

Corinthian Wares and the West

From about the middle of the eighth down to the end of the sixth century B.C. Corinthian pottery had a wide circulation that covered directly or indirectly the whole Greek world and beyond. The overwhelming preponderance of Corinthian vases found in the West, however, suggests that Corinthian trade had from its beginning a westward bias. Though, according to present evidence, it was originally the Euboeans who after the end of the Dark Ages took the initiative to resume contact with the West, it was finally Corinthian pottery that became dominant there. Corinthian imports did not simply flood the Greek colonies and their neighbouring markets in the West, but they also offered a fresh repertoire of ideas to expatriate and native potters and gave rise to several local styles.

Full assessment of the cultural implications of Corinthian influence in the West largely depends on quantitative analysis and evaluation of the character and origin of imported and derivative wares. As neither the individuality of style nor even the very fine fabric discouraged close imitations of Corinthian wares, in East and West, fabric identification cannot always be dealt with archaeological criteria alone and scientific analysis is frequently in for provenance problems in the field of Corinthian and Western Greek studies.

The study of Corinthian pottery has attracted the interest of scholars from a very early date (cf. Amyx 1989, p. 363). Because of the strong presence of Protocorinthian wares in the West the internal sequence of LG and EPC phases and their chronological relationship with other local schools has been most important for constructing an absolute chronology based on the dates preserved by ancient authors for the foundation of the Greek colonies in the West. Thus, originally emphasis was given to the study of the style's development (Johansen, 1923 ; Payne, 1931 and 1933 ; Benson, 1953 ; Dunbabin-Robertson, 1953) and only late in the 1960's and early 1970's scientific analysis was introduced in the field of Corinthian Studies (Farnsworth, 1964 and 1970 ; Boardman-Schweitzer, 1973). By that time, however, the main lines of

the style's development were well understood and some derivative or related wares, like the « Thapsos Class » or the « Argive Monochrome » ware, had been isolated and described. Since then scientific analysis has been largely used in this field (Farnsworth *et al.*, 1977 ; Grimanis *et al.*, 1980 ; Deriu-Boitani-Ridgway, 1985 ; Deriu-Buchner-Ridgway, 1986 ; Jones, 1986, p. 675) ; its application has significantly contributed to a better understanding of Corinthian and related wares, though many issues still remain complicated (cf. below on the chevron skyphoi from Veii). In general, however, there has been good progress in Corinthian scholarship : as a result of recent and intensive excavation the distribution pattern of Corinthian wares is well understood (Dehl, 1979 and 1984 ; D'Agostino, 1985) ; the development of PC and Corinthian pottery has recently been treated by eminent Corinthian scholars (Benson, 1989 ; Amyx, 1989 ; Neeft, 1987) and even the delicate subject of absolute dating seems to have reached, more or less, a general consensus (cf. Amyx, 1989, p. 428). But even in this euphoria of Corinthian studies many major issues still remain unsettled ; the date and character of the first Corinthian appearance in the West, for example, is yet a matter of debate, while our knowledge of local western corinthianizing wares still remains poor. It is in the intention of this paper, therefore, to survey Corinthian and related wares that were imported in the West during the eighth and early seventh century and attempt to sketch briefly what has been achieved on topics that are central to the proper understanding of early Greek presence in the West.

Corinth and its earliest pottery exports

The earliest Corinthian ware known so far to have reached the West is the MG.II chevron skyphos (Fig. 1 a and b). The MGII period (ca 800-760 B.C.) is a most important period in the history of Corinth, because it coincides with the expansion of the Corinthian *polis* (Roebuck, 1972, p. 117 ; Williams, 1982, p. 11). By that time neither Corinth nor its pottery had any significance in the Greek world. Though the first settlement in the area of the city-state of Corinth, the so-called Corinthia goes back to Neolithic times, Corinth does not seem to have got any importance during the Bronze Age. It is mentioned by Homer as a wealthy city, but Mycenaean traces in the area of Corinthia are scant. No Mycenaean palace is known and the most important Mycenaean remain, a defensive wall along the Isthmus, belongs to the end of the period (LH III B). It is assumed that in Mycenaean times Corinth was not an independent centre, but it was part of the Argolid ; even so the absence of Mycenaean remains in Corinthia is impressive especially in view of the fact that controll of communications through the Corinthian Gulf to the West was of major importance for Mycenaean rulers in the Argolid or in the Corinthia (Dickinson, 1977, p. 54-56).

Corinth has been a major *polis* of Classical Greece with a population estimated for the fifth century to a maximum of 50.000 total citizens and 20.000 slaves (Salmon, 1984, p. 168). During the Late Geometric and Archaic periods Corinth was already an eminent centre, but its eminence does not seem to have started before MG times. Traces of the Sub-Mycenaean period are few and the PG period is represented only by its latest phase (Salmon, 1984, p. 82). Clues for the subsequent EG and MG I periods are minimal and Corinthian pottery styles of this stage are totally insignificant. Nevertheless, there is evidence of export outside the Corinthia: LPG Corinthian vases are found in Boeotia (Desborough, 1952, p. 198, pl. 29.c) and in the Argolid (Frödin-Person, 1922, p. 429, fig. 227; Desborough, 1955, p. 241, n° 2). But the most numerous exports of a LPG and EG date have turned up at Medeon in Phocis (Vatin, 1969, p. 37). This is rather surprising as while Boeotia and the Argolid are within easy reach from Corinth, export of Corinthian vases in some quantity at distant Medeon in Phocis at such an early date can not be justified by the quality of the wares alone and requires another explanation. As there are no obvious trade motives in the area, an early Corinthian colonisation there has been assumed (Coldstream, 1977, p. 40) because Corinthian presence remains strong at Medeon throughout the Geometric period. This is the only site outside Corinthia and the Argolid to receive Corinthian imports during the EG period. It is in the subsequent MG I period that Corinthian activity seems to expand overseas, but evidence is as yet rather flimsy. Except for an amphora from Rhēneia (Desborough, 1952, p. 158, pl. 19, A 1451), there are no more Corinthian exports in the Aegean, while Corinthian expansion to the West and along the Corinthian Gulf had already started. No actual imports of this period have been found in Achaea, but Corinthian influence is easily detected on local Achaean wares (Dekoulakou, 1979, p. 227). Towards the end of this period (ca 800 B.C.), however, Corinthians reached Aetos in Ithaca and also Ambrakia in Epirus (Salmon, 1984, p. 86).

Sailing along the Corinthian Gulf and reaching Ithaca and Epirus was a most important step in the process of Corinthian expansionism to the West. What made Corinthians turn mainly West for their commercial and other activities is for the moment far from clear, but Corinth's geographical position must certainly have been an important factor. Corinth lies at easy reach from sea, east and west of the Isthmus, but access to the harbour of Lechaemum on the west side of the Isthmus is easier. The westward orientation of Corinthian traffic by sea is already clear by the end of MG I. The most distant site known to have been reached is Ambrakia where Corinthian MG I pottery is reported to have been found in the local settlement, below the later Corinthian colony, together with local and Ithacan wares (Vokotopoulou, 1982, p. 86). By this time Ithaca was in close contact with the settlements at the shores of Epirus and Achaea and Ithacan pottery was imported to

Medeon (Vatin, 1969, p. 60). It was not difficult for Corinthians, therefore, after the traffic with Medeon was tried and well-established to attempt to explore western waters along the Corinthian Gulf and reach Ithaca and henceforth Ambrakia. There is hardly evidence for extensive trade in this period, but by the end of MG I, around 800 B.C., the route had been familiar and traffic along the Corinthian Gulf to Ithaca and the shores of Epirus was well established.

During the next MG II period Corinth starts being an important *commercial polis*. The dispersion of its cemeteries suggests that it still remains a group of scattered villages, but there is now evidence for an increase of Corinthian activities outside Corinth. MG II Corinthian vases are found at many more places, in east and west of the Isthmus. Within the Aegean Corinthian presence is attested by a few vases at Aigina, Zagora on Andros, Iolcos, Smyrna, Thera and Knossos (Coldstream, 1968, p. 352). But the limited character of the evidence suggests no more than simple contact between Corinth and the Aegean during the first half of the eighth century and possibly on Euboean rather than Corinthian ships. There is hardly evidence for extensive Corinthian trade west of the Isthmus in this period either; nevertheless Corinthian presence is more significant and definitely better organized there. From Ambrakia Corinthians now discover the route to inland Epirus and their presence soon becomes significant at the native cemetery of Vitsa on the mountains of Zagori (Vokotopoulou, 1985, p. 276-281). The early MG II phase is represented there by two oinochoai (Vokotopoulou, 1985, fig. 65b and 67a) and two chevron skyphoi (*ibid.*, fig. 67e and 69a), but there is more extensive evidence from the later years of this period consisting of oinochoai, chevron-kyathoi and proto-kotylai, which make a total number of 15 vases, i.e. the 14,28 % of the vases of this period found at Vitsa (Vokotopoulou, 1985, p. 276, fig. 22).

Contemporary Corinthian presence at Aetos on Ithaca is generally considered as more significant (Salmon, 1984, p. 85). But the majority of Corinthian vases of a MG II date found at Aetos belong to the later years of this phase (Coldstream, 1968, p. 353). They cover the usual Corinthian range of shapes known from this period (oinochoai, chevron skyphoi and kantharoi, proto-kotylai and kraters). Their number and the absence of other imports in this period is explained in terms of a permanent Corinthian station there (Robertson, 1948, p. 122; Coldstream, 1968, p. 353; Vokotopoulou, 1982, p. 97). Much of the material « could have been made locally by Corinthian potters » (Snodgrass, 1971, p. 416). From Ithaca pottery was often exported to western Peloponnese and Epirus, as well as to certain places along the Corinthian Gulf like Medeon, where Ithacans frequented from earlier times.

