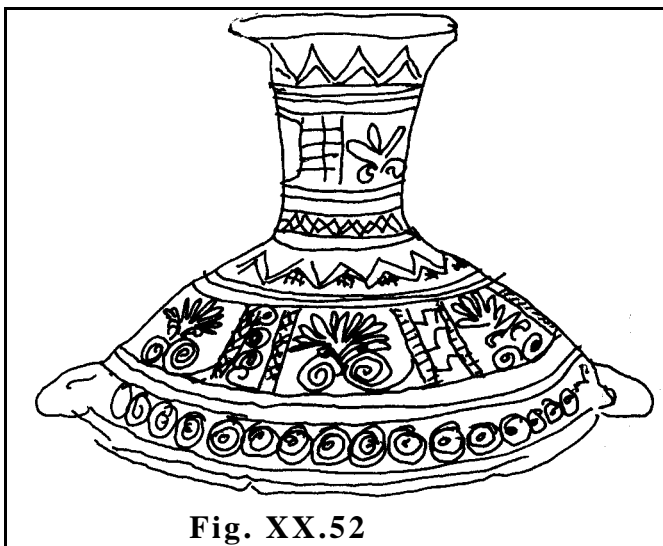


**Fig. XX.50**



**Fig. XX.51**

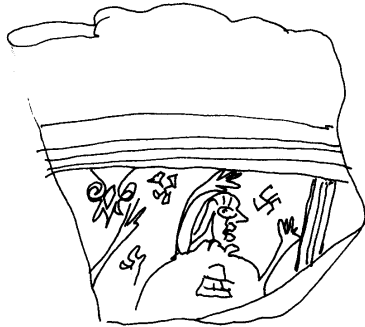
suggest that these patterns may be simply segments of an arc frieze, though this seems fairly unlikely.



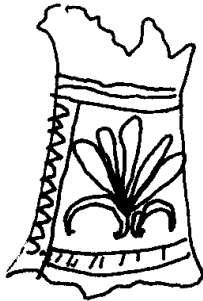
**Fig. XX.52**

Palmettes of this Cretan form do not seem to have been used by the Protocorinthians, who preferred the papyriform crowning elements of Figs. XX.38-40, 45, but were adopted in the orientalizing style of Boeotia (Figs. XX.50, 51). The designs filling the panels of XX.52

are unusual in that two pairs of downcurving volutes are present. In Attica palmettes became common and characteristic features. We have already cited a few examples growing on tendrils.



**Fig. XX.53**

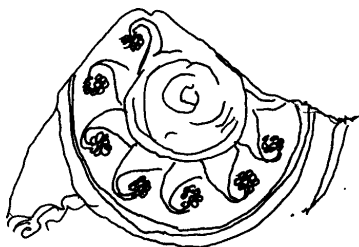


**Fig. XX.54**



**Fig. XX.55**

Specimens more akin to Cretan and Boeotian forms occur on early Protoattic sherds (Figs. XX.53, 54). Advanced early Protoattic works by the Analotos painter or in his tradition display increasingly exuberant palmettes, whose dotted foliage is characteristic of Protoattic work (Figs. XX.55, 91). Middle Protoattic provides a wide assortment of palmette designs. Figs. XX.56, 57 illustrate how individual heads can be attached to what are really abstract running dog designs.<sup>89</sup>



**Fig. XX.56**



**Fig. XX.57**



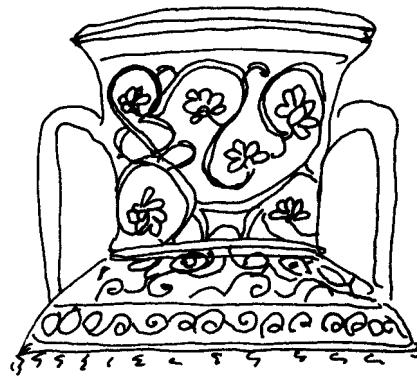
**Fig. XX.58**

We have already noted that palmettes could be added to spiraliform networks such as Fig. XX.58, Fig. XX.92 is rather unusual in that there the foliage is probably dependent

<sup>89</sup> Cf. for example, Rodney S. Young in *Hesperia*, Sup. II (1939), p. 164, Fig. 115, C 94. Rodney S. Young points to an excellent analogy, a Cretan orientalizing urn from Arkades, where birds' heads grow forth from the tips of the running dog spirals (*Ibid.*, p. 137.).

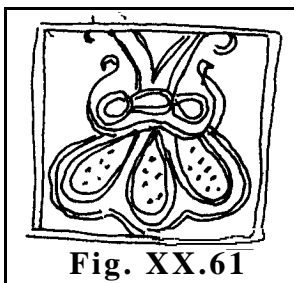


**Fig. XX.59**



**Fig. XX.60**

upon papyriform Protocorinthian models. Palmettes could tip the ends of regular spirals, as in Fig. XX.59, or of meandering spiral lines as on the famous Nessos amphora (Fig. XX.60). These examples by no means exhaust the wide variety of ways in which palmettes and palmette foliage were used by Protoattic painters, but do provide a sample of those cases which retain the distinction between downcurving perianth and foliage. Many designs display the addition of palmette foliage to otherwise abstract spiraliform tendrils.



**Fig. XX.61**

The great vitality and originality of the Protoattic style is clearly evident in all the patterns utilizing palmette motives.

The East Greek styles provide a striking contrast with those of the West, in that the use of palmette patterns was extremely limited. A simple palmette of three leaves and split perianth appears on a Late Geometric (?) sherd from the Samian Heraeum (Fig. XX.61). The majority of East Greek palmettes appear as isolated motives growing up or hanging down from the borders of animal friezes (Figs. XX.62A-E). They developed into complex and ornate patterns, the details of whose form need not concern us here. It is sufficient to note that some of them are fairly pure palmettes (Fig. XX.62E), but many others are conflated to a greater or lesser degree with *Nymphaea* characteristics (Figs. XX.62A-D).

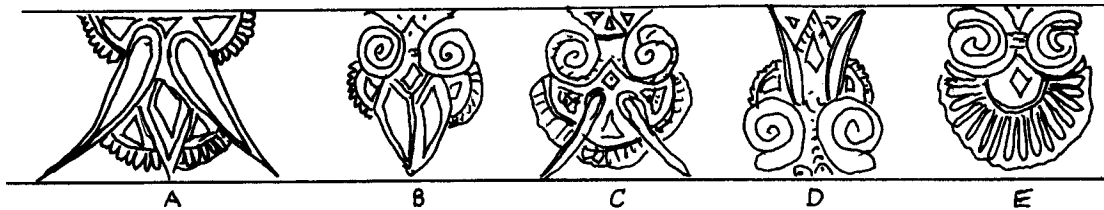


Fig. XX.62

There may possibly be some relationship between such forms and the elaborate waterlilies beloved of Iron Age Cypriote painters. Fig. XX.63 is noteworthy since it displays a comparatively late design which appears to be a descendant to Fig. XX.61. Aside from such independent palmettes, the East Greeks also used palmette foliage in conjunction with spiralfirm patterns.<sup>90</sup>

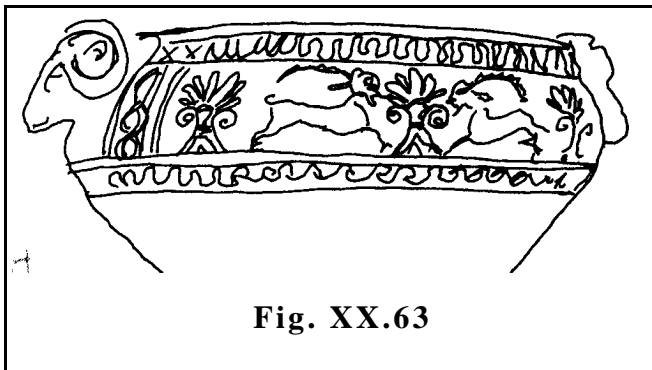


Fig. XX.63

This is not the place to work out the details of the relationships between the palmette designs of the orientalizing period and those of archaic and classical Greece, which arose on the basis provided by the

earlier patterns. The enthusiasm with which palmettes were used by orientalizing artists is symptomatic of later developments. These themes were to be among the most widely used and conspicuous motives of classical ornament. Although examples of rather simple palmette-tipped tendrils occur after the close of the orientalizing period,<sup>91</sup> many of the latter palmette ornaments became extremely complex, and the elements derived from the ancient Near East were often used in spiralfirm compositions which are completely Greek in character.

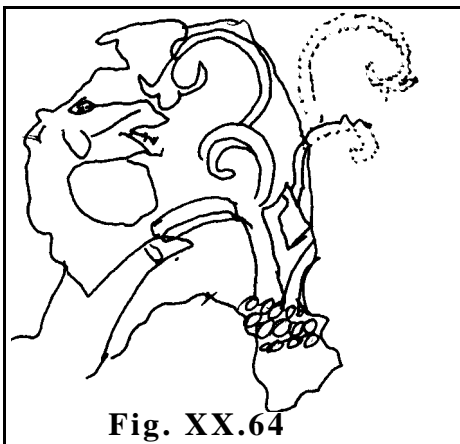
<sup>90</sup> R. Eilmann, "Frühe Griechische Keramik in Samischen Heraion," AM, LVIII (1933), p. 84, Fig. 30 (krater).

<sup>91</sup> Kunze, *op. cit.*, p. 148. Kunze interprets this element in both cases as a palm stem.

