





JÁNOS MAKKAY

EARLY STAMP SEALS IN SOUTH-EAST EUROPE

AKADÉMIAI KIADÓ BUDAPEST

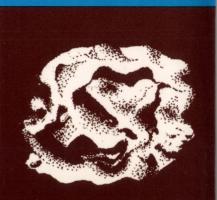












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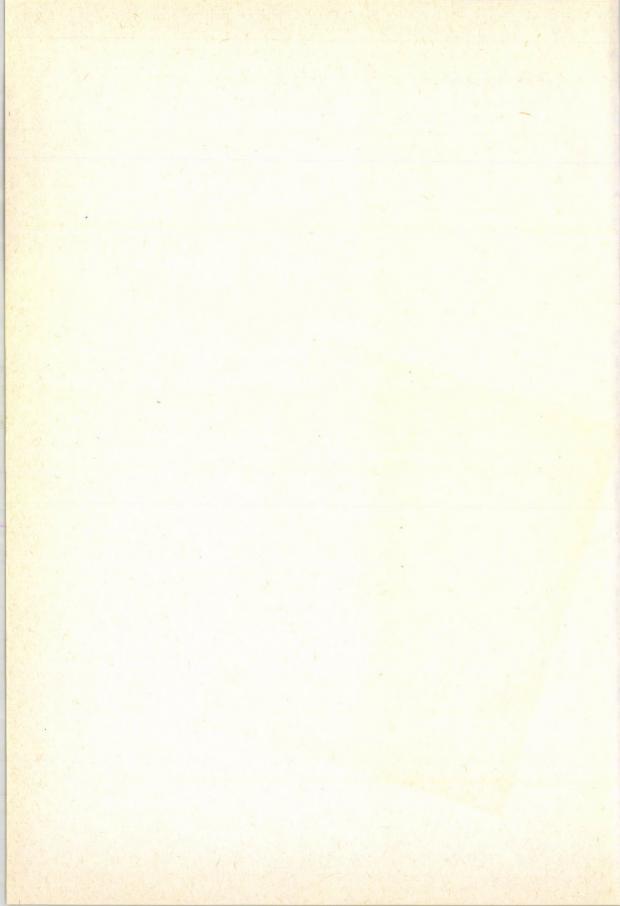
EARLY STAMP SEALS IN SOUTH-EAST EUROPE

Stone stamp seals and cylinders are characteristic finds of the Near Eastern and Aegean civilisations flourishing between the 5th and 1st millennia B. C. Similar small artefacts, usually made of clay, were also manufactured during a given period of the Neolithic and the Copper Age of South-East Europe. However, their function could not have been similar to that of the Near Eastern and Aegean seals since not one single sealing has yet come to light. This is one of the reasons why prehistoric research has neglected these finds. This study presents a catalogue of the South-East European stamps, mostly based on various publications and a few unpublished specimens, with a full bibliography on each piece. Their majority is illustrated. The second part of the study covers the chronological position of these South-East European stamps (and occasional cylinder seal imitations), their distribution, function and origin. It would appear that the South-East European stamps can be assigned to three successive and distinct chronological horizons and that they formed a group independent of both the Near Eastern and the Aegean specimens, in spite of the fact that their origins can be traced to earlier Near Eastern, mainly Anatolian seals.



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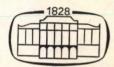


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SOUTH-EAST EUROPE

BY

JÁNOS MAKKAY



AKADÉMIAI KIADÓ · BUDAPEST 1984

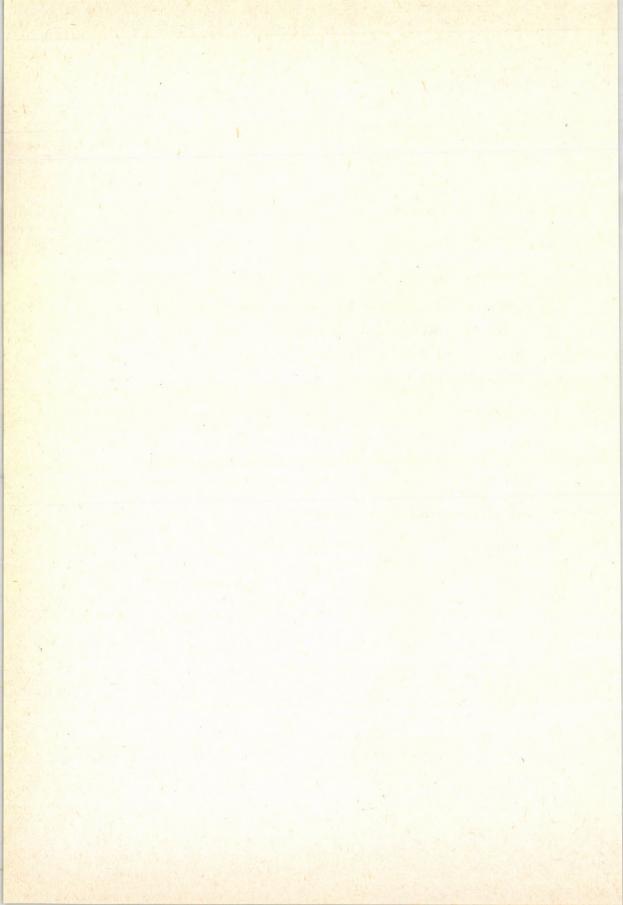
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PREFACE

The study of Neolithic and Copper Age stamp seals has not been one of the focal points of European prehistoric investigations ever since these began in the middle of the nineteenth century. Bearing this in mind, it may prove useful to turn our attention to the problems of Neolithic and Copper Age European seals, and to summarize what I consider to be the most important conclusions. This involves a study of these seals based on the most recent discoveries as well as on those of earlier excavations. Perhaps it is inconsistent to maintain that the time is ripe for a real study of this art. Yet, the rapid advance of South-East European prehistoric archeology demands the detailed investigation of stamp seals, while the full publication of Neolithic stamp seals of mainland Greece would require a general study of similar finds of the related parts of the Balkans. In fact, the Neolithic stamp seals of Greece are more closely related to those of the Balkans and the Carpathian Basin than to the Early Bronze Age seals succeeding them in Greece.

The region with which we are concerned covers modern mainland Greece, the Northern Aegean regions of Macedonia and Thrace, Bulgaria, Romania, Yugoslavia, the Carpathian Basin, Eastern Austria and Czechoslovakia, furthermore adjacent regions of the German Democratic Republic, Poland and the Soviet Union. The scope of this book is deliberately limited since Neolithic and Copper Age stamp seals were confined to this part of Europe. There is only a single exception: Italy. Italian Neolithic and Copper/Bronze Age seals have such different characteristics and problems, that we disregard their detailed study, even more so, since these have been fully discussed by O. Castiglioni.¹

This study will be divided into two main parts. The first is a Catalogue which gives short descriptions of the individual pieces and details of the main publications referring to them. In some cases the main published classifications, typologies and chronologies are reviewed or discussed. In addition, correlations between the evidence of the stamp seals and other archaeological material are summarized if necessary. The Catalogue is as complete as possible with regard to published pieces. We suspect that clay stamp seals, or their fragments might be more frequent than one would gather from the archaeological literature. A great number of unidentified and fragmentary pieces may be still located in the collections of local museums.

The second part of the study will be entirely devoted to the questions of the distribution and chronological position of the European stamp seals and their origins. The ensuing analyses are intended to show what correlations with different cultural regions and chronological periods can be established. The terminology of

chronological periods within our large area would seem somewhat confusing, since we now have an "Eneolithic period" (also called Chalcolithic) in the South-East Balkans; a Late Neolithic phase, which is sometimes called an Eneolithic Age or the Final Neolithic in Greece; and a Late Neolithic period in Macedonia which may have survived until the Early Bronze Age of the southernmost part of Greece. Thus the contemporaneity of the Central and Northern Balkanic, the Carpathian Eneolithic and Copper Ages and the Greek Early Bronze Age will have to be defined. In a recent article² we gave reasons for equating the three Copper Age periods of the Northern Balkans and the Carpathian Basin with the Early Helladic I, II and III phases.

Finally, we should point out here that the success of an attempt of this sort depends on the promptness with which such stamp seals are published. Preliminary reports are often long delayed; or they appear piecemeal as journal articles in a variety of languages.

In a study of this kind, which covers such a vast geographical and temporal area, the author has been especially conscious of the numerous possibilities of error and many lacunae. One of these is that only a few of the stamp seals have been examined personally by the author. In many cases, the lack of sufficient (published) evidence precludes the formulation of more precise conclusions.

Map references are given for sites included on the distribution map to which the running numbers and chronological determinations (letters A-E) of the Catalogue refer. Exact locations of sites are not always given. It must therefore be emphasized that the distribution map is merely a rough guide. I have based the map mainly on information given by the authors publishing stamp seals. A part of these data may be considered as contradictory.

Since the drawings reproduced in the Figures vary in scale, it is advisable to consult the Catalogue for measurements. In the Figures, the numbers in parentheses refer to the Catalogue Numbers.

I am fully aware of the fact that the word "seal" is not the proper term for the artifacts discussed in this study. The reason for the usage of this word is to occasionally break the monotony of the descriptions in the Catalogue.

I have to thank Dr. Susan Skomal and Dr. John Chapman who have been so good as to read through and correct my manuscript.

CATALOGUE

ABBREVIATIONS

- A = Early Neolithic (Protosesklo–Presesklo, Karanovo I–II, Körös–Starčevo and contemporary cultures)
- **B** = Middle Neolithic (Sesklo, Karanovo III-IV, Danilo, Cakran, Early Vinča = Vinča A-B, Linear Pottery) and surviving Early Neolithic (and contemporary cultures)
- C = Late Neolithic (Dimini, Larisa, Rachmani, Karanovo V-VI, Early and Middle Gumelnița, Vinča C-D, Tisza, Lengyel and Moravian painted pottery, Tripolje-Cucuteni-Erősd painted pottery and contemporary cultures)
- D = Copper Age cultures of the Carpathian Basin (Tiszapolgár, Bodrogkeresztúr, Lasinja-Balaton, Boleráz-Baden cultures) and comtemporary phases of the Balkans (latest Gumelnita, Ezero EBA)

 $\mathbf{E} =$ unidentified Neolithic

 \mathbf{F} = unidentified Copper Age

1. Achilleion (Thessaly, Greece). B. Stone. (Fig. XIII)

From an unknown number of stamp seals found at Achilleion only a single piece has been published from phase IIIb or IVa (i.e. the Sesklo period). It is a thin alabaster seal with engraved labyrinthine design: channels forming a complicated meandroid pattern. At the end of each groove is a circular (drilled?) depression. Perforated handle; perhaps to be worn as a pendant. Length 4.7 cms, thickness 3 mms. Square B, level 9. Conclusions of Gimbutas concerning its use as a miniature game board cannot be accepted.

Gimbutas 1974b, p. 302, Fig. 36.

2. Agia Marina (Phokis, Greece). E. Clay. (Not illustrated)

An unpublished (?) seal is reported to have been found here. Its secure context and chronology remain unknown.

Childe 1957, pp. 60–61. – For excavations at the site, see Sotiriadis 1912, pp. 270–299; Sotiriadis 1910, pp. 163–167; Sotiriadis 1911, pp. 205–235.

3-4. Aldeni II (near Cernătești, Co. Buzău, Moldavia, Romania). During recent (?) excavations two clay stamp seals were found, in levels of the Stoicani-Aldeni phase, contemporary with the Protocucuteni or Cucuteni A periods.

3. Aldeni II. C. Clay. (Fig. XXIII) Probably handled circular stamp seal. The incised pattern consists of a single deep and wide centre line that bisects the face, with seven parallel lines on both halves. No details of dimensions.

Dumitrescu 1974, p. 484, Fig. 491: left. – Probably mentioned by *Mazasă* 1946, p. 73: "pintadéres ont été trouvées . . . à Băeşti-Aldeni". – For the chronology of the Stoicani-Aldeni phase see *Comşa* 1963, pp. 7–26 and *Dragom.r* 1969, pp. 61–62, *idem* 1970, pp. 86–90. – Clay stamp seals with a similar motif were found in Ahlatlibel, dating probably to the EBA II period: *Koşay* 1934, Figs Ab – 29, 321, 209 on pp. 72 and 73. – A further parallel from the EBA II level of Tarsus: *Goldman* 1956, Fig. 394: Nos 43 and perhaps 44, but unstratified. Later parallels were found in Thera: *Marinatos*, 1976, p. 32, Pl. 56d, South layer of catastrophe, with the mention of a further piece from Thera.

4. Aldeni II. C. Clay. (Fig. XVIII)

Probably handled round stamp seal. The face is decorated with a single clockwise spiral starting from the centre. No details of dimensions.

V. Dumitrescu 1974, p. 484, Fig. 491: right. - Cf. Matasă 1946, p. 73.

5. The environs of Almyros (Thessaly, Greece). A or B? Clay. (Fig. III)

Probably handled stamp seal, with rectangular projections on each side of the square base. A deep, wide channel divides the face of the seal with deep T-shaped depressions on both parts. The main motif consists of the continuous edge. Probably a stray find from the Middle (?) Neolithic. Dimensions: unknown.

CMS V, 2. No. 718, pp. 585 and 591. – M. Theocharis 1972, p. 22, Pl. 10: γ . – D. Theocharis 1973, p. 192, bottom row, right: mentioned as coming from Nea Nikomedeia. Pl. XX on p. 299, third row, the third piece from the left side: Neolithic seal. Fig. 211 on p. 311, right: from Tsangli, Middle Neolithic period. These confused data cannot be taken into consideration.

6. Alpár-Nagyvárdomb (Co. Bács-Kiskun, Hungary). A. Clay. (Fig. IX)

A handled flat stamp seal, found in pit I. 13 or in pit 75.12 during recent excavations in 1975, probably dates to the Körös–Starčevo culture. The square face has a simple motif: two parallel incised lines frame seven connecting lines. Length of the base 5.3 cms.

I publish it with the kind permission of I. Bóna. For the site see I. Bóna, R. F. I, 29, 1976, pp. 17–18. and Bóna–Nováki 1982, Pl. X: 6.

7. Amzibegovo-Barutnica (Yugoslavian Macedonia). Late A or early B. Clay. (Fig. VII)

Elongated oval base, pinched, unperforated handle. The face of the seal curves slightly toward the ends. Decoration consists of a row of incised chevrons, both ends of the curving lines extend over the sides of the base. From S 6/I, 2, 70.–3.00 m. Level II, probably the Late Starčevo culture. Dimensions are unknown.

Korošec-Korošec 1973, p. 56, Pl. XIII: 17a-b. - Hauptmann 1967, p. 12.

8. Apfelstädt (Kreis Erfurt, GDR). C? Clay. (Fig. XII)

An oval stamp seal (?) was found at the site as a surface find together with sherds of the Rössen and Stroke Ornamented pottery cultures. An oval depression can be seen in the centre of the face, the edge is serrated, with a perforation. Length of the face cca 4,5 cms.

Unpublished. I publish it with the kind permission of D. W. Müller, Halle.

9. Argissa magula (Thessaly, Greece). A. Clay. (Fig. VI)

Long, cylindrical unperforated handle, elongated oval base. A longitudinal deep channel-like incised line bisects the face on which a pattern of two rows of connecting triangles can be seen. Damaged and heavily worn. Length of the face 4 cms. From the Protosesklo level XXVIIIb, in square Γ 11.

Milojčić 1958, p. 164, Fig. 4: 2. - CMS V, 2, No. 515.

10-16. Azmaška mogila (near Stara Zagora, Bulgaria). During recent excavations conducted by G. Georgiev at least 7 clay stamp seals were found at this wellknown site. Three pieces have been published in preliminary reports, and another four unpublished stamp seals can be found in the Stara Zagora Museum. Six pieces with longitudinal incised zig-zag lines or longitudinal central ribs are securely dated to the Early Neolithic (i.e. Karanovo I-II phases). The seventh piece with anti-clockwise single spiral can be dated either to phases I-II of the Karanovo culture or probably to Karanovo VI. A dating to the Karanovo I-II phases is supported by the fact that round based clay stamp seals with spiral patterns have been found at Çatal Höyük in levels VI and IV. On the contrary, the spiral patterned Nea Nikomedeia stamps (Cat. Nos 154, 155, 156) are dated to the Late Neolithic by Rodden. As a matter of fact, Late Neolithic deposits were found at the site, so a similar dating of the spiral patterned piece cannot be excluded.

Unfortunately only preliminary reports of the excavations have been issued. Until the final report dealing with the whole repertory is published our knowledge of the Azmak stamp seals remains very incomplete.

Georgiev 1967, p. 97, Fig. 17. – The kind informations of Mr. R. Katinčarov, I. Torma and P. Raczky. – The Çatal Höyük stamp seals: *Mellaart 1964a*, Fig. 41: 9 and *Mellaart 1967*, Fig. 56: 5. – *Mellink–Filip 1974*, Pl. 14: bottom (level VI) and *Mellaart 1964a*, Fig. 41: 1 (level IV). – The Nea Nikomedeia pieces: *Rodden 1964b*, p. 116. – The Late Neolithic deposits: *Todorova 1978*, p. 15.

10. Azmaška mogila. A. Clay. (Fig. XI)

Long, cylindrical unperforated handle with rounded end, probably oval base with incised geometric (?) pattern. Karanovo I or II period. No details of dimensions and pattern.

Georgiev 1967, p. 97, Fig. 17: left.

11. Azmaška mogila. A. Clay. (Fig. VIII)

Conical unperforated handle, oval face with irregularly carved longitudinal zig-zag lines. Karanovo I or II period. No details of dimensions.

Georgiev 1967, p. 97, Fig. 17: centre.

12. Azmaška mogila. A. Clay. (Fig. V)

Rectangular base with rounded ends and pyramidal unperforated handle. The base of the piece is decorated with three irregularly placed lines of incised zig-zags and with unfinished triangles (V-s) on both long sides. Karanovo I–II period. No details of dimensions.

Georgiev 1967, p. 97, Fig. 17: right. This piece is probably identical with a stamp seal inventorised under No. 17B in the Azmaška material. This piece has a length of 3.5 cms and a height of 3.2 cms. Jungsteinzeit 1981, Fig. 17: b on p. 39.

13. Azmaška mogila. A. Clay. (Fig. VIII)

Probably handled stamp seal with oval base. Face bears longitudinal zig-zag line (or lines), angles filled with parallel short lines or V-s. Probably Karanovo I–II culture. No details of dimensions.

Unpublished, in the Stara Zagora Museum. The drawing is published with the kind permission of I. Torma.

14. Azmaška mogila. A. Clay. (Fig. V)

Handled (?) stamp seal with square base. Face bears four longitudinal incised zig-zag lines. Probably the Karanovo I-II culture. Unknown dimensions.

Unpublished, in the Stara Zagora Museum. After the schematic drawing of I. Torma.

15. Azmaška mogila. A. Clay. (Fig. VI)

Handled (?) stamp seal with oval base. The face shows two longitudinal zigzag lines or a central rib. Probably the Karanovo I–II culture. Unknown dimensions.

Unpublished, in the Stara Zagora Museum. After the schematic drawing of I. Torma.

16. Azmaška mogila. A (or C?). Clay. (Fig. X)

Probably handled stamp seal with circular base. The face shows an incised spiral. From the Karanovo I–II or the Gumelnita culture. Unknown dimensions.

Unpublished, in the Stara Zagora Museum. After the schematic drawing of R. Katinčarov.

 Bajč-Vlkanovo (district Nové Zámky-Érsekújvár, Czechoslovakia). D. Clay. (Fig. XXVII)

Circular stamp seal with short damaged cylindrical handle. The face is patterned with a center-point design, which is composed of a small impressed circle in the center of the base, with seven short radiating lines or impressed lozenges. From a settlement feature (probably pit X) of the Late Copper Age Boleráz phase of the Baden culture. Height 3.6 cms, diam. 3.6 cms.

Točik 1964, pp. 12, 159, 163, 177, 185, Pl. LII: 11.

18-21. Bikovo-Dončova mogila (near Nova Zagora, Bulgaria). During trial excavations two stamp seals, a clay cylinder and a foot-shaped stamp seal or amulet were found at the site. Preliminary reports date them to the Gumelnita culture.

18. Bikovo-Dončova mogila. C. Clay (Fig. XXII)

Long handled stamp seal. No string hole and no carving on base. In the preliminary report published as having impressed concentric circles on its face. Diam. of the face cca 2.4 cms.

Detev 1954, pp. 184-185, Fig. 71 : left.

19. Bikovo-Dončova mogila. C. Clay. (Fig. XVIII)

Long handle with rounded end. Pattern on a circular base is probably composed of two concentric circles or an irregular simple clockwise spiral. Diam. of the base 3.7 cms.

Detev 1954, pp. 184-185, Fig. 71 : right.

20. Bikovo-Dončova mogila. C. Clay. (Fig. XXIV)

Amulet or stamp seal in the shape of a foot. It is an accurate portrayal of the human foot. The lower part of the leg above the ankle is represented by a short stump. The piece appears to be a right foot. No suspension hole, no patterned face. In the preliminary report it was published as a stamp seal. Length 6.5 cms.

Detev 1954, pp. 184–185, Fig. 71: middle. – Foot-shaped stamp seals were in use both during the Early Neolithic A and Late Neolithic C groups. Pieces found at Gura Văii (Cat. No. 89), Szarvas (Cat. No. 304) and Zăuan (Cat. No. 284) can be dated to the Körös–Starčevo culture, the perforated stamp seal from Nessonis (Cat. No. 173) to the Protosesklo phase. The white marble stamp seal with a foot-shaped handle (Cat. No. 40) dates to the Tisza culture. Foot-shaped stamp seals were more common during the Early and Middle Bronze Age phases of Anatolia (Tarsus MBA: Goldman 1956, Fig. 393: 19; Tarsus, stray find: Goldman 1956, Fig. 394: 44; Alaca Höyük EBA, from a depth of 6.3 ms: Koşay 1938, Pl. CVI, A1/a7, p. 135). A number of parallels are known from the Early and Middle Bronze Age of Crete (Krassi, tholos: CMS II, 1, No. 407, EM II–III?; see Branigan 1970, pp. 7–23, with further literature). In the light of these parallels the Bikovo piece may have been used as an amulet. The fact that it is unperforated contradicts this suggestion.

21. Bikovo-Dončova mogila. C. Clay. (Fig. XXVI)

The piece, almost a perfect cylinder in shape, but without axial perforation for suspension, is decorated with a simple design of four pairs of zig-zags intersecting

each other at right angles. At both ends a pair of continuous horizontal lines. Length 5.2 cms.

Detev 1954, p. 185, Fig. 72. – Cf. Detev 1965, p. 71, Fig. 6: 3. – Hood 1973, p. 194, Fig. 20. – Makkay 1976a, p. 26.

22. Boskovštýn (Moravia, Czechoslovakia). C. Clay. (Fig. XXI)

Conical stamp seal with suspension hole. The circular face carries a design of four concentric circles and a small dot or circle in the centre. Lines are partly heavily worn or damaged. Height cca 5 cms, diam. cca 4.5 cms. Associations: late phase of the Moravian painted (Lengyel) pottery.

Palliardi 1911, Pl. XI: 17. – Palliardi 1914, p. 263. – Schránil 1928, p. 54, Pl. VI: 10.

23-28 Botfalu/Bod/Brenndorf-Paphegy/Priesterhügel or Gorgánydomb = Csigadomb (district Braşov, Braşov, Transylvania, Romania). During old excavations conducted at the end of the last century six or more clay stamp seals were found, dated to the Late Neolithic Erősd-Cucuteni culture. Stratigraphic associations are not mentioned in publications, but they were probably unearthed from the lowest level.

23. Botfalu/Bod/Brenndorf-Paphegy/Priesterhügel. C. Clay. (Fig. XVII)

Deep engraved double spiral on a flat oval base. Connecting short lines underline the overall composition of the decoration, with its interlocking running spirals. Short (broken?) perforated handle. Accurate dimensions are unknown, length of the base probably 6.8 or 10.2 cms.

Teutsch 1903, p. 368, Fig. 14: a-b-c. – *Matz 1928*, Pl. XXVI: 2a-b. – *Roska 1927*, p. 200, Fig. 127 : 2. – *Schroller 1933*, p. 58, Pl. 40 : 9. – *Childe 1957*, p. 142, Fig. 76, and *Castiglioni 1956*, Pl. V : 5 erroneously mention it as coming from Erősd/Ariuşd. – For the site cf. *Roska 1942*, pp. 47–48.

24. Botfalu/Bod/Brenndorf-Paphegy/Priesterhügel. C. Clay. (Fig. XVII)

Short conical handle, irregular oval face with anti-clockwise closed spiral pattern. Length of the base cca 6 cms.

Teutsch 1903, p. 368, Fig. 13. – *Matz 1928*, Pl. XXVI: 3. – *Schroller 1933*, p. 58, Pl. 40: 7.

25. Botfalu/Bod/Brenndorf-Paphegy/Priesterhügel. C. Clay. (Fig. XX)

Conical, perforated handle with broken end. The probably circular face is patterned with an irregular thin incised line or an anti-clockwise spiral. Diam. of the face cca 4 cms.

Teutsch 1903, p. 382, Fig. 99: 40. - Perhaps Matz 1928, Pl. XXVI: 18.

26. Botfalu/Bod/Brenndorf-Paphegy/Priesterhügel. C. Clay. (Fig. XX)

Handled (?) stamp, side of the round face mostly broken. Pattern consists of the wide impressed channel of an anti-clockwise spiral. Diam. of the face cca 7 cms.

Teutsch 1903, p. 382, Fig. 99: 38. - Perhaps Matz 1928, Pl. XXVI: 4.

27. Botfalu/Bod/Brenndorf-Paphegy/Priesterhügel. C. Clay. (Fig. XIX)

Handled stamp, the oval face has a wide and deeply impressed channel of a clockwise spiral. Diam. of the base cca 6.7 cms.

Teutsch 1903, p. 368, Fig. 12. – *Matz 1928*, Pl. XXVI: 1. – *Schroller 1933*, p. 58, Pl. 40: 8.

28. Botfalu/Bod/Brenndorf-Paphegy/Priesterhügel. C. Clay. (Fig. XVII) Handled (?) stamp with flat oval base. The simple motif consists of two wide impressed segmented circles set back to back. Diam. of the base cca 4.8 cms.

Teutsch 1903, p. 382, Fig. 99: 39. – Matz 1928, Pl. XXVI: 5.

29-33. *Brăila-Brăilița* (near Brăila, Romania). Five (or perhaps more?) clay stamps were excavated at this site in levels I and IIa dated to the Gumelnița Al (level I) and Gumelnița A2 (level IIa) periods. The individual pieces cannot be definitely identified on the basis of the very poor illustrations.

29. Brăila-Brăilița. C. Clay. (Fig. XIX)

Pattern on a circular face consists of a twisted clockwise spiral, which starts in the center. At one point, it divides into two interlocking branches. The outer branch ends short. Dimensions are unknown. Diam. of the face cca 4.5 cms.

Hartuche-Anastasiu 1968, Fig. 19: top row, left.

30. Brăila-Brăilița C. Clay. (Fig. XIX)

Handled (?) stamp with circular face. The motif is a simple clockwise spiral. Its channel becomes broader near the partly damaged edge. Dimensions are unknown, Diam. of the face cca 4.8 cms.

Hartuche-Anastasiu 1968, Fig. 19: second row, right.

31. Brăila-Brăilița. C. Clay. (Fig. XIX)

Handled stamp with convex spherical face. Broken handle with transverse perforation. The rounded base shows a simple clockwise spiral. From level I. Diam. of the base cca 7.2 cms.

Hartuche-Dragomir 1957, pp. 138-139, Fig. 12:1. - Hartuche-Anastasiu 1968, Fig. 19: second row, left. - Hartuche-Anastasiu 1976, one of Figs 205-207.

32. Brăila-Brăilița. C. Clay. (Fig. XIX)

Handled (?) stamp with circular face and a simple clockwise spiral pattern. Diam. of the face between 7.3 and 5.7 cms.

Hartuche-Anastasiu 1968, Fig. 19: top row, right. - Hartuche-Anastasiu 1976, one of Figs 205-206-207

33. Brăila-Brăilița. C. Clay. (Fig. XIX)

Handled stamp with circular face. Handle broken at the perforation. Design consists of a simple clockwise spiral. From level IIa. Diam. of the base between 7.3 and 5.7 cms.

Hartuche 1959, p. 226, Fig. 6: 2. – Dumitrescu 1974, Fig. 488: 4 (Gumelnița culture). – Hartuche-Anastasiu 1976, one of Figs 205-206-207.

34. Cakran de Fieri (Eastern Albania). B. Clay. (Fig. XIII)

Short handled stamp with elongated oval face. The flat base shows two rows of incised oblique lines (or chevrons?). The Middle Neolithic Cakran culture, contemporary with the Kakanj and Danilo cultures. Length of the face cca 5.3 cms.

Korkuti-Andrea 1975, p. 80, Pl. XXIII: 10.

35–37. *Cavdar* (district Sofia, Bulgaria). During two seasons of excavations an unknown number of clay stamp seals were found at this site having at least five (or six) successive levels of the Bulgarian Early Neolithic. The three published pieces probably belong to the Čavdar facies of the Karanovo culture, dated to the Karanovo I–II periods.

35. Čavdar. A. Clay. (Fig. V)

Handled (?) stamp with elongated oval base. The simple pattern consists of four longitudinal parallel zig-zag lines. Length of the base cca 4 cms.

Gimbutas 1974a, Fig. 72: 3 on p. 115, p. 273. – For the chronology of the site see *Georgiev 1973*, pp. 263–266, with mention of stamps on p. 271. – *Georgiev 1981*, pp. 101–102, Fig. 54: b.