Actual Corinthian imports of a MG II date are again absent from Achaia, but their impact is obvious on local ware, mostly on vases from the

area of Aigion (Dekoulakou, 1981, p. 224 ; Salmon 1984, p. 89). A similar picture is offered by the recent finds at Galaxeidi, a most important post on the north shore of the Corinthian Gulf (Themelis, 1983, p. 235, fig. 30-31). Corinthian MG II vases have not yet been published from Medeon (cf. Salmon, 1984, p. 84), but the amount of Corinthian pottery there from the previous and later periods suggests at least continuous contact with Corinth. Corinthian presence of this period at Delphi seems rather limited (Salmon, 1984, p. 84 ; Themelis, 1983, p. 248), but it is most significant, as it comes mostly from a complex of eighth century houses and not from a context directly related to the cult of Apollo (Lerat, 1935, p. 276, fig. 32 and Salmon 1984, p. 84). Some Corinthianizing local wares of this period at Delphi (Lerat, 1961, p. 355, fig. 40b) add a further argument in favour of some kind of established commercial activities between Delphi and Corinth at this time, though the role of the Delphic Oracle for aspirant prospectors going west should not be underestimated (cf. Londey, 1990). Yet, except for a few scraps of Pendant Semi-circle skyphoi (Kearsly, 1989, p. 27-28, n° 60-64), there is not any other published evidence suggesting Euboean presence at Delphi at such an early date. This is hardly surprising, however, as Euboeans are almost totally absent from Ithaca at this time too and there are no Euboean imports at Vitsa or Medeon, which are also places that maintain a good, probably commercial, relationship with Corinth. The early eighth century is the time of the great Euboean expansion to the West and Euboean absence from the Corinthian Gulf and Ithaca where Corinthians are in control is impressive, if not fortuitous. For the moment, however, and unlike the situation in the real « West » beyond the Adriatic, there is no « Euboean horizon » along the shores of the Corinthian Gulf or at places west of the Isthmus frequented by Corinthians in the MG II period.

When the first Corinthians crossed the Adriatic and reached Italian or Sicilian soil and which was the route followed is still a matter of debate. The evidence from Ambrakia suggests that traffic via Corkyra, on which later an important Corinthian colony was founded, should be expected. But the earliest Corinthian remains found south of the modern town, at the Figaretto peninsula, in the Evelpidis plot, date to the LG period (Dontas, 1693, p. 182 ; Kallipolitis, 1982, p. 73). In ancient literature there is mention of Euboeans who were installed at Corkyra and later expelled by the Corinthians, who founded the colony there (cf. Salmon, 1984, p. 67 ; D'Agostino, 1985, p. 211), but the island has not yet been satisfactorily explored archaeologically. For the moment there is neither MG Corinthian nor Euboean horizon of a MG date at Corkyra. Yet, the ubiquitous Aetos 666 kotyle is not anymore the earliest Corinthian vessel found in Italy and Sicily. Fresh finds and recent research have now taken Corinthian presence in the West back into MG II times ; how far back within this period is not yet fully clear, as the answer

to this question depends largely on the dating of the vases in question, which in the case of Corinth are exclusively chevron skyphoi.

Chevron skyphoi and kotylai

Chevron skyphoi, along with Pendant Semi-circle and one-metope bird skyphoi, mark the earliest, pre-colonial Greek presence in the West. But while the rare Pendant Semi-circle and one-metope bird skyphoi are usually easily recognised as Euboean (Kearsly, 1989; Coldstream, 1982), identification of chevron skyphoi found in the West has often been hindered from the strong similarity of Euboean and Corinthian versions of the type and their western imitations.

The Corinthian chevron skyphos, however, has a clear and well-defined development at home (Coldstream, 1968 and 1982; Neeft 1975 and 1982; Descoeudres and Kearsly, 1983). The type, adopted at Corinth early in the MG II period, almost immediately after its invention in Athens, is at first strongly atticizing with shallow body and offset vertical lip (Fig. 1a). In a later stage of MG II, probably during the second quarter of the eighth century, a deeper local version develops (Fig. 1b), soon followed by a short-lived variety with « hemispherical body and a minimal lip » (Fig. 1c) (Coldstream, 1968, p. 97; Coldstream, 1982, p. 30; Neeft, 1975, p. 113, table IV). Chevron skyphoi of this stage, better known as *proto-kotylai*, form an intermediate stage between the MG skyphos and the ubiquitous LG kotyle, more often called Aetos 666 kotyle (Fig. 1d).

The above well-defined sequence of Corinthian skyphoi in correlation with Attic material has been most valuable in constructing absolute dates for each stage of development (Neeft, 1975 and 1982; Coldstream, 1982, p. 32). It is thus perfectly clear now that the appearance of the LG kotyle coincides with the beginning of Corinthian LG ca 750 B.C. The Aetos 666 kotyle, which marks the first phase of Corinthian LG is the commonest Corinthian vase found in pre-colonial West. But it is not any more the earliest Corinthian vessel discovered there. Recent finds clearly indicate an earlier, though as yet rather minor, Corinthian horizon, mainly evidenced at Pithekoussai in the West and at Otranto at the extreme edge of southern Apulia, opposite Corkyra and Epirus.

The shores of the Salentine peninsula in southern Apulia provided the necessary and virtually obligatory staging-posts on the pre-colonial, colonial and later imperial route from Corkyra to South Italy and Sicily. For people sailing from Ithaca, the shores of Epirus or Corkyra, the port of Otranto was the first easy steppingstone to Italy. Recent excavations at an Iapygian settlement there (D'Andria, 1982) and at nearby Cavallino (Pancrazi, 1979) have yielded evidence for close ties of the area with Epirus, Illyria and Corinth. Sherds of Corinthian *proto-kotylai* of the late MG II type known

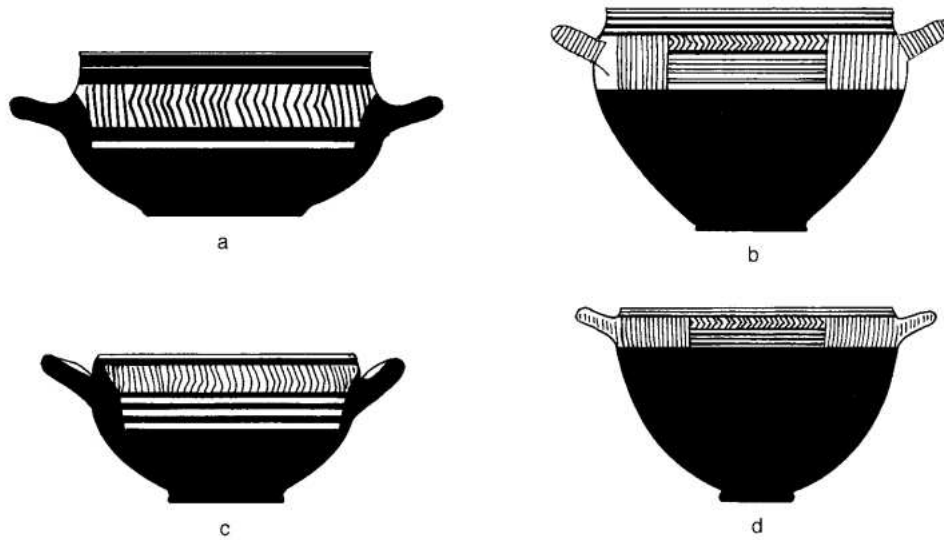


Fig. 1. a. MG II A chevron skyphos from Veii, tomb 779 of Grotta Gramiccia Cemetery (After Ridgway, 1968); b. MG II B chevron skyphos from Vitsa, tomb 13 (After Vokotopoulou, 1985); c. MG II Proto-kotyle; d. LG Aetos 666 kotyle.

from Vitsa and Ithaca have been discovered at Otranto (D'Andria, 1982, p. 109, fig. 8) and Cavallino (Pancrazi, 1979, p. 24) confirming its function as a vital staging-post on the pre-colonial route to the West. More Corinthian sherds of Aetos 666 kotylai, Thapsos class cups and PC wares (Dehl, 1984, p. 232 and 193) found at Otranto and Cavallino suggest that this route to the West via Otranto was steadily followed by Corinthians. The discovery of another, fragmentary, Corinthian proto-kotyle at Incoranata near Metapontum (Orlandini, 1974-1976 and 1982, p. 312, fig. 4), widens Corinthian horizon in pre-colonial Italy and at the same time indicates the route followed by Corinthians who went to Pithecoussai during the MG period. The slightly later Aetos 666 kotylai found at Porto Cesareo, Satyrion and Scoglio dell'Tonno along the Gulf of Taranto (Dehl, 1979; D'Agostino, 1985) indicate a steady route along the coast, which was obviously established earlier, in the exploratory journeys of MG II times. Corinthian imports of this date in Sicily consist of some controversial fragments of proto-kotylai from Megara Hyblaea (Villard, 1982, p. 184). But MG Greek imports (of Euboean and Cycladic origin) are generally sparse on the island of Sicily (Dehl, 1984, p. 95).

Greek MG imports, mostly of Euboean or Cycladic origin, occur more often in native tombs at Etruria (Ridgway, 1968; Descoeudres-Kearsly, 1983) and Campania (Johannowski, 1967 and 1969; D'Agostino, 1979). However, traces of a late MG II Corinthian horizon have recently been spotted at

Pithecoussai (Ridgway, 1981). Though no imported MG Greek pottery has been discovered at the cemetery of Pithekoussai, two local skyphoi found in LG tombs exhibit elements that suggest Corinthian MG II models (Ridgway, 1981, p. 48, fig. 1). In addition, nine sherds belonging to imported MG II skyphoi have been found among the material from the Acropolis dump (Scarico Gosetti); they are generically defined as « Euboean » (Ridgway, 1981, p. 49), except for one the fabric of which is characterized as being « clearly Corinthian » (Ridgway, 1981, p. 49, pl. II.1). All the sherds are virtually small scraps without handles or bases and their dating to the MG II period basically depends on the formation of the lip. Thus, disagreement has already been expressed on the dating of these sherds to the MG II period (by Neef apud Ridgway, 1981, p. 49, n. 19). On some of these sherds chevrons are shown floating in the panel, which is a late characteristic of the class (Coldstream, 1982) and thus they cannot be dated to the MG period. But most of the other sherds explained as Euboean (Ridgway, 1981, p. II, 2, 4, 5), are decorated with a chevron panel in a manner that looks authentically MG II and there is no doubt that the sherd of the Corinthian skyphos is also of a late MG II date (Ridgway, 1984, p. 98).

