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AMBER BEADS OF THE TIRYNS TYPE

Abstract. – Tiryns type amber beads have been found on archaeological sites of the Late Bronze Age in the Mediterranean and its hinterland, and are dated to the 12th and 11th century B. C. Infrared spectroscopy proved that those beads are made of Baltic amber, and the distribution of the Tiryns type beads in the Balkans, Italy and Mediterranean sheds new light on the cultural and trade contacts in the prehistoric Europe.

Long a subject of careful scrutiny in the science of archaeology, finds of prehistoric amber in the Mediterranean are important witnesses to trade and cultural contacts among distant parts of Europe at that time. The presence of amber on the eastern shores of the Mediterranean even before the Late Bronze Age (LH I: ca. 1600 B. C.) is corroborated by a number of finds, some of which are not easily validated.

Nevertheless, many amber beads from the Mycenaean period have been subjected to infrared spectrography, which established that most were of Baltic origin: of the 264 artefacts tested, 230 were of Baltic provenance.¹ This means, among other things, that in prehistoric times Baltic amber must have found its way to the Mediterranean and played an important role in the system of trade and other exchanges with the Mycenaean civilization.

Of particular importance and interest is a type of amber bead found in a hoard at Tiryns. These beads are known, after the site, as the "Tiryns" type, and are dated, in Greece, to horizon LH III–C (after 1200 B. C.). They are elongated, biconical or cylindrical, with a ridge along the middle.² Beads of this type have

¹ C. Beck, *The Provenience of Amber in Bronze Age Greece*. Annual of British School of Archaeology at Athens 69, 1974. 170–172; C. Beck, G. Southard, A. Adams, *Analysis and Provenience of Minoan and Mycenaean Amber II: Tiryns*. Greek, Roman and Byzantine Studies 9/1, 1968. 5–19.

² A. Harding, H. Hughes–Brock, *Amber in the Mycenaean World*. Annual of the British School of Archaeology at Athens 69, 1974. 157.

been found throughout the Mediterranean: on both Adriatic coasts, in Greece, Crete, Rhodes, Syria, in the Lipari Islands and Sardinia. In what used to be Yugoslavia, beads of this type have been found at Baška, on the island of Krk, at Privlaka and Vrsi, near Nin, at Golubnjača, and at Debeli Vrh nad Predgradom (Map 1).

BAŠKA

Baška is situated on the eastern shore of the island of Krk, facing the Velebit channel. Several archaeological finds originating from Baška found their way to the Museum of Natural History in Vienna at the turn of the century. As early as 1895, E. Nowotny of the Prehistoric Commission of the Viennese Academy of Sciences excavated at Baška; the Late Bronze Age material in Vienna, which contains a considerable quantity of amber, probably derives from his excavations.

Nothing is known about the conditions in which Bronze Age amber from Baška was found; we do not even know whether it came from a grave or not. Types 1, 2, and 3 are varieties of Tiryns beads, while 4a and 4b are typologically related to them; they are found together at several sites. The importance of the Bronze Age find from Baška lies, among other things, in the fact that a quantity (20) of wrought beads were found, 11 of them belonging to type 4a. In addition to Tiryns beads and related ridged beads of the 4a and 4b types, there was also one flattened oval bead, one oval, and two rectangular beads. The 4b ridged bead was threaded on a piece of bronze wire rectangular in section, and may have been used as an ornament on a pin or fibula.³

PRIVLAKA

Privlaka is situated 6 km northwest of Nin, in northern Dalmatia, at the very tip of the peninsula that almost girds the bay of Nin. The Privlaka grave (No. 87 in the registers of the Museum in Zadar) was discovered by chance in 1914, but the find was inventoried and is kept in the Archaeological Museum in Zadar. In 1960, the finds were published by Š. Batović. The grave contained three amber beads, twelve greenish glass beadlets, a bronze bracelet with ribbed decoration, and three closed bracelets of triangular section. Š. Batović dated the finds from the Privlaka grave to Ha A2/B1.⁴ The very presence of amber would suggest a somewhat higher dating (Ha A1/A2), but the long tradition of its use is also a factor to be reckoned with.