## PLANT ORNAMENTS OF NORTH SYRIAN ORIGIN AND POSSIBLY RELATED MOTIVES

### SOUTH-FLOWER TREES

An outstanding series of orientalizing motives can be derived from the patterns of superimposed South-flower perianths typical of north Syrian art. Although we possess no indisputable links between the presumptive oriental prototypes and hellenic designs, a plant guarded by two lions on one of the bronze shields from Palaikastro displays several features explainable only by reference to north Syrian themes. The Palaikastro plant



grows, not from a scaly trunk, but, as older oriental examples demonstrate, from a rocky cliff (Fig. XX.64).<sup>92</sup> The effect is comparable to that achieved in the Sakje Geuzi relief of Fig. XIX.24, as Kunze has pointed out.<sup>93</sup> The plant itself consists of three superimposed South-flower perianths, whose identity is largely obscured since each one has split

into two almost unconnected bands. In addition, small South-flowers have been attached to each spiral end. The latter feature is purely Greek. However, the stylization of the perianths, and the sweeping curves in which the resulting scrolls are arranged resemble the analogous, but not quite so pronounced, characters of the north Syrian “censers” (Fig. XIX.27).<sup>94</sup> The lozenge shaped element projecting from the lowermost South-flower perianth of Fig. XX.57 is significant, as it can be correlated with the triangular lobes that were so strongly emphasized on the “censers.” This coincidence in important details

<sup>92</sup> An incorrect reconstruction of this shield design is published in BSA, XI, (1904/05), pl. XVI and in Poulsen, *op. cit.*, p. 78, Fig. 76. Cf. Kunze, *op. cit.*, pp. 13, no. 8; 148.

<sup>93</sup> Kunze, *op. cit.*, p. 148. Kunze interprets this element in both cases as a palm stem.

<sup>94</sup> Figs. XIX.28 and XIX.33 display the same features, but possess, in addition, volutes which do not recur in the Palaikastro or other Cretan designs.

indicates an underlying genetic relationship which even the modifications introduced by the originative Cretan artist have not obscured.

Although it is possible to claim north Syrian designs such as Figs. XIX.24 and XIX.27-33 as the direct prototypes of the Palaikastro design, no definitive statement can be made as to the exact manner by which they became known in Crete. Fortunately, certain imported objects from the Idaean cave demonstrate that there is no necessity to assume any intermediary between Crete and the East. Among the votive objects from that cave are specimens belonging to both the north Syrian and Phoenician<sup>95</sup> categories. Fragments of figures standing on a column base compare to examples from Nimrud, whose Syrian nature has been demonstrated by Barnett.<sup>96</sup> The forequarters of a lion attached to a tube, although made of ivory, cannot be dissociated from the north Syrian “censer” type that is so well exemplified by Fig. XIX.34.<sup>97</sup> The Idaean cave also yielded a small ivory bowl possessing a stem, the under part of which is molded into breasts and arms. In his discussion of this piece, Kunze has pointed out that it may well be related to the north Syrian “censers” and particularly to one now in Hamburg.<sup>98</sup> The presence of such objects in the Idaean cave proves that the north Syrian school for which superimposed South-flower perianth designs were typical exported its products to Crete. Nothing short of the discovery there of an actual “censer” with floral ornament would be more satisfactory in indicating the source upon which the designer of Fig. XX.57 drew. In addition, recent discoveries at Al-Mina in north Syria have even revealed one of the oriental ports through which such commerce was carried on.

A number of ornaments composed of superimposed South-flower perianths can be correlated with the Palaikastro pattern, but none bears such evident marks of oriental ancestry as Fig. XX.64. The ultimate oriental derivation of this group has, however, long

---

<sup>95</sup> Kunze, “Orientalische Schnitzerin aus Kreta,” *AM*, LX/LXI (1935/36), Pls. LXXXIV, 1; LXXXV, 3, 6.

<sup>96</sup> *Ibid.*, Pls. LXXXIV, 11; probably also LXXXIV A, 13; LXXXVI, 12; cf. pp. 221ff. R. D. Barnett, “Nimrud Ivories and the Art of the Phoenicians,” *Iraq* II (1935), pp. 192-194; Pl. XXVII, 2, 4.

<sup>97</sup> Kunze, *op. cit.*, Pl. LXXXIV A, 17.



Fig. XX.65

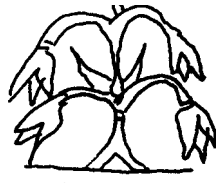


Fig. XX.66



Fig. XX.67

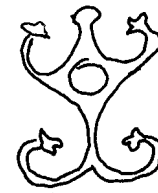


Fig. XX.68

been recognized by classical archaeologists.<sup>99</sup> Two different strains may be distinguished, that with small South-flowers or palmettes attached to the ends of the large perianth, as in the Palaikastro plant, and that without such additions. Examples of the first class are fairly common in Crete. A plant which was probably formed in this manner is suspended from the upper register containing animals and which forms part of a shield fragment from the Idaean cave (Fig. XX.65). There the terminal South-flowers are now the main elements of the design, which corresponds in this respect to a pattern on an ivory plaque found below the archaic Artemisium at Ephesus, and accordingly earlier than 550 B. C. (Fig. XX.66). The similarity between Figs. XX.65 and 66 is sufficiently great to indicate some relationship; in the absence of further material, it would be unwise to speculate on the possible nature of the connection.

Designs painted on two early orientalizzing vessels (Figs. XX.67 and XX.69) and impressed on a relief pithos from the temple at Prinia (Fig. XX.68) are more definitely related to the Palaikastro form than Fig. XX.65 or 66. Fig. XX.68, although similar to Fig. XX.67, is placed upside down. Two illuminating variants on Fig. XX.69 illustrate the ease with which the early Greek painter who must have drawn both broke up oriental elements. In one of the two “trees” of Fig. XX.69, the South-flowers are fairly well preserved, especially the uppermost one, which possesses a median lobe and bands at its

<sup>98</sup> *Ibid.*, p. 222; Pl. LXXXIV, 14. Cf. S. Prezeworski, “Les encensoirs de la Syrie du nord,” *Syria* XI (1930), Pl. XXV, 1.

<sup>99</sup> According to Johansen, “il n’y a certainement aucun doute qu’il existe une relation intime entre les motifs crétois...et les ornements chypriotes bien connus, composés d’éléments végétaux superposés, (Johansen, *op. cit.*, p. 59) Payne says that “the sacred tree...was certainly derived from the East...” (*BSA* XXIX [1927/28], p. 291). Kunze cites the oriental “sacred trees or trees of life” and in particular Figs. XIX.24 and XIX.26 as prototypes for this class of designs (Kunze, *op. cit.*, pp. 147-148).

Revised: August 11, 1999

Copyright © 1999 Oriental Institute, University of Chicago  
<http://www-oi.uchicago.edu/OI/DEPT/RA/HJK/HJKXX.pdf>

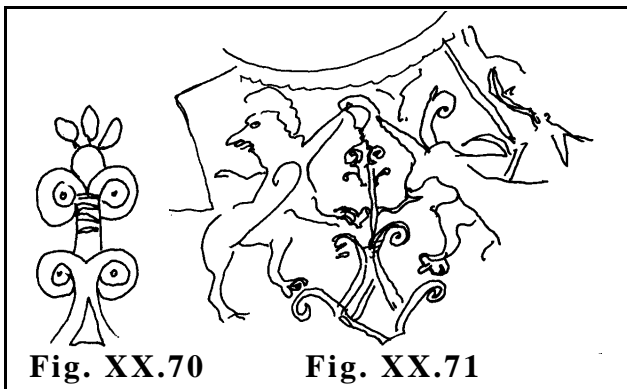


**Fig. XX.69**

base. Even the two lower and more disintegrated flowers are sharply distinguished from the cross-hatched areas that may correspond to the triangular lobes found in oriental motives. In the other tree on this vessel (Figs. XX.69), the top South-flower is practically unrecognizable; the others have broken down into four

scrolls bordering the interior cross-hatched areas. The subsidiary South-flowers present on the trees of Fig. XX.69 are not as organically connected with the main design as in Figs. XX.64, 67, 68, but are simply playful accessories which were also added to the double

volute of the lower register (Fig. XX.69).



**Fig. XX.70**

**Fig. XX.71**

Crete has yielded only two examples of South-flower “trees” without supplementary flowers. One, on an early orientalizing pithos from Knossos, is very simple (Fig. XX.70).

Payne compared it to the tree on a slab from Tell Ahmar,<sup>100</sup> which is of the same type as Figs. XIX.3 and XIX.7. Fig. XIX.11 demonstrates that such forms were used on small, portable objects. The tree forming the central axis of an antithetical group on an amphora from Arkades is more complicated than the Knossos one. Fig. XX.71 consists of three, or

<sup>100</sup> Payne, “Early Greek Vases from Knossos,” *BSA*, XXIX (1927/28), p. 291.  
 Revised: August 11, 1999  
 Copyright © 1999 Oriental Institute, University of Chicago  
<http://www-oi.uchicago.edu/OI/DEPT/RA/HJK/HJKXX.pdf>



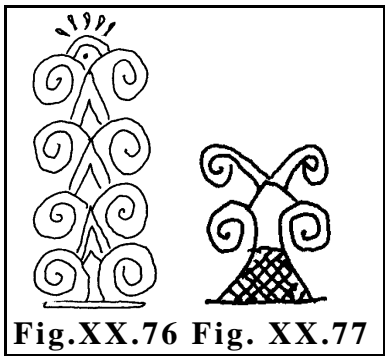
possibly four perianths, divided into scrolls in much the same manner as in Figs. XX.64 and 69. The triangular lobe of the Palaikastro plant is also found in the Arkades pattern.