36. Čavdar. A. Clay. (Fig. VIII)

Stamp with unperforated conical handle and longitudinal oval base with an incised pattern of 10 straight transverse lines. Length of the base 3.6 cms.

Gimbutas 1974a, Fig. 72: 5 on p. 273. – See *Georgiev 1973*, p. 271. – *Georgiev 1981*, pp. 101–102, Fig. 54: a.

37. Čavdar. A. Clay. (Fig. V)

Stamp with unperforated conical handle and longitudinal oval base engraved with longitudinal parallel zig-zag lines. Length of the base cca 7.8 cms. Winn wrongly mentions it as coming from Rug Bair.

Gimbutas 1974a, Fig. 72: 2 on p. 115, p. 273. – *Winn 1973*, Fig. 14b. – *Georgiev 1981*, pp. 101–102, Fig. 54: c.

38–39. Costişa (district Piatra Neamţ, Romania). Passek published two stamps as coming from this site. Their schematized drawings bear a close resemblance to each other, but their chronological positions given by Passek differ. We could not find the original report. The site may be Mănoaia–Costişa, near Piatra Neamţ. The excavations yielded Cucuteni Al finds.

Passek 1949, p. 45, Fig. 13: 5. - Vulpe-Zamosteanu 1962, pp. 315-318.

38. Costișa. C. Clay. (Fig. XXVII)

Handled (?) circular stamp with horn-like incised parallel lines on its face. From phase IB of the Tripolje culture (i.e. from the contemporary Cucuteni Al period). Diam. of the base 1.7 (!) cm.

Passek 1949, p. 45, Fig. 13: 5 – The pattern of the piece is very similar to the design of the Tiszaug-Kisréti part piece (Cat. No. 249). It was destroyed

during World War II. Unfortunately, its finder, K. Szabó, did not mention in his preliminary report whether this small object had a handle. If it had, this stamp seal would be the nearest parallel to this piece. Dr. I. Ecsedy kindly called my attention to this striking similarity. Cf. Szabó 1934, p. 37, Fig. 48.

39. Costișa. C or D. Clay. (Fig. XXVII)

Circular stamp with unperforated short handle. The slightly concave base of the piece is decorated with 6 lines of incised zig-zags. Phase $\gamma/1$ of the Tripolje culture. Dimensions are unknown.

Passek 1949, Fig. 62.

40. Csóka/Čoka, the Kremenyák hill (Vojvodina, Yugoslavia). C. White marble. (Fig. XXIV)

A two-handled vessel containing the hoard of a jeweller was found in pit 2. Among numerous artifacts made from bone, cardium, shell and animal tooth there was "a large fungiform ornamental marble button" with a foot-shaped handle. The circular face is undecorated. A single sherd of the Tisza culture dates the hoard to the early phase of the Late Neolithic, contemporary with the Vinča C phase. Diam. of the base 7 cms.

Banner 1960, p. 18, Pl. LII: 33. Cf. p. 34. – The kind information and drawing of O. Trogmayer.

41. Csongrád-Papp István farm (Co. Csongrád, Hungary). A. Clay. (Fig. XI)

Stamp with cylindrical projection and oval base. Edges on both the handle and base are rounded. No trace of decoration. Surface find in 1934, no associations. Its characteristic features date it to the Körös–Starčevo culture. Length of the base 7.3 cms.

Unpublished. Local Museum of Csongrád, Inv. No. 57.1.128.

42–43. *Cuneşti* (Co. Ialomița, Romania). Two stamp seals were found during trial excavations coming from unknown contexts. Their characteristic features date them to the Gumelnița culture. Passek dated both of them to the Tripolje IB period.

Passek 1949, Fig. 13: 1-2.

42. Cunești. C. Clay. (Fig. XXI)

Circular stamp with short horned handle. Face is broken and shows a pattern of three wide concentric circles. Unknown context. Diam. of the face 8.8 cms.

Popescu 1938, p. 117, Fig. 9:2. - Passek 1949, Fig. 13:1.

43. Cunești. C. Clay. (Fig. XXIII)

Circular stamp with perforated stalk. Face scored with eight roughly parallel incised lines. Diam. of the face 4 cms.

The piece has no exact parallel, but two EBA 2 examples found in Ahlatlibel are fairly close. A similar piece was found in Tarsus EBA II.

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Popescu 1938, p. 117, Fig. 9:3. – Passek 1949, Fig. 13:2. – Ahlatlibel: Koşay 1934, Ab-328 and Ab 323. Tarsus: Goldman 1956, Fig. 392:6, p. 232.

44-45. Danilo-Bitinj (district Sibenik, Croatia, Yugoslavia). Together with pottery objects, J. Korošec published a "pintadera fragment" and "a fragmented oval and more massive object" which can hardly be considered to be a pintadera. The secure context of both pieces is unknown, but they probably date to the Danilo culture.

44. Danilo-Bitinj. B? Clay. (Fig. XIV)

Handled (?) stamp, half of the base is broken. The oval face shows transverse engraved lines which cut the edges. Dimensions are unknown.

Korošec 1958-1959, p. 162, Pl. XXVIII: 2.

45. Danilo-Bitinj. B? Clay. (Fig. XIV)

Fragmented object. The broken oval base shows a design which consists of opposing rows of triangles along transverse lines. Technique of excised triangles resembles pottery decoration of later, Early Bronze Age phases. Dimensions are unknown.

Korošec 1958-1959, p. 162, Pl. XXVI: 6.

46. Dévaványa-Katonaföldek (Co. Békés, Hungary). A. Clay. (Figs I and XI) Stamp with wide unperforated cylindrical handle which was broken on the

end. The circular base shows no design. Körös–Starčevo culture, trench II of the 1970 excavations, fireplace A. Diam. of the base 3 cms.

Ecsedy 1972, p. 60, Pl. 21: 5. Through the kindness of Dr. I. Ecsedy I am able to publish a photograph of this piece.

47. Deve Bargan (Bulgaria). C. Clay. (Fig. XVIII)

Circular stamp with rounded handle. The base shows a deep incised spiral, unwinding from left to right. Associations are unknown. The Gumelnita culture. Diam. of the base 4.6 cms.

Gaul 1948, p. 173, Pl. XXXVI: 6. – Popov 1926a, Fig. 147. – Popov, 1926b, pp. 103–109.

48-51. Dikili Tash (Greek Macedonia, Greece). Three stamp seals and a clay cylinder are kept in museum collections from here. Exact location of the site and context (excepting piece Cat. No. 51) are unknown.

48. Dikili Tash. E. Clay. (Fig. XII)

Rectangular stamp with broken unperforated anthropomorphic handle. Half of the base is broken off. The base carries an incised pattern of herringbone lines. Sites and context unknown, museum sources suggest it may have come from Neolithic-Chalcolithic levels. Length of the base 8 cms.

CMS V, 2, No. 449, p. 349.

49. Dikili Tash. ? Clay. (Not illustrated)

A clay stamp seal was reported to have been found in Dikili Tash. No definite information is available from its museum record. The type and the exact chronology of the piece cannot be established.

CMS V, 1, p. xli, with further literature.

50. Dikili Tash. C. Clay. (Fig. XXV)

Barrel-shaped clay cylinder with axial perforation. It is for the most part broad in comparison to its height. Surface is decorated with irregular, incised vertical zigzag lines. Late Neolithic (?). Diam. 3 cms.

Zervos 1963, p. 636, Fig. 582. - Hood 1973, p. 193, Fig. 18. - CMS V, 1, p. xli.

51. Dikili Tash. D. Clay. (Not illustrated)

Handled (?) stamp seal with circular face. Decoration consists of irregular chevrons. The French excavations, trench A, beginning of the Early Bronze Age. Dimensions are unknown.

Deshayes 1968, p. 1064, Fig. 3. - CMS V, 1, p. xli.

52. The cave of Emen (district Tirnovo, Bulgaria). C or D. Clay. (Fig. XXVII)

Conical stamp with circular face, which bears two lines that meet in the centre of the face in a large dot. Four small dots are symmetrically arranged in each quadrant. Level B, perhaps the Gumelnita culture, or Early Bronze Age levels. Associations unknown. Diam. of the base cca 4 cms.

No equivalents to this motif have been found in South-East Europe. It does, however, resemble the impressed decoration on the top and bottom of an Amuq H clay cylinder. The motif of an EM II seal impression from Myrtos and a design from the Trapeza cave (MM I) also show strong similarities. Other good parallels are known from Tarsus EBA II, Troy II–V, and especially from the Alishar Höyük (from an uncertain period).

Nikolova-Angelov 1961, p. 313. Fig. 20: 3. – Amuq H: Braidwood-Braidwood 1959, Fig. 289: 5; Myrtos: Warren 1972, p. 227, Fig. 97: 134 + Pl. 77C = CMS V, 1, No. 20, p. 17; the Trapeza cave: CMS II, 1, No. 431; Tarsus: Goldman 1956, p. 232, Fig. 342: 3–5; the Alishar Höyük: Von der Osten-Schmidt 1930–1932, Part. II, p. 45, Fig. 37: 2350; Troy II-V: Matz 1928, Fig. 12: 5, with further literature.

53-57. Endrőd-Szujókereszt, site 39 (Co. Békés, Hungary). During recent excavations five clay stamp seals were recovered at this site. Three patterned pieces were found in pit 1, trench IX/1977, whereas two undecorated small stamps were found in culture levels. All are securely dated to the Körös-Starčevo culture.

53. Endrőd-Szujókereszt, site 39. A. Clay. (Figs I and III)

Stamp seal with rectangular base, slightly concave face and asymetrically placed handle, now broken. The design is contained within a rectangular face

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mounted on a conical base. The original surface was retained creating a positive impression. The motif consists of zig-zag lines which wind clockwise from the left corner to the centre. From the centre the line unwinds anti-clockwise to its starting point. With the exception of the point of origin and terminus, the angles of the design are characterized by a cul-de-sac projection (similar to the so-called biped-motif). The channel walls are irregularly carved by deep incisions at an oblique angle to the surface. Traces of the incising instrument are visible at the bottom. Length of the base 5.8 cms, width of the base 4.6 cms, preserved height 2.8 cms. From the upper, grey ashy level of pit 1 in trench IX, 90–120 cms.

Unpublished. Excavations of the author in 1977 and 1978. Tessedik Sámuel Museum, Szarvas Inv. No. 78.85.17. – For parallels of the motif, see the Pyrasos piece (Cat. No. 199) and a painted sherd found in Sesklo: *Tsountas 1908*, Fig. 98. The most striking parallel of the motif can be seen on the body of a clay figurine of the Middle Neolithic Alföld Linear Pottery, found at Szarvas, site 102 (unpublished).

54. Endrőd-Szujókereszt, site 39. A. Clay. (Figs I and IV)

A narrow stamp seal with elongated and upcurving oval base, unperforated cylindrical handle and slightly convex face. The handle was pinched at the end. Decoration consists of five longitudinal zig-zag lines: three run on the face and two on the widening edges. Length of the face 4.5 cms, height 3.9 cms. From the upper, grey ashy level of pit 1 in trench IX, 90–120 cms.

Unpublished. Excavations of the author in 1977 and 1978. Tessedik Sámuel Museum, Szarvas, Inv. No. 78.85.9.

55. Endrőd-Szujókereszt, site 39. A. Clay. (Figs I and IV)

A narrow rectangular stamp seal with a perforated handle. The design consists of a positive zig-zag impression on the original surface created by three rows of incisions: an enclosed zig-zag in the center and two open zig-zags on either side. Length of the base 3.9 cms, height 3.1 cms. From the upper grey ashy level of pit 1 in trench IX, 90–120 cms.

Unpublished. Excavations of the author in 1977 and 1978. Tessedik Sámuel Museum, Szarvas, Inv. No. 78.85.16. – It should be noted that the pieces listed under Cat. Nos 53–55 were found very close to one another in the same rubbish pit which may perhaps be associated with the house excavated in 1978, i.e. house 1 in trench XX.

56. Endrőd-Szujókereszt, site 39. A. Clay. (Fig. XI)

Simple cylndrical base, short unperforated handle. Face bears no trace of decoration. Diam. of the base 4.8 cms, height 4.4 cms (end of the handle is broken off). From trench V of the 1977 excavations, 60–80 cms.

Unpublished. Excavations of the author in 1977 and 1978. Tessedik Sámuel Museum, Szarvas, Inv. No. 78.34.26.

57. Endrőd-Szujókereszt, site 39. A. Clay. (Fig. XI)

Low cylindrical base, short unperforated handle with broken end. Worn face bears no trace of decoration. Diam. of the base 3.4 cms, height 3.3 cms. From trench XXVII of the 1978 excavations.

Unpublished. Excavations of the author in 1977 and 1978. Tessedik Sámuel Museum, Szarvas, Inv. No.: not inventorized yet.

58-63. Erősd/Ariuşd-Tyiszkhegy (Transylvania, Romania). At least five (or six?) stamp seals were found in the lowest level (VII) of the Late Neolithic site in the course of the excavations conducted by F. László (then the director of the Sepsiszentgyörgy Museum) in the years between 1907-1912. In his preliminary reports F. László did not publish them, only mentioned them briefly. He listed three characteristic features of these seals: short handle, circular face and spiral pattern. Although their secure context remains unknown, their occurrence in the lowest Erősd level dates them to the earliest phase of the Erősd-Cucuteni-Tripolje cultures.

F. László 1911, p. 219. - A. László 1973, p. 191. - A. László 1974, p. 477.

58. Erősd/Ariusd-Tyiszkhegy. C. Clay. (Fig. XVII)

Clay stamp with oval base and short unperforated handle. The pattern consists of disconnected parts of spirals. Length of the base cca 5.6 cms.

Roska 1927, p. 200, Fig. 126.

59-62. Erősd/Ariusd-Tyiszkhegy. C. Clay. (Fig. XXXI)

Four unpublished pieces excavated and mentioned by F. László now probably in the Sepsiszentgyörgy/Sfintul Georghe local museum. One piece (No. 59) has recently been published from this collection. The elongated oval base bears a horizontally placed S-spiral with semicircles inside the curves; short lines and V-s along the edges. Dimensions are unknown.

Miclea-Florescu 1980, Fig. 105, and p. 71.

63. Erősd/Ariusd-Tyiszkhegy. C. Clay. (Fig. XXII)

The round piece, believed by F. László to represent a lid handle, may in fact have been a stamp. Its face carries a wide impressed circular channel. Dimensions are unknown, without context.

F. László 1924, Pl. X: 10.

64-65. *Eutresis* (Boeotia, Greece). Surprisingly enough, only two stamp seals have been reported from this site.

64. Eutresis. C? Clay. (Fig. XIII)

Stamp seal, tips of base and top of handle lost in antiquity. Octagonal face, transverse perforated handle. Both parts of the face bear deep incised irregular squares. In the spaces enclosed within each square there are smaller quadrangular

incisions. From the upper filling of pit Z. Group II, probably Late Neolithic. Presumed length 5.2 or 5.5 cms.

Caskey-Caskey 1960, pp. 135, 137, 161, Pl. 52: II. 47.-CMSV, 2, No. 681 and CMS V, 1, p. xviii: "aus dem Ende des Spätneolithikums". – The schematic drawing in D. Theocharis 1973, p. 192, top row, right, probably represents the Eutresis seal. – For a somewhat similar, but much later seal see CMS I, No. 428: Crete, "Zeit der Älteren Palast".

65. Eutresis. E. Stone. (Not illustrated).

Long triangular body, perforated at one end. One of the long sides bears a crudely incised network. From pit I in the lower level of the EH III phase, now lost.

Goldman 1931, p. 199, Pl. 20: 2. - CMS V, 1, p. xli.

66. Ezerovo-lake Varna (district Varna, Bulgaria). C. Clay. (Fig. XXII)

Handled stamp with circular face. Fragmented. No trace of decoration. Unknown dimensions. From the Gumelnita IIc–IIIc period, probably comtemporary with the Karanovo VI period.

Todorova-Tončeva 1975, pp. 42, 45, Pl. 9: 7.

67. Ezerovo (?)-settlement mound (district Plovdiv, Bulgaria). C. Clay. (Not illustrated)

Stamp with rounded handle and circular base. The center of the face shows a deep hole, with four suspension perforations around it. Face broken. Probably the Gumelnita culture. Dimensions are unknown.

Detev 1963, p. 151, Fig. 15:2, mentioned as a stamp seal. Its use, in our opinion, has to be considered as uncertain.

68-75. Frumuşica-Cetățuia (Co. Neamţ, Romania). The eight clay stamp seals found in this settlement are of exceptional interest. It was the belief of the excavator, that all specimens, both the stratified and unstratified pieces, can be plausibly assigned to a given period of prehistoric occupation, to the phase of the bichrome Cucuteni A pottery. Thirteen other stamp-like pieces, all of different appearance were also found. The faces of these very small clay pieces bear no decoration. It is almost certain that these peculiar small conical objects cannot be regarded as stamps and probably served some other function. Similar small clay cones are frequently found Tripolje-Cucuteni sites (e.g. Hăbăşeşti, Luka Vrublevetskaia, Izvoare, Sultana, etc.).

Matasă 1946, pp. 21–22 and 72–73. – See Cat. Nos 90–92. Hăbăşeşti, 103–109. Izvoare, 127. Luka Vrublevetskaia. For Sultana, see Andrieşescu 1924, p. 74, Pl. IX: 5, 10, Pl. XXIII: 4. – Similar small clay cones are known from Truşeşti: Petrescu-Dîmbovița et al. 1953, p. 17, Fig. 13: 6–7. – Similar conical lumps probably used as lids for narrow-necked jars have been reported from Knossos V–III: Evans 1964, p. 231, Pl. 58: 3. 68. Frumușica-Cetățuia C. Clay. (Fig. XVIII)

Stamp with short horned unperforated handle and circular base. The face bears an incised clockwise spiral. Trench I, "plate-forme supérieure" or "inférieure", from a depth of 60–70 cms. Diam. of the base 7.3 cms. Traces of yellowish-red painting on its face,

Matasă 1946, pp. 22, 72, No. 1, 158, Pl. LI: 366.

69. Frumuşica-Cetățuia. C. Clay. (Fig. XX)

Stamp with short perforated handle and circular base. The face bears two interlocked spirals, unwinding in the same direction. Deliberately burnt. Trench I, "plate-forme inférieure", near fireplace I, from a depth of 70 cms. Diam. of the base 6.7 cms.

Matasă 1946, pp. 21-22, 72, No. 2, 158, Pl. LI: 367.

70. Frumuşica-Cetățuia. C. Clay. (Fig. XVIII)

Stamp with perforated conical handle and circular base. The face shows a simple incised clockwise spiral. Traces of white painting. Diam. of the base 4.2 cms.

Matasă 1946, pp. 72, No. 3, 158, Pl. LI: 370.

71. Frumuşica-Cetățuia. C. Clay. (Fig. XVIII)

Stamp with slightly oval base and broken handle. Fine radiating striations can be seen on the outer edge. Face bears simple clockwise interlocking spirals, which unwind parallelly. Diam. of the face 6 cms.

Matasă 1946, pp. 72, No. 4, 158, Pl. LI: 369.

72. Frumusica-Cetățuia. C. Clay. (Fig. XVIII)

Small stamp with perforated flat handle and circular, slightly oval base. Simple clockwise spiral, which turns back in the centre can be seen on the face. Diam. of the base 4.2 or 5.1 cms.

Matasă 1946, pp. 73, No. 5, 158, Pl. LI: 368.

73. Frumuşica-Cetățuia. C. Clay. (Fig. XXIII)

Small stamp with perforated handle and rectangular plaque. The face of the seal bears a simple incised clockwise meander. Traces of red polished painting. Diam. of the face 4.4 cms. Trench I, level 1, from a depth of 40 cms.

Matasă 1946, pp. 73, No. 6, 158, Pl. LI: 371. – For a somewhat similar motif see Goldman 1956, Fig. 392: 11, Tarsus EBA II.

74. Frumuşica-Cetățuia. C. Clay. (Fig. XXIII)

Handled (?) stamp with partly broken oval base. Edge irregularly shaped. The face has a quadranted circle design: two lines meet in the centre of the face, forming a cross. Each quarter of the circle is filled with chevrons or parallel lines. Diam. of the base 6.3 cms.

Matasă 1946, pp. 73, No. 7, 158, Pl. LI: 372.

75. Frumușica-Cetățuia. C. Clay. (Not illustrated)

Stamp seal (?) with unperforated handle and slightly concave oval base. No trace of decoration. Dimensions are unknown.

Matasă 1946, pp. 73, 158, Pl. LI: 373.

76-77. Grabovac-Vinogradi (near Obrenovac, Serbia, Yugoslavia). Two relatively securely dateable stamps have been recovered from this site.

76. Grabovac-Vinogradi. A. Clay. (Fig. V)

Roughly shaped clay stamp with elongated oval base and long unperforated handle. The face bears six longitudinal parallel zig-zag lines. Length of the base 5.5 cms. Associations are unknown, the Körös–Starčevo culture.

NCB 1968, p. 31, no. 46. – *Galović 1969*, p. 32, No. 50. – *Todorović 1967*, Pl. I: second row, left. – *Tasić 1973*, p. 52, No. 64, Pl. XVIII : 64. – *Gimbutas 1974a*, Fig. 72 : 1 on p. 115. – *Lazarovici 1971*, Fig. 7 : 2: he dates it to the late Körös–Starčevo (IV) period for unknown reasons.

77. Grabovac-Vinogradi. A. Clay. (Fig. IX)

Stamp with quadrangular face and unperforated squat handle. The worn decoration consists of irregularly incised concentric squares. From trench D-4, pit 1. The Körös-Starčevo culture. Height 4.5 cms.

Tasić 1973, pp. 52 and 55, Pl. XVIII: 63.

78. Gračanica-Gladnice (Serbia, Yugoslavia). A. Clay. (Fig. XI)

Stamp with round base and unperforated handle. No trace of decoration except for two short lines incised after firing. Körös–Starčevo culture, associations are unknown. Dimensions are unknown.

Glišić-Jovanović 1957, p. 227, Pl. V: 27.

79. Gradeshnitza-Loukanovo darvo (district Vratza, Bulgaria). B. Clay. (Fig. XV)

Stamp with short handle and elongated oval body. Its face shows deep incised longitudinal herringbone lines. From "habitation IA", level A of the Karanovo III period. Height 4 cms.

Nikolov 1974, p. 18, Fig. 22: left.

80. Gradeshnitza-Malo polje (district Vratza, Bulgaria). A. Clay. (Fig. X)

Handled (?) stamp with round base. The decoration is a simple cross of four incised lines. From level B of the Early Neolithic, the Karanovo I or II period. Dimensions are unknown.

Nikolov 1974, Fig. 8: right.

81-83. Greece. Three clay stamps dated to the Greek Neolithic were published recently. Their shapes and motifs are strange compared to other Neolithic Greek stamps. Neither the exact place, nor the precise circumstances of discovery of these stamps are known. Lack of information regarding the site(s) at which the stamps were found makes an accurate dating particularly difficult. 81. Greece. E. Clay (?). (Fig. XII)

Handled stamp with cruciform body. Two deep lines cross in the centre. Dimensions are unknown.

D. Theocharis 1973, p. 299, Pl. XX: fifth row, left.

82. Greece. E. Clay (?). (Fig. XII)

Probably handled stamp. Centre of the body consists of a regular square, with four long projections on each side. Four tear-shaped impressions pointing to the centre can be seen on its face. Dimensions are unknown.

D. Theocharis 1973, p. 299, Pl. XX: fifth row, second.

83. Greece. E. Clay (?). (Fig. XII)

In the center of the pattern there is a simple cruciform field, surrounded by similar meandric hooks in the four corners. Dimensions are unknown.

D. Theocharis 1973, p. 299, Pl. XX: third row, right.

84–86. Grivac (near Kragujevac, Serbia, Yugoslavia). Three clay stamps found here have been published without dated context and adequate illustrations. Their shapes do not enable an accurate dating; the proposed dates range from the Early Neolithic (i.e. the Körös–Starčevo culture) to the Vinča B–C phases. Finds from Grivac are considered to have possibly come from Starčevo levels by Galović. No evidence has yet been published to support this dating.

For the chronology of the site see Galović 1968, p. 2.

84. Grivac. E. Clay. (Fig. XXII)

Unbored conical body, round base. No trace of decoration. On the edge of the base short striations. Dimensions are unknown.

Gavela 1958, pp. 252-253, Fig. 33: top row, middle.

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85. Grivac. E. Clay. (Fig. XXII)
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Unbored conical body, probably round base. Most of the base and body is broken off. No trace of pattern. Dimensions are unknown.

Gavela 1958, pp. 252-253, Fig. 33: top row, right.

86 Grivac. E. Clay. (Fig. XXII)

Squat handled stamp with circular base. No trace of decoration. Dimensions are unknown.

Gavela 1958, pp. 252-253, Fig. 33: top row, left.

87-88. Gumelniţa-Măgura (near Olteniţa, Co. Ilfov, Romania). C. Clay. (Fig. XX) In the Olteniţa Museum a number of unpublished clay stamp seals can be found which were probably excavated at the tell of Gumelniţa. Two handled pieces with circular base and pinched stem bear simple anti-clockwise spiral patterns. They can be dated to the Gumelniţa culture.

The kind information of the late I. Nestor and I. Torma.

89. Gura Văii (near Gh. Gheorghiu-Dej, Co. Bacău, Romania). A. Clay. (Fig. IV)

Foot-shaped stamp seal, the upper part of the handle is broken off. It is a schematic depiction of the human foot with no rendering of the toes. The oval base carries an incised pattern of five longitudinal zig-zag lines. No secure associations. The Moldavian variant of the Körös–Starčevo culture. No details of dimensions.

The presently known earliest foot-shaped clay stamp seal was found in Byblos; it was dated to the Early Neolithic. Its pattern is similar to the simple ornament of the Velušina piece (Cat. No. 271).

V. Dumitrescu 1974, Fig. 488: 5. – For the site itself see Niţu-Buzdugan-Eminovici 1971, pp. 31-78, without mention of Körös-Starčevo finds. – For the Byblos EN piece: Dunand 1973, Fig. 52, No. 33.119. – For foot-shaped stamp seals, see Cat. No. 20. Bikovo.

90-92. Hăbăşeşti-Holm (district Tg. Frumos, Co. Iași, Romania). Three pintaderas were found here in Cucuteni A level(s).

90. Habaşeşti-Holm. C. Clay. (Fig. XX)

Circular stamp with perforated low handle and upcurving edge of base. The face is decorated with a fine anti-clockwise spiral. Although the design is still clear, the face of the seal appears to be worn. Diam. of the base 9 cms.

V. Dumitrescu 1954, p. 466, Fig. 44: 1. - Cf. V. Dumitrescu 1967, Fig. 53.

91. Hăbăşeşti-Holm. C. Clay. (Fig. XXI)

Roughly shaped stamp with conical unperforated handle and circular base. Part of the base is broken. Decoration consists of an irregular anti-clockwise spiral. Diam. of the face 4.5 cms.

V. Dumitrescu 1954, p. 466, Fig. 44: 5.

92. Habaşeşti-Holm. C. Clay. (Fig. XXII)

Roughly shaped stamp: squat handle and oval base with protruding central part. Decoration: circular channel around the protrusion. Diam. of the base 3.3 cms.

V. Dumitrescu 1954, p. 466, Fig. 47:11.

93. Hadersdorf am Kamp (Lower Austria). C. Clay. (Fig. XXIII)

Stamp with unperforated cylindrical handle and quadrangular base with convex lower face. The pattern is a simple grid. It dates to the Austrian variant of the Late Neolithic Lengyel culture. Dimensions are unknown.

Pittioni 1954, p. 155, Fig. 101:1.

94. Hódmezővásárhely-Bodzáspart, Pap Bognár farm (Co. Csongrád, Hungary). A. Clay. (Fig. V)

Stamp with unperforated handle and rectangular base with rounded corners. The elongated face bears a pattern of three longitudinal zig-zag lines, partly damaged. Secure provenance is unknown. Surface find or from and old excavation. The piece definitely belongs to the Körös-Starčevo culture. Unpublished. Tornyai János Museum, Hódmezővásárhely, Inv. No. 1914/37. I publish it with the kind permission of Mrs. K. Nagy.

95–99. *Hódmezővásárhely–Vata farm* (Co. Csongrád, Hungary). Five clay stamps were found during excavations of J. Banner at the Vata-farm. They differ from each other as regards shape and decoration. The total lack of excavation records does not permit association with secure contexts (i.e. pits, levels, or houses), since no *loci* are given for them in publications. With the exception of Cat. No. 96, they can be dated to the Körös–Starčevo culture on typological grounds. It would be advisable to consider whether this latter piece could also date to the Early Neolithic.

95. Hódmezővásárhely-Vata farm. A. Clay. (Fig. V)

Small stamp with asymmetrical unperforated handle set at an oblique angle to the oval base. Pattern consists of an irregularly incised zig-zag line running around and V-s at the rim of the face. Part of the edge is broken off. Length of the base 3.3 cms.

Banner 1935, p. 119, Pl. XVII: 4a-b. – Banner 1942, Pl. XV: 4a-b. – Kutzián 1944, p. 84, Pl. XLVI: a-b. – Gimbutas 1976b, Fig. 5: 3. – Lazarovici 1971, Fig. 7: 10 erroneously mentions it as found in Nessonis. – Tornyai János Museum, Hódmezővásárhely, Inv. No. 2614/33.

96. Hódmezővásárhely-Vata farm. A? Clay. (Fig. X)

Handled stamp with circular and slightly concave base. End of the handle and parts of the edge are broken off. The face of the seal is decorated with a finely incised quadripartite design, parts of which are isolated from one another: hatched squares, cross, grid, and a hatched triangle. Diam. of the base cca 4 cms.