³ F. Lo Schiavo, *Il gruppo liburnico-japodico*. Atti della Accademia Nazionale dei Lincei VIII/XIV (CCCLXVII), Roma 1970. 424–426; Š. Batović, *Kasno brončano doba na istočnom Jadranskom primorju*. Praistorija jugoslavenskih zemalja IV, Sarajevo 1983. 293.

⁴ Š. Batović, *Predmeti osobitih oblika s područja Liburna*. Radovi Instituta Jugoslavenske akademije znanosti i umjetnosti u Zadru 6–7, 1960. 75; Š. Batović, *L'età del bronzo recente sulla costa orientale del Adriatico*. Godišnjak Centra za balkanološka ispitivanja Akademije nauka i umjetnosti Bosne i Hercegovine XVIII, 1980.

Only three amber beads were found in the Privlaka grave, but they are very important typologically. Two are of the Tiryns type (sub-types 1a and 1b), while the third is barrel-shaped, i. e. cylindrical, and decorated with parallel horizontal ribs, a type closely associated with the Tiryns variety. Unfortunately, the amber from Privlaka remains unanalysed.⁵

VRSI

Vrsi is located 3.5 km northeast of Nin, in northern Dalmatia. Grave No. 89 (now renumbered as No. 1) was accidentally discovered by a farmer in 1925. The owner sold the entire contents of the grave to the Zadar Museum, but nothing is known about the precise conditions of the find. The material was published by Š. Batović in 1960. In 1973, Batović ran trial excavations at the same spot; he discovered no further graves, only potsherds and iron slag.⁶

The grave contained amber beads, two bronze arc fibulae with disc-shaped protrusions on the bow, ribbon bracelets, and ribbed bracelets. On the basis of both the bronze artefacts and the characteristic Tiryns amber, the Vrsi finds have been dated to Ha A1/A2 (1200–1000 B. C.).

Only four amber beads were found in the grave at Vrsi. The most interesting is a variant type of Tiryns (type 1b), typical of the Late Bronze Age in the Adriatic and Mediterranean. It is flattened, with a prominent ridge running along the middle; in section it is an elongated ellipse and resembles a vertebra. One of the oval beads is perforated in an unusual manner: in addition to the central vertical perforation it also has two openings set crosswise, which join the main perforation obliquely. Amber from Vrsi, unfortunately, remains unanalysed.⁷

GOLUBNJAČA

The Golubnjača cave is located in the region of Lika, 10 km west of Perušić, between the villages of Sušanj and Krušica, on the west bank of the Lika. In 1962, speleologists found traces of prehistoric cultures in the cave. Excavations were undertaken in 1968 under the supervision of R. Drechsler-Bižić of the Archaeological Museum in Zagreb. Archaeological finds in the cave dated from the Neolithic, Late Bronze Age, Early and Late Iron Age, as well as the Roman and Slav periods. The archaeological material was scattered in several layers, and it was impossible to connect it with a more precisely defined archaeological context. R. Drechsler-Bižić believes that these finds are typical of temporary shelters, of which the cave was probably one.

⁵ Š. Batović, *Predmeti osobitih oblika*. 42–44, 55; Š. Batović, *L'età del bronzo*; Š. Batović, *Kasno brončano doba*. 315.

⁶ Š. Batović, *Kasno brončano doba*. 227.

⁷ Š. Batović, *Predmeti osobitih oblika*. 44–47; Š. Batović, *L'età del bronzo*. 11–14; Š. Batović, *Kasno brončano doba*. 315.

A single amber bead from a layer in Golubnjača cave belongs to a sub-type of Tiryns. By analogy with other finds, dated with more certainty, it has been classified as belonging to Hallstatt A1/A2 (1200–1100 B. C.). In addition to the central vertical perforation the Golubnjača bead has two smaller horizontal ones, which probably served to stop it from rotating.⁸

DEBELI VRH NAD PREDGRADOM

In 1977, during the construction of a road, a hoard was unearthed at Debeli vrh nad Predgradom, near Kočevje in Slovenia. Heavy machines disturbed the original position of the hoard and scattered the archaeological material over 80 m of the new road, burying it under the embankment. Subsequent archaeological excavations supervised by G. Hirschbäck–Merhar of the Regional Museum in Kočevje recovered most of the material from the hoard. G. Hirschbäck–Merhar published the hoard, while the amber was studied in greater detail by B. Teržan.

