IONIAN BRONZE BELTS

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The first discovery of complete Ionian bronze belts was made in the summer of 1955, in the British School at Athens' excavations of the Harbour Sanctuary at Emporio in South Chios. The full publication of the finds must await that of the rest of the excavation, but since this discovery has led to the recognition of parts of similar objects on other Ionian sites, and has also raised important questions of the relationship between Ionian and Phrygian metalwork, it has seemed desirable to publish this preliminary account and classification.

Fig. 1

A reconstructed drawing of the most complete example found (Fig. 1) can serve as text for the description of their construction and features. The main part of the belt is a continuous strip of sheet bronze with parallel sides, usually about 0.06 wide. The fragments show that not all were continuous strips but there could be riveted joins. They are undecorated except at the extremities, but along each edge there

1 Noticed in *Archaeological Reports* 1955 (*JHS* lxxxvi Suppl.) 38, with fig 4. I am indebted to the Committee of the British School at Athens for permission to make this preliminary publication.
are small holes presumably for sewing on leather or linen backing which would have been rolled over the edges making a raised border, top and bottom, such as is seen on many representations of metal belts.

The strap- (as opposed to the hook-) end of the belt is terminated by a vertical strip rivetted onto it. The ends of this strip are rolled forward much in the way that the backing would have been. The pierced bronze strap is itself fastened to the belt some distance from the end. The width of the strap is about three quarters that of the belt. It has a rounded end, and along the centre a row of square holes into which the hook fitted. The number of holes varies from eight to eleven, and there are occasional fragments with circular holes. On the example illustrated in FIG. 1 the notch most used was reinforced by a flat plate of metal, fastened by seven rivets. The straps are decorated with patterns made up from small punched circles. The base of the strap narrows, with square shoulders, to a slim bronze plate which is rivetted onto it. This plate is often grooved and incised. From each end of the plate projects a spike fitting through pierced square knobs which are rivetted into the main part of the belt. The strap is thus hinged onto the belt.

At the other end of the belt the hook is formed by a straight-sided bronze tongue, usually of one piece with the belt but in some instances (as FIG. 1) made of a separate sheet of metal and rivetted onto the belt. The tongue has a blunt end at the centre of which a narrow flange is turned over to make the hook. The main part of the belt has two projecting wings at either side of the junction with the tongue. On the tongue itself there may be decoration of small punched circles matching that on the strap, a row of studs (as on FIG. 3), compass-incised cable or simply an incised border. The only other decoration on the belts are the compass-incised rosettes which appear within the arms of two of the handles (as on FIG. 3 and PLATE XXI c).

These 'handles' are the most distinctive features of the belts. They are fastened rigidly, at three points, onto the belt immediately behind the tongue (FIG. 2). The handles are cast but the decoration of the head and reel members as well as the incision is added afterwards. The rivets are mounted in rectangular or pyramidal members beneath the centre moulding on the hoop, and beneath each terminal or the moulding behind each terminal. The underside of the handles is not decorated; it is often flattened, sometimes hollowed.

Similar belt handles have already been found on other Ionian sites, although not identified as such. I have included these in the summary of types below. I am indebted to Prof. U. Jantzen, Prof. E. Akurgal and Prof. J. M. Cook for permission to include unpublished handles from Samos and Old Smyrna. The types may be broadly grouped by their terminals: on A to D they are circular, E to G rectangular, and Type H has animal-head terminals. The other determining factors are the number of mouldings on the hoop and its section.

Type A. Three single head and reel mouldings without terminals. The simplest form. One example from Emporio, and perhaps Ephesus pl. 19. 3 (a plate across the head as on the example of Type C from Old Smyrna).

Type B. Three mouldings with one, two or three head and reels on each. Twelve examples from Emporio (as PLATE XX a, c, FIG. 2),

and at Phanai in Chios, BSA XXXV (1934-5) pl.31.35. On all but the example from Phanai and three from Emporio there is a short collar between the terminal and the moulding behind it. Two others
have the end rivets beneath the terminals while the mouldings behind them are hollowed beneath. The terminals are usually incised as rosettes. On one example from Emporio the bow is cut on the upper side so as to appear twisted (Arch. Reports 1955, 37 fig. 4 right; here, PLATE XX b).