Banner 1935, p. 119, Pl. XVII: 6a-b. – Banner 1942, pp. 24–25, Pl. XV: 6a-b. – Kutzián 1944, pp. 83–84, Pl. XLVI: 1a-b. – Makkay 1968, p. 281, with further literature. — Tornyai János Museum, Hódmezővásárhely, Inv. No. 2615/33, now missing.

97. Hódmezővásárhely-Vata farm. A. Clay. (Fig. VII)

Stamp with long, perforated handle and rectangular base. Apex of the handle is missing. The face has a design divided into quadrants by two lines in the shape of an X. Each quarter of the face is filled in with chevrons. Length of the face 6.2 cms.

Banner 1935, p. 119, Pl. XVII: 5a-b. – Banner 1942, pp. 24–25, Pl. XV: 5a-b. – Kutzián 1944, p. 83, Pl. XLVI: 5a-b. – Tringham 1971, Fig. 11: o. – Gimbutas 1976b, Fig. 5: 6. – Passek 1949, Fig. 13: 3 mentions it erroneously as having been found at a site called Körös. Childe 1939, p. 18, Fig. 4 mentions "prototypes as early as Halafian times and in the Chalcolithic layers of Alişar" for its parallels. Cf. also von der Osten 1957, p. 60, Fig. 6: 17.

98. Hódmezővásárhely-Vata farm. A. Clay. (Fig. IX) Large clay stamp, apex of the handle and edge are partly damaged. The design

of the roughly circular face consists of a coiling anti-clockwise meander line. Outer corners of the meander are broken off. Diam. of the base 7.2 cms.

Banner 1932, p. 15, Pl. VIII: 5-6. – Banner 1942, pp. 24–25, Pl. XVI: 5-6. – Kutzián 1944, p. 84, Pl. XLVI: 2a-b. – Gimbutas 1976b, Fig. 13: 1. – Tornyai János Museum, Hódmezővásárhely, Inv. No. 786/32 (old) and 62.19.29 (new).

99. Hódmezővásárhely-Vata farm. A. Clay. (Fig. XI)

Small clay stamp with conical handle and roughly circular base. Its slightly concave face is decorated with an unidentifiable design, heavily worn. Diam. of the base cca 2.4 cms.

Banner 1935, p. 119, Pl. XXI: 17. – Banner 1942, pp. 24–25, Pl. V: 17. – Kutzián 1944, p. 84, Pl. XLVI: 6. – Tornyai János Museum, Hódmezővásárhely, Inv. No. 4103/34.

100-102. *Hódmezővásárhely-Zsoldos farm* (Co. Csongrád, Hungary). Two or three clay pintaderas, dated to the Körös-Starčevo culture, from presumably two different settlement features were found at the site.

100. Hódmezővásárhely-Zsoldos farm. A. Clay. (Fig. VII)

Handled stamp of good quality. Mushroom shaped, unperforated handle, rectangular base, partly damaged. Pattern consists of irregularly incised U-s flanked by short lines. Length of the base 4 cms.

Banner 1932, p. 9, Pl. VIII: 1-2. – Banner 1942, pp. 24–25, Pl. XVI: 1–2. – Kutzián 1944, p. 83, Pl. XLVI: 3a-b. – Gimbutas 1976b, Fig. 5: 5. – Tornyai János Museum, Hódmezővásárhely, Inv. No. 1928/31.

101. Hódmezővásárhely-Zsoldos farm. A. (Fig. VIII)

Stamp with conical body and unperforated handle set at an oblique angle. The rectangular curved face bears irregular longitudinal zig-zag lines crossing each other, forming V-s and X-s. Found in an unnumbered rubbish pit. Poor quality. Length of the base 5.8 cms.

Banner 1932, p. 9, Pl. VIII: 3-4. – Banner 1942, pp. 24–25, Pl. XVI: 3-4. – Kutzián 1944, p. 83, Pl. XLVI: 7a-b. – Gimbutas 1976b, Fig. 5: 4. – Tornyai János Museum, Hódmezővásárhely, Inv. No. 1926/31.

102. Hódmezővásárhely-Zsoldos farm. A. Clay. (Not illustrated)

Clay anchor or stamp with longitudinally perforated handle and elongated base with broken ends. The center of the base shows a worn design of indeterminate nature. Found together with stamp No. 101 in a refuse pit. Height cca 7 cms.

Makkay 1976a, Pl. 1: 1. – Tornyai János Museum, Hódmezővásárhely, Inv. No. 1927/21.

103-109. Izvoare (near Piatra Neamţ, Moldavia, Romania). Six small clay and one white marble (Cat. No. 109) stamps were found at this site in levels dated to Izvoare II (contemporary with Protocucuteni-Cucuteni A2 and A3). The body is generally conical, short handle, circular base. Face sometimes slightly concave. No trace of decoration, except single striation on the edge of a larger piece. Diameters range from 1.6 cms to 2.8 cms. For their possible use see Cat. Nos 68–75.

R. Vulpe 1957, p. 237, Fig. 239: 1, Fig. 240: 1-5.

109. Izvoare. C. White marble. (Not illustrated)

Conical form with circular base. No traces of decoration. Dated to the Izvoare II period. Diameter of the face 2.2 cms.

R. Vulpe 1957, p. 254, Fig. 257: 5.

110. Kalambaki-Doxat tepe (Eastern Macedonia, Greece). E, probably C. Clay. (Fig. XII)

Low body, short (unperforated?) handle and oval base. Apex of handle and part of base are broken away. Face bears an irregularly anti-clockwise incised spiral. Diam. of the base 6.4 cms. Stray find.

CMS V, 2, No. 450, pp. 349 and 351. – *Grammenos 1978*, site 8, pp. 217–218, Fig. 6: 29.

111-116. Kanzianberg bei Villach (Carinthia, Austria). Six fragmented clay staps (?) were found at the Copper Age site. Insufficient information has been published concerning their shapes and chronology. Assignation to the Lasinja II-III phases seems to be most probable. Two unpublished pieces are in a private Villach collection (the kind information of Mr. Guido Vahlkampf, Vienna, University, Institute of Arhaeology, 1979). See Cat. Nos 115-116.

111. Kanzianberg bei Villach. D. Clay. (Fig. XXVIII)

Handled (?) stamp, square face with rounded corners. The face carries a design of three center lines that bisect the face of the seal, and connect chevron-like oblique lines. Between two center lines short opposite striations. Diam. of the base 5.2 cms.

Dolenz 1938, p. 67, Pl. III: 3.

112. Kanzianberg bei Villach. D. Clay. (Fig. XXVIII)

Handled (?) stamp with elongated base. Its design consists of transverse parallel zig-zags. Length of the base 8.9 cms.

Dolenz 1938, p. 67, Pl. III: 1.

113. Kanzianberg bei Villach. D. Clay. (Fig. XXVIII)

Fragment of a pintadera (?), part of base (?) with three segmented circles. Height cca 3.2 cms.

Dolenz 1938, pp. 67-68, Pl. III: 4.

114. Kanzianberg bei Villach. D. Clay. (Fig. XXVIII)

Three sided prismatic clay object, perhaps pintadera. The excavator suggested that it had perhaps been used as a stamp seal. All sides bear a decoration: three

longitudinal zig-zag lines and three rows of chequerboard pattern. Length of the piece 7.3 cms.

Dolenz 1938, p. 67, Pl. III: 2.

115-116. Kanzianberg bei Villach D. Clay. (Not illustrated)There is no available information as regards their shape and decoration.See Cat. Nos 111-116.

117. Kapitan Dimitrijevo-the Baniata tell (Bulgaria). C. Clay. (Fig. XXI)

Handled stamp with irregularly shaped circular base. Apex of handle is broken off. Face bears a wide central depression surrounded by a wide circular channel. Probably from the late phase of the Gumelnita culture. No details of dimensions. Associations: none.

Detev 1950, p. 17, Fig. 32: d.

118. The environs of Kaposvár (Co. Somogy, Hungary). D? Clay. (Figs I and XXVII)

Stamp with broken handle and heavily damaged face. The chevroned cross pattern meets in a dot in the centre of the seal, thus forming a quadranted circle. Quadrants are filled in with triple chevrons. Surface find from an unknown site. Although it was not collected together with securely dated finds, this find can perhaps be dated to the Lengyel or Lasinja culture, since it resembles seals of these periods in both paste, shape and decoration. (see the similar pieces from Prague–Bubeneć, Cat. No. 194, and Ruse, Cat. No. 210). The piece has a very close parallel among seal impressions from Keos. Diam. of the base 4.4 cms.

Unpublished, in private collection. – The Keos sealing: Younger 1974, Fig. 54 = CMS V, 2, No. 470.

119–121. Karanovo-settlement mound (district Nova Zagora, Bulgaria). It is particularly difficult to deal adequately with stamp seals from Karanovo, as only a fraction of the material found in excavations has been published in the preliminary reports. Eight or nine stamp seals were found, ranging in date from the Karanovo I to the Karanovo VI phase, but our study only includes the stamp material with definite information.

Georgiev 1971, p. 289. - Mellaart 1971, p. 289.

119. Karanovo-settlement mound. A. Clay. (Fig. V)

Stamp with long unperforated handle. Probably oval or rectangular face with longitudinal zig-zag lines. No details of dimensions. From the Karanovo II phase.

Georgiev 1961, Find chart B, "Übersichtstabelle der Kulturentwicklung in Karanovo". Folded find chart, second level. – See Georgiev 1969, p. 217: clay stamps with oval base and geometric pattern, dated to Karanovo II.

120. Karanovo-settlement mound. C. Clay. (Fig. XXI) Perforated handle and round base patterned with three concentric circles or

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"spiral-like ornament". No details of dimensions. From the Karanovo VI phase. Several Karanovo stamp seals were found in Karanovo V–VI levels.

Georgiev 1961, p. 83, folded find chart, sixth level. - Georgiev 1971, p. 289.

121. Karanovo-settlement mound. C. Clay. (Fig. XXIII)

This widely discussed stamp seal was allegedly found "in situ in einer durch Brand vernichteten Wohnstätte aus Karanovo VI, Nordsektor, drittes Siedlungsniveau samt anderen der zweiten Hälfte des Äneolithikums angehörenden Einrichtungen und Funden..." It is discoidal with a short conical handle, 2 cms long. Its face is partitioned into four quadrants by four incised straight lines. All four parts are decorated with symmetrical geometric motifs, which resemble one another very much. These geometric motifs have nothing in common with written signs or with the earliest Balkan writing systems as suggested by G.I. and V. Georgiev and others. Diam. 6 cms.

Makkay 1971b, pp. 1–9 with further literature. – Makkay 1976a, p. 21, note 52. – Cf. Georgiev 1971, p. 289. – Vladár–Bartoněk 1977, p. 422: "Hingegen ist das Liniengewirr auf dem Tonsiegel aus Karanovo ... schwerlich etwas anderes als ein kompliziertes; viergliedriges, vielleicht auf ursprüngliche figurale Zeichnungen zurückgehendes schematisches Ornament ... aufzufassen."

122. Kazanlik-settlement mound (Central Bulgaria). A. Clay. (Fig. VIII)

During excavations a number of clay stamp seals were found in the Early Neolithic levels of the Kazanlik tell. One piece with oval face bears a pattern of longitudinal zig-zag lines. No details of dimensions.

Unpublished. The kind information of Mr. R. Katinčarov.

123. Kraków-Nowa Huta, Zeslawice (Poland). C. Clay. (Fig. XII)

In pit 5 a clay pintadera was found together with finds of the local variant of the Late Neolithic Lengyel culture. Base and unperforated (?) handle are partly damaged. The oval face has a longitudinal row of incised chevrons. Length of the remaining part of the base cca 3.6 cms.

Godlowska 1970, p. 79 and 90, Pl. I: 10. Dr. W. D. Müller called my attention to this find.

124. Kunszentmárton-Jaksorérpart (Co. Szolnok, Hungary). A. Clay. (Fig. VII)

Unperforated flat handle, rectangular base with flat surface. End of the base is broken off. The pattern not only fills the face of the seal, but in fact extends over its edge. The design consists of transversal zig-zags. Surface find, collected in 1930 in the field of Mrs. Boldizsár Kiss. It can be dated to the Körös–Starčevo culture on typological grounds. Length of the base cca 10.8 cms (restored).

Unpublished. Koszta József Museum, Szentes, Inv. No. 54.156.87. I publish it with the kind permission of Dr. K. Hegedüs.

125. Kunszentmárton-Nagyérpart (Co. Szolnok, Hungary). A. Clay. (Figs IV and XXX)

Handled stamp with rectangular base, rounded corners. No perforation. The simple decoration consists of three longitudinal parallel zig-zag lines and unfinished V-s on the long sides. Found during an excavation of E. Schupiter/Zalotay on a Körös-Starčevo culture site. Length of the base 4.4 cms, height 3 cms.

The name and location of the site where the piece was found varies greatly in the literature: *Kutzián 1944*, pp. 42–43, Pl. XVIII: 11a-b: from Kunszentmárton-Nagyérpart. – *Schupiter 1931*, p. 58, Pl. XII: 20–21: Szentes-Nagyjaksorpart. – *Banner 1932*, p. 28, Pl. XLI: 20–21: Nagyjaksorpart. – *Tompa 1937*, Pl. 14: 10: Szentes-Nagyrétpart. The piece is now housed in the Koszta József Museum, Szentes, without inventory number.

126. Lipová-Ondrochov, Homokpuszta (district Nové Zámky, Slovakia). D. Clay. (Fig. XXVIII)

Rectangular base with short, unperforated handle. Pattern consists of seven longitudinal parallel lines with traces of red paint. From pit 30/58. Dated to the Middle Copper Age of Slovakia, a territorial variant of the Lasinja–Furchenstich–Balaton II–III groups, contemporary with the Bodrogkeresztúr culture of the Great Hungarian Plain. Length of the base 6.5 cms, width 4 cms.

Točik 1961, pp. 330, 335, Fig. 12: 7. - Točik 1964, pp. 157, 159.

127. Luka Vrublevetskaia (Ukraine). C. Clay. (Not illustrated).

Among five small clay cones one larger example may be regarded as a stamp seal. It is long-handled with a probably circular face. No trace of decoration. Tripolje culture. Diam. of the base cca 2.7 cms.

Bibikov 1953, p. 201, Pl. 71 : o. – For parallels of the small cones see Cat. Nos 68–75!

128–144. *Maliq* (Eastern Albania). The number of clay stamp seals and cylinders recovered from this site is high in comparison with sites of contemporary Balkan cultures. At least 17 seals were found during excavations, 6 of which are clay cylinders and 11 are stamp seals. These indicate an extensive use of stamp seals and cylinders. Their fixed stratigraphical position dates them to the Maliq IIa period, contemporary with the Thessalian Late and Final Neolithic, the Vinča C, the Tisza and early Lengyel cultures. Photos and drawings in different publications vary greatly as regards the shape, decoration and dimensions of these seals.

Prendi 1966 and 1969. - Prendi 1976, p. 71, Pl. XX: 1-4, 12-15.

128. Maliq. C. Clay. (Fig. XXI)

Short thin handle, round base. In the centre of the base round depression surrounded by two concentric channels. Diam. of the face cca 4.5 cms.

Prendi 1966, p. 260, Pl. X: d, top row, second from the left.

129. Maliq. C. Clay. (Fig. XIX)

Short unperforated handle, round base, bearing a simple clockwise spiral motif. Diam. of the face between 3 and 4 cms.

Prendi 1966, p. 260, Pl. X: 4, top row, third from the left. – *Prendi 1976*, p. 71, Pl. XX : 2.

130. Maliq. C. Clay. (Fig. XIX)

Handled (?) stamp seal with, round base. Face bears a simple clockwise spiral motif. Diam. of the base perhaps 7.5 cms.

Prendi 1976, p. 71, Pl. XX: 4.

131. Maliq. C. Clay. (Fig. XVII)

Unperforated (?) handle, round base. Face carries an interlocked clockwise whirling spiral motif of four branches. Diam. of the base cca 4.8 cms.

132. Maliq. C. Clay. (Fig. XVII)

Unperforated pointed stalk, round base. Face bears a whirling star motif (i.e. a twisted wheel or the Catherine wheel motif) composed of four radiating curved half spirals. The design gives the impression of two opposing single spirals. Diam. of the face cca 4.2 cms.

Prendi 1966, p. 260, Pl. X : d, middle row, third from the left. – Korkuti 1971, Fig. 14. – Prendi 1976, p. 71, Pl. XX : 3. – This motif has no parallels among early South-East European stamp seals. Apart from some Cretan pieces, dated to the prepalatial period, similar patterns can be seen on EBA Anatolian clay stamp seals. Cf. CMS II, 1, No. 81 (Agia Triada, Tholos A) and CMS II, 1, No. 189 (Lenda, Tholos no. I). – Han Ibrahim Şah: Ertem 1974, pp. 67–68, Pl. 59: 2 (Level V), Pl. 60: 2 (Level VII). – Tepecik mound: Esin 1970, p. 167, Pl. 11: 3: EBA. – Pulur: Koşay 1976a, pp. 189–190, Pl. 88, EBA, levels III–X. Cf. Koşay 1971a, Pl. 79. and Koşay 1972, Pl. 97.

133. Maliq. C. Clay. (Fig. XVII)

Large stamp seal with short perforated handle and flat round base. One third of the base is broken. Curved lines radiate from the centre of the face to the edge. Diam. of the face cca 8 cms.

Prendi 1966, p. 260, Pl. X:d, middle row, right. For its parallels see Cat. No. 132.

134. Maliq. C. Clay. (Fig. XXIV)

Stamp with conical body, unperforated handle. Base consists of a continuous fringe forming a C-spiral. Diam. of the base cca 2.6 (?) cms.

Prendi 1966, p. 260, Pl. X : d, middle row, fifth from the left. – For C-spirals on Minoan seals see *Kenna 1960*, p. 102, No. 103. – *CMS II*, *1*, Nos 25, 82, 110, 180, 243, 405, 446a, 472. – C-spirals on Lerna seal impressions: *CMS V*, *1*, Nos 45, 51, 100. – Kea–Agia Irini: *CMS V*, *2*, Nos 467, 468, 469. – See also Cat. No. 154, Nea Nikomedeia.

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135. Maliq. C. Clay. (Fig. XXIV)

Stamp seal of usual form: long base with longitudinal large loop handle. Face bears lines of oval hollows between straight longitudinal lines. Length of the base cca 7.5–8 cms.

Prendi 1966, p. 260, Pl. X: d, middle row, fourth from the left.

136. Maliq. C. Clay. (Fig. XXIV)

Handled stamp of uncertain shape. The face with broken ends (or edge) shows transversal oval protrusions with deep cuttings on both sides. Length of the base cca 4-4.5 cms, or perhaps 5.8 cms?

Prendi 1966, p. 260, Pl. X : d, top row, fifth from the left. – *Prendi 1976*, p. 71, Pl. XX : 1.

137. Maliq. C. Clay. (Fig. XXII)

Handled stamp of uncertain shape. Three or four parallel wavy lines can be seen on the sinous base. Length (?) of the base probably 5.5 cms.

Prendi 1966, p. 260, Pl. X: d, top row, fourth from the left.

138. Maliq. C. Clay. (Fig. XXIV)

Large stamp with flat handle and oval base. Ends of the base are broken off. Pattern consists of concentric rectangles, breaking into an anti-clockwise spiral. Two bordering lines can be seen by the edge. Width of the base cca 6 cms.

Prendi 1966, p. 260, Pl. X: d, middle row, left.

139. Maliq. C. Clay. (Fig. XXVI)

Clay cylinder bored through the long axis. Top and bottom of the surface are bordered by single lines. Four semicircles can be seen on both (?) ends (not depicted on the drawing). The surface is decorated with slightly oblique vertical zig-zags. Height between 6 and 10 cms?

Prendi 1966, p. 260, P. X: f. – Details, as seen in a photo, differ greatly from this drawing: Korkuti 1971, Fig. 14. Our drawing is based on Pl. XX: 12 in Prendi 1976. It is possible that Prendi 1966, Pl. X: f and Prendi 1976, Pl. XX: 12 represent two different clay cylinders.

140. Maliq. C. Clay. (Fig. XXVI)

Clay cylinder probably with axial perforation. Concentric circles around the perforation can be seen on both (?) ends. Surface is bordered by single lines. The main motif consists of four horizontal concentric rectangles. The motif on the cylinder closely resembles the pattern seen on the Maliq stamp seal Cat. No. 128. Height cca 6.5–7 cms?

Prendi 1966, p. 260, Pl. X: f, left. – Prendi 1976, Pl. XX: 15 is perhaps also identical with this piece.

141. Maliq. C. Clay. (Fig. XXVI)

Barrel-shaped clay cylinder with wide axial perforation. Surface is decorated with oblique lines of sub-triangular hollows. One bordering line. Height cca 7.5 cms?

Prendi 1966, p. 260, Pl. X : f, right.

142. Maliq. C. Clay. (Fig. XXVI)

Part of the side of a clay cylinder, probably perforated through the long axis. Surface motif consists of two twisted spirals, which run into opposite directions. Height cca 7 cms.

Prendi 1966. p. 260, Pl. X: f, second from the left.

143. Maliq. C. Clay. (Fig. XXVI)

Clay cylinder with axial perforation. On the upper edge short incisions. Surface is bordered with double lines, with small impressions and short lines outside them at both ends. The main motif consists of four or five X-shaped incised symbols inside oval fields. Height perhaps 9.6 cms.

Prendi 1976, p. 71, Pl. XX: 13.

144. Maliq. C. Clay. (Fig. XXVI)

Clay cylinder with axial perforation. Surface is bordered with a single incision on the upper end. Main motif: two pairs of three concentric ovals arranged above each other, running around. The ovals cover the whole surface of the cylinder with their ends meeting. Height perhaps 10.4 cms.

Prendi 1976, p. 71, Pl. XX: 14.

145. Manolé-Razkopanitsa (near Plovdiv, Bulgaria). D. Clay. (Fig. XXVII)

Stamp with unperforated long handle and round base. Face bears an interesting motif: a centre dot surrounded by four small circular depressions bored into the face of the seal, connected with the central dot by straight lines. It was found in the lower level of the tell of Razkopanitsa, dated to the Ezero culture of the Balkan Early Bronze Age. No details of dimensions. For contemporary parallels see seals from Bajč–Vlkanovo (Cat. No. 17) and Němčice na Hanou (Cat. No. 171); for a similar motif from Troy III–V, see *Matz 1928*, Fig. 12: 2, with further literature. This motif could be a simplified version of the design of a Lerna seal impression: CMS V, 1, No. 117, House of Tiles, room XI, Lerna III d (= EBA II).

Detev 1968, Fig. 29: find chart, lower level. - Detev 1971, Fig. 1: lower level.

146. Martvica mogila (near Preslav, Bulgaria). C. (Fig. XX)

Handled (?) stamp with irregularly shaped circular base. Face bears an irregular clockwise incised spiral. Diam. of the base cca 4.7 cms. It can probably be dated to the fully evolved phase of the Gumelnita culture. No context.

Radunčeva 1967, p. 87, Pl. I: 10.

147. Nagykanizsa-Sánc (Co. Zala, Hungary). D. Clay. (Not illustrated) Crescentic clay stamp with short unperforated handle. Narrow convex face

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with upcurving ends. Pattern consists of dense transverse zig-zags made by "Furchenstich" technique. From pit VII/a, dated to phase II (or III?) of the Lasinja-Balaton culture. Length of the base 5 cms.

N. Kalicz, R. F. 27, 1974, pp. 14-15. - Kalicz 1976, p. 41, Pl. 10:1.

148–149. Nándorválya/Valea Nandrului (Transylvania, Romania). A clay stamp or anchor, and a stone cylinder were found by Zs. Torma in the course of her field reconaissance in the last century; these finds probably date to the Vinča A–B culture.

148. Nándorválya/Valea Nandrului, the great cave. B. Clay. (Not illustrated)

Clay anchor or stamp seal with an 8 cms long and 3 cms wide base. Ends of oblique unperforated handle and base are broken off. No trace of decoration on base. It can be dated to the Vinča A-B phases. Surface find collected by Zsófia Torma before 1880.

Torma 1880, p. 24, Pl. X: 6. - Makkay 1976a, p. 16, Pl. 1: 2.

149. Nándorválya/Valea Nandrului. B. Stone. (Fig. XXV)

Part of a cylinder, made of trachyte. On the remaining central part a row of six different signs, divided by a thin vertical line. The piece is now missing from the Zsófia Torma Collection of the Transylvanian National Museum. Width cca 5 cms, height 2 cms. Found by Zsófia Torma before 1879. It can probably be dated to the Vinča A-B periods. The piece may have been found in the great cave of Nándorválya (see Cat. No. 148), but there is no evidence to support such a hypothesis.

Torma 1879, p. 194, Pl. IV: 5a-b. – *Torma 1882*, pp. 14, 31, 44, Pl. IV: 7. Inaccurate drawings were published in both articles. – *Gooss 1878*, p. 606, Fig I: 5, erroneously published the piece as found in Tordos. – *Vlassa 1970*, p. 21, Fig. 19: 5, with the original drawing of Zsófia Torma.

150–170. *Nea Nikomedeia* (Greek Macedonia, Greece). Twenty-one partly incomplete clay stamp seals were found at Nea Nikomedeia. With the exception of some pieces with spiral patterns (Cat. Nos 154–156) from the Late Neolithic, these date to the Early Neolithic. In *CMS V*, 2, p. 565, these seals with spiraloid patterns are erroneously dated to the Early Neolithic, although Rodden definitely assigned them to the LN.

It would thus appear that EN clay seals exhibiting geometric patterns were fairly common at Nea Nikomedeia. Patterns are not at all comparable to those on the pottery. Some of the stamps found at this site have designs similar to those on stamps from Çatal Höyük, and of the Karanovo I–II and Körös–Starčevo cultures. Since relationships to the Çatal Höyük pieces will be discussed in the chapter covering chronological problems, the most striking similarities to the Karanovo and Körös–Starčevo stamp seals can be listed as follows:

- (a) step pattern of opposed horn-like meandroid bands: Nea Nikomedeia: Cat. No. 150 and Endröd: Cat. No. 53; Tečić: Cat. No. 247.
- (b) longitudinal zig-zag lines or channels, or central zig-zag line(s) and on both sides V-s in the angles: Nea Nikomedeia: Cat. Nos 163, 165 and Azmaška mogila: Cat. Nos 11–14; Čavdar: Cat. Nos 35, 37; Endrőd: Cat. Nos 54–55; Grabovac: Cat. No 76; Gura Văii: Cat. No. 89; Hódmezővásárhely–Bodzáspart: Cat. No. 94; Hódmezővásárhely–Vata farm: Cat. No. 95; Karanovo: Cat. No. 119; Kazanlik: Cat. No. 122; Kunszentmárton–Nagyérpart: Cat. No. 125; Óbessenyő/Bešenova Veche: Cat. No. 178; Rug Bair: Cat. No. 203; Túrkeve–Lyukashalom: Cat. No. 272; Vinča: Cat. No. 279.
- (c) A continuous longitudinal central zig-zag rib: Nea Nikomedeia: Cat. Nos 160–162 and Azmaška mogila: Cat. No. 15; Endrőd: Cat. No. 55.
- (d) Central cruciform relief band flanked by engraved V-s: Nea Nikomedeia: Cat. Nos 165–166 and Hódmezővásárhely–Vata farm: Cat. No. 97; Hódmezővásárhely–Zsoldos farm: Cat. No. 101.
- (e) Longitudinal or transversal wide zig-zag channels running parallel: Nea Nikomedeia: Cat. No, 164 and Kunszentmárton-Jaksorérpart: Cat. No. 124.

These striking similarities may indicate the important role played by the Nea Nikomedeia (and other contemporary) stamp seals in the introduction of the clay stamp seal industry to South-East Europe, transmitting thereby Anatolian influences. These first, probably indirect influences occurred in the Karanovo I–II culture. The more northwestern Körös–Starčevo culture may have received indirect influences, transmitted by the Karanovo or Protosesklo cultures. It must be emphasized that stone stamp seals are lacking in the Nea Nikomedeia assemblage, as well as in the Karanovo and Körös–Starčevo cultures. On the other hand, patterns of Nea Nikomedeia stamps show a much wider range of variations than the contemporary EN stamp seals of the Balkans. In any case, Nea Nikomedeia seals form a link between the earliest seals of Anatolia and the Balkans. Since the Nea Nikomedeia stamp seals have recently been published in full detail, we shall only give a short description.

Rodden 1964a, pp. 605–607. – Rodden 1965. – CMS V, 2, Nos 691–711. – Edwards et al. 1977, Pl. 19: b. – For similarities between stamp seal patterns and motifs seen on pottery see Endröd, Cat. No. 53, and Rodden 1964a, p. 605, and Milojčić–Milojčić-v. Zumbusch 1971, p. 60. – CMS V, 1, p. xvii, note 11, with further literature. The exact find spot of the individual pieces has not yet been published.

150. Nea Nikomedeia. A. Clay. (Fig. III)

Stamp with unperforated conical handle and square base. Excised step pattern consists of two pairs of inverted and opposed horn-like meandroid bands. Early Neolithic. From D7–E7 burnt wall trench. Length of the base 3.7 cms.

Rodden 1964a, Fig. 20: middle row. – Rodden 1965, Fig. d; left. – Milojčić 1964, p. 65, Fig. 2: 17. – D. Theocharis 1973, p. 192, second row, left and Pl. XX: top row, left. – CMS V, 2, No. 691. – Hauptmann 1971, p. 377, Fig. 65: 10.

151. Nea Nikomedeia. A. Clay. (Fig. VI)

Stamp with perforated cylindrical handle and bipartite conical base. A pair of meandrical steps forms a cross in the centre of the base. Contour of the face is stepped. Early Neolithic. From A 3/2 fC. Length 2.4 cms.