The hoard contained 147 artefacts, chiefly bronze, including swords, daggers, arrowheads, celts, sickles, bracelets, and bands of bronze. Some sheets of bronze and bronze wire were also found, as well as a whetstone, bronze slag, and amorphous unprocessed bronze. Thirteen amber beads and four narrow tubes of bronze sheet were found inside a celt – probably parts of a necklace. B. Teržan believes that two clasps of bronze wire with spiral ends could have belonged to the same necklace.

On the basis of characteristic bronze artefacts and the Tiryns-type bead, the hoard was dated to Hallstatt A1. Culturally, the material shows close analogy with that belonging to the urnfield cultures of Pannonia and Transdanubia. The amber beads, on the other hand, have analogues in Italy, Dalmatia, and the Aegean, as well as the Mediterranean at large.

The hoard at Debeli vrh nad Predgradom has yielded 13 amber beads: one of the Tiryns type and 12 of irregular polygonal/cylindrical and prismatic shapes, typologically classifiable as amorphous beads. Amber from the Debeli vrh hoard was submitted to spectrographic analysis in Ljubljana; the resulting spectrum was typical of Baltic amber.⁹

All the Tiryns type beads that have been unearthed are dated to the horizon Hallstatt A1–A2 (1200–1000 B. C.). Some believe that this type of find, broadly speaking, should also include the amber beads from Križevci and Vra-

⁸ R. Drechsler-Bižić, *Zaštitna iskopavanja pečine Golubnjače kod Kosinja*. Vjesnik Arheološkog muzeja u Zagrebu IV, 1970. 111–118; Š. Batović, *L'età del bronzo*. T. X.

⁹ G. Hirschbäck–Merhar, *Debeli vrh nad Predgradom*. Rešena arheološka dediščina Slovenije 1945–1980, Ljubljana 1980; G. Hirschbäck–Merhar, *Prazgodovinski depo Debeli vrh nad Predgradom*. Arheološki vestnik XXXV, 1984. 90–109; B. Teržan, *O janjarju z Debelega vrha nad Predgradom*, Arheološki vestnik XXXV, 1984. 110–118; D. Hadži, B. Orel, *Spektrometrične raziskave janjarja in smol iz prazgodovinskih najdišč na Slovenskem*. Vestnik Slovenskega kemijskega Društva 25/1, 1978. 51–62.

njic, which have direct analogues in Italian amber.¹⁰ Amber beads of different types but dating from the same period have been found elsewhere in the former territory of Yugoslavia: at Glasinac, in the graves of Osovo, Crvena Lokva, Gučevo, and Borovsko. A hoard with 45 amber beads from Majdan, near Vršac, has been dated to Hallstatt A2 (1100–1000). This find is culturally related to the Carpathian Late Bronze Age; the amber probably reached Majdan by the eastern prong of the amber road, as in the case of similar finds in Romania.¹¹ Glasinac amber is chiefly dated to Hallstatt A1, while only a single amorphous bead from the grave at Borovsko belongs to Hallstatt A2.

From 1000 to 800 B. C., i. e. during Hallstatt B1 and B2, there is very little amber in Yugoslavia. Only a few beads have been found: three biconical ones in Vranjic near Split, an amorphous one in Vrlazje at Glasinac, and one in Popadin Dol, Pelagonia. Chronologically, all these amber pieces belong to Hallstatt B1, between 1000 and 900 B. C. Since the same amber could have been in use over a lengthy period, it is possible that these finds had arrived in the territory of Yugoslavia even earlier, during the Hallstatt A period. This is supported by the Vranjic beads, which correspond, typologically, to Tiryns type beads.¹²