Type C. As Type B but with five mouldings on the hoop. From Phanai, loc. cit., pl. 31.32, 33; Ephesus 151f. (seven found in all, but see Type A) pl.19, 1, 2; and from Old Smyrna (PLATE XXI b; underside) with a plate across the terminals. The intermediate mouldings are thinner than the main three at Ephesus and Old Smyrna; all being thin at Phanai. The ‘heads’ are in general much narrower, more like discs, and a segment is cut out of them beneath (cf. Phanai, pl.31-33 and our Type E) so that they appear to be clipped onto the hoop.

Type D. The three mouldings and hoop are rectangular in section and decorated with small punched circles. Two examples from Emporio (as on FIG.3).

Type E. Rectangular terminals with vertical ribs on the face and sides, and the rivets beneath them. Two examples from Emporio; and from Phanai, ADelt ii (1916) 211 fig. 35. 2 and an unpublished fragment (Chios Museum 487). The mouldings are like the discs of Type C with the same feature of the missing segment beneath. None is complete. There were probably five or seven mouldings.

Fig. 3


Type F. Five mouldings generally (one has seven, and on another there are light ridges between the five). Rectangular terminals as Type E, some with a bridge of metal joining them and cast with them. For this feature compare the strips rivetted across examples from Ephesus (Type A) and Old Smyrna (Type C). Several from the Heraion, Samos, in Vathy Museum (PLATE XXI a; B 614-5).

Type G. Narrow rectangular terminals with horizontal ribbing on the face and sides and three mouldings on the hoop. One example only from Emporio.

Type H. Animal-head terminals. (i) lions’ heads. From Emporio, Arch. Reports 1955, 37 fig. 4 left; here, PLATE XX d. The hoop made of two strips with a wire between, cut above to appear twisted. Rectangular members in place of mouldings, with two rivets in each.

(ii) rams’ heads. From Phanai, ADelt ii (1916) 210 fig. 34, pl. 5 fig. 30 (Chios Museum 470). The hoop and moulding as Type C (Phanai) or E.

Other parts of belts other than handles found outside Emporio may be briefly noticed. Samos: straps with cable pattern, cross-hatched border or openwork. Phanai, Chios: two tongues with hooks, one plain, the other with studs; also plain and decorated strips of belts.

Some generalisations can be made on the basis of this classification of the handles. When there are more than three mouldings they shrink to discs with segments cut out beneath, where the others are flat. The presence of a ‘collar’ between the terminal and moulding is not significant, nor is the position of the rivets, though these are rarely on the terminals in Chios. Examples from the two Chian sites are much the same but there is a type (C) at Phanai only matched at Ephesus and Old Smyrna. Samos (F) is quite distinct. Clearly then there were local schools of belt-makers in Ionia. The earliest from the stratified deposits at Emporio are from a level dated, by its pottery, ca. 690-660. These are either simple (A) or odd (G). The latest (D,E,H)

4 As the fibula, ibid., pl. 87, 894. C. B. Blinkenberg, Type XII. 14.
5 ADelt ii (1916) 211 fig. 35 centre right.
6 BSA XXXV (1934-35) 151: Some are decorated with zigzag lines of stamped dots, some with running-S pattern interspaced with roses. Occasionally the edges of the strip are preserved, pierced with small holes. But some of these pieces might be from bracelets, as examples from Emporio.
are from a level dated ca. 630-600. No significant chronological factors can be observed otherwise. A single example was found in a later context. This need not mean that they were still being made in the sixth century, although this is probable on other grounds (see below). The earliest dedicated were probably not newly made, so some could belong to the end of the eighth century. Taking into account the other points, we find that the punched-circle decoration on straps and tongues may be an early feature; on the angular small handles of Type D it seems late. Multiplication of mouldings, as on fibulae, may also be a sign of lateness, as are the square shoulders (instead of the simple half-circle).