South-flower trees constitute one of the features linking the Cretan and Protocorinthian styles.<sup>101</sup> Three plant motives decorate a small aryballos in Berlin (Figs. XX.72-74). One of these, Fig. XX.74, is closely comparable to the Cretan tree of Fig. XX.70, the main difference being the greater development of the palmette foliage in the Protocorinthian example. The other South-flower tree of this vessel, Fig. XX.74 has a strangely elaborated lower part. Although the many-staged plant of Fig. XX.73, on the same aryballos, now shows little resemblance to its presumptive ancestors, it was probably inspired by forms such as Fig. XX.69. This is made somewhat more likely by the presence of an intermediate Protocorinthian form, a sherd from the Argive Heraeum, Fig. XX.75, which is closely related to the Cretan designs of Figs. XX.64, 69 and 71. The presence of palmettes here having leaves stylized in the manner typical for Protocorinthian, at the tips of the scrolls is, of course, another feature connecting Fig. XX.75 with Cretan motives (Figs. XX.64,67 and 68).

The theme of superimposed South-flowers also occurs in two other groups of early orientalizing pottery. Four perianths reduced to simple spirals and supporting a linear palmette crown, decorate the foot of a Boeotian bowl (Fig. XX.76). Two linear “perianths” grow from a cross-hatched base on a vessel from Thera (Fig. XX.77). At present there seems to be only one Protoattic vessel, an amphora in New York, assigned by

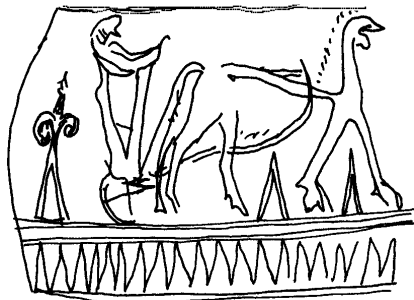
<sup>101</sup> Johansen, *op. cit.*, p. 58  
 Revised: August 11, 1999  
 Copyright © 1999 Oriental Institute, University of Chicago  
<http://www-oi.uchicago.edu/OI/DEPT/RA/HJK/HJKXX.pdf>



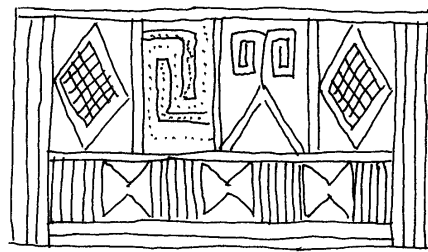
**Fig. XX.76 Fig. XX.77**

J. M. Cook to “a not too early” stage of his Early Protoattic phase (ca. 710-680 B. C.), but classified by Rodney S. Young among developed early Protoattic vases (ca. 690-670 B. C.),<sup>102</sup> which bears a South-flower tree (Fig. XX.78). Its base is formed by two lines bordering a triangular, cross-hatched area; such a simple motive

supporting some kind of linear pattern is known both on East Greek geometric sherds from Samos (Fig. XX.79) and Delos,<sup>103</sup> and on a Cycladic geometric vase (Fig. XX.80),

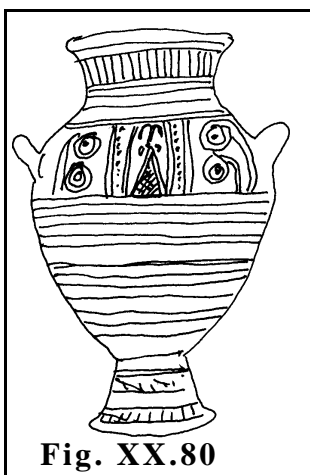


**Fig. XX.78**



**Fig. XX.79**

but the upper part of the Protoattic pattern, the downcurving volutes surmounted by a cross-hatched lobe that in turn supports a small cordate crowning motive, can hardly be



**Fig. XX.80**

dissociated from designs such as Figs. XX.69 and 71. The resemblance of the crowning element of the Arkades plant (Fig. XX.71), with that of Fig. XX.78 is rather striking; the latter must be regarded as a simplified rendering of Cretan early orientalizing South-flower trees, which range from the middle to the end of the Eighth Century B. C. and are, therefore, significantly earlier than the Protoattic vase of Fig. XX.78.

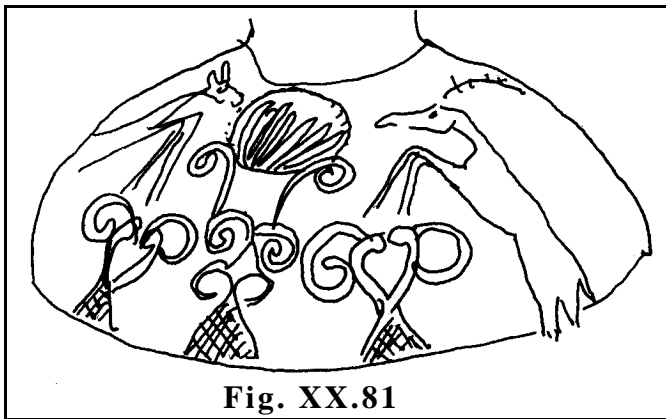
There remains one other design which falls within the category of South-flower trees and which offers a decided analogy to both the Cretan Fig.

<sup>102</sup> Payne, “Early Greek Vases from Knossos,” BSA, XXIX (1927/28), 185, 214. Rodney Young, “Graves from the Phaleron Cemetery,” AJA, XLVI (1942), p. 57.

<sup>103</sup> Cf. also Eilmann, *op. cit.*, AM, LVIII (1933), p. 68, Fig. 17a; p. 69, Fig. 18a,c; CVA: Italia, X, Pl. CCCCLXXII(, 1 (Ialiso 444; skyphos).

Revised: August 11, 1999

Copyright © 1999 Oriental Institute, University of Chicago  
<http://www-oi.uchicago.edu/OI/DEPT/RA/HJK/HJKXX.pdf>



**Fig. XX.81**

XX.69, and the Protoattic Fig. XX.78. This is the middle plant appearing on an oinoche from Kamiros, which must belong to a transitional geometric-orientalizing stage (Fig. XX.81). The Cretan

Fig. XX.69 offers the closest analogy to the cross-hatched triangular areas and the perianth scrolls of Fig. XX.81, but in the upper part of this pattern the archetypal perianth and palmette foliage have been subjected to a unique disintegration, resulting in two widely separated scrolls with palmette leaves strung between them. The existence of this East Greek pattern and its evident similarity with West Greek motives create a problem which cannot be answered with the limited evidence now at our command. The nature of the relationship prevailing between Fig. XX.81 and its western counterparts cannot yet be determined. These East and West Greek trees may have been developed as collateral transmutations of oriental prototypes, and may not be directly related at all. Before the exact date of Fig. XX.81 is established, it is impossible to speculate whether, in addition to actual oriental models, Cretan craftsmen were also stimulated by the products of their East Greek colleagues. A detailed study of the interrelationships of the various regional arts of early Greece is long overdue.

Another point which needs clarification is that of the relationship of the Cypriote orientalizing motives with those of other groups. Johansen, for example, has stated that the Cretan South-flower trees must be influenced by Cypriote prototypes.<sup>104</sup> Although he refers to well-known Cypriote designs formed of superimposed vegetal elements, he does not cite specific forms. The assumption of the originality and importance of Cyprus, which

<sup>104</sup> Johansen, *op. cit.*, pp. 58-59.  
Revised: August 11, 1999  
Copyright © 1999 Oriental Institute, University of Chicago  
<http://www-oi.uchicago.edu/OI/DEPT/RA/HJK/HJKXX.pdf>

Payne apparently shared with Johansen,<sup>105</sup> clashes with Pfuhl's estimate of Cypriote orientalizing vases, as local products, lacking any distinct unified tradition, and without importance for the general development of Greek art.<sup>106</sup>



Fig. XX.82



Fig. XX.83

The weird mixture of debased elements found on Cypriote vessels substantiates such a statement. The hybrid designs of Fig. XX.82, for instance, can be regarded as a very degenerate example of South-flower trees such as Figs. XX.69, 71, 72; it could by no means be considered as the starting point from which such patterns developed. Fig. XX.83 stands even further away from the main stream of Greek development. It is formed of various *dejecta membra*; the Phoenician semicircular volute is early recognized. The downcurving volute could be another *Schalenpalmette* upside down or a vestige of a South-flower perianth. The ornaments on a vase found near Kition yield further evidence of the inextricable mingling of foreign elements in Cypriote work (Figs. XX.84, 85). The central shaft of Fig. XX.84 is formed by rosette-filled squares, a theme common on Cypriote pottery of this period,<sup>107</sup> and undoubtedly derived from the “late Hittite” repertory, where such borders were commonly used.<sup>108</sup> The remainder of the design is formed by volutes and a South-flower perianth with palmette foliage. No exact oriental ancestor can be cited, but the form of the hybrid elements is sufficient to indicate that in this

<sup>105</sup> Payne, *Necrocorinthia*

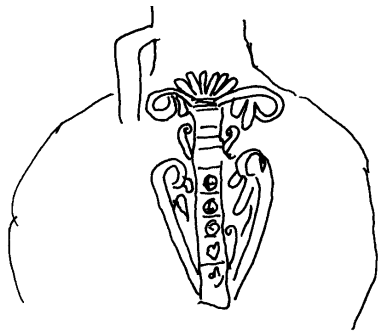
<sup>106</sup> Pfuhl, *op. cit.*, p. 159.