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Although they have been named after a Greek site, most Tiryns-type beads were found in Italy, more precisely at Fratesina–Polesine, where a hoard yielded a number of examples of all types (1a, 1b, 2, 3, 4a, 4b).¹³ According to Nuccia Negroni Catacchio, the area around the mouth of the Po (Polesine) was an important centre for the manufacture of Tiryns-type beads, and the Fratesina–Polesine hoard, with its many amber finds of the same type in a single place, may have belonged to a workshop.¹⁴ Amber beads of the Tiryns type have been found at several sites in Italy, from Clanezzo in the Alpine region¹⁵ to Torre Castelluccia near Tarento.¹⁶ Most Tiryns beads were found in Lombardy and central Italy;

¹⁰ B. Teržan, *op. cit.*; N. Negroni Catacchio, *La problematica dell'ambra nella protostoria italiana: le ambre intagliate di Fratta Polesine e le rotte mercantili nell'alto Adriatico*. Padusa VIII/1–2, 1972. 1–18; N. Negroni Catacchio, *L'ambra: produzione e commerci nell'Italia preromana*, Italia, Milano 1989. 659–696.

¹¹ R. Rašajski, *Ostava bronzanih predmeta iz Majdana kraj Vršca*. Starinar XXXIX, 1988. 15–28.

¹² B. Teržan, *op. cit.*

¹³ N. Negroni Catacchio, *La problematica dell'ambra nella protostoria italiana: Le vie dell'ambra e i passi alpini*. Bulletin d'études préhistoriques alpines IV, 1972. 71–80; N. Negroni Catacchio, *Le ambre intagliate di Fratta Polesine*; N. Negroni Catacchio, *La problematica dell'ambra nella protostoria italiana: ancora sulle ambre di Fratesina di Fratta Polesine*. Padusa 3–4, 1973; N. Negroni Catacchio, *Le vie dell'ambra, i passi alpini orientali, e l'alto Adriatico*. Aquileia e l'arco alpino orientale, Antichità Altoadriatiche IX, Aquileia 1976. 21–57; N. Negroni Catacchio, *Il vago d'ambra tipo Tirinto del "Riparo dell'ambra", loc. Candalla com, di Camaiore (Lucca)*.

¹⁴ N. Negroni Catacchio, *Le ambre intagliate di Fratta Polesine*, 17; N. Negroni Catacchio, *L'ambra nella protostoria italiana*. Ambra oro del Nord, Venezia 1978. 84–85.

¹⁵ R. Poggiani Keller, *Valtellina e mondo alpino nella preistoria*, Milano 1989. 88–90.

¹⁶ A. Harding, H. Hughes–Brock, *op. cit.* 168.

also interesting is a find from Capetaniata near Foggia.¹⁷ Beads of the same type were also unearthed in the Lipari Islands¹⁸ and at two sites in Sardinia.¹⁹

In Greece, the beads were found – apart from Tiryns – in Cephalonia, Salamis, Tisba, the Diktaean cave at Grete, and Ialysos.²⁰ In the Middle East, Tiryns-type beads were found in strata containing Mycenaean material at Ras Shamra (Ugarit) in Syria²¹ and Akhziv in Israel.²² Important for the distribution of the beads in the Balkans is the information about an unpublished find at an unspecified site in Albania, in the valley of the Mati²³ (Map 2).

The origin of this type of bead has not been established with certainty; nothing is known about the derivation of the shape of the amber beads that spectroscopic analysis has revealed as of Baltic provenance nor about the place of their manufacture.²⁴ The shape itself has been explained in various ways, but it is clear that the beads are symbolic of vertebrae or ossicles rather than precise geometric shapes.

The Tiryns find is also interesting because the beads from that site were part of a strange ornamental structure made of gold wire. These are the so-called "wheels", plaited in the form of round baskets, with cruciform spokes; the spokes were made of Tiryns beads strung together (Fig. 1). The science of archaeology has often attempted to explain the purpose of these "wheels" or "baskets" of plaited gold wire with amber beads, but no theory has been convincing enough. Most authors believed that these were "crowns" or "wheels,"²⁵ but Curt Beck and his team recently put forward the theory that we are dealing with "baskets", since the gold wire was plaited in a manner familiar from basket-weaving. Even the section of the gold wire is semi-circular, reminiscent of wicker ready to be used in basket-weaving. Beck's interpretation of the shape is based on the somewhat far-fetched assumption that the artefacts in question might symbolize gold baskets with Hyperborean gifts which would, of course, include amber.²⁶ Much more important is the fact that the technique used in manufacturing these artefacts can be related

¹⁷ N. Negroni Catacchio, *Ancora sulle ambre di Fratesina; Il vago d'ambra tipo Tirinto*.