Rodden 1964a, Fig. 20: bottom row, middle. – *Milojčić 1964*, p. 65, Fig. 2: 16. – *CMS V*, 2, No. 692.

152. Nea Nikomedeia. A. Clay. (Fig. VI)

Tripartite base consisting of three connected rectangles. The main motif is composed by the continuous edge of the deep engraved rectangles. Part of the base and handle are broken off. Diam. of the base 4.5 cms. From C 6/1.

Rodden 1964a, Fig. 20: top row, left. - CMS V, 2, No. 693. - D. Theocharis 1973, p. 192, middle row, middle and Pl. XX: second row, left.

153. Nea Nikomedeia. A. Clay. (Fig. VI)

Conical body, cylindrical handle, unperforated. Edge of the base is damaged. Decoration consists of wolf's tooth pattern composed of connected solid triangles between deeply engraved triangles. Diam. of the base 5 cms. From Tx 3/1.

CMS V, 2, No. 694.

154. Nea Nikomedeia. C. Clay. (Fig. XIX)

Fragmented stamp: part of oval base, unperforated handle. Decoration: part of running spiral or C-spiral. The surviving left part runs clockwise. Length 3.5 cms. This piece may be one of the "baked clay stamps with spiral motifs", dated to the Late Neolithic by Rodden. From M 6/0.

Rodden 1964b, p. 116. - CMS V, 2, No. 695. - For the C-spiral motif on contemporary LN stamps see Cat. No. 134.

155. Nea Nikomedeia. C. Clay. (Fig. XIX)

Conical body, round base, unperforated handle. Wide channel of simple spiral unwinding clockwise. From the Late Neolithic. Surface find, found in the ploughzone. It is uncertain whether its dating was based on typological features. Diam. of the base 2.6 cms.

CMS V, 2, No. 696.

156. Nea Nikomedeia. C. Clay. (Fig. XIX)

Round base, oblique, unperforated handle. Face bears deep and wide engraved channel of simple clockwise spiral. From "a 6/1a LNT", Late Neolithic. Diam. 2.7 cms.

CMS V, 2, No. 697.

157. Nea Nikomedeia. A. Clay. (Fig. X)

Probably conical body, the upper part of which is broken. The oval face bears five horizontal lines of small dots in its lower part and vertical lines of similar dots on the upper part. Diam 5.5 cms. From C 0/0.

CMS V, 2, No. 698.

158. Nea Nikomedeia. A. Clay. (Fig. X)

Conical body (?) with pointed oval base. Half of the body is broken off. Face bears a motif consisting of oblique lines of conical impressions. Diam. 4.5 cms. From L 6/1 Fea. R.

CMS V, 2, No. 699.

159. Nea Nikomedeia. A. Clay. (Fig. X)

Conical body, short cylindrical unperforated handle with rounded end. A central impressed dot is surrounded by six dots of similar dimensions. From D 4/2. Diam. of the hase 3 cms.

CMS V, 2, No. 700.

160. Nea Nikomedeia. A. Clay. (Fig. VI)

Long thin base with short handle. Unfinished perforation. Deep engraved triangles on both side of the base, the central part of the face is decorated by a longitudinal zig-zag pattern. Surface find dated to the Early Neolithic on typological grounds. Length: 5.1 cms.

CMS V, 2, No. 701.

161. Nea Nikomedeia. A. Clay. (Fig. VI)

Long thin base, unperforated handle. On face relief zig-zag pattern, similar to Cat. No. 160. Length of the base 5.3 cms. From D 1/3.

162. Nea Nikomedeia. A. Clay. (Fig. VI)

Conical body, elongated oval base, unperforated handle. The face bears a zigzag pattern, similar to Cat. Nos 160–161. Legth of the base 3.2 cms. From A 3/2.

Rodden 1964a, Fig. 20: middle row, second from the left. - CMS V, 2, No. 703.

163. Nea Nikomedeia. A. Clay. (Fig. IV)

Conical body with thin elongated oval base. Unperforated handle. Two deep engraved longitudinal zig-zag channels compose a continuous zig-zag rib leaving triangle motifs on both sides. Length of the base 5.6 cms. From L 6/0.

Rodden 1964a, Fig. 20: bottom row, right. – D. Theocharis 1973, p. 192, top row, middle and Plate XX: top row, second from the right. – CMS V, 2, No. 704.

164. Nea Nikomedeia. A. Clay. (Fig. IV)

Flat, rectangular base, no handle. Highly damaged. Three or more wide

CMS V. 2. No. 702.

longitudinal zig-zag channels compose the pattern. Points of triangles extend over the edges. Length of the extant part: 5.5 cms. From L 8/0.

Rodden 1964, Fig. 20: middle row, right. - CMS V, 2, No. 705.

165. Nea Nikomedeia. A. Clay. (Fig. IV)

Conical body, elongated oval base, short, unperforated handle. Two longitudinal zig-zag channels compose a central zig-zag rib and V-s in the angles. Inner sides of V-s are cut at the edges. Length of the base 5.4 cms. From TX 1/1 7–9.

Rodden 1964a, Fig. 20: bottom left. – Rodden 1965, Fig. d on p. 86. – D. Theocharis 1973, p. 192, second row, right, and Pl. XX: top row, second from the left. – CMS V, 2, No. 706.

166. Nea Nikomedeia. A. Clay. (Fig. IV)

Conical body, elongated oval base, perforated handle. Tip of the handle is broken off. Face bears a central cruciform motif flanked by incised V-s. From A 2/3. Length of the base 4.4 cms.

Rodden 1964a, Fig. 20: middle row, left. - CMS V, 2, No. 707.

167. Nea Nikomedeia. A. Clay. (Fig. IV)

Rectangular base with rounded corners and a short unperforated handle. Face bears a motif composed of six or seven longitudinal incised zig-zag lines. Part of outer lines extends over the edge. Length of the base 4 cms. From TX-10-1.

CMS V, 2, No. 708.

168. Nea Nikomedeia. A. Clay. (Fig. VI)

Cylindrical unperforated handle, upper part is broken off. Trefoil base with a deep round impressed dot in the center. Height: 4.6 cms. From TX-8-0.

CMS V, 2, No. 709.

169. Nea Nikomedeia. A. Clay. (Fig. X)

Conical body, short, wide, unperforated handle. Elongated rectangular base with two parallel deep channels. Length of the base 5.6 cms (damaged). From D 9/2.

Rodden 1964a, Fig. 20: top row, right. - CMS V, 2, No. 711.

170. Nea Nikomedeia. A. Clay. (Fig. X)

Conical body, long oval base, unperforated short handle. Thin incised straight and curved lines which form an unusual, dagger-like motif can be seen along the edge. Length of the base 3.8 cms. From D 9/2.

Rodden 1964a, Fig. 20: middle row, fourth from the left. – CMS V, 2, No. 711. – As regards D. Theocharis 1973, p. 192, top row right, see Cat. No. 64. Eutresis.

171. Němčice na Hanou (Czechoslovakia). D. Clay. (Fig. XXVII)

Stamp with high conical body and widening base. Axial perforation widens into a hollow at the base. Four short lines divide the face into quarters. Each quarter

is filled in with parallel short lines, at right angles to the next group of lines. From the Bošáca type of the Late Copper Age Baden culture. Diam. of the base cca 8 cms.

Pavelčik 1967, p. 25, Pl. VII: 87. – For a parallel from Troy II–V, see Matz 1928, Fig. 12: 3, with further literature.

172. The cave of Nemea (on the south slope of the Tsoungiza hill, near Heraklion, Greece). E. Stone. (Not illustrated)

"A button-shaped seal of whitish stone, bearing on one side a checkerboard pattern marked with deeply incised lines and on the other a peculiar character like a triangle dotted at its center." No details of dimensions.

Blegen 1927, p. 439. – Childe 1957, pp. 60–61. – Cf. Blegen 1925, pp. 175–184 and Blegen 1926, p. 127, for details of the excavations. – CMS V, 1, p. xli mentions it as missing.

173-176. *Nessonis* (Thessaly, Greece). Four stamps were recovered in this locality, either from the same site (Nessonis, magula I), or from various sites.

173. Nessonis, magula I A. Clay. (Fig. VIII)

Foot-shaped stamp with transversal suspension hole. A design of herringbone lines following the contour of the base is engraved on the base. Length of the base 4.1 cms. Early or developed phase of the Early Neolithic Protosesklo culture. Surface find collected by D. R. Theocharis in 1962. It is uncertain whether this dating is based on typological traits or on the personal impression of D. R. Theocharis.

D. Theocharis 1967, p. 148, Fig. 89: bottom left. – Hauptmann 1971, p. 371. – D. Theocharis 1973, Pl. XX: second row, second from the left. – CMS V, 2, No. 722, p. 585.

174. Nessonis. A or B. Stone. (Fig. III)

Quadrangular slightly convex base with widening projections on each side. Flat perforated handle. Face bears a fine labyrinthine design, with a circular drilled hole at the end of each groove. Max. diam. of the face 4.6 cms. No details of context. Early or Middle Thessalian Neolithic. Found in 1965.

D. Theocharis 1973, Fig. 272: b and Pl. XX: fifth row, right. - CMS V, 2, No. 514, p. 405.

175. Nessonis. A or B. Stone. (Fig. III)

Rectangular base with small projections at both ends. Flat, perforated handle. Face bears a simple meandric labyrinthine design, consisting of two unconnected parts. Length of the face 5.6 cms. No details of context. Early or Middle Thessalian Neolithic.

CMS V, 2, No. 723, p. 585.

176. Nessonis. A or B. Stone. (Not illustrated)

Stone stamp seal of unknown shape. Round face with concentric circle(s) or depression. No details of dimensions. Context unknown. Early or Middle Thessalian Neolithic.

D. Theocharis 1973, Fig. 272: e.

177. Nitriansky Hrádok, plantáz JRD-Diely (district Nové Zámky/Érsekújvár, Czechoslovakia). D. Clay. (Fig. XXVIII)

A complete stamp seal was found during deep ploughing together with pottery finds of the Late Copper Age Boleráz group of the Baden culture. High unperforated body with two relief bands between three longitudinal zig-zag channels. Dimensions: length 4.6 cms, height 7 cms.

Točik 1977, pp. 284 and 291, Fig. 179 : 2. – *Němejcová-Pavúková 1979*, p. 394 calls the site "Výsoky breh". – *Pavúk 1981*, p. 97, Fig. 10 on p. 26, right.

178. Óbessenvő/Besenova Veche (Transylvania, Romania). A. Clay. (Fig. V)

Oval base with broken end. Short unperforated handle. Face bears longitudinal wavy lines, partly distorted. Length probably 5.5 cms. No context. It dates to the Körös–Starčevo culture.

Kisléghi-Nagy 1911, pp. 157–158, Pl. III: 6. – For details of the excavation see Kisléghy-Nagy 1909, pp. 146–154 – Kutzián 1944, p. 83, Pl. XLVI: 8a-b. – Lazarovici 1969, p. 18. It is mentioned as coming from Ostrovu Golu in the caption of Fig. 9:8. – Lazarovici 1971, Fig. 7:4.

179. Obrež-Baštine (Voivodine, Yugoslavia). A. Clay. (Not illustrated) A clay stamp seal dated to the Körös-Starčevo culture is mentioned from this

site. No details of dimensions. No context. Unpublished? Mentioned by Tasić 1973, pp. 52–53. – See Brukner 1960, pp. 81–108, perhaps Fig. 19: d and pp. 108 and 111.

180–181. Oltszem/Olteni-Vármege (village Bodok/Bodoc, Co. Kovászna/Covasna, Transylvania, Romania). Five clay stamp seals were found in 1908 by Ferenc László in levels of the Late Neolithic Erősd painted pottery in the fortified settlement at Altstem/Oltszem/Olteni. The rich material recovered during the excavations has remained unpublished, except for two stamp seals. F. László 1911, pp. 177–178. – A. László 1973, p. 191. – A. László 1974, p. 477.

180. Oltszem/Olteni-Vármege. C. Clay. (Fig. XX)

Handled stamp with round base, which bears a simple anti-clockwise spiral pattern. Traces of red paint can be seen in the deeper part of channels. Diam. of the base cca 5.1 cms. No context.

F. László 1911, p. 219, Fig. 78: left, Inv. No. 844 in the Sepsiszentgyörgy/Sfîntul Gheorghe Museum. – Roska 1927, pp. 199–200, Fig. 125: 1. – Passek 1949, Fig. 12: 1 – Matz 1928, Pl. XXVI: 6. 181. Oltszem/Olteni-Vármege. C. Clay. (Fig. XVIII)

Handled stamp with round base decorated with simple spiral pattern. Diam. of the base cca 5 cms. No context.

F. László 1911, p. 219, Fig. 28: right. Inv. No. 822 of the Sepsiszentgyörgy/Sfintul Gheorghe Museum. – Matz 1928, Pl. XXVI: 7. – Roska 1927, pp. 199–200, Fig. 125: right.

182. Öcsöd-Kendereshalom (Co. Szolnok, Hungary). A. Clay. (Fig. X)

An oval clay stamp seal was found at this site of the Körös–Starčevo culture during excavations conducted by J. Korek in 1958. Low, rib-like unperforated handle. Face bears a pattern composed of irregularly arranged small impressions. Surface is worn. No context. It may be dated to the Körös–Starčevo culture on the grounds that the majority of the finds from this site, housed in the Tessedik Sámuel Museum, Szarvas, can be assigned to this culture. Length 7 cms.

Unpublished. Tessedik Sámuel Museum, Szarvas, Inv. No. 60.7.59. – For the excavations see J. Korek, R. F. 11, 1959, pp. 21–22.

183-184. Perieni-Rîpa Roşcanilor (Co. Vaslui, Rumania). A pair of clay stamps were found together with other finds of the Körös-Starčevo culture by M. Petrescu-Dîmboviţa in 1955. A third piece with sign-like incisions may belong to other category of finds, to very early clay plaques with incised symbols. See Makkay 1980b.

183. Perieni. A. Clay. (Fig. VIII)

This finely-cut stamp seal brings out vividly the geometrical design which makes the most of the limited space available to the engraver. Conical body, tip is broken away. Elongated oval face with interlocking meandroid motifs. Length of the face 5.4 cms.

Petrescu-Dîmbovița 1957, p. 73, Fig. 7: 15. – Petrescu-Dîmbovița 1958, p. 66, Fig. 3: 6a-b. – V. Dumitrescu 1974, Fig. 488: 3. – Gimbutas 1976b, Fig. 5: 7. – Drawings published by Petrescu-Dîmbovița and Dumitrescu differ from one another as regards important details.

184. Perieni. A. Clay. (Fig. XI)

Long unperforated handle with broken end, squat base. The very worn surface bears no decoration. Height cca 5.1 cms.

Petrescu-Dîmbovița 1957, p. 73, Fig. 7: 16. - Petrescu-Dîmbovița 1958, p. 66.

185. Philia (Thessaly Greece). A. Clay. (Fig. III)

Originally square base with rectangular projections on each side. On corner is broken off. Face bears a meandroid labyrinthine design with drilled holes at the end of some grooves. No context. On the basis of motif parallels (esp. in the case of the piece from Pyrasos, Cat. No. 199) it can be dated to the Protosesklo phase. Diam. of the face cca 4.8 cms. Milojčić 1964, p. 65, Fig. 2: 14. – Weinberg 1965, p. 25. – D. Theocharis 1973, Pl. XX: bottom row, left. – CMS V, 1, p. xli, with further literature. – D. Theocharis 1959, p. 66, Fig. 28: 2.

186. Pilismarót-Basaharc (Co. Komárom, Hungary). D. Clay. (Fig. XXVIII)

Conical flat body, unperforated. The design, which is influenced by the shape of the thin elongated base, consists of seven small adjoining diamonds, each dotted with three small impressed points. From a grave of the Late Copper Age Boleráz phase of the Baden culture. Length of the base cca 8.3 cms.

Torma, Mitt. Arch. Inst. 4, 1973 (1975), p. 182, Pl. 55: 2. – See its close parallels from Znojmo (Cat. No. 289) and Vrbové (Cat. No. 281).

187. Plovdiv-Jassa tepe (district Plovdiv, Bulgaria). C. Clay. (Fig. XXII)

Unperforated conical handle, round base. No trace of decoration. No details of dimensions. Context unknown, probably the Gumelnita culture.

Detev 1959, p. 59, Fig. 83: 13. – For recent excavations and the chronology of the site see Detev 1976, pp. 81–141.

188–192. Porodin-Tumba (Yugoslavian Macedonia, Yugoslavia). Four or five clay stamp seals were found in the course of Yugoslavian excavations of a tumba: (published) associations are lacking. Stratigraphically they should fall within the period of the "Porodin group". Their suggested dating is therefore the local Middle Neolithic. This phase probably followed the latest Starčevo period as a surviving development. It is certain that the entire pottery assemblage of the Porodin group cannot be described as "Starčevo", although it is a tenable view that except for the clay stamps, certain elements, at least, survived from the late Starčevo culture. Further evidence is required to establish whether or not the site of Porodin had separate levels datable to different periods.

For the location of the site see Sanev et al. 1976, map, site 7. – For the chronology of the site see Hauptmann 1967, pp. 5–7. – Nandris 1970, p. 212, note 23.

188. Porodin-Tumba. B. Clay. (Fig. XIV)

Round flat base, unperforated conical handle. Face bears a composite design: two lines bisect the face. Double bordering zig-zag lines can be seen on both parts. Outer angles of zig-zags and the central band are filled with punctuations. Diam. of the face 8.3 cms.

Grbić et al. 1960, pp. 46–47, Pl. XXV: 1. – Garašanin et al. 1971, p. 70, No. 87. – Simoska–Sanev 1976, p. 34, No. 50. – Winn 1973, Fig. 16: a. – Sanev et al. 1976, p. 44, Fig. 251.

189. Porodin-Tumba. B. Clay. (Fig. XIV)

Handled stamp with round base. Design consists of lines of small barbotinelike bosses. Part of base is broken off. Diam. of the base: 6.5 or 9.3 cms. *Grbić et al. 1960*, pp. 46–47, Pl. XXV: 3. – *Garašanin et al. 1971*, p. 70, No. 86. probably refers to this piece. – *Sanev et al. 1976*, p. 44, Fig. 252.

190. Porodin-Tumba. B. Clay. (Fig. XIV)

Handled stamp with round base. Face is decorated with five asymmetrically placed barbotine-like bosses: one in the centre, four near the edge. No details of dimensions.

Grbić et al. 1960, pp. 46-47, Pl. XXV: 4.

191. Porodin-Tumba. B. Clay. (Fig. XIV)

Conical stamp with flat base. Face bears no decoration. No details of dimensions. It may belong to the category of small clay cones (see Cat. Nos 68–75, with further literature).

Grbić et al. 1960, pp. 46-47, Pl. XXV: 2.

192. Porodin-Tumba. B. Clay. (Fig. XIV)

Stamp seal found at a subsequent excavation. Round base, conical perforated handle. Face bears a motif of four concentric circles. Diam. of the face 3.5 cms.

Garašanin et al. 1971, p. 70, No. 88. – Winn 1973, Fig. 16: b and notes to the figures, p. VIII. – Simoska-Sanev 1976, p. 34, Fig. 51.

193. Porodin-Tumba Bara. B (or C?) Clay. (Fig. XIV)

Handled stamp seal with rounded base. Face bears a curvilinear incised motif resembling the wing of a bird. Height 4 cms. No context. Separate levels of the tumba can be dated to the developed phase of the Middle Neolithic and the Eneolithic Šupleveć–Bakarno gumno culture.

Simoska-Sanev 1976, p. 42, Fig. 148. – For problems of the Crnobuki-Šupleveć-Bakarno gumno complex see Garašanin 1955, pp. 75–77 and Garašanin 1958, pp. 118–119. – Garašanin 1978, pp. 101–108, with further literature. – For a somewhat similar motif see CMS II, 1, No. 261, Platanos, tholos B, EM II-MM I.

194. Prague-Bubeneć (Czechoslovakia). C. Clay. (Fig. XXIII)

Round based stamp seal with broken handle. Flat face shows a finely engraved cruciform design forming a quadranted circle. Quadrants are filled in with triple chevrons. Outer angles have short diagonal lines. Associations unknown. Probably from the Jordanów (Jordansmühl) group, contemporary with the late phase of the Moravian painted (Lengyel) pottery or with the Lasinja–Balaton–Furchenstich period. Diam. of the face 4.5 cms.

Stocký 1929, Pl. LIII: 14. – Schránil 1928, Pl. VIII: 13. – Mrs. M. Zapotocká has kindly allowed me to quote the following remarks of B. Novotný. In his dissertation (manuscript, University of Prague, 1948), he wrote the following: "28.7.1906 beim Graben der Fundamenten für die neue Lagerräume der Fabrik Hoyermann ... wurde ein Tongegenstand gefunden, der gewöhnlich

für eine Pintadera gehalten wird." Museum Hans Paulka (Prague?), Inv. No. P. 3374. Cf. *Novotný 1950*, p. 239: 'Begleitfunde sind nicht bekannt.'" Finds of the Linear Pottery, the Stroke Ornamented pottery and the Jordanów culture can be found in the material excavated or collected at this site. Thus the piece cannot be dated with certainty.

195. Predionica (near Priština, Kosovo-Metohija, Yugoslavia). C. Clay. (Fig. XXIII)

Rescue excavations revealed an important settlement of the Vinča–Pločnik phase with a single occupational level. The 'floruit' of the site was the Vinča C period, but there can be some doubt as to whether or not the occupation continued into the later Vinča phases. Especially noteworthy are the fine figurines. The excavation report is somewhat disappointing, lacking as it does a discussion of the find contexts. No stamp seals have been reported in the final report, but some published pieces appear to be pintadera-like objects, first of all No. 368. This is a button shaped stamp seal, with a round base. The face bears a central cruciform design, with chevrons and rectangles in opposite quadrants. No context. Diam. of the face 6.9 cms.

Galović 1959, p. 66, No. 368, Pl. LXXIX: 1-2. – Gimbutas 1974a, p. 117, Fig. 80. – There were other pieces which may also have been stamp seals, albeit they were published as 'objects' or 'lids', e.g. Cat. No. 491, Pl. LXXV: 4: marble object; Cat. No. 369, Pl. LXXIX: 5: lid fragment; Cat. No.?, Pl. LXXV: 5: in all probability a stamp seal with oval face; Cat. No. 370, Pl. LXXIX: 4: lid fragment.

196. The environs of Priština (Kosovo-Metohija, Yugoslavia). A. Clay. (Fig. VIII) Half of a handled stamp with elongated oval base is reported to have been found at a site near Priština, now in the Priština museum. The face is decorated with asymmetrical running and interlocking spirals. There is no definite evidence for dating it to the Starčevo culture. No details of dimensions.

Winn 1973, Fig. 14: e, p. 64.

197. Prodromos (Thessaly, Greece). A. Clay. (Fig. X)

Conical stamp seal reportedly found at the Early Neolithic site of Prodromos. Round base with a design of five deeply engraved center-pointed triangles representing a five-spoked wheel. Diam. of the face 3 cms.

CMS V, 2, No. 724. – *D. Theocharis 1973*, Pl. XX: fourth row, the second from the left, as found in Greece. – *G. Hourmouziadis 1971*, pp. 164–175, does not mention it.

198. Prša/Perse (district Lučenec/Losonc, Czechoslovakia). B or C. Clay. (Fig. XV)

Handled stamp seal without perforation. Worn surface, broken edges. Central cruciform motif with double chevrons in each quarter. No details of dimensions.

Found in a grave of the VII–IXth centuries A.D. in secondary position. The excavator dated the Neolithic sherd material found in earlier levels to the 3rd phase of the Middle Neolithic Bükk culture. It can in fact be dated to the Tiszadob phase of the Alföld Linear Pottery. Since not one single clay stamp seal has yet been found in the whole territory of the Linear Pottery culture, this piece may date to the Late Neolithic Lengyel painted pottery on typological grounds.

Lichardus 1962, Fig. 3:9-10.

199. Pyrasos (near Nea Ankhialos, Thessaly, Greece). A. Stone. (Fig. III)

Quadrangular base with similar projections on each side. No handle. Base has a vertical perforation perhaps for a wooden (?) handle. The flat face is decorated with fine meander labyrinthine design with deeply drilled holes at the end of each groove. From level I., i.e. the Protosesklo period. M. Theocharis dated it to the Middle Neolithic. Length of the base 3.3 cms.

D. Theocharis, 1959, p. 66, Fig. 28: 1. – Zervos 1962, Fig. 298 (from Néol. Ancien III). – Milojčić 1964, p. 65, Fig. 2: 13. – D. Theocharis 1967, p. 149. – M. Theocharis 1972, p. 22, Pl. 10: α . – Christopoulos–Bastias 1974, p. 64, top right. – D. Theocharis 1973, Fig. 272: c, and Pl. XX: second row, right. – CMS V, 2, No. 720. – Weinberg derives it from the middle level of the Early Neolithic accumulation: 1965, p. 25. – Milojčić–Milojčić-v. Zumbusch 1971, vol. I, p. 130, compares the motif of this piece to a painted motif on a sherd from Sesklo (Tsountas 1908, Fig. 98). – Nandris 1970, p. 200 derives it from the middle of level I in a decorated ware association.

200. Racibórz-Ocice (Upper Silesia, Poland). C. Clay. (Fig. XII)

Clay stamp seal (?) or decorated knob found in a rubbish pit of the Ocice group of the local Late Neolithic Lengyel painted pottery. End of the handle is broken off. A wide channel bisects the face with two oblique lines on both parts. Unknown dimensions.

Kozlowski 1962, p. 33, Fig. 7, and the kind personal communication of Dr. J. K. Kozłowski. – Dr. D. Müller, Halle called my attention to this find.

201. Réty/Reci-Dobojka, hill of the Calvinist parish church (near Covasna/Kovászna, Transylvania, Romania). C. Clay. (Not illustrated)

A single stamp seal was found during the excavations of Ferenc László, and dated to the Late Neolithic Erősd painted pottery period. No associations. No details of dimensions.

Unpublished. A. László 1973, p. 191 and A. László 1974, p. 477. – For the site see F. László 1911, pp. 182–183.

202. Rhini (Thessaly, Greece). E? Clay. (Not illustrated).

Unpublished stamp seal(?). Its shape resembles stamp seals from Sesklo.

Wace-Thompson 1912, p. 131, Fig. 79: q. - CMS V, I, p. xli. The piece cannot be found in museums.

203-205. Rug Bair-Gorubinci, Sveti Nikole (Yugoslavian Macedonia). Excavations in 1960 and 1970 yielded three clay stamp seals dated by M. V. Garašanin to the Vršnik IV phase, contemporary with the earliest Vinča culture. Typologically they may be dated within the Starčevo culture, even more so, since their stratigraphical position does not contradict such a dating.

Winn 1973, Fig. 14: b derives it from Čavdar. - For the chronology of the settlement see Hauptmann 1967, p. 12. and Sanev 1975, pp. 223-225.

203. Rug Bair. A. Clay. (Fig. V)

Stamp seal with perforated handle and elongated oval base. Face bears a design of three longitudinal zig-zag lines. It probably dates to the late Starčevo culture. Length of the face 3.5 cms.

Garašanin-Sanev 1971, pp. 25, 69, No. 72a. – Gimbutas 1974a, pp. 115, 273, Fig. 72: 4, dates it to the Starčevo I period for unknown reasons. – Winn 1973, Fig. 14: a, p. 64, notes to the figures, p. viii, p. 65: latest Starčevo. – Gimbutas 1976a, Pl. 9: surface find, contemporary with Anza III-IV. – Sanev 1975, Pl. X: 5.

204. Rug Bair. A. Clay. (Fig. VII)

Handled stamp seal without suspension hole. The elongated oval face has a design of parallel transverse chevrons the ends of which extend over the edge. Probably the late Starčevo culture. Length of the face 5 cms.

Garašanin-Sanev 1971, p. 69, No. 72b. - Winn 1973, pp. 64-65, Fig. 14: c.

205. Rug Bair. A. Clay. (Fig. IX)

Stamp seal with rhomboidal body. The similarly shaped face bears a simple anti-clockwise meander in its centre. It is surrounded by parts of distorted chevrons on three sides. Diam. of the face 4 cms. It probably dates to the late Starčevo culture.

Garašanin-Sanev 1971, p. 69, No. 72c. - Winn 1973, pp. 64-65, Fig. 14: d. - Sanev 1975, Pl. X: 4.

206–207. Ruginoasa-colina lui Drăghici (Co. Iași, Romania). Two stamp seals were found during the excavations at this site of the Cucuteni culture. They were dated to the Cucuteni A phase in preliminary reports.

206. Ruginoasa. C. Clay. (Fig. XIX)

Handled stamp seal without perforation. Round face is decorated with a simple clockwise spiral. No details of dimensions.

H. Dumitrescu 1933, p. 65, Fig. 10: 1. – Passek 1949, Fig. 14: 7, contemporary with Tripolje I B in her opinion.

207. Ruginoasa. C. Clay. (Fig. XX)

Handled stamp seal with suspension hole. Round face is patterned with a simple anti-clockwise spiral. No details of dimensions.

H. Dumitrescu 1933, p. 65, Fig. 10: 8. – Passek 1949, Fig. 13: 4, contemporary with Tripolje I B.

208-210. Ruse-settlement mound (Northern Bulgaria). Three stamp seals were found here in 1950-1953. They date to the Late Gumelnita culture (contemporary with the Karanovo VI phase).

208. Ruse. C. Clay. (Fig. XXI)

Stamp seal with tip of the long handle missing, broken along the suspension hole. Round base, decorated with eight concentric circles. A small part of the edge is missing. Diam. of the base 5.9 cms.

Georgiev-Angelov 1957, p. 89, Fig. 48:1.

209. Ruse. C. Clay. (Fig. XXII)

Stamp seal with round base and unperforated cylindrical handle. No trace of decoration. Diam. of the base 4.5–4.8 cms.