Knowledge of Corinthian MG II chevron skyphoi is reflected in the Corinthianizing local wares found at Campania (Johannowski, 1967; D'Agostino, 1979 and 1982), but this could have been due to the Corinthianizing aspect of Euboean pottery (Boardman, 1969, p. 112; D'Agostino, 1979; Coldstream, 1982, p. 217). Campania has been a fruitful source of pre-colonial Greek imports, but only one actual Corinthian import of this period has been discovered there, so far (D'Agostino, 1990, p. 82, fig. 12).

An other imported MG II chevron skyphos (Fig. 1a) claimed as Corinthian has been found at tomb 779 of the Grotta Gramiccia cemetery in Veii (Ridgway, 1968, p. 312, pl. 57d; Descoedres-Kearsly, 1983, p. 29, n° 1). It is classified by shape to the first series of chevron skyphoi of the early years of MG II. By context it belongs to an advanced stage of phase IIA of the Veian sequence and in spite of all the disagreements on Veian chronology (cf. Ridgway, *et al.*, 1985, p. 140; 1988a), it cannot be dated long after the beginning of the eighth century. Its heavy fabric and careless painting is also in favour of an early dating. The Quattro Fontanili and the Grotta Gramiccia cemeteries in Veii have yielded a number of pre-colonial chevron skyphoi, the origin of which cannot always be identified by fabric or style (cf. Ridgway *et al.*, 1985). The chevron skyphos from Grotta Gramiccia tomb 779, however, has always been recognised as Corinthian (Blakeway, 1935, p. 196, n. 1; Ridgway, 1968, p. 312; Descoedres-Kearsly, 1983, p. 29). The Corinthian origin of the vase was recently confirmed by Mössbauer Spectroscopy conducted by Deriu; the project was instigated by D. Ridgway aiming at a comparative analysis of Geometric pottery from Veii and Pithecoussai (Ridgway, *et al.*, 1985). The negative results of a previously undertaken analysis

by RLAHA at the Fitch Laboratory of the British School in Athens (Jones, 1986, p. 680 and table 8.12, n° 26) in a project mainly aiming at the identification of Western Greek pottery should not be commented as the project « bears limitations in the way, it was structured and in its sampling strategy » (Jones, 1986, p. 675). Besides, fabric and style of the Grotta Gramiccia chevron skyphos strongly suggest a Corinthian origin. In this case this is the earliest Corinthian vase known so far to have reached the West early in the eighth century. It is also earlier than the chevron skyphoi known from Vitsa and Ithaca and as the majority of early chevron skyphoi from Veii are Euboean, it is possible that it came to Etruria in a Euboean ship. Thus, the mid-eighth century proto-kotylai from Pithecoussai, Otranto, Cavallino, Incoronata and possibly Megara Hyblaea still remain the surest indication of the first real Corinthian presence in the West. On the other hand, the strong Corinthianizing element in the style of the local chevron skyphoi which reflects Corinthian MG II models, certainly makes a case for an early Corinthian presence there.

With the strong Corinthianizing tradition of Euboean style in mind and the perplexities of early Euboean and Corinthian presence in the West in front of them the excavators of Pithecoussai organized an extensive project of scientific analysis by Mössbauer Spectroscopy to test material from Pithecoussai, Cumae and modern clays from Ischia (Deriu *et al.*, 1986). The results of this analysis, masterly discussed and evaluated by D. Ridgway (Ridgway, 1988a), demonstrate the effectiveness of scientific analysis when it is used in combination with archaeological expertise. The results of an earlier analysis of Geometric pottery from Veii by Mössbauer Spectroscopy (Deriu *et al.*, 1985) were taken into account and discussed (Ridgway, 1988a) against a recent typological and stylistic study of the same material by Descoeudres (cf. Descoeudres-Kearsly, 1983). Discrepancies in the attributions of the two projects were evaluated in terms of colonial potters and the local imitations of Greek pottery were discussed in terms of the resulting pottery sequence. Yet, the controversial early MG II Corinthian skyphos from Veii still stands at the upper end of this sequence together with some Euboean MG skyphoi; local imitations fall wholly within the next phase. Veii II B, which coincides with the LG colonial period, during which Corinthian wares become widely popular in the West.

Corinthian Late Geometric and Protocorinthian pottery

During the LG period Corinth increases in size and its pottery production expands. Corinthian vases are now being exported to the West in large quantities: they are found not only in Corinthian, but in almost every Greek colony in the West and to a lesser extent in many native cemeteries. At the same time Euboeans, mainly Euboeans from Pithecoussai, are equally competitive in the market. but by the EPC period the pottery trade in the West

is in the hands of the Corinthians. In Pithecoussai itself Corinthian vases are well represented in LG I contexts, but « they are taking over in LG II » i.e. in the EPC period (Ridgway, 1982, p. 73). This is the period of colonialism and great Corinthian expansionism, during which they also discover the route to the East and visit distant places in the Aegean and the Levant. PC pottery is now present almost everywhere in these areas, but usually at minute quantities, as Eastern Greek products are there better preferred. To some extent Eastern Greek pottery rivals PC in the West as well, but there it is the Corinthians who finally dominate the market. By the MPC period they have reached Sardinia (cf. Ridgway, 1988-1989, p. 135, fig. 7-8), and PC pottery has been found at Punic contexts in Spain (Shefton, 1990). Corinthianizing vases are known at Carthage already by the late eighth century, but PC imports are not known there before an advanced date in the seventh century (Cintas, 1970, pl. XXIV, p. 126-129). In the late eighth and early seventh century, therefore, the main Corinthian market is in the area of the Greek colonies in Italy and Sicily and to a lesser degree in Latium and Etruria (Dehl, 1984).

Corinthian exports in the West include only a limited range of shapes and types: the shallow chevron skyphos of the MG II A period (Fig. 1a) is followed in the MG II B by a deeper variety (Fig. 1b) and soon afterwards by the proto-kotyle (Fig. 1c). The beginning of LG is marked by the Aetos 666 kotyle (Fig. 1d) and then comes the heron kotyle. Kotylai, along with oenochoai and aryballoi, remain the most popular export vases of Corinth throughout the PC period. Such a steady preference to specific shapes could be explained either in terms of travellers demands or the colonists' need to respect their tradition and underline their bonds with the mother city in a symbolic way (cf. Arafat-Morgan, 1989, p. 335). But persistency to one type of export vase suggests a kind of specialization in production for export and in a more wide way it implies a difference between internal and external market. The evidence of Corinthian MG exports in the West seems to indicate that such a specialization must have been achieved at Corinth before the middle of the eighth century.

The impact of imported Corinthian vases on local and immigrant potters in the West has been strong from the beginning. Corinthian vases were imitated not only by expatriate Greeks working in the colonies, but also by natives in neighbouring lands. But there is a sharp stylistic distinction between colonial Greek and native pottery, as the former is immediately reflecting contemporary Aegean styles (cf. Stuart-Leach, 1987, p. 141), while the latter copies them only at second hand from colonial products. Nevertheless, not even the colonial imitations are always accurate; elements of different workshops or of a different date are often mixed on one and the same vase.

Important colonial workshops producing faithful imitations of Corinthian pottery have been identified at Megara Hyblaea (Vallet-Villard, 1956; 1964;

Villard, 1982) and Pithecoussai (Ridgway, 1984 ; Ridgway *et al.*, 1986 ; Neeft, 1987). At Pithecoussai local colonial pottery of a LG date has a strongly Corinthianizing aspect, usually attributed to the Corinthianizing aspect of Euboean styles. But direct imitations of Corinthian models have also been recognized (Ridgway, 1981 ; Coldstream, 1982) and two important EPC colonial workshops producing globular aryballoi have been recently identified (Neeft, 1987, p. 60, fig. 11 : « Pithecussan Painters X and Y »). The fabric is local and the characteristic gray-red clay is coated by a yellowish slip, which according to Buchner might have been made from imported Corinthian clay (Neeft, 1987, p. 60). Vases in the same fabric have been found in many places in Campania and are usually labelled « Cumaean » (Johansen, 1923, p. 18 ; Canciani, 1974 ; Dik, 1981). As Mössbauer test conducted by Deriu (Ridgway, *et al.*, 1986) have indicated no difference in clay of the aryballoi from Pithecoussai and of similar vases found at Cumae the fabric is now considered to be Pithecoussan not Cumaean (Neeft, 1987, p. 59-60). Nevertheless, there is strong evidence for local production in mainland Campania, too : Kilns containing fragments of seventh century pots have been discovered at Pontecagnano (Johannowski, 1981). It would be interesting to test the sherds from the Pontecagnano kilns against the Pithecoussan-Cumaean fabric of the colonial workshop of the EPC aryballoi and then against the so-called « Cumaean » oenochoai (studied by Canciani, 1974 ; Dik, 1981 ; Frederiksen, 1979, p. 287 ; Stuart Leach, 1987, p. 107).