¹⁸ *Ibid.*

¹⁹ G. Liliu, *La Sardegna tra il I millennio A. C.* La Sardegna nel Mediterraneo tra il secondo e il primo millennio A. C., Cagliari 1986. 13–32; G. Ugas, C. Lucia, *Primi scavi nel sepolcreto nuragico di Anias*. La Sardegna nel Mediterraneo. 255–275; F. Lo Schiavo, *Ambra in Sardegna*. Studi in onore di F. Rittatore Vonwiller I, Como 1982; F. Lo Schiavo, D. Ridgeway, *La Sardegna e il Mediterraneo occidentale allo scorcio dell'II millennio*. La Sardegna nel Mediterraneo. 391–418.

²⁰ A. Harding, H. Hughes Brock, *op. cit.*; N. Negroni Catacchio, *Ancora sulle ambre di Fratesina*; N. Negroni Catacchio, *Le vie del ambra, i passi alpini orientali, e l'alto Adriatico*.

²¹ C. Schaeffer, *Ugaritica I*, Paris 1939, 100.

²² J. Todd, *Baltic Amber in the Ancient Near East*, Journal of Baltic Studies XVI–3, Special Issue: Studies in Baltic Amber, 1985. 292–301.

²³ A. Harding, H. Hughes–Brock, *op. cit.* 167.

²⁴ C. Beck, G. Southard, A. Adams, *op. cit.* 9–14.

²⁵ *Ibid.* 6–8.

²⁶ *Ibid.* 15–18.

to some central European models;²⁷ this, in its turn, would raise the issue of trade in gold and gold jewellery in prehistoric times. The mysterious Tiryns beads have left other questions unanswered too: were other amber beads of the same type found in the Mediterranean also part of similar gold ornaments, or were the Tiryns "wheels" or "baskets" a unique find, with beads of this kind being habitually used in other ornaments as well, e. g. the necklace from Debeli Vrh in Slovenia.²⁸

Some shapes of Mycenaean amber beads – in the first place those from Kakovatos and the amber disc from Knossos – have been compared with finds from central Europe and the Wessex culture in Britain. Certain chronological deviations have somewhat undermined the comparison, but similarities between European and Mycenaean finds are undeniable. The parallelism is most obvious in the shape of the amber spacer plates found at Mycenae and Kakovatos, which resemble finds from Germany and England. It has been established that there was a type of amber ornament in central Europe between 1600 and 1500 B. C. whose shape corresponded to that of the spacer plates; this might support the theory of Mycenaean influences in the west, though Mycenae's contacts with central and western Europe remain unproven. Analysis of the amber found in both regions showed it to be of Baltic provenance, and there is no reason to discard the possibility that amber artefacts of a particular shape may have travelled as far south as Mycenae and as far west as Wessex.²⁹ Resemblances between the gold wheels (baskets) from Tiryns and examples of the work of central European goldsmiths point to the possibility that contacts of some kind may have lasted until 1200 B. C., or even longer.³⁰ Some amber specialists believe that nearly all the amber found in Mycenaean Greece was imported in the form of beads;³¹ this, however, would be hard to prove, seeing that simple amber beads were a universal and widespread phenomenon in prehistoric times and that only the Kakovatos beads and spacer plates are suggestive of central European parallels. On the other hand, some have even suggested that the inscription *re-di-na-to-mo* (resin-cutter), found in linear-B tablets in Pylos, refers to an artisan who works with amber, though there is reason to believe that it probably meant resin-worker.³² Tiryns beads and their presence throughout the Mediterranean, especially in the Adriatic, show that wrought amber was certainly popular and played an important part in cultural and trade contacts among Mediterranean peoples in Mycenaean times.