<sup>107</sup> J. Myres, *Handbook of the Cesnola Collection* (New York, 1914), p. 86, 699.

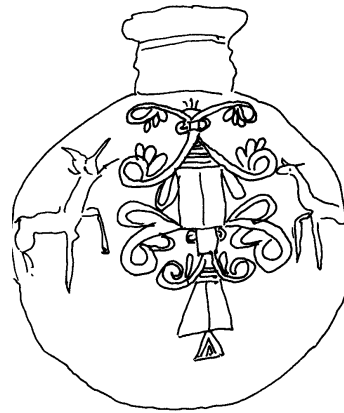
<sup>108</sup> Cf. Ch. XIX, p. 774 and n. 45.

Revised: August 11, 1999

Copyright © 1999 Oriental Institute, University of Chicago  
<http://www-oi.uchicago.edu/OI/DEPT/RA/HJK/HJKXX.pdf>



**Fig. XX.84**



**Fig. XX.85**

case, the sources are to be sought in north Syria, not in Phoenicia. The same holds true for the plant ornament on the other side of this same vessel (Fig. XX.85). In fact this pattern may well have been directly derived from the decoration of north Syrian “censers.” The coincidence between Fig. XIX.33 and that part of Fig. XX.85 which is suspended upside down is striking, despite the multiplication of drops and the appearance of rectangular elements in the painting. Such an origin would explain why the Cypriote painter placed his South-flower hybrid upside down. If he were copying from a rounded object such as a “censer” bowl, he would have no guide as to the correct orientation of the pattern. It is clear that in the Cypriote designs three different influences can be detected - Greek in Fig. XX.82, Phoenician in Fig. XX.83, and north Syrian in Figs. XX.84 and 85. As long as Cyprus cannot provide designs displaying more originality and consistency of style than those just discussed, that island can hardly be regarded as capable of exerting effective influence upon Greek design.

#### UPTURNED VOLUTE MOTIVES AND THEIR POSSIBLE GREEK RELATIVES

The oinoche from Kamiros is important, not only for its larger plant motive, but also for the two smaller ones which provide the most unequivocal renderings of the upturning volute known in early Greek art (Fig. XX.81). There can be no doubt as to the identity of this element, which occurs here in much the same form as on the “late Hittite”

works of Figs. XIX.13-14. This, as well as the north Syrian character of the superimposed South-flower scrolls of the central plant of Fig. XX.81 are points which must be emphasized strongly. They indicate that Phoenicia should not be regarded as the sole source of the oriental influence received by the East Greeks,<sup>109</sup> but that “late Hittite” art also played an important role.

From the upper part of the volutes of Fig. XX.81, there project downcurving scrolls, fully comparable to those constituting the South-flower perianths of the middle plant. Their attachment to the volutes can be regarded simply as a carry-over from the central plant, rather than as displaced elements of a South-flower that was once below the volute. Unfortunately, no indisputable evidence that orientalizing artists used the complete tiers of South-flower and volute, which were so typical of Near Eastern plant ornament, has yet been discovered.



**Fig. XX.86**

The small plants of Fig. XX.81, however, do demonstrate that the upturned volute was adopted, at least in East Greece. Further proof is given by a late Kameiran B (?) bowl from Vroulia, adorned by upturned volutes enclosing vestigial palmette lobes and foliage within their arms (Fig. XX.86). With the aid of such clues, which illustrate

that in some cases Greek designers did utilize introrse volutes, we may seek for West Greek designs which may perhaps be related to this important oriental motive. This task is very difficult since it is easy for volute designs to be developed in a quite abstract manner on a spiraliform basis.

<sup>109</sup> Pfuhl states that “Für unsere Kenntnis, tritt er (i. e. Rhodian-Milesian) als fertiger orientalisierender Stil auf. Er steht zu seinem Phönikischen Vorbildern in besonders enger Beziehung; man spürt die unmittelbare Nachbarschaft.” Pfuhl, *op. cit.*, p. 100. These remarks are made, of course, concerning stages of East Greek pottery later than that represented by Fig. XX.81.

Revised: August 11, 1999

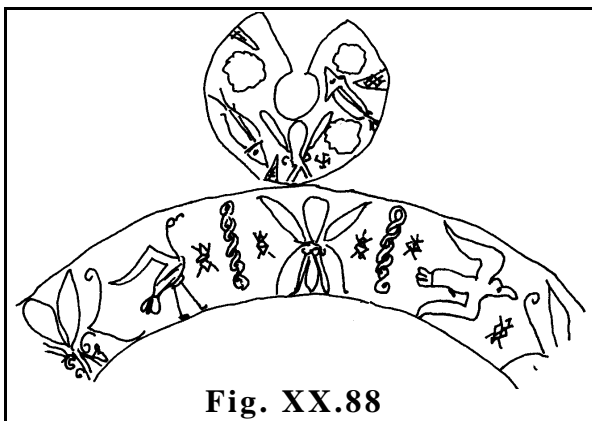
Copyright © 1999 Oriental Institute, University of Chicago  
<http://www-oi.uchicago.edu/OI/DEPT/RA/HJK/HJKXX.pdf>



**Fig. XX.87**

A small, early Protocorinthian oinochoe displays a large volute enclosing palmette foliage (Fig. XX.87). It is the least equivocal upturning volute motive which we possess and it is tempting to consider the small down-curving spiral ends of this design as vestiges of a South-flower perianth. However, there are no intermediate Cretan designs, as in the case of the South-flower trees or patterns of Phoenician lineage, so that the oriental origin of Fig. XX.87, though likely, cannot be

definitely proved.

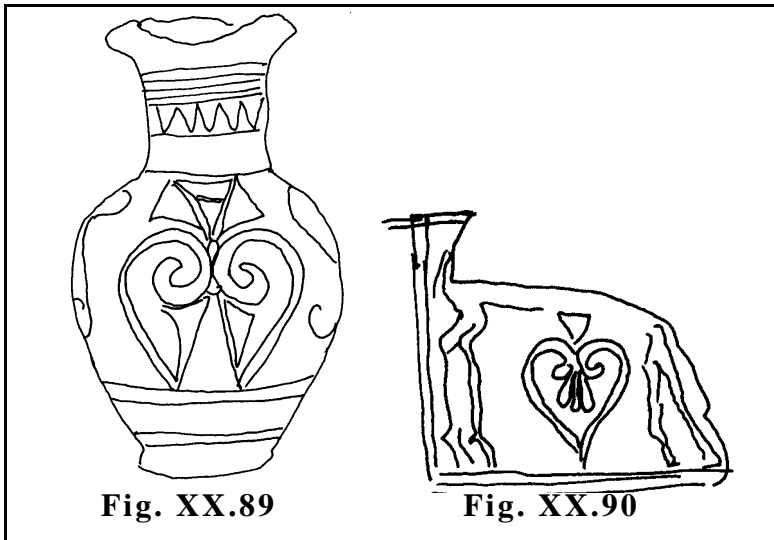


**Fig. XX.88**

Several designs can be correlated with Fig. XX.87. An "aryballe pansu" from Cumae (Fig. XX.88) bears three varying patterns characterized by prominent foliage, which is in one case combined with small down-curving elements reminiscent of a South-flower perianth. Another consists of the

same foliage -- separated by two incurving buds -- with smaller lines growing upwards.

The third variant has, in addition, a pair of upturning spiral scrolls. The designs of this early Protocorinthian pot illustrate clearly the difficulties which face us in Greece. The upturning spirals of Fig. XX.88 may be simple abstract lines. On the other hand, we have seen how the Greeks transmuted elements of oriental origin into their own abstract, spiraliform idiom, so that there is a possibility that the upturning volute is reappearing here in a practically unrecognizable guise. The same may be said concerning Fig. XX.89, another early Protocorinthian vessel from Cumae and for a closely related early Protoattic pattern (Fig. XX.90). By the same hand is the Amalatos hydria, Fig. XX.91, where the thickened stem and palmette foliage are reminiscent of oriental themes. An early Protoattic



hydria, the work of the so-called Mesogeia painter, bears a continuous band formed by adjacent units equivalent to Fig. XX.91, except for the addition of down-curving palmette-tipped tendrils. This design is very important since it

serves as a link between Fig. XX.91, with which it is contemporary and which shows comparatively pronounced oriental affinities, and the design on the Nessos amphora (Fig. XX.60), which belongs to the succeeding Black and White style of Middle Protoattic. There the motive of the Vlasto Hydria<sup>110</sup> reappears, but reduced to an interlacing pattern of completely abstract, spiraliform type, which, despite its altered appearance may ultimately have a connection with oriental motives.