Georgiev-Angelov 1957, p. 89, Fig. 48:2.

210. Ruse. C. Clay. (Fig. XXIII)

Stamp seal with slightly damaged base and broken handle. Face bears quadranted circle design with five chevrons in each quarter. Diam. of the face 4.5 cms. From a depth of 2.45 ms. The exact chronological position of this level remains unknown.

Georgiev-Angelov 1957, p. 89, Fig. 48: 3. - Gimbutas 1974a, p. 91, Fig. 48: a.

211–214. Salmanovo–Deneva mogila (near Preslav or Šumen, Bulgaria). Four clay stamp seals were found at the site of the Gumelnita culture which can probably be dated to the late developing phase of this culture. Their exact chronological positions are unknown.

Mikov 1933, Fig. 24, pp. 65-66.

211. Salmanovo-Deneva mogila. C. Clay. (Fig. XVIII)

Handled stamp with round base. Face bears an incised simple clockwise spiral. Diam. of the base 5.7 cms.

Filow 1913, p. 345, Fig. 3: left. – *Popov 1915*, pp. 151–152, Fig. 110: A. – *Matz 1928*, Pl. XXVI: 9. – *Gaul 1948*, p. 142, Pl. XXXVI: 9. – *Guide Sophia*, p. 99, No. 1036, Fig. 56: left.

212. Salmanovo-Deneva mogila. C. Clay. (Fig. XXI)

Handled stamp with round base, which bears a motif of three concentric channels and a central dot. Diam. of the base 4.3 cms.

Filow 1913, p. 347, Fig. 3: middle. – *Popov 1915*, pp. 151–152, Fig. 110: B. – *Matz 1928*, Pl. XXVI: 10. – *Gaul 1948*, p. 142, Pl. XXXVI: 10. – *Guide Sophia*, p. 99, No. 1037, Fig. 56: middle.

213. Salmanovo-Deneva mogila. C. Clay. (Fig. XXIV)

Conical stamp seal with no perforation; eleven depressions in flat base, three holes in centre, eight around them. Diam. of the base 4.6-4.8 cms, height 4.4 cms. diam. of the holes 0.6-0.7 cms.

Filow 1913, p. 347, Fig. 3: right. – *Popov 1915*, pp. 151–152, Fig. 110: C. – *Matz 1928*, Pl. XXVI: 11. – *Gaul 1948*, p. 142, Pl. XXXVI: 11. – *Guide Sophia*, p. 99, No. 1038, Fig. 56: right.

214. Salmanovo-Deneva mogila. C. Clay. (Not illustrated)

Round stamp seal resembling Cat. No. 212. Diam. of the face 5.3 cms. No details or information as regards its decoration.

Popov 1915, pp. 151-152. - Guide Sophia, p. 99, No. 1039.

215–217. Servia (Western Macedonia, Greece). During old and recent excavations three stamp seals were found at this well-known site. Two are securely dated to the Late Neolithic, the third to the same phase or the Early Bronze Age. The LN pieces may be contemporary with the B stamps of the Balkans.

215. Servia. B or C. Clay. (Fig. XXII)

Unperforated handle, oval base. On the face lengthwise "a central groove, on either side of which scratched strokes, not uniformly deep, irregularly spaced." Length of the base 5.8 cms.

Heurtley 1939, pp. 78, 116, 165, Fig. 35: r and Pl. X: 35 r. – Castiglioni 1956, Pl. V: 4. – D. Theocharis 1973, Pl. XX: third row, second from the left. – CMS V, 1, p. xli: the piece is missing from museum collections.

216. Servia. B or C. Clay. (Fig. XXII)

Handled stamp seal, no perforation. Elongated oval base with sinuous edge. No other trace of decoration. Slightly curved base. Length of the face 5.5 cms.

Heurtley 1939, pp. 78, 116, 165, Fig. 35: s, Pl. X: 35 s. - Castiglioni 1956, Pl. V: 3. - CMS V, 1, p. xli: the piece is missing from museum collections.

217. Servia. C or D. Clay? (Not illustrated)

A "curious pintadera" was found in Late Neolithic or Early Bronze Age levels at recent excavations of the site. No details.

Rhomiopoulou-Ridley 1974, p. 359. – Cf. *Ridley-Wardle 1979*, pp. 185–230 (without mention of the pintadera).

218–227. Sesklo (Thessaly, Greece). A complete inventory of the Sesklo stamp seals is yet not possible, but from preliminary calculations there appear to be nine published stamps from Sesklo A (i.e. the acropolis and its surroundings). Four of the pieces were found and published by Chr. Tsountas, the other five are from the recent excavations of D. Theocharis. Some of these stamps are comparable to Early Neolithic pieces of the Balkans, while others have entirely different designs with Middle or Late Neolithic parallels. Although the majority of the Sesklo stamp seals came from excavated levels, there is great uncertainty as regards their exact dating. Overall stratigraphic information cannot be easily gleaned from the present system of trench and depth recording. In fact, whatever one may think of the stratigraphy of Sesklo, there is little doubt that some of the Sesklo seals can be dated to the Early Neolithic on typological grounds.

218. Sesklo. B. Clay. (Fig. XIII)

Conical perforated handle, round base. The face shows nine irregular holes surrounded by a channel. From the uppermost level of the acropolis. Probably the Sesklo period. Diam. of the face cca 3.2 cms.

Tsountas 1908, p. 339, Fig. 273. – Matz 1928, Pl. XXVI: 7. – Zervos 1962, Figs 296–297, right, probably Late Neolithic. – CMS I, p. 4, No. 1, with earlier literature. – Buchholz-Karageorghis 1971, No. 1360.

219. Sesklo. B. Clay. (Fig. XIII)

On the back of a square plate, a flat unperforated knob handle. The large face bears a labyrinthine pattern, with concentric elongated H-shaped motifs. Found on the South-East side of the acropolis together with A3 α painted pottery. Length of the base cca 11 cms. It probably dates to the Sesklo period.

Tsountas 1908, p. 339, Fig. 271. – Matz 1928, Pl. XXVI: 13. – Zervos 1962, Figs 296–297, middle. – CMS I, p. 4, No. 2, with further literature. – D. Theocharis 1973, Pl. XX: bottom row, second from the left. – Buchholz-Karageorghis 1971, No. 1359.

220. Sesklo. B. Clay. (Fig. XIII)

Stamp with round, partly broken base and perforated handle with ornithomorphic terminal. Face bears a central cruciform motif with quadrants filled with irregular chevrons. Found at a depth of 3 metres together with A3 α ware. The Sesklo period. Diam. of the base cca 4 cms.

Tsountas 1908, pp. 339–340, Fig. 272. – Matz 1928, Pl. XXVI: 15. – Zervos 1962, Figs 296–297, left, from the Early Neolithic. – CMS I, p. 3, No. 3, with further literature. – Kenna 1968, pp. 278–280, Fig. 1: 1, compared it to Anatolian EBA seals. – Buchholz-Karageorghis 1971, No. 1361. – D. Theocharis 1973, Pl. XX: fourth row, left. – Gimbutas 1976b, p. 81. Fig. 5: 1.

221. Sesklo. A. Clay. (Fig. X)

4*

Stamp with a thin curved base and a short knob-like handle. Face is decorated by four longitudinal parallel lines. From the deeper levels of the site. It probably dates to the Protosesklo period. Length of the base 6.3 cms.

Tsountas 1908, p. 339, Fig. 270. – Matz 1928, Pl. XXVI: 16. – CMS I, p. 3, No. 4.

222. Sesklo. A. Clay. (Fig. VI)

Conical body, unperforated short handle. The elongated face bears a longitudinal zig-zag channel produced by deeply cut triangles on both sides. It can be dated to the Protosesklo period by its close resemblance to certain Nea Nikomedeia stamps. Length of the base 3.4 cms. From the 1962 excavations.

D. Theocharis 1967, pp. 148, 151, Fig. 89: bottom right. – CMS V, 2, p. 585, No. 712. – D. Theocharis 1973, Pl. XX: second row, second from the right = p. 192, top row left, incorrectly from Nea Nikomedeia.

223. Sesklo. A. Clay. (Fig. III)

Cruciform body, no handle. Deeply cut simple meandroid ornament with an ancient drilled hole in the centre. Diam. of the base 4.3 cms. The 1962 excavations. It can be dated to the Protosesklo period on typological grounds.

D. Theocharis 1973, Plate XX: third row, left = p. 192, bottom row, left. – CMS V, 2, p. 585, No. 713.

224. Sesklo. E. Stone. (Fig. XII)

Irregular, slightly curved square base with projections on two sides. No handle. Simple meander labyrinthine design. There are drilled holes at ends and turning points of grooves. Worn surface. Length 2.6 cms. No context, probably the Sesklo period. From trench I of the 1963 excavations.

CMS V, 2, p. 585, No. 714.

225. Sesklo. E. Clay. (Fig. XII)

Conical body, wide perforation, round base. Three concentric circles can be seen on the face. From trench I of the 1963 excavations. No context, but it probably dates to the Sesklo period. Diam. of the base 2.1 cms.

D. Theocharis 1973, Pl. XX: bottom row, right. - CMS V, 2, p. 585, No. 715.

226. Sesklo. A? Stone. (Fig. X)

Foot-shaped (?) stamp seal, irregular rectangular base, slightly curved on the top. The flat base is decorated with four longitudinal incised lines. Both long edges are notched. Found on the acropolis in 1966. It probably dates to the Protosesklo period. Length of the base 5 cms.

D. Theocharis 1973, Pl. XX: bottom row, second from the right. – Fig. 272: d. – CMS V, 2, p. 585, No. 716.

227. Sesklo, site B. A? Clay. (Fig. VI)

Stamp with broken handle and quadrangular section. The center of the face bears a quadrangular depression; sides formed by deeply cut inturned triangles. 1971 excavations, 150 metres away from the acropolis. Probably the Protosesklo period. Diam. of the base 5.6–5.8 cms.

D. Theocharis 1973, Pl. XX: fourth row, second from the right. – CMS V, 2, p. 585, No. 717. — D. Theocharis 1971, p. 18.

228-232. Sitagroi (Macedonia, Greece). Four or five clay cylinder seals-in Renfrew's terms roll cylinders or cylindrical clay objects-have been reported from Sitagroi, dated to two different phases (Sitagroi II and III). The stratigraphical position of one piece (Cat. No. 229) is somewhat different, since it was found in the upper level, Sitagroi Vb. On typological grounds, however, it can also be attributed to phases II or III. At the time of writing these cylinders have not been fully published and interpreted, but it is expected that they will be fully studied in the final report. Renfrew dates them to the Late Neolithic or the Early Copper Age of the Balkans, contemporary with the Karanovo IV-V phases in the latter case. Speculating on their use, Renfrew suggested that the "roll-cylinders" at Sitagroi could have been used to stamp moist clay. But cylinders were never used in this way to decorate Late Neolithic or Early Copper Age pottery in the Balkans, moreover, reliefornamented motifs which may be considered to have been produced with similar cylinders patterned with deeply-cut incised ornaments have not yet been found. Such a method of decoration would apparently have required seals (stamp or cylinder seals) with patterns cut in relief. The existence of such stamp seals in the Late Gumelnita culture or in contemporary cultures has not yet been proved.

As regards the origins of the Sitagroi cylinders, Renfrew pointed out that "while Near Eastern influence is certainly a possibility, clay cylinder seals at least a millennium older have been found at Sitagroi in north Greece. It would at least be possible to argue a local inspiration." It is evident that the Sitagroi cylinders did not precede the invention and earliest use of cylinders in the Near East. Chronological and stylistic considerations imply that the Sitagroi cylinders (and their South-East European parallels) must be regarded as imitations of Near Eastern forerunners. In evaluating the Near Eastern origin of the South-East European cylinder industry, the comparison, interpretation and secure dating of the Sitagroi cylinders would be of the utmost importance. It would appear that at present we have no grounds for speaking of a local origin or local inspiration. The manufacture of the first European cylinders in South-East Europe was strongly influenced by Near Eastern and Anatolian traditions. South-East European Late Neolithic cultures were introduced to the cylinder tradition of the East, and thereupon made it their own. Consequently, the clay cylinders of Sitagroi were made locally. It will, of course, remain controversial whether these objects (i.e. the clay cylinders found in Maliq, Cat. Nos 139-144, Sitagroi, Bikovo, Cat. No. 21, Dikili Tash, Cat. No. 50, Tordos, Cat. No. 275) are actually cylinder seals until a sealing which corresponds to the clay (or stone) cylinder is also found. As regards general proportions, size, motifs and chronology, the suggestion is unreasonable.

Renfrew 1972, pp. 411, 445. - Hood 1973, pp. 193-194, with further literature.

- D. Theocharis 1973, Fig. 238 (from the Late Neolithic). - Gimbutas 1976b, Fig. 5: 8: the piece is in the Philippi Museum Inv. No. 3684 (= CMS V, 2, No. 635, our Cat. No 230), from Sitagroi II (!). - CMS V, 2, Cat. Nos 633-636. -Makkay 1976a, pp. 26-27, with further literature. - South-East European cylinders were recently also discussed by Charvát 1975 and Helck 1979, p. 13, notes 21-23. - For sealed (?) impressions on Gumelnita pottery see Kaludova 1966, pp. 52-59, esp. Fig. 14: a-b. - Detev 1960, p. 58 and Figs. - Cf. Detev 1965, pp. 65-68. - For Aegean EBA sealings see Heath 1958, pp. 81ff. -Wiencke, 1969, pp. 500ff and Wiencke 1970 pp. 94ff. - Wiencke 1974, pp. 149-163. - Younger 1974, pp. 164-172. - Bossert 1960, pp. 1ff. - Persson 1924, pp. 162-172. - Isler 1973, p. 175. - Lavezzi 1979, pp. 342-347. - As regards the cylinder cutting industry in the Aegean, see Pini, CMS V, 1, p. xxiii.

228. Sitagroi. C. Clay. (Fig. XXV)

Clay cylinder with axial perforation. The surface bears irregularly incised zigzag lines. Height 3.6 cms. From Sitagroi II.

CMS V, 2, p. 503, Cat. No. 633. - D. Theocharis 1973, Fig. 238: left.

229. Sitagroi. C. Clay. (Fig. XXV)

Clay cylinder, without an axial perforation. The surface was divided into three equal parts by incised horizontal lines, enclosing zig-zags. Bordering line at both ends. Cruciform motifs at both ends. Height 6 cms. From Sitagroi Vb.

CMS V, 2, p. 503, Cat. No. 634.

230. Sitagroi. C. Clay. (Fig. XXV)

Slightly barrel-shaped clay cylinder, unperforated. Surface was divided in two equal parts by a single line, bordered at both ends by similar lines. Both fields patterned with crosses, V-s, chevrons. Cruciform motifs at both ends. Height 3.8 cms. From Sitagroi III.

CMS V, 2, No. 635. – *D. Theocharis 1973*, Fig. 238: centre. – *Gimbutas 1976b*, p. 81, Fig. 5: 8.

231. Sitagroi. C. Clay. (Fig. XXV)

Slightly barrel-shaped unperforated clay cylinder. Surface was divided into equal parts by double lines. At both ends double bordering lines. Between the lines on both fields, chain of S-spirals, W-s and V-s. Geometric motif at both ends. From Sitagroi II. Height 3.9 cms.

CMS V, 2, p. 503, No. 636. - D. Theocharis 1973, Fig. 238: right.

232. Sitagroi. C? Clay? (Not illustrated)

A further clay (?) cylinder has been reported from this site. No details. *Hood 1973*, p. 193.

233-234. Sofia-Slatina (Bulgaria). Trial excavations revealed rich Neolithic material from two superimposed levels. The lower level was dated to the

Middle Neolithic by N. Petkov, although it also yielded painted pottery of the Karanovo-Kremikovci type. Two clay stamps were found together with "Late Neolithic" vessels in the upper level. They could, however, belong to earlier assemblages on typological grounds.

233. Sofia-Slatina. Probably A. Clay. (Fig. IX)

Very symmetrical star-shaped base, cylindrical unperforated handle. The center of the face has an incised rectangle enclosing distorted rectangles. On points parallel lines. Diam. of the base 11 cms (?).

Petkov 1961, p. 68, Fig. 8: 3. - Cf. Petkov 1962, pp. 43-49.

234. Sofia-Slatina. Probably A. Clay. (Fig. VIII)

Hour-glass shaped stamp seal with flat body. Each end of the seal is patterned. The upper oval face shows two longitudinal zig-zag lines, the lower oval face bears parallel chevrons bordered by small dots. Diam. of the lower face cca 6 cms.

Petkov 1961, p. 68, Fig. 8:4. – Lazarovici 1971, Fig. 7:8 (in caption mistakenly derived from Kunszentmárton-Nagyérpart).

235. Starčevo-Grad (district Pančevo, Yugoslavia). A. Clay. (Fig. XI)

A single pintadera was found in pit 5A. Long, cylindrical unperforated handle, oval base. Face shows no decoration. The Starčevo culture, probably the late phase. Height 9.1 cms, length of the base 8.3 cms.

Arandjelović-Garašanin 1951, pp. 51 and 158, Pl. III: 8.

236. Supska (near Čuprija, Serbia, Yugoslavia). A. Clay. (Fig. IX)

A red-brown incised clay pintadera was found in a pure Starčevo level associated with a decorated rod-head figurine during the 1957 excavations in Sonda 1c/otkop. 17. Face shows a simple labyrinthine motif. Height 1.6 cms, length of the base 3.9 cms.

Unpublished. National Museum, Beograd, Inv. No. 22.653. The kind personal communication and drawing of Dr. J. Chapman.

237. Szakály-Törökcső (Co. Tolna, Hungary). B? Clay. (Fig. XV)

In 1962 I. Torma collected a small damaged rhomboidal stamp seal together with characteristic sherds of the Transdanubian Linear Pottery. A part of this pottery may probably be dated to the earliest, transitional phase between the Körös–Starčevo and earliest Linear Pottery cultures. Paste, finish and color of the piece do not exclude a dating to this transitional phase. The perforated cylindrical handle is broken off. Face bears four concentric incised rhombs with a similar hole in the centre. Length of the base 4 cms, height 2.2 cms.

Unpublished. Balogh Ádám Museum, Szekszárd, Inv. No. 74.404.6. I publish it with the kind permission of Mr. I. Torma.

238–240. Szarvas-Szappanos (Co. Békés, Hungary). A. Clay. (Fig. IX) On the well-known site of the Körös-Starčevo culture a clay plaque was found by E. Krecsmarik several decades ago. The piece is now missing from the local collections of the Tessedik Sámuel Museum, Szarvas and is probably lost. The published badly drawn figure probably shows the square face of a stamp seal, patterned with incised concentric squares or a meandric spiral. It is possible that this plaque was not the base of a stamp seal, but a so-called *tanga*.

Gy. Gazdapusztai conducted a trial excavation on the site in 1957. His excavation records mention the recovery of two pintadera-like clay objects. The pieces cannot be found among the finds of this excavation, now kept in the Tessedik Sámuel Museum, Szarvas. One of these pieces is perhaps identical with the piece discussed under No. 304 of the Appendix to this Catalogue.

E. Mérey-Kádár, then working in the Koszta József Museum, Szentes, inventorized the small archaeological collections of the Szarvas Secondary School. The finds of this collection were collected by E. Krecsmarik during the first three decades of this century. The majority of the Neolithic finds was found at the Szappanos settlement. Mérey-Kádár described "a pintadera carved from sandstone, with long conical body and a slightly concave face. Face bears serrated edges like a crest. Height 2.6 cms, width 2 cms." The piece is now missing from the collection, which was transferred to the Tessedik Sámuel Museum in Szarvas a few years ago.

Krecsmarik 1915, Pl. I: 25. – The excavation records of Gy. Gazdapusztai, kept in the Tessedik Sámuel Museum, Szarvas, and the Hungarian National Museum, Budapest, Archiv. No. 463. Sz. VII, p. 2. – Inventory cards of E. Mérey-Kádár in the Tessedik Sámuel Museum, Szarvas. – For the so-called Neolithic tangas see *Banks 1977*, pp. 324–339. For similar pieces of the Körös–Starčevo culture see *Ignat 1978*, p. 12, Pl. VIII: A–B.

241. Szeghalom-Dióér (Co. Békés, Hungary). D. Clay. (Fig. XXVIII)

I. Ecsedy conducted a trial excavation revealing important Copper Age levels at this site. In the level dated to the early Baden culture a small irregularly shaped clay stamp was also found. Face and side bear a pattern consisting of small scattered holes. Diam. of the face 1.8 cms.

Unpublished. I would like to express my thanks to Dr. I. Ecsedy for permission to publish the piece. For the chronology of the site see *Ecsedy* 1975, pp. 15–18. – *Ecsedy* 1973, pp. 17–20. – A very similar piece was found in Agios Stephanos, Laconia, Greece, in area Δ dated to the Bronze Age: *Taylour* 1972, p. 247, Pl. 51: h. (The kind information of Dr. I. Ecsedy.)

242. Szentes-Jaksorérpart (Co. Csongrád, Hungary). A. Clay. (Figs I and VII)

Small stamp seal, unperforated short handle, oval base. Face bears lines of parallel transverse chevrons. Central part of face is damaged. Length of the base 3.8 cms. From the trial excavation of G. Csallány or a gift of Halász F. Szabó, found at the site.

Kutzián 1944, pp. 39 and 84, Pl. XVII: 5. – Koszta József Museum, Szentes, Inv. No. 4.949.15 (old), 54.156.101 (new).

243-245. Szolnok-Szanda (Co. Szolnok, Hungary). A. Clay. (Fig. A)

During recent excavations an unidentified number (probably three) of clay stamp seals were found in features securely dated to the Körös–Starčevo culture. No details or information.

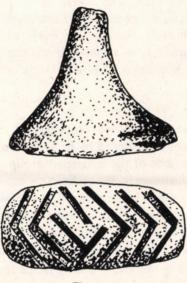


Fig. A

Unpublished. Mentioned by Kalicz-Raczky, R. F. 31, 1978, p. 26. A drawing of one specimen ornamented with a simple meandric pattern has recently been published. Kalicz-Raczky 1983, p. 18, P1. 9: 3a-b.

246. The environs of Szolnok (Co. Szolnok, Hungary). E. Clay. (Fig. XXVIII)

In 1958 Zs. Csalog reported the accidental discovery of a broken clay stamp seal which can probably be dated to the Neolithic. The form and decoration of the stamp is unparallelled as yet among the Early Neolithic seals of Hungary. The pottery associated with this piece is unsuitable for determining the chronology of the piece. Clay stamp with broken cylindrical handle and round base with widening edge. Damaged face shows incised linear motif. No details of dimensions.

Unpublished. Kind information and sketch provided by Zs. Csalog, then working in the Damjanich János Museum, Szolnok. The piece is now missing from the collection of the museum.

247. Tečić (near Kragujevac, Serbia, Yugoslavia). A. Clay. (Fig. III)

Stamp with unperforated handle and square base. Face shows a complicated meander labyrinthine motif. Found at the site of the Körös–Starčevo culture. No secure (published) context. Diam. of the face 4.2 cms.

Galović 1964, p. 8, Pl. 11 : 4. – Milojčić 1964, p. 70, Fig. 2: 18. – Galović 1968, Pl. 10 : 3b. – Galović–Renfrew 1969, p. 31, No. 42, Pl. 4 : 42. – NCB p. 29, No. 39. – Gimbutas 1972, Fig. 8 : 3–4. – There are some insignificant differences in figures published in the cited works. – Winn 1973, Fig. 14: f erroneously derives it from Vinča.

248. The tell of Tilikiug or Lisitza mogila (near Sdievo or Savdievo, district Nova Zagora, Bulgaria). C. Clay. (Fig. XVII)

Found at a depth of 60 cms at the tell Lisitza mogila in 1942. The frustum has widening edges at both ends. Round face bears an interesting pattern: two interlocking spirals which run in opposite directions bordered by curvolinear chevrons. Dated to the Karanovo VI phase. Diam. of the base 4.5 cms, height cca 3.3 cms.

Koičev 1959, p. 94, Fig. 82.

249. Tiszaug-Kisréti part (Co. Szolnok, Hungary). D. Clay. (Fig. XXVII)

During old excavations conducted by K. Szabó a decorated clay plaque was found together with the finds of the Kisrétpart group of the Early Copper Age Tiszapolgár culture. Unfortunately, the preliminary report does not provide a full description of the piece, which was destroyed during World War II. Face has a pattern composed of three rows of curvolinear short incisions. This decoration is very similar to the nearly comtemporary stamp seal from Costişa (Cat. No. 38). Dimensions are unknown, no details of shape and handle.

Szabó 1934, p. 37, Fig. 48. Dr. I. Ecsedy called my attention to this piece.

250. Tiszaug-Tópart (Co. Szolnok, Hungary). A. Bone! (Not illustrated)

Banner mentions a pintadera, made of bone, dated to the Körös-Starčevo culture. Kutzián who published the finds from the site did not mention it. The entire material collected from the site was destroyed during World War II.

Banner 1932, p. 37. - Kutzián 1944, Pl. IX: 1-12.

251–265. Tordos/Turdaş-La lunca (Co. Hunyad, Transylvania, Romania). The finds collected at this remarkable site by Zsófia Torma during the last decades of the last century also comprise fifteen clay objects which may be considered as stamps. They were eventually published by Zsófia Torma herself and in modern works. In the lack of correctly drawn figures we republish Torma's drawings after N. Vlassa's new article, since a considerable part of the pieces is now missing from the Zsófia Torma collection of the Transylvanian National Museum (Cluj-Kolozsvár). There may be numerous apparent errors and discrepancies in old sources concerning the Tordos stamps which leave some questions open. These stamps probably date to the Vinča A-B periods since all the material collected or excavated at Tordos can be assigned to the early (Vinča-Tordos) phase of the Vinča culture. 251. Tordos. B. Clay. (Fig. XVI)

Unperforated handle. Round face bears four rows of small dots. Part of the base is broken away. Diam. of the base cca 4.5 or 2.2 cms.

Roska 1941, Pl. CXXIX: 23. – Zs. Torma: Tordos, Manuscript, Pl. 58 (76): 16, after Vlassa 1974. – Vlassa 1974, p. 182, Pl. 23: 6.

252. Tordos. B. Clay. (Fig. XVI)

Small conical stamp, the base shows a deep impressed large central hole encircled by a simple, incised clockwise spiral $(2\frac{1}{4} \text{ turns})$ crossed by four radiating curved lines. No details of dimensions.

Torma 1897, Pl. I: bottom row. – *Torma 1894*, pp. 35–36, Pl. III: 35: kleine Thonkegel. – *Torma 1902*, Pl. XXIX: without numbering. – *Zs. Torma:* Tordos. Manuscript, Pl. 65 (26): 18, after *Vlassa 1974*. – *Vlassa 1974*, p. 182, Pl. 23: 3.

253. Tordos. B. Clay. (Fig. XVI)

Squat, unperforated handle, oval face. The handle bears two crescent-shaped incised lines. Face bears two signs of "pictographic" character. Diam. of the base 2.7 cms.

Zs. Torma: Tordos. Manuscript, after Vlassa 1974. - Vlassa 1974, p. 182, Pl. 23: 7.

254. Tordos. B. Clay. (Fig. XVI)

Low conical body, oval face. Motif consists of three transversal lines. Length of the face 2 cms.

Zs. Torma: Tordos. Manuscript, after Vlassa 1974. – Vlassa 1974, p. 183, Pl. 23:8.

255. Tordos. B. Clay. (Fig. XVI)

Conical body, probably round base. No visible traces of decoration on the face. Diam. of the base cca 2.4–3.3 cms.

Zs. Torma: Tordos. Manuscript, after Vlassa 1974. – Vlassa 1974, p. 182, Pl. 23: 1-2.

256. Tordos. B. Clay. (Fig. XVI)

Conical body, round (?) base. The probably circular face is undecorated (?). Diam. of the base 3 cms.

Zs. Torma: Tordos. Manuscript, Pl. 65 (26): 19, after Vlassa 1974. – Vlassa 1974, p. 182, Pl. 23: 5.

257. Tordos. B. Clay. (Fig. XVI)

Handled stamp (?) with round (?) base. No traces of decoration. No details of dimensions.

Mărghitan-Andrițoiu 1971, Fig. 2, "polissoire de vases". This piece is kept in the local museum of Deva, and was probably a gift from Zsófia Torma.

258. Tordos. B. Clay. (Fig. XVI)

Stamp (?), tip of handle is broken off. Round (?) base, face without decoration. No details of dimensions.

Mărghitan-Andrițoiu 1971, Fig. 2: bottom right, "polissoire de vases". See note to Cat. No. 257.

259. Tordos. B. Clay. (Fig. XVI)

Complete stamp seal with long unperforated handle and round base. No trace of decoration. Diam. of the base cca 5 cms.

Roska 1941, Pl. CI: 2.

260. Tordos. B. Clay. (Fig. XVI)

Mushroom-shaped clay stamp with worn surface and broken edges. Round base. No trace of decoration. Diam. of the base cca 4 cms.

Roska 1941, Pl. CXXIX: 24.

261. Tordos. B. Clay. (Fig. XVI)

Frustum-shaped stamp with short handle and/or projection on the top. The round face was probably undecorated. Diam. of the base cca 2.2–2.4 cms.

Zs. Torma: Tordos. Manuscript, Pl. 44 (25): 16, after Vlassa 1974. – Vlassa 1974, p. 183, Pl. 23: 10a.

262. Tordos. B. Clay. (Fig. XVI)

Low frustum-shaped stamp with similar, unperforated handle. A row of small dots can be seen around the upper edge. The round face was probably undecorated. Diam. of the base cca 2.2–2.4 cms.