The fabric of the « Cumaean » oenochoai (Fig. 2b) is described as similar to that of the Cumaean-Pithecoussan aryballoi. But their style is closely imitating Corinthian models (Fig. 2a). The earliest ones are in a Sub-geometric style, but Orientalizing pieces soon follow ; they follow MPC models of the « Cumae group » of oenochoai (studied by Robertson, 1953 ; Benson, 1989 ; Amyx, 1989). Authentic PC oenochoai of the « Cumae group » had originally been found only at Cumae (Gabrici, 1913, pl. 30-31), but now there are good PC originals from Pithecoussai as well (Ridgway, 1981-1982, p. 65, fig. 1). The Pithecoussan-Cumaean oenochoai that closely imitate PC models form in themselves a most influential class of pottery that stimulates further local production in similar styles (cf. Fig. 2c) in the Etruscan sites of Caere, Tarquinia and Vulci (Frederiksen, 1979, p. 287). The group is certainly worth investigating on grounds of fabric as well as on grounds of style, as is the original PC Cumae group, too, for which our lists need a lot of refinements (cf. the difference in attributions by Amyx 1989 and Benson, 1989). The distribution of the PC Cumae group of vases, which inspired imitations in Ithaca, as well as in Campania, has a wholly westward direction ; in this respect it closely resembles another class of pottery well-known in the West and conventionally named « Thapsos Class ».



Fig. 2. a. MPC oenochoe by the « Cumae group » workshop (Toulouse Painter), Toulouse, Musée St-Raymond; b. Italian imitation of PC oenochoe. Rome, Villa Giulia, Inv. 74.916; c. Italian imitation of PC oenochoe. Tarquinia, Museo Nazionale, RC 2102.

The Thapsos Class

The so-called « Thapsos Class » of vases is a highly controversial LG ware widely attested in the West, not only in the Greek colonies in Italy and Sicily but in several native contexts there. Its fine powdery, green-gray fabric connects the group with Corinth, as it is almost identical with that of PC vases, but it differs markedly in colour from the reddish, hard-fired clay of contemporary orthodox LG Corinthian wares. Thus, the Corinthian origin of the class has been questioned at a very early date, as soon as vases of this group from Delphi were first published (Laistner, 1912-1913). Ever since a long debate has been going on to day (cf. Neef, 1981, p. 54 for a comprehensive memoir of the history of the debate).

It is not only the difference in fabric that has fed the debate, but a difference in style as well. There is certainly a distinct variation in the preference of shapes, as some of the most common shapes of the Thapsos Class, like the large skyphos-krater (Fig. 3), are not found in LG Corinthian, while the most popular shapes of orthodox LG Corinthian, like the kotyle or the mug, are not represented among the vases of the Thapsos Class. A few shapes like the oenochoe, the pyxis or the krater occur in both workshops, but in a completely different style. Those of the Thapsos Class have a sharp profile, which comes in sheer contrast with the plump, round forms of the orthodox LG Corinthian vases (Coldstream, 1968, p. 103; Bosana-Kourou, 1983, p. 260). Much more notable are the differences in the decorative scheme and the motifs used (Neef, 1981). Not only the curvilinear motifs, which

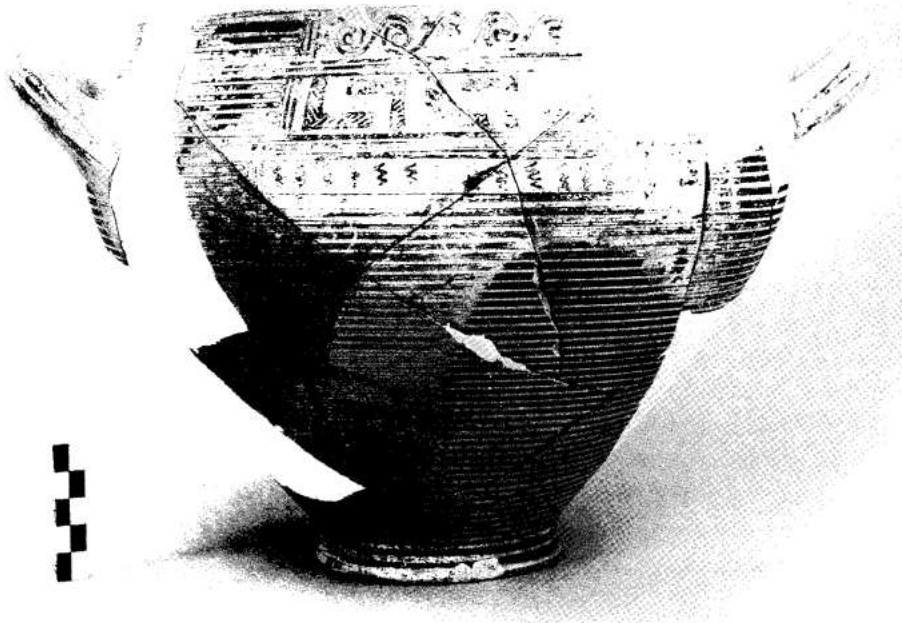


Fig. 3. Thapsos Class skyphos-krater from Delphi. Delphi Museum N° 7396 (Photo courtesy of École Française d'Athènes).

form the trade-mark of the Thapsos Class vases, are totally absent from LG Corinthian, but the elongated panel flanked by verticals that usually decorates the shoulder of the Thapsos Class vases, has never been used on LG Corinthian ware.

It is for such major differences in style and fabric, therefore, that the debate over the origin of the Thapsos Class has taken so long. Several candidates, like Delphi (Laistner, 1912-1913), Aigina (Weinberg, 1941), Megara Hyblaea (Boardman, 1970, p. 496) have been offered to replace Corinth, but proposals in favour of Corinth outnumber the rest. There can be no question of Delphi or Aigina today, as the clay in both these regions is bad and of different quality (Kourou, 1983, p. 258). Megara was proposed because of its vicinity to Corinth and on account of the ware's abundance at its only colony in the West, Megara Hyblaea. But since this issue was raised a lot more material has been discovered in Italy and Sicily. Megara Hyblaea is not any more the richest source of the Thapsos Class vases as originally thought. Recent excavations on Ortygia at Syracuse (Pelagatti, 1982a and 1982b), have brought to light a large amount of material there. Besides, the overwhelming majority of the pottery found at Megara Hyblaea is Corinthian (Villard, 1982, p. 181). Back home, Megara have not yielded any local material and



Fig. 4. Thapsos Class skyphos-krater from Aigion in Patras Museum (Photo courtesy of Deutsches Archäologisches Institut, Athen).

the pottery from its neighbouring Ayioi Theodoroi is either Attic or Corinthian. The possibly Megarian origin of the Thapsos Class vases was attempted to be investigated by scientific analysis (Boardman-Schweitzer, 1973). But an analysis by Optical Emission Spectroscopy, in which Bronze Age sherds from Megara Minoa were tested against Thapsos Class and PC sherds gave somewhat uncertain results.

Much later a strange skyphos-krater was found at Aigion (Fig. 4), which combined a shape and a decorative scheme of the Thapsos Class style with some additional decoration in the side metopes of the shoulder panel executed in a true PC black-figured style (Bosana-Kourou, 1979). The Aigion skyphos-krater, which combines for the first time on the same vase stylistic elements of the Thapsos Class and PC vases, prompted a Neutron Activation and X-ray Analysis project (Grimanis *et al.*, 1980), in which the Aigion skyphos-krater was tested against PC, Thapsos Class and orthodox LG Corinthian vases. The result was a matching in the chemical composition of the tested samples and therefore a common Corinthian origin for all the groups examined was suggested. Yet, the difference in colour and hardness of the clay of LG Corinthian on the one hand and Thapsos Class and PC on the other remained to be explained, though clay beds in Corinth produced a wide range of variant clays (Whitbread, 1986).

In an attempt to solve the Thapsos Class enigma the excavators of Pithekoussai instigated an analysis of Corinthian and Thapsos Class sherds found at Pithekoussai by Mössbauer Spectroscopy, which helps to distinguish two groups of pottery made of clay of the same basic consistency, even if it was worked and fired differently (cf. Kostikas *et al.*, 1974). The project was carried out in Italy by Deriu and the results seem absolutely to confirm in broad terms a Corinthian origin for the Thapsos Class vases (Deriu, *et al.*, 1986).

A Corinthian origin for the Thapsos Class vases seems now almost certain and it is in full accord with the ware's distribution pattern, as it emerges after the last 20 years intensive rescue excavations in Italy and Sicily (cf. Dehl, 1984, map 2; Neeft, 1981, p. 52, fig. 14). Thapsos Class skyphoi are, now together with the Aetos 666 kotyle, the most common Greek import found in the Greek colonies in Italy and Sicily. Its distribution pattern follows that of Corinthian pottery in every respect: it is only rarely found in the Aegean (cf. Neeft, 1981, p. 49, n. 190), but it is widely distributed to the west of Corinth at places along the Gulf: it is abundantly represented at Delphi and Ithaca and it is also attested at Ambrakia on the south shores of Epirus and further north at Trenn in coastal Illyria. In inland Epirus Thapsos Class vases have been found at Vitsa (Vokotopoulou, 1987, p. 278), and beyond the Adriatic they have been discovered at many places from Otranto and Cavallino in Apulia and sites around the Gulf of Taranto to Sicily, Campania and Etruria (cf. Neeft, 1981, p. 52, fig. 14; Dehl, 1984, map 2).

The impact of the Thapsos Class on local potters in the importing centres has been strong though not equal to that of MG skyphoi or PC vases. In mainland Greece some attempts to imitate the Thapsos Class vases were made at Aetos on Ithaca (cf. Robertson, 1948, p. 60, n° 285, pl. 16; Benton, 1953, p. 291, fig. 11). Shape and decoration are closely copied, but they lack the delicacy of the original. In an effort to imitate the light-coloured clay of the model they make use of a white slip — a mannerism virtually used in all local workshops imitating vases of the Thapsos Class. The most significant production centre of such imitations was probably at Pithecoussai, which acted as a redistributory centre in the West supplying with pottery not only neighbouring Campania or Etruria, but places further afield like Carthage or some Punic centres in Sardinia and Spain. An important local workshop producing such skyphoi has also been spotted at Megara Hyblaea (Vallet-Villard, 1964, p. 143, pl. 122), while the concentration of such skyphoi in Locri (cf. Sabbione, 1982, p. 286, fig. 34) might mean the existence of another large production centre there.