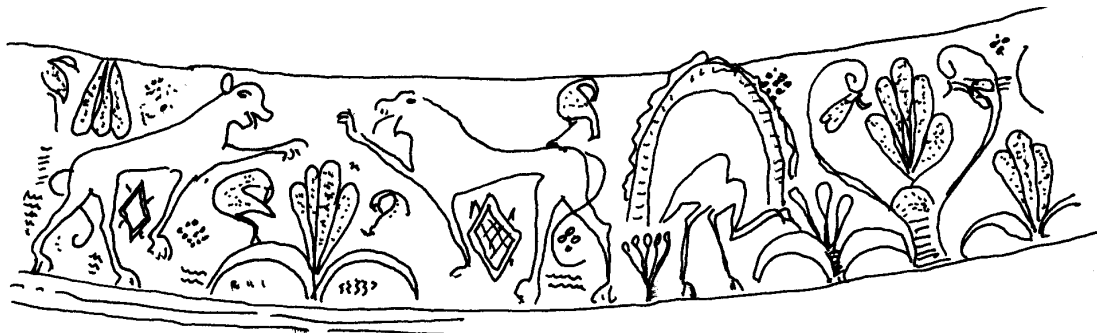


Fig. XX.91

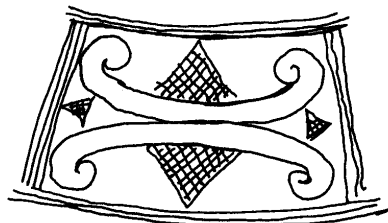
### THE DOUBLE VOLUTE

The fine early orientalizing pithos from Knossos which has already provided us with two instructive South-flower trees (Fig. XX.70), provides the earliest known example

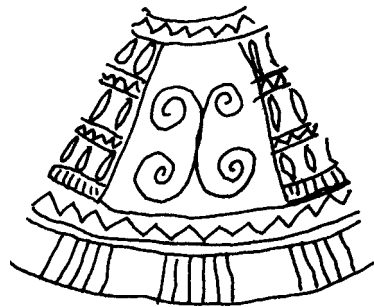
<sup>110</sup> BSA, XXXV (1934/5), Pl. XLIV.  
 Revised: August 11, 1999  
 Copyright © 1999 Oriental Institute, University of Chicago  
<http://www-oi.uchicago.edu/OI/DEPT/RA/HJK/HJKXX.pdf>



of a Greek pattern clearly derived from the double volute motive, which made a sudden appearance in the orient on gold ornaments from LC III contexts in Cyprus (Figs. XVI.89 and XVI.90) and from Palestine, and - in connection with other elements - on a Megiddo ivory (Fig. XVI.101). We have seen that the genesis of this motive is still shrouded in mystery, but that it is related to other patterns formed of c's, and applications of the motive. Therefore we have placed the Greek double volutes among the motives probably possessed of a north Syrian ancestry, despite the present rarity of examples from that area.

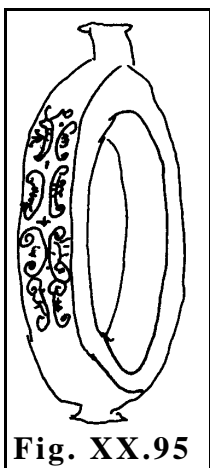


**Fig. XX.93**



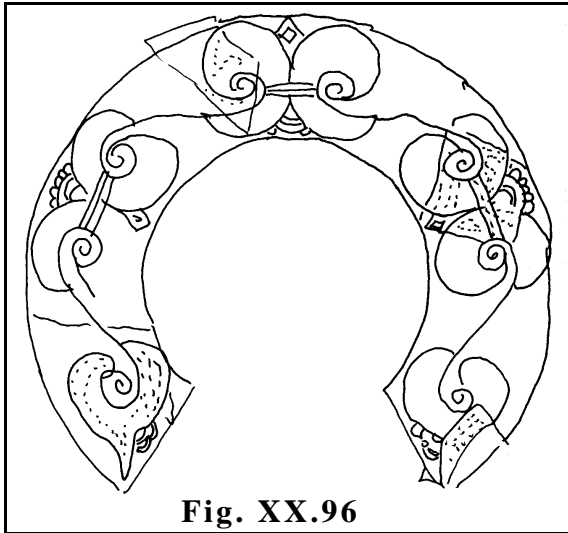
**Fig. XX.94**

Kunze, the only scholar to devote considerable attention to this type of design, has pointed out that, in addition to the oriental series, double spirals were used on late geometric vessels (Figs. XX.93 and 94). These are distinguished from the double volutes which appear on a shield from Palaikastro (Fig. XX.64), on a Rhodian relief amphora (Fig. XX. 23) and on a flask from Vroulia (Fig. XX.95) by the absence of lobes filling



**Fig. XX.95**

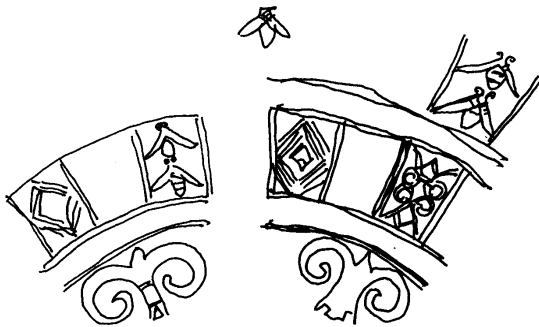
the corners between the curving ends. As soon as these features appear, the double volutes become reminiscent of oriental patterns. It could be argued that this is merely an accidental convergence since Geometric c-curves were used by the Greeks (Figs. XX.93, 94) and since the addition of lobes filling angles between the ends of curling scrolls was a typical Greek procedure. Fortunately we now have early Greek examples displaying the binding of the two volutes together, a feature that can be



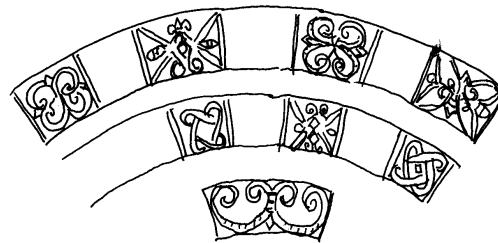
**Fig. XX.96**

explained only on the basis of oriental prototypes.<sup>111</sup> Sherds from the shoulder of a pitcher found at the Samian Heraeum belong to a phase of East Greek pottery intermediate between the normal Geometric and the Early Kamiros phase, and characterized by lush vegetal ornament.<sup>112</sup> In Fig. XX.96 the design is reconstructed.

The most important elements are fat double volutes, bound together and with projecting palmette foliage. A sherd apparently exemplifying the same kind of pattern was found at Ephesus.<sup>113</sup> The only other East Greek example of the motive is later -- occurring on a ring flask from Kamiros (Fig. XX.95), but there the volutes are not bound together.



**Fig. XX.97**



**Fig. XX.98**

The Knossos pithos of Fig. XX.69 bears the clearest West Greek example of the motive. There is a broad binding, and, as in the Samian example, there is a distinction between the filling motives of the angles; in one case a rectangular lobe appears; in the other a rounded one is topped by a miniature South-flower. Double volutes are also to be recognized in

<sup>111</sup> Kunze, *op. cit.*, p. 120.

<sup>112</sup> Rumpf, "Zu den Klazomenischen Denkmälern," *JdI.*, XLVIII (1933), p. 65 and n. 7. Rumpf suggests that this phase may be dated c. 750 B. C.

<sup>113</sup> In his discussion of this motive Payne refers it to patterns appearing at the close of the Geometric period and refers to Wade, who has claimed Mycenaean analogies for it. Payne says that when it occurs in the Cretan orientizing style, it is considerably evolved and "with the reserved circles in the central bar, it suggests a metal prototype - perhaps a double handle of some kind."

some of the patterns on another Knossian pithos (Fig. XX.98). Here they have been considerably modified. The binding has been enlarged until it resembles a long sheath. Even more striking is the treatment accorded to the spiral ends of the volute arcs which touch and are bound together. In addition, they are provided with a curving lobe, so that they become South-flowers, like those that appear on the same vessel below (Fig. XX.98). As a whole the double volutes of Fig. XX.98 are so completely hellenized, being closely akin to the designs of bound scrolls that were typical of early Cretan orientalizing ware (e.g. Figs. XX.97, 98)<sup>114</sup> that their true character would hardly be decipherable if it were not for the double volute of Fig. XX.69.<sup>115</sup>

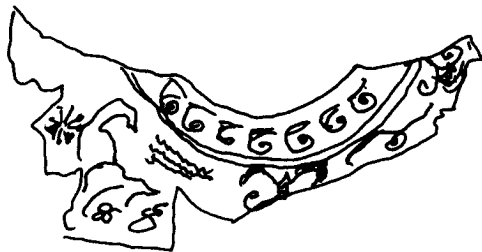


Fig. XX.99

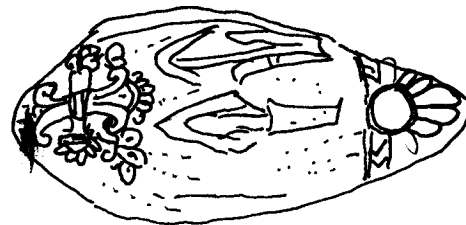


Fig. XX.100

Clearly recognizable double volute patterns remain very rare in Greece. A fragmentary Protoattic vessel bears what appears to be an example of this motive (Fig. XX.99). Another appears on a Late Protocorinthian dubk vase (Fig. XX.100), where the volutes are filled with palmette foliage in a manner somewhat reminiscent of the East Greek double volutes of Fig. XX.95.

Despite its use in early Greek art, the double volute never became important in classical ornament. It served, as Jacobsthal has pointed out,<sup>116</sup> as a “pre-canonical” handle ornament on several “affektieren” black-figured amphoras (Fig. XX.101).<sup>117</sup> Although the

<sup>115</sup> Jacobstahl, *Ornamente Griechischen Vasen*, p. 36.

<sup>116</sup> *Ibid.*, Pl. XIX, C.