The relationship of these handles to East Greek and Anatolian fibulae is obvious, and they are clearly inspired by them; not, however, made from the same moulds, for, except for the smallest, there are no fibulae on Chios to compare with the handles for size and complexity. 7 Nor indeed does it seem that fibulae of this size were as popular in East Greece as they were in Phrygia. The purpose of the belt handles is also quite different for they fasten nothing, nor could anything readily be suspended from them. Most probably their only use was to assist the wearer in drawing in his belt as tight as possible. This in itself seems hardly sufficient reason for their presence, and it may well be that they represent the fibulae which fastened linen belts, like the giant safety pins at the waist of a kite, and that they survived as decorative appendages on the metal belts.

The probable ancestry of this type of belt was made clear very soon after they were found in Chios, by the discovery of three belts in Tumulus P at Gordion. 8 A simplified drawing of how one is made is shown in Fig. 4. These closely resemble the Ionian belts in the tongues, hook and fibula-like handle; one also has a plate across the terminals which we have noted on some Ionian handles, although not at Emporio. They differ from them in various ways. The cut-outs at the junction of belt and tongue are much deeper, but they appear on Ionian belts in a less exaggerated form. The incised decoration can run all along the belt; it includes the compass-incised rosettes we find on Ionian belts. The most significant difference is the absence of the hinged tongue with its row of holes; instead there are openwork loops fastened flat onto the belt. There seems to be little good reason for the elaborate Ionian form as the hinge was scarcely necessary and the choice of notches offered (up to eleven) seems excessive. Tumulus P at Gordion is dated by the excavators to the end of the eighth century. 9 These Phrygian belts may then be barely if at all older than the earliest Ionian examples. A slightly later Phrygian belt was found in Tumulus I at Ankara. This has a round-ended strap, more in the manner of the Greek belts, but it is an elaborate openwork affair and not hinged; no belt handle was preserved. 10 Others are reported from Gordion. 11

No other belts of this type are known to me, and the tally of find-places is: Phrygia—Gordion, Ankara; Ionia—Emporio and Phnai on Chios, Old Smyrna, Samos, Ephesos.

It can hardly be disputed that Phrygia was the source of inspiration for the Ionian belts, but, as with almost everything else the Greeks borrowed from the east, the form was considerably changed and given an independent course of development in Greek lands. The belts can take their place as important witness to Phrygian-Ionian relations in matters of metalwork, beside the bowls with spool-handles and, it may be, the ornate symmetrical fibulae. The latter too enjoy a separate and individual development in Ionia, well illustrated at Emporio. More important, perhaps, is this reflection of the profound influence of native Phrygian work on the Greeks-especially

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7 But see note 2. The bridge between the terminals (as Type F) may be suggested by Phrygian fibulae, as Blinkenberg, Type XII.10.
8 R.S. Young, AJA LXI (1957) 327 pl. 92, fig. 23. I am much indebted to Professor Young for notes on his finds.
9 Ibid., 335f.; LXII (1958) 154.
10 Bulletin XI (1947) pls. 11-13 figs. 23-25; E. Akurgal, Phrygische Kunst 82, 85.
the Ionians. This is quite a separate matter from the problem of the transmission through Phrygia or elsewhere of types of metalwork which were at home in remoter places and which are also found in Phrygia (notably the cast cauldron-attachments).