Zs. Torma: Tordos. Manuscript, Pl. 44 (25): 18, after Vlassa 1974. – Vlassa 1974, pp. 83-84, Pl. 23: 10b.

263. Tordos. B. Clay. (Fig. XVI)

Frustum-shaped stamp with widening edges at both ends. Each end of the seal is patterned. On the top four incised crossing lines form an eight-petaled rosette with a dot in each angle. In the centre of the base a quartered square with deep engraved squares in each quarter. Zig-zag lines run along the sides of the squares. Height cca 4 cms, diam. of the base cca 3.4 cms.

Zs. Torma: Tordos. Manuscript, Pl. LXXXV (49): 3, after Vlassa 1974. – Vlassa 1974, p. 188, Pl. 28: 8.

264. Tordos. B. Clay. (Fig. XVI)

Spoon-shaped clay stamp, side and base are undecorated. On the top scattered dots. Top edge is serrated. Height cca 2.3 cms.

Zs. Torma: Tordos. Manuscript, Pl. 33 (61): 9, after Vlassa 1974. – Vlassa 1974, p. 187, Pl. 24: 5.

265. Tordos. B. Clay. (Fig. XXV)

Clay cylinder found by Zsófia Torma, now lost. In Torma's description "a clay

cylinder of Babylonian origin, like the Hissarlik one, decorated with a sign (or signs) of Troy, which in Sayce's judgment is (are) derived from Asia Minor." The piece can probably be identified with a drawing of Zsófia Torma's manuscript, published recently. This probably represents a perforated cylinder seal made of clay. Both ends show five similar U-shaped lines around a central hole (perforation?), forming a rosette-like pentafoil design. The surface carries deeply incised lines at both ends and three horizontal rows of independent simple meandric motifs.

It will, of course, remain unproven whether this object was actually a clay cylinder until the original piece is found in museum collections. With a view to general proportions, size and motif, the above suggestion is reasonable.

Torma 1887, p. 76. – Vlassa 1974, p. 191, Pl. 24: 6a. – Makkay 1969a, p. 14, notes 54–55. – Hood 1973, p. 194. – Helck 1979, pp. 9–13. – For the chronology of the earliest South-East European stamps and clay cylinders see Makkay 1976a, p. 26. – For cylinders found in Troy see Schmidt 1902, p. 303, Nos 8868–8869. – For a somewhat similar motif, see the decoration of an EM I–II seal found in Agia Triadha, in tholos A: CMS II, 1, No. 16.

- 266–267. Trn-Golema tumba (Pelagonia, Yugoslavia). Recent excavations yielded two clay stamp seals from a tell which has Early, Middle and Late Neolithic levels. The stamp seals published without secure context can be dated to the Middle Neolithic Porodin group. More information is required as regards their chronology.
- 266. Trn-Golema tumba. B. Clay. (Fig. XV)

Cylindrical, unperforated handle, oval face. Pattern consists of diagonally incised large V with parallel lines on both sides. Short incised lines inside angle of V. Height cca 4.3 cms.

Simoska-Sanev 1976, p. 44, Fig. 153.

267. Trn-Golema tumba. B. Clay. (Fig. XV)

Unperforated handle, oval base. Face bears no decoration with the exception of an irregular channel around the edge. Height 3.5 cms.

Simoska-Sanev 1976, p. 44, Fig. 154.

268–269. Trn-Mala tumba (Pelagonia, Yugoslavia). During excavations of the Neolithic tell settlement much material was recovered, including two clay stamp seals found in horizon II dated to the Middle Neolithic Porodin group.

268. Trn-Mala tumba. B. Clay. (Fig. XV)

Unperforated handle with tapering end. Rectangular base with rounded corners. Deeply engraved running spiral can be seen on the face. Height 4 cms.

Simoska-Sanev 1976, p. 45, Fig. 170. – Simoska-Sanev 1977, Pl. III: 2. – Bagolini compared the pattern of this seal to spiraloid motifs seen on a nearcontemporary vessel: Bagolini 1977, Fig. 74. 269. Trn-Mala tumba. B. Clay. (Fig. XV)

Stamp, unperforated handle, cross-shaped body. In the middle of quadrifoliate parts a deeply engraved simple cross can be seen. Height 4.5 cms.

Simoska-Sanev 1976, p. 45, Fig. 171.

270. Tsangli magula (Thessaly Greece). Clay. A. (Fig. III)

Surface find now in the Volos Museum, dated by Milojčić to the Protosesklo phase on typological grounds. Originally handled with traces of damage on the obverse. Square base with small projections on each side. Face bears a meander labyrinthine motif. Diam. of the base 6.5 cms.

Matz 1928, Pl. XXVI: 8. – *Milojčić 1964*, p. 65, Fig. 2: 12, with earlier literature. – *D. Theocharis 1959*, p. 66. – *M. Theocharis 1972*, p. 22, Pl. 10: δ : from the district of Almyros. – *D. Theocharis 1973*, Pl. XX (No. 16) and Fig. 211: from Tsangli. – *CMS V*, 2, No. 719: the piece is inventorized in the Volos Museum as found in Almyros.

271. Tsani magula (Thessaly, Greece). A or B. Stone. (Fig. XIII)

Short perforated handle, cross shaped flat base. The centre of the face shows a simple engraved cross enclosed by two continuous concentric cruciform channels. Found in level II together with A3 β pottery, dated to the first period by Wace and Thompson. Diam. of the face 5.4 cms.

Wace and Thompson report the discovery of six (!) clay (?) cylinders from the site. There is no information about these.

The pattern of the piece is very similar to the painted decoration of a pedestalled flat bowl found in Servia during recent excavations.

Wace-Thompson 1912, p. 149, Fig. 93. – Childe 1940, p. 34. – Milojčić 1964, pp. 64–65, Fig. 2: 11 (from the Protosesklo phase), with further literature. – Zervos 1962, p. 95, Fig. 299: Néolithique Ancien III. – D. Theocharis 1973, Pl. XX: 4, Fig. 272: top row, left. – M. Theocharis 1972, p. 22, Pl. 10: β (dated to the Middle Neolithic). – Matz 1928, Pl. XXVI: 14. – Christopoulos-Bastias 1974, p. 64, top left. – CMS V, 2, No. 721.–Mellink–Filip 1975, Pl. 165: a. – For the Servia pedestalled bowl, see Ridley–Wardle 1979, Fig. 9: 23.

272. Túrkeve-Lyukashalom (Co. Szolnok, Hungary). A. Clay. (Figs I and V)

Small clay stamp probably collected by the late I. Méri during field surveys in 1949 on a site of the Körös–Starčevo culture. Flat body, perforated handle, elongated oval base. Face bears three longitudinal zig-zag lines. Length of the base 3.2 cms. Surface find, no context. During field surveys of the past decade it was not possible to identify the exact site.

Unpublished. Hungarian National Museum, Budapest, Inv. No. 6/1949 Cs. The name of the site varies, it is also called Gyakos halom (Gyakos mound). Around site 19 of Gyoma (Co. Békés), now in the territory of Túrkeve, traces of a rich Körös-Starčevo settlement were found during recent field surveys.

Since the settlement lies beneath and around the Lyukashalom (Lyukas mound), it may be identical with the find spot of the stamp seal. Cf. MRTIV/2, Gyoma, site 19.

273. Usoe I (near Asparuhovo, Co. Varna, Bulgaria). B. Clay. (Not illustrated) During recent excavations a group of clay stamp seals was also found. A published picture of a single piece shows an anthropomorphic handle. The base bears no trace of decoration. It is also possible, that the pieces are small-size human representations. Diameters are between 3 and 4 cms.

Todorova-Zlatarski 1978, p. 6, Fig. 10. A dating to the latest phase of the Middle Neolithic or to the earliest phase of the Late Neolithic seems to be the most probable. Cf. Todorova 1973, pp. 16-31.

274. Usta nad Drim (Yugoslavian Macedonia). B. Clay. (Fig. XIII)

A clay stamp seal dated to the Late Neolithic by M. Garašanin was found at the site in 1966. In the lack of other well-dated material from the site we cannot dispute this dating, although on typological grounds a Middle Neolithic date, contemporary with the Porodin group appears to be more plausible. This problem requires further clarification.

Short unperforated handle, square base which has finely incised meanders. Diam. of the base 7.5 and 4.5 cms.

Garašanin et al. 1971, p. 74, No. 130, Fig. 130. For the chronology of the site see pp. 26-27. - Sanev et al. 1976, p. 48, Fig. 338.

275-276. Velušina-Veluška tumba (Yugoslavian Macedonia). Excavations of the large neolithic tell indicate continuous growth throughout the Early Neolithic period. The investigation revealed a series of four strata beginning no later than the earliest Starčevo phase (Anza I). Two clay stamp seals were recovered from the site. Unfortunately the preliminary report does not mention which level they were found in. Typologically both can date from earlier phases of Starčevo occupation.

275. Velušina-Veluška tumba. A. Clay. (Fig. VII)

Conical (perforated?) short handle, oval base. Parallel oblique lines run on either side of the straight line bisecting the face. Diam. of the base 3.5 cms.

Simoska-Sanev 1976, p. 32, Fig. 2. – For the chronology of the site, see Simoska-Sanev 1975, pp. 25–88, esp. p. 88. – The same incised motif can be seen on the head of a clay figurine found at the site: p. 76, Pl. XX: 3-3. For small clay figurines with decorations on heads resembling stamp seal patterns see Smederevska Palanka, quartered circle motif with chevrons: Gimbutas 1974a, Fig. 47; Pianul de Jos, a similar motif: Paul 1969, pp. 33–34, Pl. 15: 1–2. Cf. Höckmann in Kunst der Kykladen, p. 186, Fig. 182, note 30. The Zelenikovo piece (Cat. No. 287) has a decoration of longitudinal zig-zag lines. The shape of the stamp strongly resembles a human figure.

276. Velušina-Veluška tumba. A. Clay. (Fig. VII)

Handled (?) stamp seal with elongated oval base. Face shows a motif of parallel transverse zig-zags. Length of the face 7.8 cms.

Simoska-Sanev 1976, p. 32, Fig. 3.

277. Verbița (District Calafat or Plenița, Co. Oltenia or Craiova, Romania). A. Clay. (Fig. X)

Small clay stamp with broken handle and round base. Face bears a quadranted circle design, each quarter of the circle is filled with parallel chevrons. The motif lacks the lines quartering the circle, altough in other respects the pattern is identical with common quadranted circle designs of the Late Neolithic. From level II, dated to the Starčevo–Körös culture. Diam. of the base 2.5 cms.

Berciu 1961, pp. 31-32, Fig. 3: 2. - See Berciu 1959, pp. 76-77.

278. Vidra-settlement mound (near Bucharest, Co. Ilfov, Romania). C. Clay. (Fig. XVIII)

Manufactured in signet-form like a mushroom, this is a rare shape among Neolithic stamp seals. A third of the round base broke off. The face shows a simple engraved clockwise spiral ($5\frac{1}{4}$ turns). Found in a level dated to the Vidra IIA = the Gumelnita A1 phase. Comsa dated it to the Boian–Gumelnita transition. Diam. of the face 4.7 cms.

Rosetti 1938, p. 33, Pl. 13:9. - Comşa 1961, map 4, Figs 13-14.

279. Vinča (near Beograd, Yugoslavia). Probably A. Clay. (Fig. IV).

A single stamp seal excavated in Vinča found at a depth of 7.3 ms, probably dates to the Late Körös–Starčevo phase on typological grounds. (The depth itself corresponds to the Vinča B phase.) Small cone, quadrangular base with rounded corners. Face shows a simple pattern consisting of five zig-zag lines running lengthwise. Length of the base 3 cms.

Vasić 1932, p. 33, Pl. 13: 47a-b. – *Kutzián 1944*, Pl. LXIII: 6a-b. – A further piece—a chance find with incised spiral-meandric design—considered by Fewkes as a stamp seal, does not belong to this category. It is a decorated clay plaque of unknown purpose. *Fewkes 1936*, p. 37, note 199. Cf. *Vasić 1906*, Fig. 24.

280. Vinica-Klisedjik (district Šumen, Bulgaria). C. Clay. (Fig. XXI)

Among other rich finds of the Late Neolithic settlement, rescue excavations have brought to light several clay objects which may be considered pintaderas. This identification may be regarded as certain in only one case. This handled (?) piece has a circular base with a face having three engraved concentric circles with a large dot in the centre. Found in house 3 of the first building level. It dates to the Early Chalcolithic. No details of dimensions.

Radunčeva 1976, p. 16, Fig. 12: 13. Other published figures which may represent pintaderas: Fig. 20: 6, Fig. 42: 2, Fig. 55: 8.

281. Vrbové (district Trnava, Slovakia, Czechoslovakia). D. Clay. (Fig. XXVIII)

A complete stamp seal with traces of red paint was found together with finds of the late Boleráz phase of the Late Copper Age in 1975. On the face quadrangular impressions are arranged in three longitudinal rows. The piece is very similar to the ones from Pilismarót (Cat. No. 186) and Znojmo (Cat. No. 289). This is confirmed by the close relationship between the pottery of these three settlements (in the opinion of I. Torma). Dimensions: length 6.5 cms, height 7.4 cms.

Němejcová-Pavúková 1979, pp. 388 and 392, Fig. 2:2. – Pavúk 1981, p. 97, Fig. 10: left on p. 26,

282. Záhorska Ves (district Malacky, Czechoslovakia). D. Clay. (Fig. XXVII)

Stamp seal with long perforated handle and round base. The face shows a quadranted circle design with quadrants filled with chevrons. Dated to the local group of the Middle Copper Age, called the Furchenstich pottery, contemporary with and related to the Copper Age Lasinja–Balaton group. Lichardus dated it to the late Lengyel culture. Surface find, no associations, in private collection. Diam. of the base 4.5 cms.

Novotný 1958, p. 48, Pl. XXIII: 7. – Točik 1964, p. 159. – Lichardus 1962, p. 22.

283–284. Zăuan/Zovány-dîlma cimitirului/Temetődomb (Co. Sălaj, Transylvania, Romania). Two clay stamp seals were found at the site in trench 4, at a depth of 40–55 and 95 cms together with well-dated finds of the Körös-Starčevo culture.

Lakó 1978, p. 13, Pl. VII : 1–2. – *Lakó 1979*, p. 43. – For the excavations see *Lakó 1977*, pp. 41–46.

283. Zăuan/Zovány. A. Clay. (Fig. V)

Clay stamp seal with perforated handle. The oval face bears four longitudinal zig-zag channels extending over the edges. Exact dimensions are unknown.

Lakó 1978, p. 13, Pl. VII: 1. - Lakó 1979, p. 43.

284. Zăuan/Zovány. A. Clay. (Fig. V)

Clay stamp seal in the shape of a human foot. Unperforated handle. Shape and decoration of the face are not known, traces of deeply cut channels (probably transversal or longitudinal zig-zags or straight lines) can be seen on the edge. Exact dimensions are unknown.

Lakó 1978, p. 13, Pl. VII: 2. – Lakó 1979, p. 43.

285–287. Zelenikovo–Slatina (near Skopje, Yugoslavia). Trenches excavated in 1950 and 1953 yielded two Early Neolithic and one Late Neolithic levels. Two clay stamp seals were found in the Early Neolithic levels and a stamp in the shape of a figurine head probably dates to the Middle or Late Neolithic. There is no report on the secure context of the pieces. 285. Zelenikovo-Slatina. A. (Fig. VIII)

Clay stamp, short, broken handle with conical body. Square base has deeply engraved parallel straight grooves. It dates to the Starčevo culture. Diam. of the face 6 cms.

Galović 1964, p. 22. - Galović 1968, Pl. 4: 4. - Hauptmann 1967, p. 12.

286. Zelenikovo-Slatina. A. Clay. (Fig. X)

Short unperforated handle, end is broken. Round base with deeply engraved wide channels: a zig-zag line divides the face into two parts with short lines arranged irregularly. It dates to the Starčevo culture. Diam. of the base 3.2 cms.

Galović 1964, p. 22. - Galović 1968, Pl. 4: 5.

287. Zelenikovo-Slatina. E? Clay. (Fig. XII)

A stamp seal (?) in the shape of a figurine head. Parallel zig-zag lines are incised on the upper or lower end. No associations; it can be dated to the Early Vinča (Vinča A-B) culture on typological grounds. No details of dimensions.

Winn 1973, p. 65, Fig. 15. - For similar pieces see Cat. No. 275. Velušina.

288. Zerelia (Thessaly, Greece). E. Stone. (Fig. XII)

Square base, serrated edge. Pattern consists of two interlocking zig-zag meandric lines, both ends crossed by a short line. Partly damaged. Stray find. In the lack of associations it cannot be securely dated.

Matz 1928, Pl. XXVI: 12. – *Milojčić 1964*, p. 65, Fig. 2, 15, with earlier literature. – *D. Theocharis 1973*, Pl. XX: 19. – *CMS V*, 1, p. xli, line 8 and a missing line.

289. Znojmo (Moravia, Czechoslovakia). D. Clay. (Fig. XXVIII)

Conical flat body, unperforated handle with broken end. Thin elongated base with indented edges. An incised zig-zag line follows the contours of the base, forming six adjoining diamonds. Each diamond is filled with four impressed dots. It dates to the Late Copper Age, the Boleráz group of the Baden culture. Its almost perfect parallel was found in Pilismarót, dated to the same period (see Cat. No. 186). Length of the base cca 8.1 cms.

Pavelčik 1967, p. 25, Pl. VII: 100.

APPENDIX TO THE CATALOGUE

Pieces found, published or made known to me after the closing of the manuscript are listed in this appendix in alphabetical order. The sites in question are marked on the map, but these pieces could not always be discussed in the comprehensive evaluation.

290. Bălgarčevo (South-West Bulgaria). A. Clay. (Not illustrated)

Rectangular base shows horizontally placed interlocking spirals. It can probably be dated to the close of the Early Neolithic, perhaps to the Karanovo I–II period. Context is unknown, no details of dimensions.

Unpublished. The kind oral communication of Mrs. L. Perničeva, Institute of Archaeology, Sofia.

291. Burim-Peshkopi (North-East Albania). A. Clay. (Fig. B)





A stamp seal with broken handle was found on a site strongly related to the Early Neolithic Starčevo culture. A multilinear spiraloid pattern ornaments the elongated oval base. No details of dimensions.

Prendi-Andrea 1981, pp. 28-31, Pl. I:8.

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292. Bursuci-Cărămidărie (district Epureni, Moldavia, Romania). A? Clay. (Fig. XXXI)

Oval based stamp seal with unperforated squat handle. The tip of the slightly damaged handle is serrated. The face is divided into four quadrants filled with V-

-shaped chevrons extending to the edges. Context is unknown. It is assigned to the Early Neolithic, i.e. the Körös–Starčevo culture in the publication, but in view of its pattern, a dating to the Cucuteni culture would be more probable (even more so, since the site also yielded Cucuteni material). Length of base 5.2 cms, height 6.3 cms.

Coman 1980, p. 131, Fig. 106:1.

293. Igești-Scindureni (Moldavia, Romania). C. Clay. (Fig. XXXI)

The round face is patterned with two interlocking spirals which run into opposite directions. Conical body with perforation in the middle, tip is broken off. Context is unknown, but it is dated to the phase Cucuteni A2. Diam. of the base 4.6 cms, height 3.4 cms.

Coman 1980, p. 77, Fig. 106:2.

294–297. Kirdžali (South-East Bulgaria). Four clay stamp seals were found in the thick cultural deposits of the Karanovo I–II culture in the course of excavations conducted within the city during 1972. Their exact contexts and dimensions are unknown. Their motifs cannot be accurately described as a consequence of the poor quality of illustrations published in the preliminary report.

294. Kirdžali. A. Clay. (Fig. XXIX)

The elongated rectangular base shows a design in which a rhomboid "window" rests diagonally to other oblique lines of the composition. These lines form "open" triangles along the long side. The other quadrant adjoining the rhomboid "window" at its tip is filled with three oblique lines. No details of dimensions.

Pejkov 1978, p. 16, Fig. 38: top left on p. 41.

295. Kirdžali. A. Clay. (Fig. XXIX)

Round based, conical, unperforated stamp seal. The face bears an anticlockwise spiral. This piece is matched by the spiral patterned contemporary stamp seal from Tell Azmak (Cat. No. 16). No details of dimensions.

Pejkov 1978, p. 16, Fig. 38: top right on p. 41.

296. Kirdžali. A. Clay. (Fig. XXIX)

Damaged stamp seal with unperforated handle. It was probably patterned with two deeply engraved longitudinal zig-zag channels forming continuous ribs with points meeting and leaving oblique, quadrangular deep impressions. This piece is matched by specimens from Nea Nikomedeia (Cat. Nos 160, 162). No details of dimensions.

Pejkov 1978, p. 16, Fig. 38: bottom left on p. 41.

297. Kirdžali. A. Clay. (Fig. XXIX)

Stamp seal with oval base and long handle. Nothing can be seen of the pattern

on its face in the illustration published in the preliminary report. No details of dimensions.

Pejkov 1978, p. 16, Fig. 38: bottom right on p. 41.

298. Kovačevo (the Pirin mountain, South-West Bulgaria). A. Clay. (Not illustrated)

An Early Neolithic stamp seal was recently recovered here. The rectangular base is patterned with a meandrical design, but the exact mode of execution is not known. It is dated to the Karanovo I–II period. No details of dimensions.

Unpublished. Kind oral communication of Mrs. L. Perničeva, Institute of Archaeology, Sofia.

299. Kramolin-Hradisko (district Trebič, Moravia, Czechoslovakia). C. Clay. (Fig. XXX)

A stamp seal was found here several decades ago by J. Skutil. Squat body, upper part is damaged. The oval face shows a finely engraved cruciform design forming a quadranted oval. The four quadrants are filled with slightly irregular chevrons. Its context is unknown, but it can probably be assigned to a local variant of the Lengyel culture, i.e. the Moravian painted pottery. Length of the base 3.4 cms, height of body 2.8 cms.

Unpublished. I publish it on the basis of the kind oral communication and drawing of Dr. P. Koštuřik.

300. Pernik-Lenin housing estate (Bulgaria). A. Clay. (Fig. XXIX)

A stamp seal with rectangular base rounded at the corners, having an unperforated handle set slightly obliquely to the base. The channels of an irregularly placed distorted meander pattern can be seen on the face. A discontinuous zig-zag line runs along both long sides. Karanovo I–II period. Length of the base 5.2 cms, total height 2.6 cms.

Čohadziev 1980, card no. 4. We would like to thank Dr. M. Čohadziev for placing the photograph and drawing at our disposal. Recently also published in *Jungsteinzeit 1981*, Fig. 17:a on p. 39.

301-303. Sesklo (Thessaly, Greece). B. Clay. (Fig. XXIX)

Several stamp seals were found during the 1978 campaign. Three seals, found in house A bear circular engravings. The face of one of these seals is patterned with a deep impression in the centre, encircled by two deep concentric channels (No. 301). All seals have a perforated handle. Four floor levels were observed in house A dated to the MN III period, these seals can be assigned to the second floor. Since house Z2 is the latest, these stamp seals can be dated to the developed phase of the Sesklo culture. No details of dimensions.

Kotsakis 1981, p. 104, Pl. 8:a.

304. The environs of Szentes (Co. Csongrád) or Szarvas-Szappanos (Co. Békés, Hungary). A. Clay. (Fig. XXX)

An especially interesting stamp seal was found in the bequest of József Csalog, the former director of the Koszta József Museum in Szentes, a few years after his death. Its body is foot-shaped, the unperforated handle terminates in an animal head. The species of the animal cannot be determined. Two parallel lines run on both sides of the handle, three lines on the back starting from the ears to the edge of the base. Two impressions perhaps indicating the toes of a human foot can be seen on the front of the elongated oval base. The back part, i.e. heel of the foot is damaged. The face shows a pattern of five longitudinal, incised zig-zag lines, of which the two outsider ones extend to the edge. These latter two lines are discontinuous and leave triangle motifs. Even though the piece is a stray find, it can be dated to the Körös–Starčevo culture on typological grounds. It is perhaps identical with the specimen found by Gyula Gazdapusztai at Szarvas–Szappanos in 1957 which was subsequently lost (Cat. Nos 238–240). Length 4.5 cms, height 3.6 cms.

Unpublished. Koszta József Museum, Szentes, without inventory number. The kind oral communication of Dr. K. Hegedűs.

305. The environs of Szentes, perhaps Szegvár-Tűzköves (Co. Csongrád, Hungary). C. Clay. (Fig. XXXI)

Also found in the bequest of József Csalog. A perpendicular channel can be seen on one side of the long, pointed, unperforated handle. The slightly oval base shows a small hole with a diam. of 0.5 cms, a depth of 0.5 cms, in the centre, from which radiate eight lines. Six of the fields between these lines are filled with short, V-shaped chevrons pointing to the centre. The face is heavily worn, the edge of the base and the face is slightly damaged. Context is unknown. It can probably be assigned to the Tisza culture on typological grounds and by its paste. This would incidentally be the only known stamp seal of the Tisza culture. Diam. of the base 7.3 cms, height 7.1 cms.

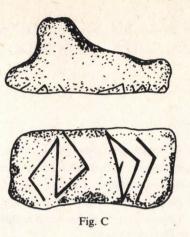
Unpublished. Koszta József Museum, without inventory number. The kind oral communication of Dr. K. Hegedűs.

306. Tîrpeşti-Rîpa lui Bodai (near Petricani, Moldavia, Romania). C. Clay. (Fig. XXXI)

Stamp seal having a conical body and squat handle with tip broken off at the perforation. Face is patterned with a spiral unwinding to the right, i.e. clockwise. Diam. 5.1 cms. Cucuteni A phase.

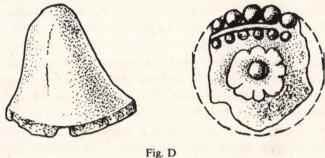
Marinescu-Bîlcu 1981, p. 69, Figs 192: 31 and 200: 8.

307. Chişoda Veche/Kisoda (district Timişoara, Romania). B? Clay. (Fig. C) Short handle, quadrangular base, face is ornamented with incised unfinished



meander on the left side, and two chevrons on the right. Length of the base 7 cms. Dated to the Vinča B2–C period.

Radu 1982, p. 76, Pl. III: 17a-b-c. 308. Vashtëmia (Albania). A. Clay. (Fig. D)



Small conical stamp, circular face with broken edge. Seven-petalled flower in the centre, encircled by two rows of small dots around the edge. It cannot be established on the basis of the published drawing whether the pattern is impressed or executed in relief. Found together with Early Neolithic white-on-red (Protosesklo-like) painted pottery. Diam. of the base cca 3 cms. Not illustrated on the map.

Korkuti 1982, p. 125, Pl. XVII: 12.

309-311. Poduri-Dealul Ghindarie (Moldavia, Romania). C. Clay. (Not illustrated)

Three clay stamp seals were recently recovered from Cucuteni levels. One is undecorated, the other bears a clockwise spiraloid pattern, the third is ornamented with geometric motifs.

D. Monah et al., Cercetări Arheologice 5, 1982, Pl. IV: 5, Pl. V: 1, 5.

GENERAL CONCLUSIONS: ORIGINS, DISTRIBUTION AND CHRONOLOGY

Since the majority of questions concerning these seals is discussed in the Catalogue, we may concentrate on some more important points. These may be grouped around two basic viewpoints. Firstly, what we can deduce from the distribution patterns of Neolithic and Copper Age seals in South-East Europe, granted that we can date these seals with accuracy. Secondly, what we can say about the origins of the earliest European seals.

I. The Early (A) and Middle (B) Neolithic stamp seals

A solution suggested for the origins of stamp seals will naturally be affected by conclusions about the origins of the earliest Neolithic pottery of South-East Europe and the problem of whether waves of eastern, Anatolian influences reached the Greek mainland and Thrace during the initial phase of the Early Neolithic. There is a general consensus that the South-East European Early Neolithic developed under Anatolian influences, therefore it was not the result of a totally independent local Neolithic revolution. This is also corroborated by the fact that there is no evidence suggesting that stone or clay was used for the manufacture of stamp seals in the Thessalian or Southern Greek pre-pottery Neolithic. This is in sharp contrast to the number of stone and clay ear plugs found at Souphli magula, Sesklo and Argissa magula, and even in the Körös-Starčevo culture.³ This very characteristic type has good Near Eastern connections. In general, nothing yet found in Greece or in the South-East European countries to the north suggests an independent invention of stamp seals in Europe at the beginning of the Early Neolithic. Thus, it now seems clear that parts of the eastern seaboard of Greece were affected by Anatolian influences at this time. Consequently, typological and chronological evidence appears to give clear indications for eastern influences in the introduction of the earliest stamp seals to Greece and South-East Europe during the Early Neolithic. We should now consider the chronological and typological evidence.