²⁷ *Ibid.* 18; S. Marinatos, *Lautsizer Schmuck in Tiryns*. Deutsche Beiträge zur Altertumswissenschaft 12/13, 1960. 151–157.

²⁸ B. Teržan, *op. cit.*

²⁹ A. Harding, *The Mycenaean and Europe*, London 1984. 68–87; T. Smith, *Mycenaean Trade and Interaction in the West Central Mediterranean 1600–1000, BC*, Oxford 1987. 46–49; C. Beck, S. Shennan, *Amber in Prehistoric Britain*, Oxford 1991. 133–135.

³⁰ S. Marinatos, *op. cit.* 151–157; A. Harding, H. Hughes–Brock, *op. cit.* 158.

³¹ H. Hughes–Brock, *Amber and the Mycenaean*. Journal of Baltic Studies XVI/3, Special Issue: Studies in Baltic Amber, 1985. 259.

³² *Ibid.*

The map of sites where Tiryns beads have been found shows that most finds originated in or around the Adriatic basin. Although the beads accompanied Mycenaean material at some sites in Italy, and particularly Greece and the eastern Mediterranean, in Yugoslavia and at sites in northern Italy there is no evidence that the immediate context of the finds was Mycenaean. If the distribution of the finds is also taken into account, it is to be surmised that beads of this type were manufactured in workshops close to the shores of the northern Adriatic and, being a highly sought-after commodity, took a lively part in exchanges with Mycenaean and other centres in the eastern and central Mediterranean. Mycenaean ware found in Fratesina shows that Mycenaean traders were interested in the Adriatic region. The eastern Adriatic coast and its hinterland must have participated no less actively in Adriatic trade, as witness amber finds of the Tiryns type at Yugoslav sites. As they were most probably manufactured from Baltic amber in north Adriatic workshops, the beads in question are to be seen as traces of the turbulent times of the urnfield culture's southward thrust. The distribution of the beads along the Adriatic rim and further afield in the Mediterranean also points to lively ethnic and cultural movements during this period, including even the military campaigns of the so-called Sea Peoples, who reached the Middle East.

ЋИЛИБАРСКЕ ПЕРЛЕ ТИПА ТИРИНС

Резиме

Перле типа Тиринс карактеристичне су по томе што на издуженом биконичном или ваљкастом облику, по средини имају испупчени хрбат. Име су добиле по месту налаза, а у Грчкој се везују за хоризонт LH III-C (после 1200. пре н. е.). Перле тог типа пронађене су на готово читавом медитеранском подручју – на обе јадранске обале, у Грчкој, на Криту, Родосу и у Сирији, потом на Липарским острвима и на Сардинији. На подручју бивше Југославије, примерци овог типа пронађени су у Башкој на Крку, Прилаши и Врсима код Нина, у Голубњачи и на Дебелом Врху над Предградом. Досад није поуздано утврђено откуда потичу перле овог типа: не зна се ни порекло облика ни место израде оваквих перли од ћилибара, за које је спектрографском анализом утврђено да су балтичког порекла. О самом облику перли постоје различита тумачења, али је јасно да оне не представљају никакву чврсту геометријску форму, већ – вероватније – симболизују пршљенове или кошчице. Ако се узме у обзир концентрација налаза перли типа Тиринс, могло би се претпоставити да је овај тип накита израђиван у радионицама близу обала северног Јадрана и да је, као очигледно веома тражен трговачки артикал, живо учествовао у размени са микенским и другим центрима источног и средњег Медитерана. Источна јадранска обала и њено залеђе свакако су такође живо учествовали у трговачком животу јадранског басена, о чему сведоче и налази ћилибара типа Тиринс. Будући да су највероватније направљене у занатским центрима северног Јадрана, али од ћилибара балтичког порекла, све ове перле могу се сматрати остацима бурног времена када је Урненфелдер култура продирала ка југу. Распоред тих перли по ободу јадранског басена, као и на ширем подручју Средоземља, указује и на жива етничка и културна крстања овог периода, па чак и на освајачке походе тзв. „народа с мора“, који су стигли до Блиског Истока.