The imitators of the Thapsos cups pay more attention to shape rather than to decoration. The shape is always closely copied, but not the decoration, which is added carelessly and mechanically. There is a steady preference for

the « senza pannello » variety. When the panel type is imitated the central unit of the decoration i.e., the shoulder panel, is rendered in a very generic and sketchy way being either too long (cf. Sabbione, 1982, p. 286, fig. 34, n° 90), or even too short (cf. a cup from tomb 201 in Calatia, published recently (Albore-Livadie, 1982-1986, p. 36, fig. 9)). This does not necessarily suggest imitation at second hand, as it is a common element of Pithecussan workshops, in which first hand knowledge of the material certainly was not lacking. Imitations of the Thapsos Class skyphoi are more commonly found in PC contexts, but the copying had certainly started much earlier during the LG period.

Relative and absolute dating has been a major problem of the Thapsos Class. Because of the almost total lack of reliable contextual evidence for the ware till very recently, dating has been applied almost exclusively on grounds of style. But lack of correlation with orthodox LG Corinthian makes evaluation of the style's development difficult, if not arbitrary. Fortunately, the last twenty years of research have brought to light some important contextual evidence for the Thapsos Class.

The *floruit* of the Class falls certainly within LG as now Thapsos Class cups are evidenced in contexts containing the kotyle of the Aetos 666 type (cf. Salento Archaico, 1979, p. 23, pls. 22-24). The lower limit of the Class defined by the MPC Aigion skyphos-krater (Fig. 4), is also fixed by the « senza pannello » skyphos, attested in graves in Italy and Sicily together with MPC aryballoi of the transitional-to-ovoid variety. But even the controversial upper limit of the class is now well-settled by context as Thapsos Class sherds have been found in a well stratified excavation at Otranto in a context overlying Corinthian LG (Salento Archaico, 1979, p. 19). As no Thapsos Class has been found so far in a MG context the beginning of the Class should be placed at the start of LG, and not as it seems long before that. The ware's first appearance in the West, therefore, coincides with the first systematic presence of the Corinthians in western waters marked by the Aetos 666 kotyle. Thus the activity of the Thapsos Class workshops covers the LG and the EPC periods fully. A few vases from Delphi made in the characteristic fabric of the Thapsos Class and combining in their decoration MG and LG elements give evidence of the first attempts of the Thapsos Class potters to formulate their style. This brief and tentative *Proto-Thapsos* period fixes the starting point of the workshops' career at the end of MG and underline's the group's Corinthian connection (Bosana-Kourou, 1983, p. 287; Benson, 1989, p. 16). Yet, the group is only very poorly represented at Corinth. On the other hand, with the exception of Delphi and Ithaca, Thapsos Class vases are not abundantly represented anywhere in Greece. Thus, it is now generally accepted that they were made especially for export, while their absence from Corinth may be fortuitous. Benson has proposed that the location of the

Thapsos Class Workshops in Corinth is likely to have been in a part of the Potter's Quarter itself but as yet unexcavated (Benson, 1984). This is certainly a very likely possibility. But as Neeft has underlined (Neeft, 1981, p. 57), it is not the exact location of the workshop that matters, but rather the explanation of the main elements in its style. And in the style of the Thapsos class Corinthian elements exist: above all the upper and lower end of the Class (The Proto-Thapsos and the Aigion skyphos-krater), link it irrevocably with Corinth. Furthermore, its distribution pattern closely follows that of the LG Corinthian in the West. Obviously the workshop was producing mainly for export and possibly it was staffed by immigrant potters, which could explain both the non-Corinthian elements in its style, as well as its distribution pattern.

« Argive Monochrome » Ware

Another controversial group of pottery imported in the West and closely related to Corinth is the so-called « Argive Monochrome » ware (hence AM). This is a most important class of highly stylized fine, handmade pottery manufactured in more than one places in mainland Greece (Courbin, 1966, p. 30; Kourou, 1987, p. 31; Kourou, 1988, p. 314) and possibly in the Greek colonies in the West (Cristofani-Martelli, 1973, p. 4). Handmade wares in ancient Greece are usually coarse wares, basically manufactured for household use; they are made intentionally for local consumption and not for export. But the small handmade vases of the AM type form a notable exception to this rule: not only they are not coarse, but fine or semi-fine wares, but they also present an impressive distribution pattern in Greece and in the Greek colonies in Italy and Sicily; they also occur in many native places in the West, mainly in Campania and Etruria, that were importing Greek or colonial Greek vases from the end of the eighth century onwards. They are by right, therefore, a central issue in the subject of early Greek presence in Western Mediterranean.

AM vases found in the West are usually explained as Corinthian, mostly because of the Corinthian monopoly in the colonial trade. Back home, however, during the eighth and seventh century vases of the AM type were produced in many places in Greece, notably in North East Peloponnese and Attica. Peloponnesian AM vases made at several places in the Argolid and Corinthia, were widely exported almost everywhere in the Greek world, including Attica. But Attic workshops obviously did not sell much in the Argolid and Corinthia, as only very rarely they are evidenced there (Courbin, 1966, p. 32, n. 41); they are better attested, though in small numbers, in neighbouring Boeotia, where they were closely imitated. Isolated pieces are also known from Euboea, the Cyclades and elsewhere in Greece, but none has so far been reported from the Greek colonies in the West. According to their distribution pattern, therefore,

Attic AM vases were probably intended exclusively for the demands of the internal market, in which they were trying to compete Peloponnesian imports.

By contrast, Peloponnesian AM vases are widely distributed in the Greek world including the colonies in the West, where they make a really impressive presence second only to that of PC imports. The extent of the ware's popularity there is well indicated by the existing statistics. By 1984 the total number of AM vases found at Megara Hyblaea was 251, which comparatively is a very large number second only to that of PC vases, which in the same statistic were reported « not over 500 ». The number of all the other vases imported at Megara Hyblaea during the LG and EPC periods is very small: there are only 9 pieces of LG wheelmade and painted Argive vases, 7 or 8 Attic, 5 Cycladic and 4 or 5 Rhodian (Dehl, 1984, p. 102).

The statistics from Pithecoussai offer equally impressive numbers. During the LG I period AM vases consist the 8.5% of the imported vases found in cremation graves and 5.9% of the imported pottery found in inhumation graves. The numbers become smaller in the following LG II phase of Pithecoussai (i.e. EPC), but they still can reach sometimes the 4% of the imported pottery in cremation graves and the 3.7% of the imported pottery in inhumation graves (Ridgway, 1982, Table 3A-3B). During this period, however, AM vases are imported at Cumae in Campania along with PC vases (Dehl, 1984, p. 85; Gabrici, 1903) and in the next MPC period they are further attested in inland Campania at Pontecagnano together with impasto and in a few native contexts in Etruria (D'Agostino, 1968, p. 90 and 160). Some of them might be local (Pithecoussan?) imitations, as they are usually found in graves together with local oenochoai of the Pithecoussan-Cumaean type (cf. Colonna, 1968, p. 269, fig. 3 and 4). The existence of local workshops operating in the West has already been suggested (Christofani-Martelli, 1973).

Provenance has always been a controversial issue for the AM vases found in Italy or Sicily. On grounds of fabric Attica is excluded, but distinction between Argive and Corinthian fabric is not always possible (cf. Dunbabin, 1962, p. 314; Coldstream, 1968, p. 363, n° 10). Argive clay used for AM vases is usually gritty, in a light colour with a greenish hue, while Corinthian clay is well-levigated and it has a light whitish colour (Courbin, 1966, p. 30); nevertheless this distinction is far from being universal, as Corinthian workshops often produce less refined versions of the type. In an attempt to explain colour variation in the clay of AM vases and in order to obtain information about the firing conditions applied in their manufacture a technological examination of AM sherds was undertaken at N.R.C. Demokritos (Maniatis-Panakleridou, 1987). In this study pottery fragments representative of the main groups of AM were examined and the microstructures of the samples were studied by Scanning Electron Microscopy. The main conclusion of this research was that there is a considerable degree of variation in the firing

techniques used by workshops producing AM vases and that there is a sharp distinction in the firing temperatures of Argive and Corinthian AM vases. Corinthian vases of the AM type were fired in very high temperatures (900°-1500° C), while for Argive AM the lowest possible kiln temperature had been achieved (650°-750° C). But the samples examined were mainstream Corinthian and Argive AM sherds, which drives out workshops working independently in other sites in North-East Peloponnese.

Cradle of the AM vases is generally considered the Argolid (Caskey-Amandry, 1952 : Courbin, 1966), where the ware is extremely abundant and where there is a long tradition of handmade production going back to the Dark Ages and beyond (Desborough, 1954, p. 264). But a comparable handmade tradition exists also in Corinth (Williams, 1981, p. 146 ; Weinberg, 1943, p. 8). A similar tradition is attested in Attica (Bouzek, 1974 and 1985, p. 198 ; Kourou, 1987, p. 41) suggesting a full sequence of handmade wares in early Greece in general. This sequence is more clear in the Argolid, where AM vases appear early in the EG period, while the PG Pie Ware was still being produced. But they make an equally early appearance in Corinth, where the earliest known examples of the type date to the local LPG (Weinberg, 1943, p. 8 ; Williams, 1973, p. 5, pl. 2). There can be little doubt, therefore, that Argive and Corinthian AM have a common origin in the local Peloponnesian tradition of handmade wares. Thus, their style develops along the same lines and they differ only in fabric as Corinthian AM are much more refined and well burnished or polished.