<sup>117</sup> Florenz 1818 - Mon. Lin. VII, p. 342, Fig. 22 = Webster, “Tondo Composition in Archaic and Classical Greek Art,” JHS XIX (1939), p. 161, 14. Naples H (?) 2744 = Webster, *op. cit.*, JHS XIX, p. 161, 16 bis = Phot Sommer 11003.

original designs have been transformed into graceful palmette-tipped tendrils, the original theme is not completely obscured. Double volutes placed vertically served as the axis

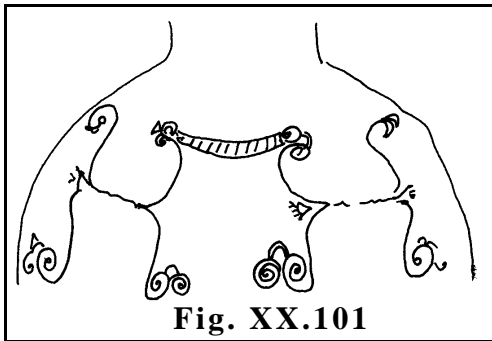


Fig. XX.101

between pygmies on the Northampton amphora.<sup>118</sup> It is to Jacobsthal, too, that we owe the recognition of modified examples of this same motive as representations of lightning.<sup>119</sup>

### GREEK INVENTIONS

With the discussion of the double volute we have exhausted the motives that can be traced back to probable north Syrian prototypes. Besides the motives which, as a whole have either Phoenician or north Syrian prototypes, there are others, often completely Hellenic tendril or spiraliform compositions, which use motives of eastern derivation -- South-flowers or palmettes -- as accessories. In such cases it is impossible to determine from what source Greek artists were borrowing, even though they are obviously using foreign elements.

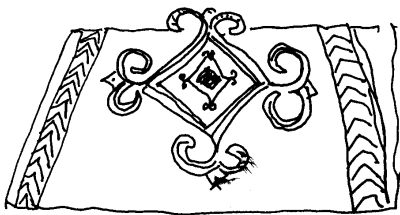
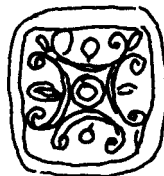
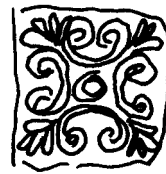


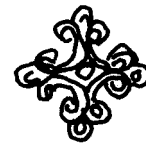
Fig. XX.102



A



B



C

Fig. XX.103

The large isolated South-flowers of Fig. XX.98 illustrate the use of generalized oriental patterns in early Cretan and Boetian fabrics; highly spiralized examples occur on Melian ware.<sup>120</sup> Such South-flowers could be used to elaborate Geometric patterns, as in the

<sup>118</sup> Jacobsthal, *op. cit.*, p. 37. Pfuhl, *op. cit.*, para. 266. E. Gerhard, *Auserlesene griechische vasenbilder* (Berlin, 1840-58), p. 317. Burlington Fine Arts Exhibition Catalogue 1904, Pl. XCI.

<sup>119</sup> Jacobsthal, *op. cit.*, p. 28. Kunze, *op. cit.*, p. 120.

<sup>120</sup> C. Dugas, *La Céramique des Cyclades* (Paris, 1925), Pl. IX.

Cretan lozenge motive of Fig. XX.102, a theme which has, as Payne pointed out, relatives in the products of other Greek schools.<sup>121</sup> Many of these illustrate the way in which

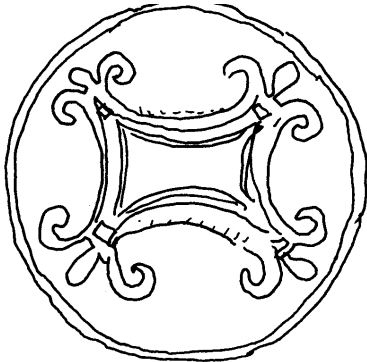


Fig. XX.104

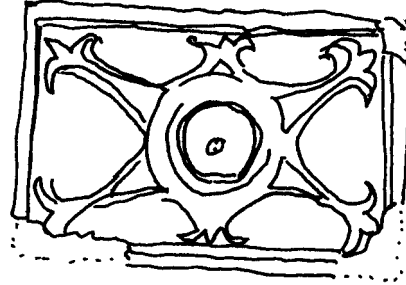


Fig. XX.105

abstract curvilinear elements simulate plant-like patterns. Fig. XX.103A, 103C and 104 are formed by c-curves and lobes. The angles of the c-curves of Fig. XX.103B are filled by groups of four lobes, and only Fig. XX.105 exhibits what appear to be more organic South-flowers.

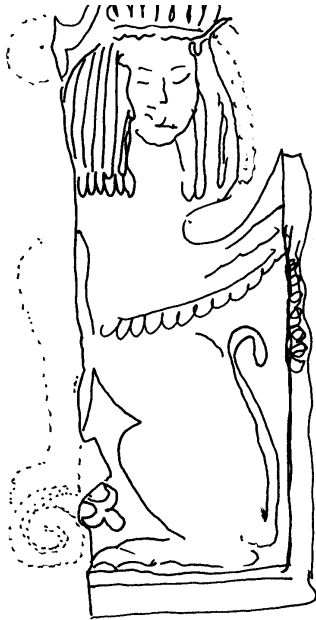


Fig. XX.106

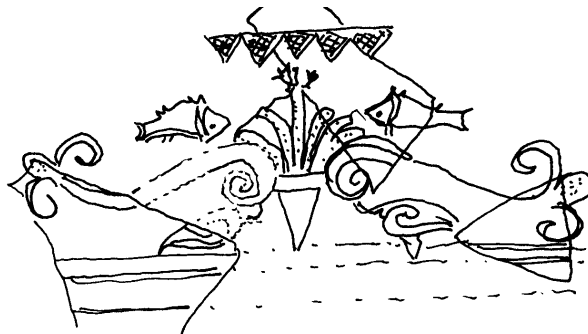


Fig. XX.107

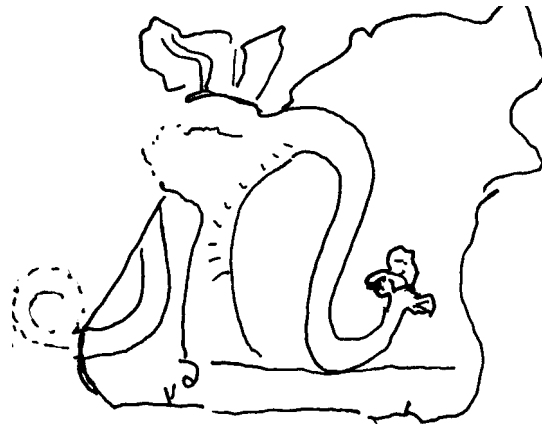
In other designs the identity of the floral units is certain. A plaque from the Artemis Orthos temple has, as a subsidiary filling element, a spiral curl ending in a South-flower

<sup>121</sup> Payne, "Early Greek Vases from Knossos," BSA XXIX (1927/28), p. 293f. Hogarth, *Ephesus, The Archaic Artemesia* (London, 1908), Pls. IV, 31; VIII, 23-26; IX, 33-35, 41-46; X, 33.

(Fig. XX.106). An early design on sherds of a dinos from the Samian Heraion, intermediate between Geometric and typical orientalizing styles of East Greece, displays well-formed South-flowers, with curling petals sharply distinguished from the central lobe, attached to spiral scrolls (Fig. XX.107). A similar pattern serves as the headdress of a



**Fig. XX.108**



**Fig. XX.109**

winged figure carved on a bone plaque found at the Spartan shrine of Artemis Orthia in association with Geometric pottery dated by the excavators not later than the middle of the Eighth Century B. C. (Fig. XX.108). Another fragmentary ivory from Artemis Orthia, Fig. XX.109, without archaeological context, consists of a central stem with down-curving tendrils ending in South-flowers, the whole being somewhat reminiscent of Fig. XX.110.



**Fig. XX.110**



**Fig. XX.111**



**Fig. XX.112**

The motive of animals or monsters confronting one another above an axial plant element is illustrated on a relief pithos from Afrati in Crete (Fig. XX.112). The thick basal stem and

curved tendrils of Fig. XX.111 are shared by some plants illustrated in these figures. The lower part of the vegetal motive of the Amasis oinochoe in Wurzburg (Fig. XX.113) may well be descended from such early Greek motives as those just cited, but the remainder of the design does not have good earlier parallels. Earlier than this Sixth Century B. C. vase