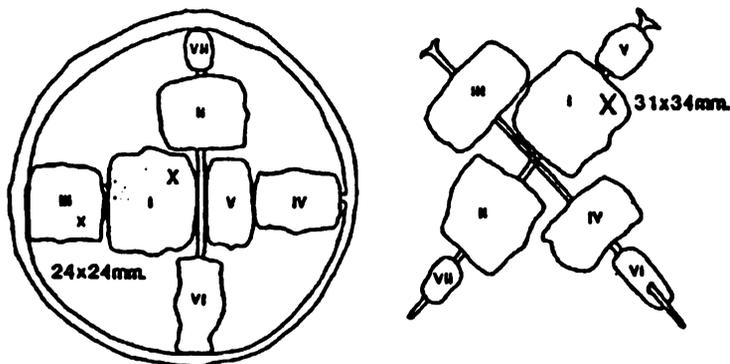
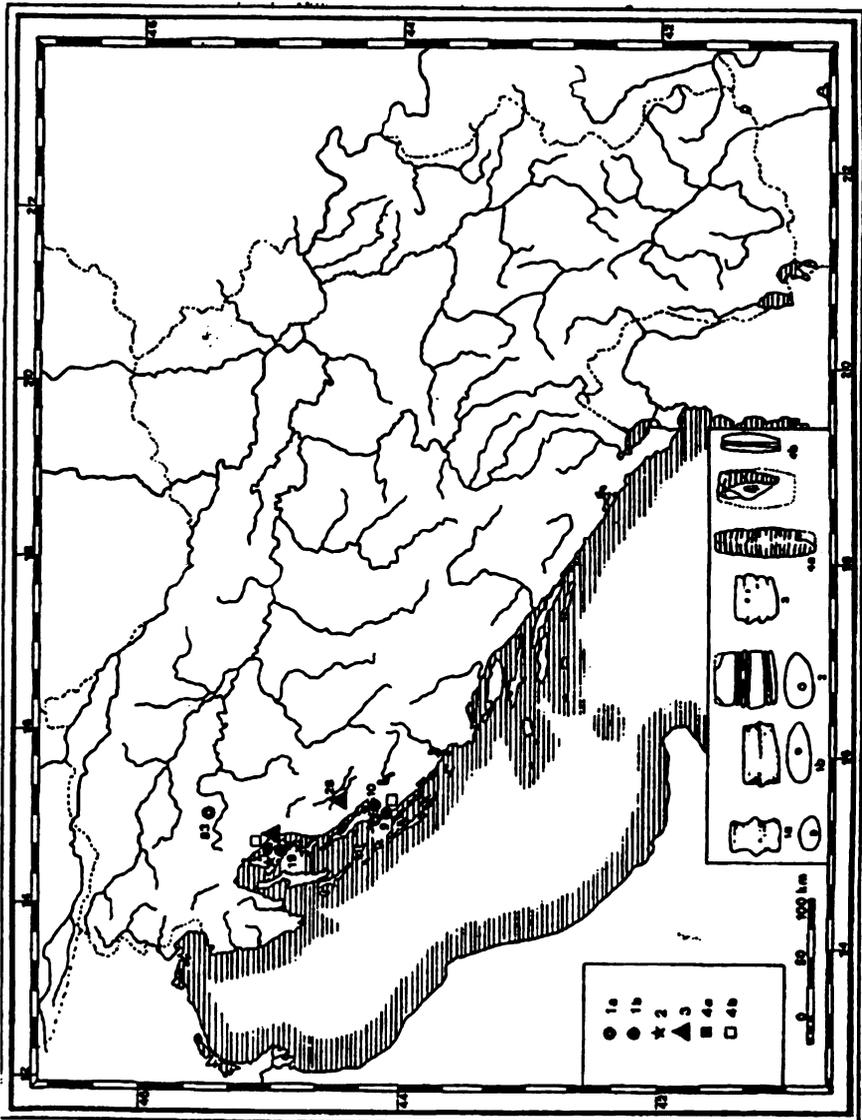


Fig. 1 Tiryns wheels (C. Beck, G. Southard, A. Adams, 1968)



Map 1:

Type 1a: Privlaka (9), Debeli vrh nad Predgradom (83).