The special character of the Phrygian-Ionian belts is made particularly clear when compared with metal belts made elsewhere in the ancient world, and with the other available evidence for bronze belts in Greece. Apart from the Phrygian finds the record of belts in the east is poor. From the period with which we are mainly concerned the type with rounded ends appears on Assyrian reliefs worn by warriors who have small-crested helmets and round or tall shields. There is a bronze belt from Cyprus in New York with a tongue and hook and projecting shoulders, but it hooks onto a simple wire loop as do other eastern belts. On various Greek sites fragments of bronze strips have been identified by excavators as parts of bronze belts or may be plausibly so described, but there is no indication of the way in which they may have been fastened. A belt with rounded ends from Knossos copies eastern models, as do the figures embossed and traced upon it. At Perachora there is an eastern buckle, and in Samos an 'Italic' one. Italy, indeed, affords some variety in early bronze belts, generally with two or more hooks fitting into eyes or notches cut in the belt itself. Some belts are lozenge-shaped, and many carry incised geometric patterns. Celtic types offer as little for comparison. The only western belts which in any way resemble the Phrygo-Ionian belts are from Spain, where some Iberian belt-ends have circular cut-outs behind the hooks. It is just possible that there is some connection here, for the types can be traced well back into the sixth century. It owes nothing to earlier (e.g., Hallstatt) types but appears at a time when Ionians are being particularly active in the very area where early examples of the belts are found—N.W. Spain and S. France—and when Greek influence on other native products, especially pottery, can be detected.

For the decoration on the Ionian belts the circles, cable, simple meander and diamonds are in no way remarkable. The technique of small punched circles appears also on the handles of Type D and fibulae, for the scaly patterns on Greek bronze griffin protomes and eastern siren attachments, and often on other metalwork. Two sorts of punch were used on the belts: one was simply tubular, the other had a square end with a circular depression producing a square sinking with a raised centre disc. The widespread use of punched decoration on Greek bronzes of the eighth and seventh centuries has not been fully appreciated. It is, of course, this, and not incised decoration, which is found on the hammered tripod legs from Olympia and elsewhere. The compass-drawn rosettes on the belts are also common on late eighth- and seventh-century metalwork, notably the Boeotian fibulae and a Cretan cup, and they are found on the Phrygian belts.

12 E.g., Gadd, The Stones of Assyria p. 35. The other belts on these reliefs are akin, with a rounded end and ribbon or tape to fasten them (like puttees). Similar ones, with a triangular end and tapes, appear on the Carchemish reliefs, Carchemish III 1918, (modern analogies are cited); M. Miocci, Applique Art figs. 36, 40. At Zagarra there are triangular ends with hook and eye, as Bossert, Atlantotomio figs. 49, 56.

13 Richter, Greek Bronzes p. 144 no. 1276. I do not know whether bronze belts from the Caucasus (as E. Chantrit, Ant. des Caucases i p. 87-115, 53) have anything to do with the Phrygian.

14 E.g., BSA XLVIII (1953) pl. 69. E233, 233a (Aetos; 233a has perforations at the edge); Boules des Delfes v 130 figs. 43, 45, 46; 46a (are these belt fittings like ours, the last a tongue and hook?); Olympia iv pl. 19-20 passim. A belt from Arcadia of ca. 650, with reliefs, is mentioned in BCH LXXXV (1956) 196.

15 Brock, Berliner figs. 115, 158. A Hittite or North Syrian type, cf. Bossert, Atlantotomio figs. 477, 551-3; Prazewski, Die Metallindustrie Anatoliens 69f.; Akurgal, Spätmykäische Bildstilart 24 E.

16 Perachora ii 33B E., fig. 26, pl. 44-5.

17 Cf. Jacobsthal, Early Celtic Art i 119ff.

18 Cf. Louis and Taffané, Le Premier âge du fer Langueviocien i 123 fig. 123, 2; ii 69 fig 44, 65 fig. 45, 233 fig. 185-9, 231 fig. 1023 iii 141 fig. 134. For later examples see Vázquez-Ossorio, Catálogo de los escudos de bronze ibéricos pl. 166 (some with punched-circle decoration). An example was found at Olympia: Olympia iv pl. 66-1151. A Greco-Sikel bronze warrior, probably of the sixth century, wears a native breastplate with discs, but Greek helmet and greaves, and a belt with what looks very like a 'handle': Richter, Ancient Italy fig. 27; de Ridder, Louvre Cat. pl. 14-124.