Corinthian vases of the AM type are exported from a very early date. AM aryballoi are included among the Corinthian vases of a LPG or EG date that have been found at Medeon in Phocis (Vatin, 1969, p. 67, fig. 68-69). In the late eighth and in the seventh centuries the distribution pattern of Corinthian AM vases, to the extent it can be plotted, it appears similar to that of PC vases. All the imported AM vases from Ithaca (Robertson, 1948, p. 52) and Syracuse (Pelagatti, 1982) are Corinthian. At other places non-mainstream Corinthian AM (i.e. those made outside the city-centre and thus lacking the extremely fine Corinthian fabric) are not easily distinguished from Argive as they are uniform in shape and style. As a rule Peloponnesian AM vases (both Argive and Corinthian) are not decorated. Thus, it is most interesting that in the seventh century there is a potter working in Corinthian clay and producing vases decorated with impressed and incised motives in the Attic tradition. The hallmark of these AM vases is an incised cross-in-diamond motif completing the rouletted decoration of the vase (cf. Fig. 5 and 6). Vases of this workshop are well-known from the West. Among the AM vases from Megara Hyblaea there is a number of fragments of conical lekythoi decorated with this characteristic impressed and incised decoration (Vallet-Villard, 1964, pl. 60, p. 7-11). They are the products of a significant

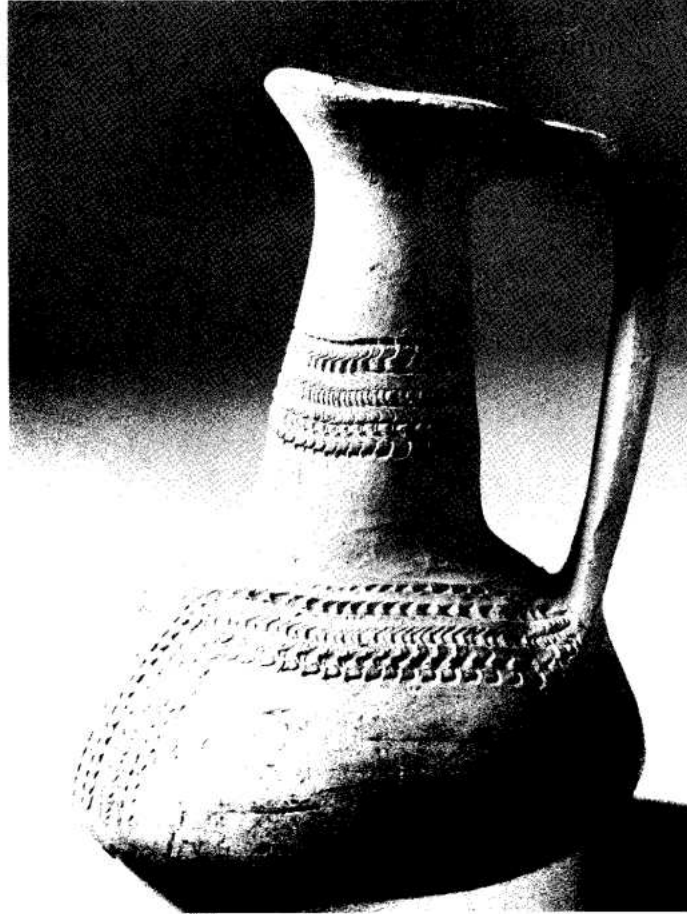
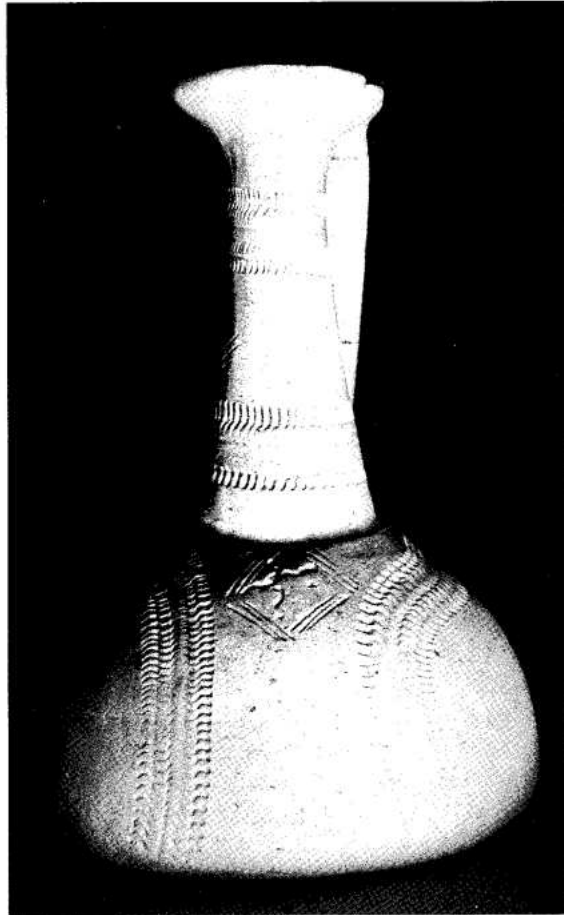


Fig. 5. Corinthian AM lekythos in Athens. Kanellopoulos Musum N° 231 (Photo by kind permission of Dr Maria Brouskari).

Corinthian workshop that introduces impressed decoration in the Corinthian AM style early in the seventh century (Kourou, 1987, p. 48).

This is the first time in the history of Corinthian AM vases that a potter deviates radically from the local Peloponnesian tradition of non-decorated vases. Products of this workshop, in which the characteristic unit of decoration is an incised cross in a diamond pattern on the shoulder of the vase (cf. Fig. 5 and 6), are well attested in the Greek colonies in the West (Gela, Selinus, Megara Hyblaea cf. Kourou, 1987, p. 48). In mainland Greece they are usually found at major sanctuaries near Corinth (Perachora, Argive Heraeum, Aphaia Sanctuary on Aegina), but they are virtually absent from Corinth, so far. In this respect this « Cross-in-Diamond » workshop of Corinthian AM vases closely resembles the workshops of the Thapsos Class. It



*Fig. 6. Corinthian AM lekythos in Mainz, Römisch-Germanisch Zentralmuseum N° 0.36633
(Photo by kind permission of Dr Ernst Künzli).*

produces vases mainly for export made in a Corinthian clay, but in a non-Corinthian style. And again, as with the Thapsos Class vases, the production of the Cross-in-Diamond potter to the degree it is known, it seems to stop abruptly at the end of the potter's career. A similar fate had, more or less, the EPC workshop of the Cumae group, which later developed an influential tradition in Campania — and this might be taken to imply that a workshop pattern existed in Corinth in LG and PC times that invited craftsmen from elsewhere to work in Corinth in workshops mainly producing for export.

Nota KOUROU
University of Athens
Department of Archaeology and History of Art
University Campus
GR - 157 84 ATHENS

ABBREVIATIONS

AM	Argive Monochrome
EG	Early Geometric
EPC	Early Protocorinthian
LG	Late Geometric
LPC	Late Protocorinthian
LPG	Late Protoegeometric
MG	Middle Geometric
MPC	Middle Protocorinthian
PC	Protocorinthian
PG	Protoegeometric

BIBLIOGRAPHY

- ALBORE-LIVADIE, Cl., 1982-1986. *La tomba della Necropoli Sud-occidentale di Calatia*, in *Maddaloni. Attività del Gruppo Archeologico Calatino F. Imposimato*, p. 13-33.
- AMANDRY, P., 1950. *Delphes. Chronique des fouilles en 1949*, in *Bulletin de la Correspondance Hellénique*, 74, p. 325-328.
- AMYX, D., 1988. *Corinthian Vase Painting of the Archaic Period*, Berkeley.
- AMYX, D. and LAWRENCE, P., 1975. *Corinth VIII Archaic Corinthian Pottery and the Anaploga Well*, Princeton.
- ARAFAT, K. and MORGAN, C., 1989. *Pots and Potters in Athens and Corinth: A Review*, in *Oxford Journal of Archaeology*, 8, p. 311-346.
- BENSON, J.N., 1953. *Die Geschichte der Korinthischen Vasen*, Basel.
- BENSON, J.L., 1984. *Where were Corinthian Workshops not represented in the Kerameikos of Corinth (750-400 BC) ?*, in *Ancient Greek and Related Pottery, Proceedings of the International Vase Symposium in Amsterdam*, p. 98-101.
- BENSON, J.L., 1989. *Earlier Corinthian Workshops*, Amsterdam (*Allard Pierson series, Scripta Minora*, 1).
- BENTON, S., 1953. *Further Excavations at Aetos*, in *Annual of the British School at Athens*, 48, p. 255-631.
- BLAKEWAY, A., 1932-1933. *Prolegomena to the Study of Greek Commerce with Italy, Sicily and France in the Eighth and Seventh Centuries*, in *Annual of the British School at Athens*, 33, p. 170-208.
- BLEGEN, C., PALMER, H. and YOUNG, R., 1964. *Corinth XIII. The North Cemetery*, Princeton.
- BOARDMAN, J., 1969. *Euboean Pottery in East and West*, in *Dialoghi di Archeologia*, III, p. 102-114.
- BOARDMAN, J., 1970. *Review of Coldstream's «Greek Geometric Pottery»*, in *Gnomon*, 42, p. 493-503.
- BOARDMAN, J. and SCHWEIZER, F., 1973. *Clay Analysis of Archaic Greek Pottery*, in *Annual of the British School at Athens*, 68, p. 267-283.
- BOARDMAN, J., 1980. *The Greeks Overseas*, London.
- BOSANA-KOUROU, N., 1979. *A Grave Group from the Area of Aigion (in Greek)*, in *STHLH Festschrift in Memory of N.M. Kontoleon*, Athens.