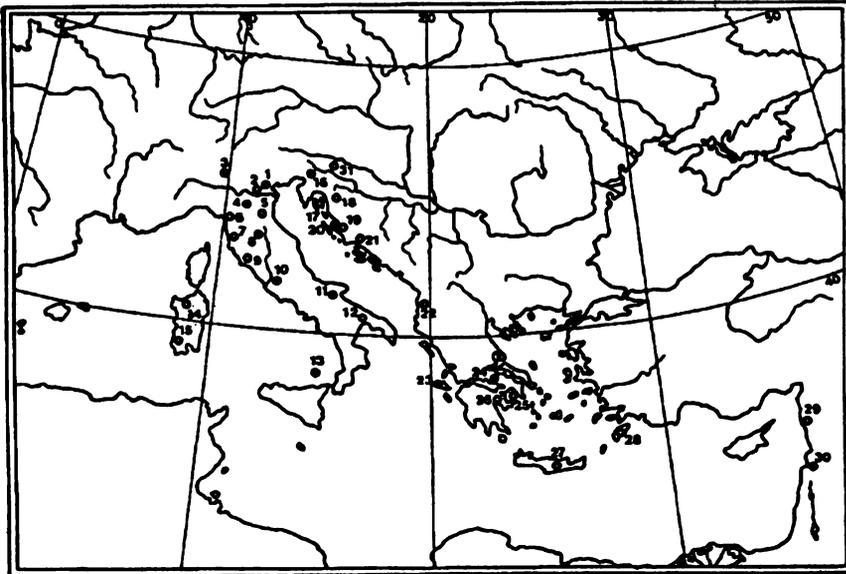
Type 1b: Vrsi (10), Privlaka (9), Baška (19).

Type 2: Baška (19).

Type 3: Baška (19), Golubnjača (28).

Type 4a: Baška (19).

Type 4b: Privlaka (9), Baška (19).



Map 2:

The distribution of Tiryns beads

1. Frattesina Polesine (N. Negroni Catacchio, 1972, 1973, 1976, 1986)
2. Fondo Paviani (N. Negroni Catacchio 1986)
3. Clanizzo, Costa Cavallina (R. Poggiani Keller 1989: 88–90)
4. Bismantova, Reggio Emilia (N. Negroni Catacchio 1986)
5. Borgo Panigale, Bologna (Ibid.)
6. Camaiore, Lucca (Ibid.)
7. Populonia (Ibid.)
8. Panigarola (Ibid.)
9. Ponte San Pietro Valle (Ibid.)
10. Osteria dell'Osa, Roma (Ibid.)
11. Capitanata, Foggia (Ibid.)
12. Torre Castelluccia, Taranto (A. Harding, H. Hughes-Brock 1974: 168)
13. Piazza Monfalcone, Lipari (N. Negroni Catacchio 1986)
14. Attenu, Sassari (G. Lilliu 1986: 20)
15. Antas (G. Ugas, G. Lucia 1986: 256–257)
16. Debeli vrh nad Predgradom (G. Hirschbäck-Merhar 1984; B. Teržan 1984)
17. Baška, Krk (F. Lo Schiavo 1970: 424–426)
18. Golubnjača (R. Drechsler-Bižić 1970)
19. Vrši (Š. Batović 1960: 44–47)
20. Privlaka (Ibid.: 42–44)
21. Vranjic (I. Marović 1960: 6–15)
22. Nepoznati lokalitet u dolini reke Mati (A. Harding, H. Hughes-Brock 1974: 167)
23. Metaxata, Kefalonia (N. Negroni Catacchio 1972, 1973, 1976, 1986)
24. Tisba (Ibid.)
25. Salamina (Ibid.)
26. Tirins (C. Beck, G. Southard, A. Adams 1968)
27. Diclean Cave, Crete (N. Negroni Catacchio 1972, 1973, 1976, 1986)
28. Ialysos, Rhodes (D. Strong 1966: 39)
29. Ras Schamra, Ugarit (C. Schaeffer 1939: 100)
30. Akhziv (J. Todd 1985)
31. Križevci (Z. Homen 1982)