14 Commonest on oriental work, or pieces closely imitating eastern objects, like our belts. On ordinary Greek geometric bronzes simple punched dots are commoner than the circles, but cf. Argeia Heraklion i pl. 88, 95, 97-40; Olympia i pl. 23, 293, 351-354 (seventh-century); BCH LXXVII (1953) pl. 32c.

13 Not easily detected in illustrations, but cf. Argeia Heraklion i pl. 101, 1837.

11 I discuss the motif in metalwork in Cretan Collection in Oxford 84-86.
Who wore the belts? One from Gordian was worn by a four-year-old princess; another, from Ankara, was apparently from a warrior's grave. In Phrygia, it seems, they could be worn by either sex at any age. The usage in Ionia need not have been very different, but there are no grounds for identifying them with any particular item of Homeric armour, although they could no doubt have been comfortably worn with a leather or linen corselet.

The almost total absence of weapons from the Harbour Sanctuary at Emporio—other than a few clay votive shields—tells against the identification of the belts as parts of panoply. The other votives have a more distinctly feminine character, and there is strong supporting evidence for the view that the belts were worn by women. Plain belts often appear on seventh-century Greek clay figurines, but on two from Chios the white dots along each edge strongly suggest the sort of stitching required by the backing to a metal belt, and implied by the perforations along the edges of the examples found. Unfortunately the buckle is not represented. The very tight waist, both of the clay figures and in the vase representations of women in archaic Greece might also be more than an artist's convention, and imply that tight belts were sometimes worn. That of the Auxerre goddess certainly seems to have represented metal; it was painted yellow and had a broad border as of the backing to a bronze belt.

Several archaic Samian korai wear belts with similarly thickened edges. There is, however, one representation which is certainly of a belt of our type and it is worn by a goddess. It appears on the famous bronze plaque from Olympia with, in four registers, birds, griffins, Herakles and a centaur, and a potnia theron with lions. The engraving in the Olympia publication clearly shows the potnia wearing a belt with a semicircular handle behind the hooked tongue.

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22 Haplite panoply came late to Ionia. The silver-gilt statuette from Phanai, often cited (A delt i 1916 408 pl. 4 fig. 28; BSA XLII (1947) 88 fig. 5, 89, 110; JHS LXXIV (1954) 4) is hardly earlier than 600.

23 One from Emporio and one from Phanai, BSA XXXV (1934-35) pl. 33.15.

24 The type with square end is common in the seventh century; cf. Homann-Wedeking, Die Anfänge der griechischen Grobsplastik 63ff., figs. 22, 23, 32.

25 Buschor, Altsizische Standbilder Figs. 86, 92, 352, 357, 361, 362, 373 (contrast figs. 150-153; AA 1937, 205; fig. 1; Langlotz, Die Korai 39 fig. 10.

26 Olympia iv pl. 38. Photographs since published do not show this detail adequately.

This is copied in FIG. 5 and much of the detail can be made out in PLATE XXII from a photograph kindly given me by Mr Brian Shefton. The handle has a bar across the terminals, as Type F, which is Samian, but no other elaboration is visible. The main strip of the belt has a narrow border and seems to have been decorated in panels. The relief is generally regarded as East Greek work and dated to the second quarter of the sixth century. It shows that the belts certainly survived those from the main deposits at Emporio, and that they were known in the period of the Samian korai, who seem to wear metal belts. The relief supports the view that the belts were worn by women. As votives they have appeared in Chios at sanctuaries where Artemis was worshipped beside Apollo, in Samos in the Heraios, at Ephesus in the Temple of Artemis, in Old Smyrna in the temple of a goddess. If they were not dedicated simply as valuable and handsome objects they may be taken to be the παγοθεανοι ζωνες which were dedicated to a Hera or Artemis by girls at their marriage. If so they might well have been worn from early childhood—remember the four-year old at Gordian—and the generous allowance for expansion well justified.

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1 Payne, Narcorinthia 230 f.; Kunze, Ol. Forsch. ii (Archaische Schildbänder) 67 n. 2.

20 Rouse, Greek Votive Offerings 249.