- BOSANA-KOUROU, N., 1983, *Some Problems Concerning the Origin and the Dating of the Thapsos Class Vases*, in *Annuario della Scuola Archeologica di Atene*, 61, NS, XLV, p. 257-269.
- BOUZEK, J., 1974, *The Attic Dark Age Incised Ware*, in *Acta Musei Nationalis Pragae*, XXVIII.
- BOUZEK, J., 1985, *The Aegean, Anatolia and Europe*, in *Studies in Mediterranean Archaeology*, 29.
- BUCHNER, G., 1981, *Pithekoussai: Alcuni Aspetti Peculiari*, in *Annuario della Scuola Archeologica di Atene*, 59, NS, XLIII, p. 263-273.
- CANCIANI, F., 1974, *CVA Tarquinia. Museo Archeologico Nazionale*, III.
- CANCIANI, F., 1976, *Tre nuovi vasi «Italo-geometrici» del Museo di Villa Giulia*, in *Prospettiva*, 4, p. 26-29.
- CASKEY, J.L. and AMANDRY, P., 1952, *Investigations at the Heraion of Argos, 1949*, in *Bulletin de la Correspondence Hellénique*, 21, p. 202-207.
- CINTAS, P., 1970-1976, *Manuel d'Archéologie Punique*, I, Paris.
- COLDSTREAM, J.N., 1968, *Greek Geometric Pottery*, London.
- COLDSTREAM, J.N., 1977, *Geometric Greece*, London.
- COLDSTREAM, J.N., 1982, *Some Problems of Eighth Century Pottery in the West seen from the Greek Angle*, in *La Céramique grecque ou de tradition grecque au VIII^e siècle en Italie centrale et méridionale*, in *CCJB*, III, p. 21-39.
- COLONNA, G., 1968, *Caere*, in *Studi Etruschi*, 36, p. 265-275.
- COURBIN, P., 1966, *La céramique géométrique de l'Argolide*, Paris.
- CRISTOFANI-MARTELLI, M., 1973, *Ceramica Argiva Monocroma*, in *CVA Gela II, Italia*, tav. LIII, 4.
- D'AGOSTINO, B., 1968, *Pontecagnano. Tombe orientalizzante in contrada S. Antonio*, in *Notizie degli Scavi*, 8, p. 75-196.
- D'AGOSTINO, B., 1979, *Le Necropoli Protostoriche della Valle del Sarno. La Ceramica di tipo Greco*, in *AION*, 1, p. 59-75.
- D'AGOSTINO, B., 1982, *La Ceramica greca o di tradizione greca nell'VIII secolo in Italia Meridionale*, in *La Céramique Grecque*, p. 55-69.
- D'AGOSTINO, B., 1985, *I Paesi Greci di Provenienza dei Coloni e le loro Relazioni con il Mediterraneo occidentale*, in *Magna Grecia*, p. 209-244.
- D'AGOSTINO, B., 1990, *Relations between Campania, Southern Etruria and the Aegean in the Eighth Century*, in J.-P. DESCOEUDRES (ed.), 1990, p. 73-87.
- D'ANDRIA, F., 1982, *Il Salento nell'VIII e VII sec. a.C.: nuovi dati archeologici*, in *Annuario della Scuola Archeologica di Atene*, 60, NS XLIV, p. 101-117.
- D'ANDRIA, F., 1990, *Greek Influence in the Adriatic*, in J.-P. DESCOEUDRES (ed.), *Greek Colonists and Native Populations*, Oxford, 1990, p. 73-87.
- DEHL, Chr., 1982, *Zur Herkunft der Thapsos Class*, in *Praestant Interna. Festschrift für V. Hausmann*, Tübingen.
- DEHL, Chr., 1983, *Cronologia e Diffusione della Ceramica Corinzia dell'VII sec. a.C.*, in *Italia in Archeologia Classica*, 35, p. 186-204.
- DEHL, Chr., 1984, *Die Korinthische Keramik des 8. und frühen 7. Jhs. v. Chr. in Italien* (Mitteilungen des DAI, Athenische Abteilung, 11), Berlin.
- DEKOULAKOU, I., 1982, *8th and 7th Century Pottery from Cemeteries in Achaia and Aetolia (in Greek)*, in *Annuario della Scuola Archeologica di Atene*, 60, NS XLIV, p. 219-237.

- DERIU, A., BOITANI, F. and RIDGWAY, D., 1985, *Provenance and Firing Techniques of Geometric Pottery from Veii: a Mössbauer Investigation*, in *Annual of the British School at Athens*, 80, p. 139-150.
- DERIU, A., BUCHNER, G., RIDGWAY, D., 1986, *Provenance and Firing Techniques of Geometric Pottery from Pithecoussai: A Mössbauer Investigation*, in *Annali di Istituto Universitario Orientale di Napoli*, VIII, p. 99-116.
- DESBOROUGH, V.R. d'A., 1952, *Greek Protogeometric Pottery*, Oxford.
- DESBOROUGH, V.R. d'A., 1954, *Mycenae 1939-1953*, in *Annual of the British School at Athens*, 49, p. 258-266.
- DESBOROUGH, V.R. d'A., 1955, *Mycenae VI: Three Geometric Tombs*, in *Annual of the British School at Athens*, 50, p. 239-247.
- DESBOROUGH, V.R. d'A., 1973, *Late Burials from Mycenae*, in *Annual of the British School at Athens*, 68, p. 87-101.
- DESCOEUDRES, J.P. and KEARSLY, R., 1983, *Greek Pottery at Veii: Another Look*, in *Annual of the British School at Athens*, 78, p. 9-53.
- DESCOEUDRES, J.P., 1978, *Euboeans in Australia. Some Observations on the Imitations of Corinthian Kotylai made in Eretria and found in Al Mina*, in *Eretria*, VI, p. 7-19.
- DESCOEUDRES, J.P., 1990 (ed.), *Greek Colonists and Native Populations. Proceedings of the First Australian Congress of Classical Archaeology held in Honour of Emeritus Prof. A.D. Trendall*, Oxford.
- DICKINSON, O., 1977, *The Origins of Mycenaen Civilization*, (SIMA, XLIX), Götteborg.
- DIK, R., 1981, *Un'oinochoe ceretana con decorazione di pesci: implicazioni culturali*, in *Mededelingen Nederlandsch historisch Instituut Rome*, XLIII, p. 69-81.
- DUNBABIN, T., 1962, *Pottery, Ivories, Scarabs and Other Objects from the Votive Deposit of Hera Limenia (Perachora. II)*, Oxford.
- DUNBABIN, T. and ROBERTSON, M., 1953, *Some Protocorinthian Vase Painters*, in *Annual of the British School at Athens*, 48, p. 172-181.
- FARNSWORTH, M., 1964, *Greek Pottery: A Minerological Study*, in *American Journal of Archaeology*, 68, p. 221-228.
- FARNSWORTH, M., 1970, *Corinthian Pottery: Technical Studies*, in *American Journal of Archaeology*, 74, p. 9-20.
- FARNSWORTH, M., PERLMAN, I. and ASARO, F., 1977, *Corinth and Corfu: A Neutron Activation Study of their Pottery*, in *American Journal of Archaeology*, 81, p. 455-468.
- FIorentini, G. and DE MIRO, E., 1983, *Gela Protoarchaica*, in *Annuario della Scuola Archeologica di Atene*, 61, NS XLV, p. 53-106.
- FREDERIKSEN, M., 1979, *The Etruscans in Campania*, in D. RIDGWAY (ed.), *Italy before the Romans*, London, p. 277-311.
- FRÖDIN-PERSON, 1922-1930, *Asine I. Results of the Excavations*.
- GABRICI, E., 1913, *Cuma*, in *Monumenti Antichi*, XXII, p. 5-871, 123 pl.
- GRAHAM, A.J., 1990, *Precolonial Contacts: Questions and Problems*, in J.-P. DESCOEUDRES (ed.), *Greek Colonists and Native Populations*, Oxford, 1990, p. 45-61.
- GUZZO, P.G., 1982, *La Sibaritide e Sibari nell'VII e VII sec. a.C.*, in *Annuario della Scuola Archeologica di Atene*, 60, NS XLIV, p. 237-251.
- GRIMANIS, A.P., FILIPPAKIS, S.E., PERDIKATIS, B., VASSILAKI-GRIMANI, M., BOSANA-KOUROU, N., YALOURIS, N., 1990, *Neutron Activation Analysis of « Thapsos Class » Vases. An Attempt to Identify their Origin*, in *Journal of Archaeological Science*, 7, p. 227-239.