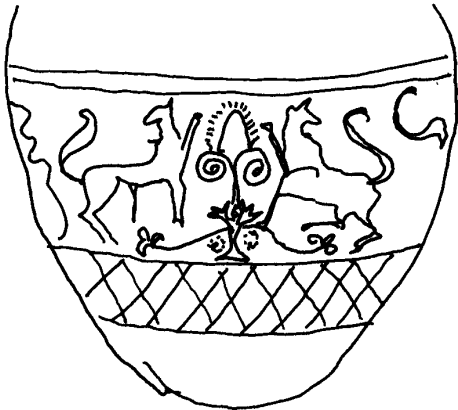


Fig. XX.113

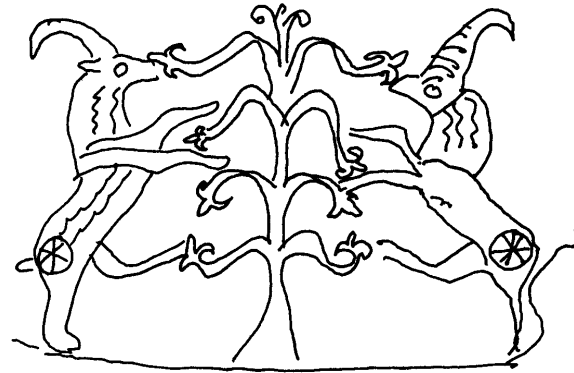


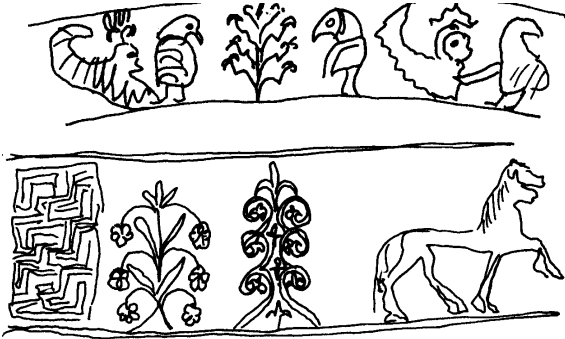
Fig. XX.114

is a gold diadem from Aigina which apparently belongs somewhere in the Seventh Century B. C. (Fig. XX.110). On it rampant animals flank a plant formed by three pairs of curving tendrils. The plant could be considered as a multiple of Fig. XX.109. On the other hand, it may well be related to the South-flower trees for which we have claimed an ultimate north Syrian ancestry (Fig. XX.64-67). In any case it is certain that Greek patterns such as Fig. XX.110 are related to and basic to those which were used on tiles decorating exterior walls recently excavated in the Phrygian level at Pazarli (Fig. XX.111, 114). These plants do not go back directly to Asiatic prototypes, but to Greek ones. Other Pazarli reliefs showing griffins and centaurs are deeply permeated with Greek stylistic elements.<sup>122</sup>

The vigorous, youthful art of the Greeks produced an almost inexhaustible variety of vegetal motives. These sometimes assume a rather naturalistic character, as on a small Protocorinthian aryballos in the Branteghem collection, where palmette flowers sprout from crooked twigs (Fig. XX.115). A Protoattic oinochoe from the Agora bears an even more “naturalistic,” though far from realistic, form: palmette flowers are attached by drooping

<sup>122</sup> *Ibid.*, Pls. XXIV-XXVII; XXXII; XXXIII.  
 Revised: August 11, 1999  
 Copyright © 1999 Oriental Institute, University of Chicago  
<http://www-oi.uchicago.edu/OI/DEPT/RA/HJK/HJKXX.pdf>

stems to an oppositely-leaved tree (Fig. XX.116) for which Cretan prototypes may be found.<sup>123</sup> The same vessel also bears a far more abstract plant consisting of down-curving spiral bands tipped with South-flowers and with others filling the interstices between the scrolls. Peculiarly Hellenic is the manner in which abstract forms are here combined with

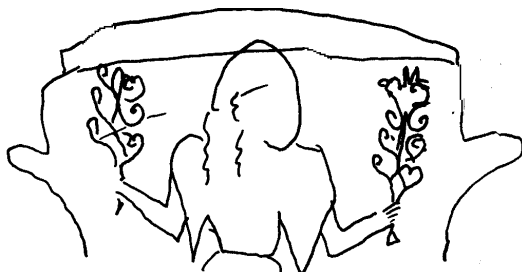


**Fig. XX.115**

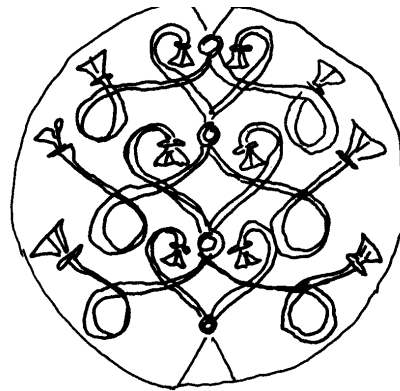
**Fig. XX.116**

elements derived from the East so as to give a rhythmic pattern presenting a certain organic cohesion.

The down-curving Protoattic tree possesses no close relatives, but is to a certain extent paralleled by a group of upturning spiral motives, the simplest of which occurs on a jar from Afrati. There a goddess holds two branches (Fig. XX.117). The base of an Early Protocorinthian pyxis from the Argive Heraeum is decorated by an interlacing pattern possessing exactly the same backbone as Fig. XX.117, but elaborated by the appearance of down-curving tendrils (Fig. XX.118). Orientalizing foliage has been added to the tips of the scrolls, just as the South-flowers were attached to Fig. XX.116.



**Fig. XX.117**



**Fig. XX.118**

<sup>123</sup> Payne, "Early Greek Vases from Knossos," BSA XXIX (1927/28), Pls. XIII, 3; XIV; XVI.  
 Revised: August 11, 1999  
 Copyright © 1999 Oriental Institute, University of Chicago  
<http://www-oi.uchicago.edu/OI/DEPT/RA/HJK/HJKXX.pdf>



On the side of the Argive Heraeum pyxis are less imposing motives akin to those of the base. The tall “tree”<sup>124</sup> from a Late Protocorinthian vessel can be regarded as a descendant of Figs. XX.117, 118. The late motive is completely abstract and the combination of a down-curving spiral supporting upturning ones can by no means be regarded as an example of stylized South-flower perianth and volutes. A Cycladic pot of a much simpler scroll motive, combined with accessorial “palmette” foliage, illustrates this use.<sup>125</sup>

These examples of the Greek vegetal motives in which elements of original oriental origin are used only as incidental elaborations, are of great significance since they reveal closely the fundamental delight which Greek artists took in quite abstract, freely moving scroll patterns which did not represent, but merely suggested, plant forms. Even when foreign units were used as elaborations, they were subordinated to the rhythmic whole, being endowed with a character quite different from that which they had possessed in the Near East. As we have already observed, the same tendencies toward stylization and movement governed the development of those motives which had been adopted as a whole from the Near East.

## PLANT ORNAMENTS OF ASSYRIAN ORIGIN

### ARC FRIEZES

The designs which may have been derived directly from Assyria rather than from north Syria or Phoenicia have not yet been discussed. The chief Assyrian exports were probably perishable textiles<sup>126</sup> and metal objects. The scanty material at present available has so far yielded practically no definite Assyrian metal works, sharply distinct from possible Urartian and Western Iranian works and Phoenician products. Thus it is possible that certain of the bronze bowls from Nimrud bearing arc friezes cited above as prototypes for those of the Cretan shields may actually be Assyrian artifacts. There is one type of

---

<sup>124</sup> Figure not identified.

<sup>125</sup> Figure not identified.

Revised: August 11, 1999  
Copyright © 1999 Oriental Institute, University of Chicago  
<http://www-oi.uchicago.edu/OI/DEPT/RA/HJK/HJKXX.pdf>

frieze -- that tipped by buds or “cones” -- for which Kunze claims an Assyrian origin, indicating that such bands can be considered especially typical for the decoration of that country.<sup>127</sup> It appears on the tympanum from the Idaean cave (Fig. XX.65), a work which is strongly influenced by Assyrian characters. Arc friezes tipped solely by buds are rarely used in Greece; examples can be found on Melian orientaling ware,<sup>128</sup> but it was far commoner for the buds to alternate with some other floral motive as in Figs. XX.4, 5, 6, 10, 25.<sup>129</sup>

## CONCLUSION

We have now reviewed briefly the three principal traditions which closed the development of ancient Near Eastern plant ornament. The story has been carried down to the point where the Greeks appear and take into their hands the end results of an evolution, the roots of which extend back into the Third Millennium B.C. In the later Eighth and in the Seventh Century B.C., when Greek art was transformed under the potent influence of the Orient, vegetal motives became prominent elements in the Hellenic repertory. The work of Poulsen reaffirmed the tremendously important role played by the Phoenicians in the transmission of oriental traditions to Greece<sup>130</sup>. There has been much discussion as to the routes by which oriental influence reached the Greek mainland. Humfry Payne, for example, has emphasized the importance of Crete as an intermediary,<sup>131</sup> whereas Wace and Blegen still consider that the main route went via Cyprus, Rhodes, and the Cyclades.<sup>132</sup> In any case, there can be no denying that oriental influences were carried by objects, such as

---

<sup>126</sup> CS, p. 308.

<sup>127</sup> Kunze, *op. cit.*, pp. 104ff.

<sup>128</sup> *Ibid.*, pp. 105ff.

<sup>129</sup> This chapter stops here in the original manuscript and was not completed. The following conclusions are taken from Kantor's summary of her thesis, entitled "A Conspectus.

<sup>130</sup> Frederik Poulsen, *Der Orient und die Fruhgriechische Kunst* (Berlin, 1912).

<sup>131</sup> Humfry Payne, *Necrocorinthia* (Oxford, 1931), pp. 4 f.

<sup>132</sup> *Klio*, XXXII (1929), 141 f.

Revised: August 11, 1999

Copyright © 1999 Oriental Institute, University of Chicago  
<http://www-oi.uchicago.edu/OI/DEPT/RA/HJK/HJKXX.pdf>

small carvings of ivory or other materials and metal work, made for the most part in Phoenician workshops.

Our appointed task is now complete. We have followed the story of plant ornament in the ancient Near East in as detailed a fashion as possible. In conclusion, it should be said that Riegl's claim for the primacy of Egypt has been substantiated. The main elements of the important hybrid forms began to evolve there during the Third Millennium B.C. In Riegl's work the only decorative arts of the Second Millennium discussed were those of the Egyptians and Mycenaeans. This was, of course, inevitable at that time. Incomplete knowledge of the artistic traditions characteristic of the Minoan and Late Helladic III cultures led Riegl to overestimate the importance of pre-Greek Aegean ornament. He considered its products as the first manifestation of Greek genius, a view that, at least in regard to Minoan Crete, cannot be upheld today. He found in certain Aegean designs the antecedents of analogous Greek patterns, while it is now known that all such motives were eliminated in the continuous evolution of LH III C into the Geometric culture. Only the Mycenaean plant designs acclimatized in the Orient had any chance of surviving. Actually, the drooping palm was the only Mycenaean motive that did reappear for a brief time in "Rhodian" Geometric ware.