The first European horizon which manufactured and used stamp seals can be easily defined: the Protosesklo phase, and the contemporary Karanovo I–II and Körös–Starčevo cultures. Nea Nikomedeia also belongs to this group of EN cultures; however, we cannot say with certainty to which one. The distribution of stamp seals belonging to this early horizon is marked on the map and in the Catalogue with A. It is clear that only a part of these A stamp seals could have belonged to the earliest phase, which includes the earliest European stamp seals, therefore the very origins of the European seal industry. These are the stamp seals which may have been directly related to their suggested Anatolian predecessors and may show traces of the initial Anatolian influences. Without accurate chronological data we cannot differentiate between these earliest seals of group A, since their cultures (i.e. sites), cannot be divided into separate developing phases within the Early Neolithic. In this respect it must be emphasized that as regards the Early Neolithic of Thessaly and Macedonia we cannot yet draw a chronological distinction between the monochrome and the Protosesklo phases, since data which would support such a subdivision are insufficient.⁴

The clay stamp seals found at Nea Nikomedeia seem to play the most important role in solving the questions of both chronology and origins. As Rodden has correctly pointed out, "in the Nea Nikomedeia series there are types similar to those known from Greece and South-East and Central Europe; others are reminiscent of the ones from the Anatolian early sites."5 We may add to his remarks that although the Nea Nikomedeia stamp seals are closely paralleled by the Körös-Starčevo stamp seal inventory, they share fewer similarities with Thessalian specimens. These seals, dated to the Protosesklo phase show the greatest difference in that their majority was made of stone, while all 18 EN stamps of Nea Nikomedeia were made of clay. This fact separates them as drastically from the Thessalian pieces as much as it ties them to the Anatolian EN pieces. All of the 21 stamp seals found in EN levels VI-II of Catal Höyük were made of clay. Their material and characteristic features are very similar to some of the Nea Nikomedeia seals and suggest a real contemporaneity, or rather, a cultural connection. In fact, these similarities are apparent in shapes and decorative techniques (i.e. the deeply-cut incised lines) rather than in their patterns. On the other hand, it is very interesting that hardly any similarities can be found between stamp seals from Catal Höyük and those from the Protosesklo phase of Thessaly. The most striking difference is the lack of the labyrinthine motif in Catal Höyük, whereas this is generally characteristic of Thessalian and Körös-Starčevo EN seals (Cat. Nos 5. Almyros, 53. Endrőd, 150. Nea Nikomedeia, 174 and 175. Nessonis, 185. Philia, 199. Pyrasos, 219 and 224. Sesklo, 247. Tečić, 270. Tsangli, and perhaps 288. Zerelia). On the contrary, there are remarkable typological similarities between the face motifs of certain seals from Çatal Höyük and those from well-dated Karanovo and Körös-Starčevo contexts. These similar motifs are the following: the division of the face into four quadrants (Catal Höyük b and Cat. No. 80. Gradeshnitza); the simple spiral (Çatal Höyük c-d, and Cat. No. 16. Azmaška mogila); the distorted meander or meandroid pattern (Catal Höyük e-f, and Cat. Nos 183. Perieni, 186. Priština); incised zig-zag lines running horizontally with deep cut triangles on both edges of the face (Çatal Höyük h and Cat. Nos 13. Azmaška mogila, 122. Kazanlik, and some other similar pieces); a quadrangular or rhomboidal face patterned with a

meander encircling a small central field decorated with a central motif or impression (Çatal Höyük l, m, n, p, v and probably Cat. Nos 77. Grabovac, 98. Hódmezővásárhely–Vata farm, 205. Rug Bair, 233. Sofia; and especially the probably somewhat later piece from Usta nad Drim, Cat. No. 274, which could not be culturally separated from the Körös–Starčevo material); and the oval or circular face intersected into two parts with a single incised line, with some curvolinear simple motifs on both halves (Çatal Höyük o and Cat. No. 286. Zelenikovo). These particular similarities indicate close connections, especially if we recall that there are hardiy any typological resemblances (except for the simple decorative patterns such as zig-zag lines or chevrons) between motifs of the earliest stamp seals of different cultural areas.

Apart from the general typological relationships of stamp seals from Çatal Höyük and Nea Nikomedeia, the similarities between Çatal Höyük, Karanovo and Körös–Starčevo patterns adequately demonstrate that the appearance of the first South-East European clay stamp seals can be ascribed to Anatolian influences. In other words, the use and manufacture of stamp seals was transmitted to South-East Europe from Anatolia, together with other innovations of primary Neolithic civilizations (i.e. pottery). Moreover, certain researchers are of the opinion that it is precisely the similarities between these stamp seals which may prove that the first pottery was introduced to South-East Europe under influences from the late Early Neolithic of Anatolia.⁶ As shown above, the Protosesklo stamp seals could not in themselves prove this.

A more accurate understanding of these initial formative influences from Anatolia is subject to chronological considerations. In the opinion of Nandris, "the seals from Catal Höyük together with those from Nea Nikomedeia form together the best antecedents for the Greek and South-East European seals, for which there are no equally convincing Near Eastern sources."7 The strong similarities between the stamps of Nea Nikomedeia and the Karanovo and Körös-Starčevo cultures strongly contradict this preference for Nea Nikomedeia; we would treat them on a basis of equality in their connections to Anatolia. Apart from (and independently of) the Nea Nikomedeia-related group of Karanovo and Körös-Starčevo seals, an important part of these stamps may be dated to a later phase of the South-East European Early Neolithic than the Nea Nikomedeia pieces which date to a very early phase. Therefore these later pieces cannot be assigned to that horizon of the earliest European seals which probably show direct Anatolian inspirations. As has been pointed out, we cannot at present detect such subtle chronological differences in the cultures of horizon A. As a result, the relatively numerous seals of the Körös-Starčevo culture cannot be dated to either an earlier or a later phase of this culture. At present it would be premature to date those Körös-Starčevo seals, whose patterns were compared to some pieces from Çatal Höyük, to a very early phase of Körös-Starčevo development even if this dating is not entirely improbable. We may conclude that the patterns on EN stamp seals of the Balkans and the Carpathian Basin are unsuitable for dating them to shorter time periods.

From this point of view, it is very instructive that on the basis of their face patterns, the Körös-Starčevo stamp seals were usually compared to the significantly later Hacilar IIB stamps, not to the Catal Höyük VI-II pieces. Mellaart himself considers these similarities as an indirect likeness.8 As we suggested, a (now undetermined) part of the Körös-Starčevo and Karanovo I-II stamps may be dated to a later developing phase of these cultures. Assuming this is true, it follows that the Anatolian connections of this later group would lead to the Hacilar IIB pieces instead of the much earlier Catal Höyük ones. Pieces showing striking similarities to Hacilar II stamps are in fact quite numerous (see esp. Cat. No. 300, the Pernik piece), and we do not think it is necessary to emphasize that amongst them we find not only Körös-Starčevo, but also later pieces dated to horizon B. Such pieces are those bearing a distorted labyrinthine pattern,9 angle filling chevrons on circular base, 10 a motif of symmetrically arranged small dots, 11 the long horizontal mid channel (or rib),12 and, finally, the elongated oval face divided into two parts by a longitudinal line with short incisions on both sides.¹³ Because of their chronological position, these elementary similarities cannot prove that the first South-East European seal industry developed under Anatolian influences, originating from the Early Chalcolithic. On the other hand, they can show that the Hacilar stamp seals and the first South-East European seals were descendants of the same initial seal industry, which probably evolved in Anatolia, and that their relationships (i.e. similarities) were the results of their indirect genetic ties. It may furthermore prove that, as far as the stamp seal industry is concerned, these connections did not cease after initial formative Anatolian influences at the end of the Early Neolithic in Anatolia (i.e. Çatal Höyük, levels VI-II).

As regards the origins of the stamp seals in general, it may be a conclusion of prime importance that neither the earliest Anatolian, nor the EN European stamp seals indicate substantial affinities with the currently known earliest stamp seals of the Levant and the Near East. Therefore these latter cannot be considered as playing a role in the development of the Anatolian–South-East European stamp seals. Apart from this fact, the chronological position of the oldest Levantine pieces would corroborate such influences since a part of them can be dated slightly earlier than the first pieces from Çatal Höyük.¹⁴

For a detailed analysis of these questions we should offer a brief survey of the first stamp seals of the Levant (Syria, Jordan, Lebanon) and the Near East. This analysis is rendered more difficult by the unfortunate fact that a synchronization of the chronological sequences of Neolithic Anatolia and the Near East (including the Levant) presents great obstacles. It is often equally difficult to establish precisely the date of invention as well as the priority of important new types of finds. We have reasonable grounds for believing that this situation was mainly caused by the fact that archaeological comparisons were (and still are) usually based on radiocarbon data for demonstrating contemporaneities. The New Archaeology, in possession of the radiocarbon dating system has discarded typological comparisons of related artifact types (e.g. stamp seals). In the following, we shall base our typological comparisons on the relative chronology of J. Mellaart,¹⁵ also established on the basis of radiocarbon dates. A further difficulty arises from the fact that with the exception of Mesopotamia and Elam,¹⁶ an up-to-date comprehensive survey of the early Near Eastern and Levantine seals is not available (i.e. has not yet been published). This deficiency affects the very area where the earliest stamp seals were found and where this artifact may have been invented.

On the basis of the above-mentioned chronological data, the oldest stamp seals are known from Ras Shamra, from pre-pottery level VC which yielded three pieces made of steatite. One of them is a button seal, the second a type with domed back, the third (broken) is similar to the foot on an unidentified animal. Their faces show geometric linear patterns: a network and an incised simple cross.¹⁷ Level VC has been dated slightly earlier than level VI of Çatal Höyük yielding the oldest Anatolian stamp seals known at present. There is no need to demonstrate that the materials and decorative patterns of these and the oldest Ras Shamra seals are different, since all Çatal Höyük pieces were made of clay and their patterns represent intricate meandric and other motifs.

The following level of Ras Shamra, level VB (phase 1, 2, or 3) yielded a flat seal with convex back and with a transversal hole. It is covered with a network of wide incised lines. It is probably contemporary with Çatal Höyük levels VIII–VI, i.e. with the oldest Anatolian pieces or a little earlier.¹⁸

The oldest clay stamp seal in Ras Shamra was found in level VA, at a depth of 10.75 ms.¹⁹ While pottery was sporadic in level VB, here it is represented distinctly. The piece is a small lentoid, decorated with a geometric pattern representing a stylized plant in the opinion of Contenson. This find may be contemporary with the Çatal Höyük stamp seals of levels VI–II or IV–II. It must be emphasized, however, that this clay piece from Ras Shamra has very different characteristics as regards its shape and decoration than the Çatal Höyük pieces.

Until now, Ras Shamra has proven to be the single place where stamp seals were manufactured continuously throughout the Early Neolithic. This tendency is best documented in level IV which also yielded Halaf pottery, since three steatite and two cornelian pieces were found in phase C, while phase IVB yielded three made of steatite.²⁰ All have a flat base with a circular or square face. They can be assigned to the button-shaped type. Their faces are decorated by geometric patterns and one piece has a quartered surface with two incised center crossing lines.

The oldest stamp seals found in Byblos in Early Neolithic levels²¹ were exclusively made of clay. This is in an interesting contrast to the nearly contemporary Ras Shamra V seals made predominantly of stone. Patterns on these Byblos EN clay seals are simple linear and meandric motifs, showing similarities with Çatal Höyük pieces in some cases.²² These, and other patterns are similarly

paralleled by South-East European A seals.²³ Most of the Byblos Middle Neolithic stamp seals were made of clay, and show typological ties with pieces of the South-East European B group.²⁴ On the other hand, these earliest Byblos seals also have parallels among contemporary or slightly later Levantine stamp seals.²⁵ The type with irregularly or regularly arranged impressions on the face is closely paralleled by types of the South-East European A group.²⁶ In any case, a great percentage of clay stamp seals from Early and Middle Neolithic Byblos differs from the general characteristics of the earliest Levantine seals, and at the same time resembles the earliest Anatolian–South-East European group.

A jade piece with incised chevrons, found in Bouqras, level II,²⁷ and an unpublished seal from the middle level of Al Kowm²⁸ may probably be contemporary and dated to or near Ras Shamra VB phase. Both can therefore belong to the second chronological horizon of the Ras Shamra seals. Because of the not very secure dating of the Byblos EN seals we cannot draw final conclusions as to whether clay seals were already made in the earliest phase of stamp seal manufacture of the Levant.

On the basis of these few Early Neolithic pieces it would be difficult to draw any general conclusions. With the exception of the pre-ceramic pieces from Ras Shamra, phase VC, the first general manufacture of stamp seals may have been related to the emergence of the pottery industry both in Anatolia and the Levant. It would appear that the appearance of the first clay stamp seals was the result of the emergence of pottery technology.

The Amuq stamp seals have a similar chronological position. Here, the earliest phase, Amuq A yielded more stamp seals made of stone as compared to the next level, Amuq B.²⁹ Their shapes and decorations are nearly perfect parallels to the Ras Shamra pieces.

We may thus conclude that the first stamp seals discovered so far are restricted to a relatively small area: from the Levantine seaboard to Southern Anatolia. There are surprisingly few clay pieces among them and the pieces which can be dated to the earliest phase were made exclusively of stone. Their shapes and patterns definitely differ from the slightly later stamp seals found at Çatal Höyük. On the other hand, both these characteristics are very similar to the corresponding features of the later, Chalcolithic seals of the Near East. Stamp seals of EN and MN Byblos have an intermediary position, since they show similarities to both the Levantine and the Anatolian-South-East European earliest seals. As regards the chronological positions of the Catal Höyük stamps, the future discovery of very early stamp seals-contemporary with Ras Shamra level VC and/or even earlier-cannot be entirely excluded since the unexcavated levels of Çatal Höyük may date to earlier periods of the pre-pottery Neolithic. On the other hand, the total lack of stamp seals in the earliest Neolithic assemblages of Northern Mesopotamia and Iran is very surprising. The first appearance of stamp seals in these areas of the Near East coincided with the spread of the Late Neolithic-Chalcolithic wares over the plain of Northern Mesopotamia. This lack of earliest seals in Northern Mesopotamia seems to be in striking contrast to the fact that the subsequent development of the stamp and cylinder seal industry can be traced to this area.

Available evidence seems to indicate that in all probability two (independent?) stamp-seal industries (schools) developed and worked in two different areas already in very early times. One of them seems to operate in the Levant, where the presently known earliest pieces were found. Mesopotamian and Iranian stamp seals of later periods seem to belong to the subsequent development of the same industry. The other manufacturing area was probably located in Anatolia with its slightly later South-East European affiliate. At present this group seems to be slightly later than the first Levantine pieces. A real time lag, or an inadequate comparison of chronological sequences may equally lie at the bottom of this discrepancy. We do not think that it would be useful to debate whether the Anatolian stamp seal industry emerged as a result of an independent local invention or whether, at a still earlier phase, it was an organic part of a primary stamp seal industry distributed throughout the Anatolian-Levantine area. Its chronological position and typological traits are in striking contrast as regards this question, since a slightly later chronological position of the same artifact category in adjoining territories was usually interpreted as the result of external influences on the territory of their subsequent occurrence. On the other hand, the different material, shapes and decorations of the earliest of the Anatolian pieces suggest an independent origin from the Levantine stamp seal school. (As shown, the Byblos EN and MN stamp seals do not prove the totally independent development of the Anatolian group.) Finally, the autonomy of this Levantine EN industry may be interpreted as a result of a continuous development leading to the invention of writing at the end of the process. The fairly early representation of plants, efforts at abstraction, etc., may be interpreted as signs of this development.

Two different finds (i.e. find groups) contradict this hypothesis. The first is a clay stamp seal with a turning spiral found in the pre-Hassuna levels of Jarmo.³⁰ Though its shape is different, its spiral pattern resembles two similar Çatal Höyük pieces (c and d), the stamp seals from Azmaška mogila (Cat. No. 16) and from Kirdžali (Cat. No. 294). A very similar piece made of limestone was found in Cyprus at Lemba Lakkous, building 3. Its base shows an incised dotted circle and a spiral interrupted by radial lines at one side. As stated, it is about a thousand years earlier than any other seal yet found in Cyprus.³¹ It should also be noted in this respect that spiral patterned Körös–Starčevo stamps have not yet been discovered, but the future discovery of such pieces is to be expected.

It is perhaps surprising that evidence for stamp seals in Northern Mesopotamia from pre-Halaf times is very scanty. Apart from the abovementioned spiral patterned piece from Jarmo, clay and stone stamps were found in Hassuna levels at Yarim Tepe I,³² in Halaf levels at Yarim Tepe II³³ and in Tell es-Sawwan I.³⁴ At Yarim Tepe I, a round stone seal with "an incised pattern in the form of a multi-line oblique cross over another multi-line cross³⁵ was found in a layer of level VI. The quadranted circle motif has close parallels among Levantine seals discussed in the foregoing. Another preliminary report mentions that five stamp seals were found in the Hassuna levels of Yarim Tepe I. One alabaster piece is of rectangular shape with an oblique incised lattice-like pattern. It was found in level VI.³⁶ Of these five seals, two were found in level VI, two in level VIII and one was uncovered in level IX. "Of special interest is the second seal recovered in the VIth horizon too. It is made of clay, its round form is emphasized by a circular groove cut on its surface. Inside the groove a human mask with a relief nose and eyes is depicted."³⁷ This is the first occurrence of an anthropomorphic representation on stamp seals to date among the earliest stamp seals of the Near East, the Levant and Anatolia. The dates of the seals found in Tell es-Sawwan I, however, are uncertain and a seal impression³⁸ (probably from the same level), has not been dated correctly. In any case, it may represent the first documented occurrence of sealings.

Although stamp seals made of clay still occur during the Halaf period in Mesopotamia,³⁹ the manufacture of stone stamp seals only became a dominant feature during the Halaf and Ubaid periods. The general impression is that this seal cutting industry had established its own traditions at this early time (probably on the basis of the early Levantine stone seal industry) and continued to flourish until the invention of the cylinder seal and writing. The initial phase of this flourishing seal industry is best represented by the rich material from Tepe Gawra.⁴⁰ It is clear that this extraordinary range of seals has nothing to do with the development of the Anatolian group of Neolithic seals (dated to much earlier phases). The Anatolian group followed independent (or diverse) paths both in its origins and its later phases. On the other hand, they may have occupied an intermediary position between early stamp seals of the Near East and the Levant, and the more remote and simple South-East European EN seals, as regards both technology and chronology. Decorative patterns on certain Hacilar II seals may be regarded as simplified versions of earlier Çatal Höyük pieces. This similarity may indicate a style that was originally conceived and diffused in Anatolia, but its strong South-East European ties with Nea Nikomedeia suggest that local schools, at least in Thracia and Macedonia, were also producing it. At the same time, the motifs and shapes of these Hacilar seals show no similarity to the earliest or later button seals of the Levant and Northern Mesopotamia. It is also true that the seals found in Hacilar-similarly to those from Catal Höyük-differ essentially from the EN and MN (A and B) seals from Thessaly. Thessalian features such as intricate labyrinthine patterns and the frequent use of stone are not paralleled in Neolithic Anatolia so far. In general, these Thessalian stone seals do not appear to be a local variant of the Anatolian Neolithic seals, associated with them as an influencing group from the beginning. It may also be noted that a great part of these Thessalian seals—bearing very little resemblance to the Anatolian or Levantine Neolithic seals—cannot be securely dated. The only exception is the Pyrasos piece (Cat. No. 199), with its undoubtedly Protosesklo dating. On the other hand, there is no need to assume that none of the other eight pieces (Cat. Nos 172. Nemea, 174-176. Nessonis, 223-224. Sesklo, 271. Tsani and 288. Zerelia) came from Early Neolithic, i.e. Protosesklo levels. There are indications that one of them, the Nemea piece (Cat. No. 172), represents a type which is extremely rare, but its original find-spot and chronology are unknown. The chronological positions of these Thessalian (Greek) seals may be determined by their material (stone), since it is possible that the manufacture of such precious artifacts was limited to the latest phase of the Early and Middle Neolithic of Greece and had a relatively small distribution. One of the securely dated pieces, the Middle Neolithic Achilleion stamp seal (Cat. No. 1) supports this dating. Stone seals were clearly prestige items, and were probably quite rare. However, the fact that the spread of South-East European Early and Middle Neolithic stone seals was confined to Greece implies that this area displays a certain independence from the Anatolian-South-East European early group. How far these thematic and material differences pertain to questions of origins and connections with Anatolia is still problematic. In this context it is necessary to emphasize that Greece has long been recognised as a very early centre manufacturing stone figurines and vessels.⁴¹ It would appear that the Greek minor arts in the Early and Middle Neolithic had a preference for stone as raw material for figurines, vessels and seals. The use of stone draws a distinction between the Greek. and the Karanovo and Körös-Starčevo seals. This may perhaps imply that fine stone material which was lacking in other areas, was abundant in Greece. But these differences could also indicate the existence of independent connections with Cyprus and the Levant, undiscovered as yet.

It is finally time to consider what can be gleaned from the material discussed here and in the Catalogue about the origins of the A seals and to place their development within the framework of the South-East European Early Neolithic. Seals from the preceding pre-pottery Neolithic of Greece are virtually unknown. The earliest occurrences of European stamp seals are to be found in cultures such as the Protosesklo, the Southern Greek Neolithic, the Karanovo I-II and Körös-Starčevo. Their appearance may be attributed to Anatolian influences which affected the coastal areas of South-East Europe at the end of the Anatolian Early Neolithic. The diffusion of this early seal industry may be related to the introduction of pottery to Europe. There is a considerable variety of suggestions as regards the origins of the earliest South-East European potteries, but there seems to be no reason to doubt that Anatolia exerted a determining influence. The Early and Middle Neolithic seals of Anatolia (comprising essentially pieces from Çatal Höyük and Hacilar) may represent a particular group. Its relations to the slightly earlier and partly contemporary Levantine group of seals have not yet been detected. It does not have close affinities with the earliest or later stamp seals from Ras Shamra and other sites (except for very scanty typological similarities with Early and Middle Neolithic Byblos). On the other hand, this Anatolian group closely resembles the Nea Nikomedeia seals, and through them, the Karanovo I–II and Körös–Starčevo series. The form and pattern of the Pernik piece (Cat. No. 299) is extremely similar to the 3 stamp seals unearthed in level II of Hacilar. Greece and especially Thessaly mostly yielded unsecurely dated finds which apparently belong to the Early or Middle Neolithic. On the basis of the present evidence this Greek material betrays little influence from Anatolia, but has connections with the Balkans and the more northern regions of the Körös–Starčevo culture.

Since only a single piece of the great number of stamp seals recovered at Achilleion (Thessaly) has been published and dated to the Sesklo period (our horizon B, see Cat. No. 1), chronological questions and other characteristic features may be examined on the basis of the Nea Nikomedeia-Karanovo I-II-Körös-Starčevo material rather than that of Thessaly. Accordingly, the first European seals made their appearance in the Protosesklo period and in the related and contemporary cultures of the Balkans and the Carpathian Basin. The first influences probably reached the Central and Northern Balkans from the open plains of Eastern Macedonia and Thrace, or they may have been transmitted via the sea route from Anatolia or the Levant to Thessaly. This complicated situation is reflected by the multilateral relationships between the Nea Nikomedeia, Thessaly and the Karanovo and Körös-Starčevo stamp patterns. Nea Nikomedeia has a distinguished place in these interconnections since its stamp seals have links both with Anatolia and with the Early Neolithic cultures of the Balkans and the Carpathian Basin. These parallels to Nea Nikomedeia range from Bulgaria (the Karanovo I-II culture), especially the Pernik piece (Cat. No. 299), to the Carpathian Basin and Northern Moldavia (i.e. the Körös-Starčevo culture). These similarities are not only general (i.e. the longitudinal parallel lines and zig-zags on oval faces) but also exhibit closer affinities. The best example is the presence of the intricate labyrinthine pattern in both groups. This similarity is good evidence for demonstrating the full or partial contemporaneity of Nea Nikomedeia, the Protosesklo, Karanovo I-II and Körös-Starčevo cultures.⁴² As generally known, there are still some uncertainties in the relative position of these cultures, particularly their beginnings. The origins of the Körös-Starčevo culture and the closely related Karanovo I-II of Bulgaria are not clear in relation to Nea Nikomedeia, since radiocarbon measurements from Nea Nikomedeia gave very early dates. This is in strong contrast to the fact that these cultures were interrelated as shown by extremely similar artifact-types (such as clay stamp seals).

Nevertheless, the general distribution of these EN seals is very instructive. They were found in those EN cultures of South-East Europe which formed an integral part of the primary Neolithic cultures on the northwestern perifery of the Near East and Anatolia, and developed a related, but secondary Neolithic civilization. In more remote Early and Middle Neolithic cultures alien to this area of South-East Europe, not one single stamp seal has yet been found with the

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exception of two isolated stray finds (see below). These Early and Middle Neolithic cultures of Central Europe are dated to a slightly later phase of the Neolithic than the Körös–Starčevo culture. It would appear that evidence for the use of clay stamp seals in the Linear Pottery cultures will not be found at all. This fact alone provides highly reliable evidence for the Anatolian origin of the first European stamp seals. This might indicate no more than the introduction of stamp seals into Thrace and Macedonia. Existing or developing interconnections may have diffused them further.

The distribution pattern shows very interesting regularities. In the Körös-Starčevo culture stamp seals were only found in the middle and eastern provinces, but not in the western area. This fact suggests that the EN stamp seals of Southern Italy could not have belonged to the same system as South-East Europe. On the other hand, the concentration of stamp seals in the central and eastern territories of the Balkans provides further proof for their ultimately Anatolian origin (i.e. connections). This western distribution line runs along the valley of the Morava river with a dense concentration at the Belgrade confluence (Cat. Nos 77. Grabovac, 78. Gračanica, 179. Obrež, 196. Priština, 247. Tečić, 279. Vinča). The present total lack of stamp seals at such a rich Körös-Starčevo site as Donja Branjevina in the Voivodina is surprising. This may be interpreted by its geographical position near the western Körös-Starčevo province or by another—yet unknown—factor. This phenomenon cannot be attributed to its early chronological dating.

Further such regularities appear in remoter areas of South-East Europe such as the Carpathian Basin, where stamp seals occur in great number in the Körös-Starčevo culture (except for the earliest phase), whereas none were found in the Middle Neolithic Linear Pottery culture. This is in sharp contrast to the fact that both groups of the Linear Pottery developed under formative influences of the Körös-Starčevo culture,43 and that they must have maintained close links with its latest phase (the Protovinča and Medina types). In spite of this, the manufacture and use of clay stamp seals were totally unknown in all groups and phases of the Linear Pottery. This statement may be taken as final if we consider the present intensity of Linear Pottery research in territories like Bohemia, Slovakia or the Great Hungarian Plain and the enormous quantity of the recovered artifacts. One of the two specimens allegedly belonging to the Linear Pottery is a stray find which can be dated to horizon C on the basis of its typological traits (Cat. No. 199. Prša). The second piece is a surface find (237. Szakály) collected together with sherds of the Transdanubian Linear Pottery. However its paste, finish and face decoration perhaps date it to the late phase of the Körös-Starčevo culture (or rather, to a local variant, the Medina group). The site itself lies on the northernmost periphery of this culture.

The lack of clay stamp seals in the Linear Pottery can be a result of the fact that the aboriginal population of its territories, although influenced by the Körös-Starčevo material culture (as shown by the introduction of pottery technology), preserved and developed its own heritage. Wooden stamp seals may have belonged to their artifacts. The other probable suggestion is that both the ancestral and the "neolithicised" Linear Pottery groups used wooden stamp seals. Therefore there was no need to adopt a clay stamp seal industry from the Körös-Starčevo culture.

There is a further fact demonstrating the southeastern-Anatolian-origin of the EN European seal industry, namely, that in the entire territory of the Körös-Starčevo and Karanovo I-II cultures, the manufacture, and probably use, of clay stamp seals came to a virtual standstill after the decline of these cultures. (The only exception may be Greece.) This even occurred in such cultural provinces which can be considered as the homeland of the genetic survivors of these EN cultures, first of all the Vinča culture. This, as a direct survivor of the Körös-Starčevo culture on its central territories,44 did not use clay stamp seals at all except in its eastern regions in Transylvania. The rich stamp seal material of Tordos in Transylvania differs greatly from all types of the Körös-Starčevo culture and can be dated to a much later, B phase, of the local Vinča development. Körös-Starčevo-in general terms A-seals cannot therefore be considered as their direct or indirect predecessors. On the other hand, these Tordos seals comprise the majority of known Middle Neolithic South-East European seals (assigned to our B horizon). Given their isolated geographical and chronological position, and different typological features, their origins may be traced to events related to the Tartaria tablets and the Tordos group of signs.45

The discontinuity of the European seal industry can be proved by the extremely small number of seals dated to the next, the B phase. It should be noted that the full EN range was not continued, with the exception of a few isolated pieces and some surviving typical EN shapes. From the whole Bulgarian Middle Neolithic we may note two pieces (Cat. Nos 79. Gradeshnitza, 213. Usoe). The latter piece has an unpatterned face, and cannot therefore be used for proving any relationship. Some of the Thessalian pieces can perhaps be assigned to the Middle Neolithic B horizon, but they have uncertain dates and they could also be dated on the basis of their characteristics to the Early Neolithic (Cat. Nos 5. Almyros, 174-176. Nessonis, 218-220. Sesklo, perhaps 224-226. Sesklo, 271. Tsani). The only Thessalian piece which can definitely be dated to the Middle Neolithic B horizon is the seal from Achilleion, but its finely carved labyrinthine pattern may be a continuation of Early Neolithic prototypes. At present we have no evidence for Middle Neolithic stamp seals from any part of the Körös-Starčevo distribution territory. There are only two exceptions: the isolated Tordos group and the specimens of the more southern Porodin group. This latter group is considered as the genetic successor of the long survived Starčevo culture by some scholars.⁴⁶ Its settlements center in the southwestern part of the Starčevo province. The discovery of its clay stamp seals (Cat. Nos 188-192. Porodin-Tumba, 193. Porodin-Tumba

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bara, 266-267. Trn-Golema tumba, 268-269. Trn-Mala tumba, and probably 274. Usta nad Drim) can be ascribed to intensive excavation activity in this area during the past few years, therefore their relatively great number would be misleading if compared to the very scanty material from other regions. Some of their characteristic features link them to Early Neolithic types (Cat. Nos 269. Trn: deeply cut channels composing a cross, 79. Gradeshnitza: longitudinal zig-zag lines, 192. Porodin: concentric circles, 266 Trn: chevron-like ornaments). On the other hand, the piece from Trn (Cat. No. 269) is neatly paralleled by a seal from Greece (Cat. No. 81). Other patterns show individual features. Three further pieces belonging to this B horizon were found on the Adriatic coast (Cat. Nos 34. Cakran, 44-45. Danilo). The piece from Cakran is highly reminiscent of Körös-Starčevo traditions, since chevrons or zig-zag lines decorate its face. (As has been shown, no Early Neolithic stamp seal has been proved to have originated in this western area of the Körös-Starčevo culture.) The patterns of the two Danilo pieces are totally isolated in the whole range of South-East European early seals, and they resemble the deeply cut motifs seen on the Late Copper Age or Early Bronze Age pottery of the Western Balkans.