- JOHANNOWSKY, W., 1967, *Problemi relativi alla « precolonizzazione » in Campania*, in *Dialoghi di Archeologia*, I, p. 159-185.
- JOHANNOWSKY, W., 1969, *Scambi tra ambiente greco e ambiente italico nel periodo precoloniale e protocoloniale e loro conseguenze*, in *Dialoghi di Archeologia*, III, p. 31-43.
- JOHANNOWSKY, W., 1982, *La Campania settentrionale*, in *CCJB*, III, p. 109-113.
- JOHANSEN, K.F., 1923, *Les Vases sicyoniens*, Paris and Copenhagen.
- JONES, R., 1986, *Greek and Cypriot Pottery. A Review of Scientific Studies*, Athens.
- HOLLOWAY, ROSS R., 1981, *Italy and the Aegean 3000-700 B.C.*, Louvain-la-Neuve and Providence.
- KALLIPOLITIS, V., 1982, *Pottery from Kerkyra* (in Greek), in *Annuario della Scuola Archeologia di Atene*, 60, NS XLIV, p. 69-76.
- KEARSLEY, R., 1989, *The Pendent Semi-Circle Skyphos*, in *Bulletin of the Institute of Classical Studies*, Suppl. 44, London.
- KOUROU, N., 1987, *À propos de quelques ateliers de la céramique fine, non tournée du type « Argien Monochrome »*, in *Bulletin de la Correspondance Hellénique*, 111, p. 31-53.
- KOUROU, N., 1988, *Handmade Pottery and Trade: the Case of the « Argive Monochrome » Ware*, in *Ancient Greek and Related Pottery. Proceedings of the 3rd Symposium, Copenhagen, August 31 September 1982*, Copenhagen, p. 314-322.
- KOSTIKAS, A., SIMOPOULOS, A., GANGAS, N., 1974, *Mössbauer Studies of Ancient Pottery*, in *Journal de Physique*, 35, p. 107-115.
- LAISTNER, M.L.W., 1912-1913, *Geometric Pottery at Delphi*, in *Annual of the British School at Athens*, 19, p. 61-69.
- LERAT, L., 1935, *Delphes. Chronique des fouilles*, in *Bulletin de la Correspondance Hellénique*, 49, p. 274-278.
- LERAT, L., 1961, *Fouilles à Delphes, à l'Est du Sanctuaire (1950-1957)*, in *Bulletin de la Correspondance Hellénique*, 85, p. 316-366.
- LONDAY, P., 1990, *Greek Colonists and Delphi*, in J.-P. DESCOEUDRES (ed.), 1990, p. 117-131.
- MANIATIS, Y. and PANAKLERIDOU, D., 1987, *« Argien Monochrome »: Détermination des températures de cuisson et autres observations*, in *Bulletin de la Correspondance Hellénique*, 111, p. 50-51.
- NEEFT, C.W., 1975, *Corinthian Fragments from Argos at Utrecht and the Corinthian LG. Kotyle*, in *Bulletin Antike Beschaving*, 50, p. 97-134.
- NEEFT, C.W., 1981, *Observations on the Thapsos Class*, in *Mélanges de l'École Française à Rome*, 93, p. 7-88.
- NEEFT, C.W., 1982, *Corinthian Hemispherical Kotylai. Thapsos Panel-Cups and the West*, in *CCJB*, III, p. 39-45.
- NEEFT, C.W., 1987, *Protocorinthian Subgeometric Aryballoi (Allard Pierson Series, 7)*, Amsterdam.
- NEEFT, C.W., 1991, *Addenda et Corrigenda to D.A. AMYX, Corinthian Vase-Painting in the Archaic Period*, Allard Pierson. Series - Scripta Minora, Amsterdam.
- ORLANDINI, P., 1974-1976, *Un frammento di coppa medio-geometrica degli scavi dell'Incoronata presso Metaponto*, in *Atti della Società Magna Grecia*, NS XV-XVIII, p. 196-199.

- ORLANDINI, P., 1982, *Scavi e scoperte di VIII e VII sec. a.C. in località Incoronata tra Sirise Metaponto*, in *Annuario della Scuola Archeologica di Atene*, 60, NS XLIV, p. 315-329.
- PANCRAZZI, O., 1979, *Cavallino, I. Scavi e Ricerche*, p. 1964-1967.
- PELAGATTI, P., 1982, *I più antichi materiali di importazione a Siracusa, a Naxos ed in altri siti della Sicilia Orientale*, in *CCJB*, III, p. 113-181.
- PELAGATTI, P., 1982b, *Siracusa: gli ultimi scavi a Ortigia*, in *Annuario della Scuola Archeologica di Atene*, 60, NS XLIV, p. 117-165.
- PFUHL, E., 1903, *Der archaische Friedhof am Stadtberge von Thera*, in *Athenische Mitteilungen*, 28, p. 1-290.
- POPHAM, M., 1981, *Why Euboea?*, in *Annuario della Scuola Archeologica di Atene*, 59, NS XLIII, p. 237-239.
- RIDGWAY, D., 1968, *Coppe Cicladici*, in *Studi Etruschi*, 35 and reprinted in English in *Italy before the Romans* (ed. RIDGWAY), London-New York, p. 113-127.
- RIDGWAY, D., 1978, *Composition and Provenance of Western Geometric Pottery: A Prospectus*, in *Papers in Italian Archaeology*, I (*BAR Suppl.*, Ser. 41.1), Oxford, p. 121-130.
- RIDGWAY, D., 1981, *The Foundation of Pithekoussai*, in *CCJB*, VI, p. 45-61.
- RIDGWAY, D., 1981-1982, *Archaeology in South Italy, 1977-1981*, in *Archaeological Reports for 1981-1982*, p. 63-83.
- RIDGWAY, D., 1982, *The Eighth Century Pottery at Pithekoussai: An Interim Report*, in *CCJB*, III, p. 69-103.
- RIDGWAY, D., 1984, *L'Alba della Magna Grecia*, Milano.
- RIDGWAY, D., BOITANI, F., DERIV, A., 1985, *Provenance and Firing Techniques of Geometric Pottery from Veii: A Mössbauer Investigation*, in *Annual of the British School of Archaeology at Athens*, 80, p. 139-150.
- RIDGWAY, D., 1988, *Western Geometric Pottery: New Light on Interactions in Italy*, in *Proceedings of the 3rd Symposium on Ancient Greek and Related Pottery*, Copenhagen.
- RIDGWAY, D., 1988, *The Pithekoussai Shipwreck*, in *Studies in Honour of T.B.L. Webster*, II, p. 97-107.
- RIDGWAY, D., 1988-1989, *Archaeology in Sardinia and South Italy, 1983-1988*, in *Archaeological Reports for 1988-1989*, p. 130-147.
- RIDGWAY, D., 1990, *The First Western Greeks and their Neighbours 1935-1985*, in J.-P. DESCOEUDRES (ed.), 1990, *Greek Colonists and Native Populations*, Oxford, p. 61-73.
- ROEBUCK, C., 1972, *Some Aspects of Urbanization in Corinth*, in *Hesperia*, 41, p. 96-127.
- ROBERTSON, M., 1948, *Excavations in Ithaca, V. The Finds*, in *Annual of the British School in Athens*, 43, p. 10-124.
- SABBIONE, C., 1982, *Le aree di colonizzazione di Gotone e Locri Epizefiri nell'VIII e VII sec. a.C.*, in *Annuario della Scuola Archeologica di Atene*, 40, NS XLIV, p. 251-301.
- Salento Arcaico*, 1979, *Atti del Colloquio Internazionale, Lecce 5-8 aprile 1977*, in *Quaderni dell'Istituto di Archeologia e Storia Antica*, Università di Lecce.
- SALMON, J.B., 1984, *Wealthy Corinth. A History of the City to 338 BC.*, Oxford.
- SHEFTON, B.B., 1982, *Greeks and Greek Imports in the South of the Iberian Peninsula. The Archaeological Evidence*, in *Madriider Beiträge*, 8, p. 337-361.
- SNODGRASS, A., 1971, *The Dark Age of Greece*, Edinburgh.
- STILLWELL, A. and BENSON, J.L., 1984, *Corinth XV.III. The Potter's Quarter. The Pottery*, Princeton.

- STUART LEACH, S., 1987, *Subgeometric Pottery from Southern Etruria (SIMA Pocket Book)*, Göteborg.
- THEMELIS, P., 1983, *Delphi and the Area in the 8th and 7th Centuries BC* (in Greek), in *Annuario della Scuola Archeologica di Atene*, 61, NS XLV, p. 213-254.
- VALLET, G. and VILLARD, F., 1952, *Les dates de fondation de Mégara Hyblaea et de Syracuse*, in *Bulletin de la Correspondance Hellénique*, 72, p. 289-346.
- VALLET, G. and VILLARD, F., 1964, *Mégara Hyblaea 2. La céramique archaïque*, Paris.
- VALLET, G., 1982, *Bilan des recherches à Mégara Hyblaea*, in *Annuario della Scuola Archeologica di Atene*, 60, NS XLIV, p. 173-183.
- VILLARD, F., 1982, *La céramique géométrique importée à Mégara Hyblaea*, in *CCJB*, III, p. 181-187.
- VILLARD, F., 1956, *Géométrie grec, géométrie sicilote, géométrie sicule*, in *Mélanges de l'École Française à Rome*, 68, p. 7-27.
- VATIN, Cl., 1969, *Médéon de Phocide*, Paris.
- VOKOTPOULOU, I., 1982, *Epirus in 8th and 7th Cent. BC* (in Greek), in *Annuario della Scuola Archeologica di Atene*, 60, NS XLIV, p. 77-101.
- VOKOTPOULOU, I., 1985, *Vitsa. A Molossean Cemetery* (in Greek), Athens.
- VOZA, G., 1982, *Evidence archeologiche di VIII e VII sec. a.C. nel territorio di Siracusa: la necropoli di Villasmundo nella valle del Marcellino*, in *Annuario della Scuola Archeologica di Atene*, 60, NS XLIV, p. 165-169.
- VERDELIS, N., 1963, *Neue Geometrische Gräber in Tiryns*, in *Athenische Mitteilungen*, 78, p. 1-62.
- WEINBER, S., 1941, *What is Protocorinthian Geometric Ware?*, in *American Journal of Archaeology*, 45, p. 30-41.
- WEINBERG, S., 1943, *Corinth VIII. The Geometric and Orientalizing Pottery*, Cambridge, Mass.
- WHITBREAD, J.K., 1986, *The Application of Ceramic Petrology to the Study of Ancient Greek Transport Amphorae, with Special Reference to Corinthian Amphora Production*, D.Phil.thesis, Southampton.
- WILLIAMS, Ch., 1973, *Corinth, 1972: The Forum Area*, in *Hesperia*, 42, p. 1-44.
- WILLIAMS, Ch. K. II, 1981, *A Survey of Pottery from Corinth*, in *Annuario della Scuola Archeologica di Atene*, 59, NS XLIII, p. 139-153.
- WILLIAMS, Ch. K. II, 1982, *The Early Urbanization of Corinth*, in *Annuario della Scuola Archeologica di Atene*, 60, NS XLIV, p. 9-21.