It has been possible to fill in the hiatus in Riegl's presentation by the investigation of the traditions of decorative art that flourished in Syria and Palestine, in Mitanni, and in Middle Assyria during the Second Millennium. The sources of the plant ornaments of the First Millennium in earlier styles are now clear. In addition, these later groups can be distinguished in more detail than was previously the case. However, the essential importance of Phoenician art as an intermediary between the oriental and Greek plant motives was emphasized by Riegl.

Such, then, is the story of plant ornament in the ancient Near East. From the moment that the Greeks adopted the stiff and formal patterns of the old Orient, they created striking transformations of the ancient motives. Working on the basis of oriental

stimulation, the Greeks created a great new series of plant ornaments, which have remained the archetypes of formalized vegetal decoration until this day.

#### SOURCES FOR THE FIGURES

- XX.1           BSA, XXXV (1934/35), Pl. L
- XX.2           JHS, L (1931), p. 249, Fig. 7
- XX.3           Kunze, *Kretische Bronzereliefs* (Stuttgart, 1931), Beil. II, A
- XX.4           BSA, XXIX (1927/28), Pl. XXI, 3
- XX.5           *Ibid.*, Pl. XXI, 4
- XX.6           *Ibid.*, Pl. XX.2
- XX.7           *Ibid.*, , Pl. XX, 4
- XX.8           Johansen, *Sikyoniske Vaser* (Copenhagen, 1918), p. 120, Fig. 79
- XX.9           *Ibid.*, p. 121, Fig. 81
- XX.10          Kunze, *op. cit.*, p. 100, Fig. 8C
- XX.11          Johansen, *op. cit.*, p. 121, Fig. 82
- XX.12          “Nimrud Bowls,” 58, D
- XX.13          “Nimrud Bowls,” 62, B
- XX.14          Kunze, *op. cit.*, Pl. VIII, 5
- XX.15          *Ibid.*, Pl. XLIII, 67
- XX.16          “Nimrud Bowls,” 59. C
- XX.17          Kunze, *op. cit.*, Pl. XLVI, 68
- XX.18          *op. cit.*, p. 99, Fig. 7, b
- XX.19          AM, LX/LXI (1935/36), Pl. XCVIII
- XX.20          “Nimrud Bowls,” 68, top right
- XX.21          “Nimrud Bowls,” 68
- XX.22          Kunze, *op. cit.*, Pl. LIII, D

- XX.23 *Ibid.*, Pl. 54, a
- XX.24 BSA, XXIX (1927/28), Pl. XXI, 1
- XX.25 Kunze, *op. cit.*, p. 105, Fig. 7
- XX.26 “Nimrud Bowls,” 58, C
- XX.27 AA, (1933), p. 306, Fig. 17, bottom, second from left
- XX.28 ILN, July 8, 1933, p. 65, Fig. 2
- XX.29 Kunze, *op. cit.*, Pl. L, 78
- XX.30 Kinch, *Vroulia*, p. 14, Fig. 95
- XX.31 *Ibid.*, p. 251, Fig. 124
- XX.32 Annuario, X-XII (1927-29), Pl. XX
- XX.33 Kunze, *op. cit.*, Pl. XLII, 65
- XX.34 *Museo Italiano di Antichita classica* II, Pl. II
- XX.35 *Ibid.*
- XX.36 *Ibid.*
- XX.37 Kunze, *op. cit.*, Beil I
- XX.38 Johansen, *op. cit.*, p. 60, Fig. 40, 1
- XX.39 *Ibid.*, Pl. VII, 2
- XX.40 *Ibid.*, p. 60, Fig. 40, 2
- XX.41 Goodyear, *Grammar of the Lotus*, 211, Pl. XXX, 4
- XX.42 Kinch, *op. cit.*, p. 205, 205, Fig. 88, a-c
- XX.43 *Ibid.*
- XX.44 CVA, Denmark (?), II, Pl. 77, 1
- XX.45 Johansen, *op. cit.*, Pl. XXV, 1, b
- XX.46 BSA, XXIX (1927/28), Pl. XXI, 2
- XX.47 *Ibid.*, p. 279, Fig. 34, 37
- XX.48 *Ibid.*, p. 279, Fig. 34, 38
- XX.49 CVA, GB, III, Pl. CCCLXXXIII

- XX.50 CVA, GB, VI, Pl. CCXL, 5
- XX.51 Kunze, *op. cit.*, Pl. LIII, b
- XX.52 AA, 1933, p. 6, Fig. 4
- XX.54 Hesperia, Sup. II (1939), p. 131, Fig. 94, B72
- XX.55 BSA, XXXV (1934/35), Pl. XLII, b
- XX.56 Hesperia, Sup. II (1939), p. 136, Fig. 99
- XX.57 AA, 1933, p. 264, Fig. 8
- XX.58 AA, 1934, p. 215, Fig. 12
- XX.59 *Ibid.* p. 211, Fig. 9
- XX.60 Jacobstahl, *Ornamente Griechischer Vasen* (Berlin, 1927), Pl. XLVIII
- XX.61 AM, LVIII (1933), p. 138, Fig. 89
- XX.62 Kinch, *op. cit.*, pp. 205-6, Fig. 87, a-e
- XX.63 *Ibid.*, p. 220, Fig. 108
- XX.64 Kunze, *op. cit.*, Pl. XXII
- XX.65 Johansen, *op. cit.*, p.59, Fig. 38
- XX.66 Hogarth, *Archaic Artemesia* (British Museum Excavations at Ephesus), Pl. XLII, 3
- XX.67 BSA, XXIX (1927/28), Pl. XI, 7; p.278, Fig.34, 36
- XX.68 Johansen, *op. cit.*, p. 59, Fig. 37
- XX.69 BSA, XXIX (1927/28), Pl. XVIII
- XX.70 *Ibid.*, p. 279, Fig. 34.35
- XX.71 Annuario, X-XII (1927-29), p. 360, Fig. 472, b
- XX.72 Johansen, *op. cit.*, p. 59, Fig. 36
- XX.73 *Ibid.*, Pl. V, 6a
- XX.74 Kunze, *op. cit.*, Beilage III, E
- XX.75 *Ibid.*, p. 148, Fig 22, b
- XX.76 AJA, (XVIII) (1914), Pl. VI
- XX.77 *Ibid.*

- XX.78 BSA, XXXV (1934/35), Pl. L
- XX.79 AM, LVIII (1933), p. 68, Fig. 17
- XX.80 Dugas, C., *La Ceramique des Cyclades* (Paris, 1925), Pl. III, 2,b
- XX.81 CVA: Italie. X, Pl. CCCCLXXVI, 4
- XX.82 Ohnefalsch, Pl. XIX, 3
- XX.83 *Ibid.*, Pl. LXI
- XX.84 *Ibid.*, Fig.39; Goodyear, Pl. XXXVII, 5
- XX.85 Ohnefalsch, Pl. LXXIV, 5
- XX.86 Kinch, *op.cit.*, Pl. XX, 4
- XX.87 Payne, *Necrocorinthia* (Oxford, 1931), but not identifiable in “NC”
- XX.88 Johansen, *op. cit.*, p. 53, Fig. 31
- XX.89 “Protocorinthian vessel from Cumae”, source not identified
- XX.90 BSA, XXXV (1934/35), Pl. XL, a
- XX.91 JdI, II (1887), Pl. III
- XX.92 BSA, XXXV (1934/35), Pl. XLIV
- XX.93 Kunze, *op. cit.*, p. 122, Fig. 13, B
- XX.94 *Ibid.*, p. 122, Fig. 13, A
- XX.95 Kinch, *op. cit.*, p. 46, Fig. 20, b
- XX.96 AM, 58, p. 135, Fig. 88
- XX.97 BSA, XXIX (1927/28), Pl. XXII
- XX.98 *Ibid.*, Pl. XXIII, 2
- XX.99 AA (1934), p. 214, Fig. 10
- XX.100 Johansen, *op. cit.*, Pl. 41, 1
- XX.101 Jacobstahl, *op. cit.*, Pl.19, C
- XX.102 BSA, XXIX (1927/28), p. 125, Pl. XIII, middle
- XX.103 Source not identified

- XX.104 Dawkins, ed., *The Sanctuary of Artemis Orthia* (London, 1929), Pl. CXLIII, 2
- XX.105 *Ibid.*, Pl. CLVII, 1
- XX.106 *Ibid.*, Pl. XCVII, 1
- XX.107 AM, 58, p. 107, Fig. 50
- XX.108 Dawkins, ed., *op. cit.*, Pl. XCIII, 1
- XX.109 *Ibid.*, Pl. CLXXVII
- XX.110 Marshall, *Catalogue of the Jewellery in the British Museum* (London, 1911), Pl. XIV, 1218
- XX.111 Turk Tarih Belletin III, (1939), Pl. XXXI, 35
- XX.112 Kunze, *op. cit.*, Pl. 55, b
- XX.113 Jacobstahl, *op. cit.*, Pl. X, a
- XX.114 Turk Tarih Belletin III (1939), Pl. XXXI, 35
- XX.115 Source not identified
- XX.116 Source not identified
- XX.117 Source not identified
- XX.118 Source not identified