A part of the insufficiently dated seals of Greece and Yugoslavia may also be dated to this horizon (Cat. Nos 48. Dikili Tash, 81–83. Greece, 110. Kalambaki, 224–225. Sesklo, 287. Zelenikovo, 288. Zerelia), but they could equally well date to the Early Neolithic on the same grounds. Their shapes and face patterns do not exclude either dating.

On the basis of our present knowledge it would appear that the probably continuous manufacture and use of Early Neolithic stamp seals was interrupted in almost all territories of South-East Europe. With the exception of Greece, we only know of isolated pieces, mostly from surviving or retarding Early Neolithic cultural groups. The continuous development of EN cultures into Middle Neolithic ones did not result in the continuous production of stamp seals, since the Vinča culture did not continue the Körös–Starčevo stamp seal industry. This is very surprising since the minor arts of the Vinča culture achieved a high level of sophistication. A further exception may be Thessaly, but pieces belonging to the Sesklo culture may be contemporary with the very end of the Karanovo and Körös–Starčevo cultures, thus dated to the EN, i.e. to horizon A. Their typological traits do not contradict this assumption. We should remember that this Thessalian seal industry may have followed independent paths to a certain extent already in the Early and Middle Neolithic (the use of the stone as raw material, drilling technology, etc.).

II. Stamp seals of the Late Neolithic (C)

In terms of relative chronology, the C group (Late Neolithic) followed not only the South-East European Early Neolithic, but also the Porodin group and the Sesklo period after a very long intermediary development. As shown, we scarcely have any well-dated stamp seals from this long time span. One may conclude that the manufacture of clay stamp seals came to a virtual standstill at that time, since the lack of Middle Neolithic stamp seals cannot be attributed to the lack of archaeological activities which resulted in the discovery of a great number of Early and Late Neolithic stamps from the same territories, and in many cases, the same sites. Therefore no continuity may be assumed between the Early and Late Neolithic seal industries of South-East Europe. Typological considerations strongly support this theory.

The decline of the South-East European seal industry during the Middle Neolithic seems to be in striking contrast to the situation in the Near East. There, in the contemporary period (which can best be defined as the Ubaid phase and its related, contemporary complexes), we witness a continuous and increasingly sophisticated seal industry. In any case, this phenomenon may also provide indirect evidence for proving the foreign origins of the EN seal industry in Europe.

The origins of the LN South-East European seals cannot be traced to Middle Neolithic seals either. Not only does their limited number exclude such a suggestion, but the chronological position of the Late Neolithic seals also contradicts this. Apart from great typological differences, the C industry followed the B horizon after a time gap. Another fact is, that the distribution territory of these LN seals does not cover either the area of the EN or that of the MN seals. They appeared in cultures whose distribution territory lies outside the former territory of the Körös–Starčevo culture (i.e. to the north of the northernmost spread of EN stamp seals). The manufacture of clay stamp seals was totally unknown in these areas in earlier times (i.e. in the Linear Pottery cultures). The most striking example of this change in the distribution pattern is the Lengyel culture. We shall return to this question later.

In view of the above, the problems concerning the Late Neolithic stamp seals of South-East Europe should be discussed independently of questions of the EN and MN stamp seals, not only as regards their origins and chronology, but also as regards their distribution and typological features.

At present, the origins of the LN European stamp seals must be regarded as totally obscure. The above-mentioned discontinuity, together with some peculiarities of their distribution, may contribute to this obscurity. These distribution factors may be related to their origins. The most striking features are the following:

The number of excavated stamp seals decreased to an extraordinary degree in some LN cultures occupying territories of previous EN cultures, for example in Greece, Yugoslavian Macedonia and in the central regions of the Körös–Starčevo culture. In certain areas this decrease may be described as coming to a complete halt. The total lack of clay stamp seals is a characteristic feature of the Late Neolithic phases of the Vinča culture (phases C–D) and of the contemporary Tisza culture. The first can be regarded as the genetic successor of the Körös–Starčevo–Early Vinča sequence, the latter as the genetic heir to the Alföld

Linear Pottery, but distributed over the northernmost territory of the Körös-Starčevo culture.47 (Cat. Nos 40. Csóka/Čoka, 307. Chisoda and 195. Predionica may be the only exceptions.) On the other hand, a great number of clay stamp seals have been found in the Gumelnita culture, distributed over the former territory of the Karanovo culture. While no differences were ascertained between these two regions in the EN as regards their stamp seal industries, we now see a nearly total standstill in one and a flourishing industry in the other. Although none of these Gumelnita pieces can be accurately dated to a shorter period within the long Gumelnita sequence,⁴⁸ we can be sure that the origins of its seals and seal industry could not have been influenced either directly or indirectly by the Karanovo stamp seal industry. Such a suggestion should also be rejected on the basis of the nearly total settlement discontinuity between the local Late Middle Neolithic and the Gulmenita culture in Bulgaria.⁴⁹ The same is true of the three Late Neolithic stamps of Nea Nikomedeia (Cat. Nos 154-156) with their spiral pattern and probably of some other LN pieces from Greece (Cat. Nos 64. Eutresis, 215-217. Servia). Similarly, the rich stamp seal collection from Malig in Albania cannot be traced to Early or Middle Neolithic prototypes, neither on the basis of their typological characteristics, nor by their chronological position, even more so, since the two Early Neolithic stamp seals from Albania (Cat. Nos 291. Burim-Peshkopi and 308. Vashtëmia) are too early to relate them to the C seals from Maliq. Earlier pieces of the near-by Porodin group (except for the very simple motif of concentric circles: e.g. Cat. Nos 128. Maliq and 192. Porodin) differ greatly from the Maliq seals as regards their patterns (Cat. Nos 185-189. Porodin-Tumba, 193. Porodin-Tumba bara, 267. Trn-Golema tumba, 268-269. Trn-Mala tumba, 274. Usta nad Drim). The same can be said of the Late Neolithic Bulgarian pieces: their shapes and patterns have nothing in common with the EN stamp seals. Therefore we cannot assume that any of the EN seal industries of South-East Europe developed continuously until the appearance of the LN seals and contributed to their emergence. Neither may we assume that such inspirational forces would have suddenly been revived after a long period of latency or would have been executed in some other material, such as wood.

A further circumstance also contradicts such a survival of traditions. Our distribution map clearly shows that the distribution of C seals transgressed the distribution territory of the EN seals only in an area which can be determined precisely as regards its cultural heritage. This area covers the Central and Eastern European sphere of the Late Neolithic painted potteries (i.e. the Lengyel, Moravian painted, Erősd–Cucuteni–Tripolje cultures). All these cultures developed on the basis of the Central European Notenkopf pottery of the Middle Neolithic, contemporary with the Vinča A–B phases. These chronological and genetic questions, however, are very complicated and would require a detailed analysis.

The distribution territory of the Notenkopf pottery extended from Transdanubia over Western Slovakia, Moravia, Southern Poland to the north of the

Carpathian Range to Moldavia and the easternmost part of Transylvania.⁵⁰ Within this huge area, only the regions lying to the east of the Carpathian Range were part of the former distribution territory of the Körös-Starčevo culture. This part of the Körös-Starčevo area was occupied by the Notenkopf population long after the end of the Körös-Starčevo development. Local groups of the Late Neolithic painted potteries (i.e. the Erősd, Tripolje and Cucuteni cultures) developed from the Notenkopf pottery complex on this part of the Körös-Starčevo territory, and, in this respect, they differ from other Notenkopf-based painted potteries of Central Europe (the Lengyel, Moravian and Polish painted potteries). These latter are also genetic descendants of the Notenkopf population, but on their own territory. These genetic and geographical differences, and the long time gap between the end of the Körös-Starčevo culture and the beginning of LN painted groups exclude the possibility that the appearance of the C stamp seals in these LN cultures could be traced to the influence or survival of the Körös-Starčevo stamp seal industry. The discontinuity between them is confirmed by the presence of the ethnically alien Notenkopf culture dating to the later part of this time gap. Seals of the Körös-Starčevo culture and of these Late Neolithic cultures also differ considerably in their typological features.

The Late Neolithic seals of the eastern painted pottery groups could not have originated from their predecessors either, since the Notenkopf pottery (similarly to all other groups of the Linear Pottery) did not manufacture or use clay stamp seals. A similar conclusion may be drawn as regards the western groups of the Notenkopf-based painted potteries (Lengyel, Moravian and Polish painted potteries), and their seals (Cat. Nos 22. Boskovštýn, 93. Hadersdorf am Kamp, 123. Kraków-Nowa Huta, 194. Prague-Bubeneć, 200. Racibórz, and probably 198. Prša). A further, yet unpublished piece from Apfelstädt (Cat. No. 8) may belong to the same group dated to the Stroke Ornamented pottery, contemporary with the Late Neolithic painted cultures. Therefore neither the origin of the stamp seals of the eastern painted pottery groups, nor the seals of the western groups may be derived from the considerably earlier Körös-Starčevo culture. Regarding the eastern groups, a long temporal gap and genetic differences exclude this possibility; in the case of the western groups it is these same differences combined with territorial divergences. Thus, the origins of a few pieces of the western groups may be traced to internal influences of the eastern painted groups. Such influences may have been diffused along the routes of the ancestral internal contacts inherited from their common heritage: the Notenkopf pottery. We should accept such an origin, since not one single stamp seal has yet been discovered in the Late Neolithic cultures of the central part of the Carpathian Basin adjoining the territory of the Lengyel culture (i.e. the Tisza culture) and in other related Late Neolithic groups (the Csőszhalom and the Herpály groups). It must also be noted that a relatively great number of excavations have been conducted on settlements of the Tisza culture which yielded very rich material. The lack of stamp seals in the Tisza material is in

striking contrast to the fact that it maintained strong ties with the stamp seal manufacturing Late Neolithic cultures of the Eastern and Southern Balkans. Stamp seal producing Late Neolithic, Notenkopf-based western painted potteries did not have these same cultural connections. This contradiction may be due to the fact that the Tisza culture, a genetic successor of the Middle Neolithic Alföld Linear Pottery culture, had an independent material and spiritual culture, differing from those cultures which had evolved from the Karanovo and Körös–Starčevo cultures in the Balkans and in the southern part of the Carpathian Basin.

Although the origins of the stamp seals of the Late Neolithic western painted pottery groups have thus been associated with their interconnections with the eastern painted groups, the ultimate origin of the seals of the Notenkopf-based LN cultures has not been solved at all. The question has been only transferred to the southeast. Numerous considerations suggest two possible origins for the Erősd– Tripolje–Cucuteni Late Neolithic stamp seals:

(a) These peoples began to manufacture clay stamp seals as imitations of earlier ones made of perishable material, perhaps wood. Their shapes and decoration do not contradict such a hypothesis. On the other hand, the question of why their genetic forerunner, the Notenkopf pottery culture did not manufacture clay stamp seals of its own after earlier wooden prototypes would still not be answered.

(b) The LN painted groups were merely passive recipients of external influences as regards stamp seals.

It may be instructive to compare these seals with those of the contemporary Gumelnita culture. Since they share very strong similarities, I support this second suggestion. The similarities themselves—it seems to me—do not need a detailed demonstration. (See the pieces in Figs XVII–XXI.) Even though it is clear that cultural links with the Gumelnita culture may have resulted in the appearance of stamp seals in the Erősd–Tripolje–Cucuteni cultures, the process itself awaits further investigation.

As shown, a local and independent origin of this Late Neolithic seal industry in Bulgaria (dated to the Kodjadermen–Gumelniţa–Karanovo VI period) cannot yet be proved since clay seals are virtually unknown from the periods which followed the Karanovo I–II culture. Thus, it may be concluded that this LN Gumelniţa stamp seal industry developed under external influences. (The lack of Middle Neolithic clay seals in almost the entire territory of the Körös–Starčevo and Karanovo cultures cannot be ascribed to the insufficiency of excavations nor to a return to the renewed manufacture of wooden seals.) Taking the geographical and chronological picture into consideration, the ultimate model of the LN Bulgarian stamp seal industry should primarily be sought in Anatolia and in Greece. Thus, the origins of the South-East European LN seals would represent an essentially similar situation as in the Early Neolithic, when the Karanovo and Körös–Starčevo stamp seals appeared as a consequence of Anatolian influences. South-East European clay stamp seals show special cultural affinities to those of Anatolia both in their early and later stages. However, the real cultural value of the influences giving rise to these LN seals is not clear, since our picture of Anatolia is not complete owing to lack of well-dated Early Bronze Age stamp seals. It is thus extremely difficult to prove such influences. Two other facts support this possibility:

(a) First, the development of stamp seals had taken diverse paths after the Early Neolithic as a consequence of which their shape, decoration and degree of abstraction differed considerably by the time they were diffused to the LN of South-East Europe.

(b) Second, the correlation and synchronization of the EBA periods of Anatolia with the various phases of the South-East European Late Neolithic and Copper Ages is one of the most controversial issues of prehistoric archaeology. The problem of chronological and cultural relations between North-West Anatolia and South-East Europe is especially difficult because no well-stratified Anatolian sites have yet been excavated and the Bulgarian transition from the Late Neolithic to the EBA (i.e. the origins of the Ezero sequence) requires further study. This stubborn problem has resisted solution even through appeals to stratification, typology and radiocarbon dating. One can neither avoid, nor settle it. A detailed survey of various related problems exceeds the scope of this book. Only a general chronological framework can be given at the most. In this chronology, the Gumeniţa–Kodjadermen–Karanovo VI period (which was followed by the stratigraphic sequence of the Ezero mound after a time gap of unknown length) cannot be earlier than phases I–II of the Anatolian EBA and may even be partly contemporary with the Aegean EH I.⁵¹

It could be of special interest that both the shapes and decorations of the LN C seals differ more significantly from the contemporary or near-contemporary stamp seals of Greece and Crete than did the EN pieces from their contemporary counterparts there. On the other hand, their Anatolian parallels may explain the similarly special relationship between them that we offered for solving the origin of the LN C seal industry. These similarities, coupled with other evidence suggest that there was an interchange of artistic and other influences between Anatolia and South-East Europe at this time, an ideal background for the transmission of new techniques, ideas and inventions to South-East Europe. Bulgaria was likely to have been the first recipient of such influences, including stamp seals. In the following I shall attempt to document these typological ties. It should be noted, however, that the most striking parallels have been dealt with in the Catalogue where the relevant pieces are discussed.

One of the most characteristic—if not the most general—motif is the *quadranted circle design:* two lines meet in the centre of the face, forming a cross. Each quarter may be filled with chevrons, parallel or diverging lines. A part of these lines may be identical with the quartering lines themselves. This type, rarely occurring in phases A and B,⁵² was frequent in phase C (Cat. Nos 74. Frumuşica,

194. Prague, 195. Predionica, 198. Prša, 210. Ruse). It is worth mentioning that already in 1940 Childe dated this type ("decorated with a filled cross") to his Danubian II which may be considered contemporary with our C phase in a broad sense. He also noted that this decoration may have imitated Near Eastern prototypes,⁵³ but he did not specify them. Kenna compared the similar Sesklo piece (Cat. No. 220) to seals found in Anatolia (Troy, Alishar Höyük, Koçumbeli in North-Central Anatolia).⁵⁴ This type of decoration seems to have been characteristic of the Anatolian and Aegean EBA, especially phases 2 and 3. We know several such pieces from the phases Amug F⁵⁵ and G,⁵⁶ Tarsus EBA 2 and EBA 3,⁵⁷ from several levels of Alishar Höyük,⁵⁸ from Alaca Höyük,⁵⁹ Ahlatlibel,⁶⁰ from the Tepecik mound,⁶¹ Poliochni, from the Blue and Red phases,⁶² from Keos (both as a seal decoration⁶³ and a sealing⁶⁴), from Lerna, from the "House of Tiles" (as a seal⁶⁵) and from phase IV as a sealing.⁶⁶ Apart from later pieces,⁶⁷ some EM I-II seals with this motif also occur in Crete.⁶⁸ The motif seen on the end of the Amorgos cylinder may also be assigned here.⁶⁹ The Anatolian parallels also include a variant of this type in which the quartering lines meet at the centre and not at right angles (Cat. No. 74. Frumusica).⁷⁰

The next extremely important motif is the spiral and its variants. As a general conclusion, it must be emphasized that only very simple types or variants of this motif can be found on C seals, as compared to the earliest spirals of the slightly later Aegean seals and seal impressions. Childe correctly noted that while the Danubian II (= C) stamp seals may have imitated Asiatic archetypes, the spiral itself was alien to the Asian continent, i.e. to the Near East.⁷¹ As a matter of fact, the number of seals decorated with spirals or spiraloid designs has not increased significantly in Asia since then. Apart from the one found in Jarmo,⁷² we know only of a few pieces dated to the EBA, among others, from Amuq phase G,⁷³ and from sites excavated in the region of the Keban dam: Han Ibrahim Sah, EBA I-II, level VII,⁷⁴ from Yeniköy Höyük, level VIII of the same period,⁷⁵ and from the Pulur mound, from levels dated to the EBA I-II.⁷⁶ These pieces include parallels of the simple spirals running clockwise or anti-clockwise. Among the early Aegean seals, the EBA III pieces of Lerna are the nearest to this type, first of all in their shapes and cutting techniques and, to a lesser degree, the spiraloid patterns themselves.⁷⁷ Similar seal impressions are known from Agia Irini⁷⁸ and relatively early Cretan seals are occasionally decorated with simple spiraloid patterns.⁷⁹ Obviously, no specific conclusions may be drawn from similarities and affinities between these very simple spiraloid patterns.

On the other hand, more intricate spiral patterns can be seen on some of the C stamp seals, with specific attributes, e.g. when the face is decorated by two different spirals which may be interlocking, connecting or running in opposite directions (clockwise and anti-clockwise, Cat Nos 29. Brăila, 69. Frumuşica). Parallels of these random cases sporadically occur among Anatolian and Aegean EBA pieces dated to slightly later phases.⁸⁰ On the Frumuşica piece the simple clockwise spiral

turns back at the center. It has relatively close parallels among the previously mentioned Anatolian-Aegean group.⁸¹

The running spiral represents the most interesting problem. Among the C stamp seals there are only two pieces which actually belong to this category (i.e. on which a continuous channel runs all over the face, and interlocking or connecting spirals compose a pattern). The design of a single piece, however, may be modeled as a running spiral motif consisting of connecting spirals, if we add short connecting lines to the original motif (Cat. No. 23. Botfalu).⁸² The result may be similar to seal impressions seen on the edge of clay basins found in Tiryns.83 The horizontal (running) version of the motif (cf. Cat. No. 59. Erősd) is matched by a seal impression from Lerna IV,84 by seal motifs from Crete in tholos grave A at Agia Triadha,85 and in tholos II of Lenda.86 Despite these similarities it is not possible to conclude that the stamp seal from Botfalu was used to produce a spiral chain by rolling in wet clay. As seen, stamp seals form Oltszem/Olteni (Cat. No. 180) and Frumusica (Cat. Nos 68, 70 and 73) preserved traces of red, vellow and white paint in their channels. This implies body painting or pattern stencilling of textiles as their probable use. It could perhaps be suggested that stencilled patterns were originally prepared on wet clay, and these patterns were subsequently worked into final decorations. In fact, there is a total lack of sealed, impressed motifs in the South-East European Neolithic on pottery and genuine sealings are altogether missing.

The very characteristic whirling wheel, or Catherine wheel motif of three Maliq stamp seals represent an independent typological problem (Cat. Nos 131-133). It is surprising, that this motif never occurs on any of the presently known C (or earlier and later) stamp seals in South-East Europe. On the other hand, it has numerous parallels in the Anatolian EBA as demonstrated by the evidence presented in the Catalogue. Unfortunately, these Anatolian EBA pieces, and especially those found in the Keban dam region, cannot be dated accurately within the EBA or, better said, they have not yet been dated in the preliminary reports. This motif occurs in Kültepe Ib,87 and in Agia Triadha, Crete, on seals from tholos A (dated to EM I-II),⁸⁸ and tholos B of Platanos, dated to EM II-MM I.⁸⁹ These latter and the Malig pieces, however, cannot be directly related. On the other hand, if the Anatolian parallels-or a part of them-date to the earliest phase of the EBA (as in the opinion of Koşay⁹⁰), then they may be contemporary with the Maliq pieces. Difficulties in correlating and synchronizing the Anatolian EBA and South-East European LN sequences do not allow the conclusion that this rare type originated in Anatolia.

A further version of spirals, *the C spiral*, is known only from the pattern of an isolated piece from Maliq (Cat. No. 134), and perhaps the same motif can be seen on a stamp seal from Nea Nikomedeia (Cat. No. 154), dated to the Late Neolithic. Parallels of this motif are mostly to be found among patterns of slightly later Cretan seals⁹¹ and among seal impressions found at Lerna and Agia Irini.⁹² In general,

substantial relationships do not seem to have existed between these and the Maliq piece, therefore no conclusion can be drawn as to the origin of the type.

Stamp seals decorated with *concentric circles* represent a common type of the C seals (Cat. Nos 18. Bikovo, 22. Boskovštýn, 42. Cuneşti, 117. Kapitan Dimitrijevo, 120. Karanovo(?), 128. Maliq, 208. Ruse, 212. Salmanovo and 280. Vinica). Two patterns similar to the concentric circles are known from the surviving A (Cat. No. 192. Porodin) and the Middle Neolithic B phase (Cat. No. 225. Sesklo). This extremely simple pattern was a favourite decorative motif of a great number of Early and Middle Bronze Age Anatolian and Aegean seals. Related pieces are known from Tarsus EBA II,⁹³ Pulur EBA I–II,⁹⁴ from the Yeniköy mound, also from EBA I–II levels,⁹⁵ from Alishar Höyük,⁹⁶ and it occurs among seal impressions found in Agia Irini.⁹⁷ Later Middle Bronze Age parallels can be found both in Anatolia⁹⁸ and the Aegean.⁹⁹ There is a very simple variant of this motif, in which a circular channel appears around a central hole or protrusion (Cat. Nos 18. Bikovo, 63. Erősd, 92. Hǎbǎşeşti). There are only are very sporadic parallels to this type.¹⁰⁰

There are, however, numerous parallels to the C type, when the quadrangular (and perhaps also circular) face was decorated with a *grid*. It is very surprising that we known of only an isolated occurrence of this type from Central Europe (Cat. No. 93. Hadersdorf). Parallels are from Tarsus, ¹⁰¹ the Amuq sequence,¹⁰² Kültepe Ib,¹⁰³ the Cyclades,¹⁰⁴ Myrtos,¹⁰⁵ and Crete.¹⁰⁶

There may be a full contemporaneity between the oldest pieces of these parallels and the Hadersdorf stamp seal.

Disregarding the Nea Nikomedeia (Cat. Nos 157–159) and Öcsöd (Cat. No. 182) stamp seals dated to the Early Neolithic, the stamp seal from Tordos (Cat. No. 251) and the Sesklo piece of uncertain dating (Cat. No. 218), there is only a single stamp seal which was decorated with *impressed holes* (Salmanovo, Cat. No. 213). Given the knowledge of the relationships listed above, it would not be surprising if its parallels could be found among the same group of Anatolian and Aegean Early Bronze Age seals.¹⁰⁷

Similarly, only a single piece was decorated with a deep and wide *center line that bisects the surface*, with incised lines on both halves (Cat. No. 3. Aldeni). Parallels to it—among others—can be found in Alaca Höyük,¹⁰⁸ Ahlatlibel,¹⁰⁹ Tarsus,¹¹⁰ Myrtos¹¹¹ and in material from a much later grave dated to the Mycenaean Age.¹¹² A variant of this pattern can be seen on the stamp seals found in Costişa (Cat. No. 38) and Tiszaug (Cat. No. 249). At present, only a very uncertain parallel of this design is known.¹¹³

The same can be said of two further patterns. One of them is composed of a simple incised clockwise *meander* on a rectangular base (Cat. No. 73. Frumuşica). The nearly total lack of meandric decoration on LN South-East European seals is very surprising. Since meandric patterns were more general on the A and B seals, this difference adduces further proof against a direct relationship between them and the C industry. At the same time, we should also note that this motif occurs very

rarely on Anatolian and Aegean Early Bronze Age seals. This would imply that such wide-ranging similarities can only be the consequence of genetic relationships. One of the sporadic parallels is known from Tarsus; ¹¹⁴ the other from Ahlatlibel.¹¹⁵

A similar conclusion can be reached as regards another simple pattern. The face is decorated with *parallel incised lines* (Cat. No. 43. Cuneşti). Similar patterns can be seen on seals from Ahlatlibel.¹¹⁶ Tarsus¹¹⁷ and in much later deposits in Crete.¹¹⁸

In the preceding pages we listed those C patterns which have typologically related parallels among Anatolian and Aegean EBA stamp seals and seal impressions. Seal impressions which can be taken as parallels are mostly from Crete and Lerna. There are some isolated LN European C pieces without exact Anatolian or Aegean parallels (Cat. Nos 215–216. Servia, 135–137. Maliq).

The question of *the Karanovo stamp seal* (Cat. No. 121) also relates to this period. There is no need, however, to deal with it in detail, for our earlier comments do not require revision.¹¹⁹ In short, its decoration does not represent written symbols (in contrast to the opinion of certain Bulgarian archaeologists according to whom it documents the earliest appearance of writing in the whole world). Its pattern consists of four incised straight lines which divide the face into four quadrants. Within these quadrants simple geometric motifs are arranged symmetrically. The Predionica piece (Cat. No. 195) has an essentially similar but simpler pattern. As to the symbolic (i.e. the suggested written) character of the signs of the Karanovo seal, one must compare it to the similar decorative elements of a clay object of unknown function found at a settlement of the Tisza culture at Szarvas, Hungary (Fig. II: 1a-c).¹²⁰

As shown, two pieces of the C category were made of *stone* (Cat. Nos 40. Csóka/Čoka and 109. Izvoare). This fact is in sharp contrast to the greater number of stone seals in phases A and B, but these latter are exclusively from Greece. One may conclude that this very low proportion conforms to the similarly very low number of stone vessels and figurines in the Northern Balkans and the Carpathian Basin throughout the Neolithic and the Copper Age.

As in the case of the Karanovo seal, there are no new aspects which would modify our earlier standpoint on the *clay cylinders* of the South-East European Late Neolithic (see the introduction to Cat. Nos 228–231. Sitagroi¹²¹). The drawing of the Tordos cylinder (Cat. No. 265) found by Zsófia Torma which has recently been republished, can be considered as essentially new evidence. If it was found in Tordos (which seems to be the case), it must be the earliest cylinder among currently known South-East European cylinders with the exception of the Nándorválya piece (Cat. No. 149), which may be its contemporary, since it dates to the Vinča B1–2 period, the phase preceding the Maliq pieces. Parallels to this Tordos cylinder are virtually unknown both among the cylinder seals of the Near East and among the South-East European pieces. Apart from these two Transylvanian finds, all other South-East European cylinders date exactly to the same period as the C seals. Moreover, they were mostly found in the deposits of the same cultures and sometimes at the same sites (Maliq). This coincidence strongly supports the theory that the formative influences in the origins of the LN clay stamps should rather be ascribed to external influences than continuous local development. In the case of cylinders this external influence can be documented by the initiative role of the peripheral cylinder seals in Anatolia and the Levant (and the Cyclades) dated to the first centuries of the 3rd millennium B. C. Therefore the same formative process may be assumed for the appearance of the South-East European C stamp seals, the only difference being that the primary influences came from Anatolia. The typological resemblances and chronological synchronizations do not contradict this general hypothesis. On the other hand, the purpose and use of the South-East European C stamp seals may be related to their origins. This question will be briefly discussed.

When one compares the South-East European C stamp seals and the typologically related Anatolian EBA seals with contemporary seals and seal impressions of the Near East, a large and somewhat disappointing gap appears, but one should never underestimate the importance of differences. The following differences are the most significant:

(a) In South-East Europe the patterns were limited to the simplest motifs, although they also have parallels in the above-mentioned territories;

(b) The spiral and its variations are the main decorative patterns of the later Aegean seals. In contrast to LN South-East Europe, spiral designs on stamp seals and impressions are few in number both in the contemporary LN-earliest Bronze Age Aegean and in EBA Anatolia. There is a great difference between these European and Aegean seals in terms of their intricacy, in accordance with point (a).

(c) No effort towards abstraction can be observed in South-East Europe.

(d) Not one single ornamental motif or element depicting animate or living beings (humans, plants or animals) can be found on South-East European stamp seals. The representations of animate beings is considered to be a distinct feature of genuine seal industries.

(e) Compared with the seals of EBA Greece; the seals of the South-East European LN show less inventiveness and reflect a much inferior technical skill.

(f) The South-East European situation is in sharp contrast to the Aegean as regards the existence of stone stamp seals.

(g) In South-East Europe there are no proven occurrences of seal impressions. Even within the enormous amount of the ceramic artifacts there is no sign of the use of stamp seals and cylinder seals to seal or decorate pottery. This is an essential difference between the Near Eastern and Aegean use of seals. The primary form of sealing pottery (or in general, containers) can be seen on finds of the pre-Halaf period in Mesopotamia, and by the end of the EBA I in the Aegean. The fact that the South-East European C stamp seal industry came to an end at exactly the same time when there was an increase in the use of sealings during the EBA II in Crete and Mainland Greece is of basic importance. This difference can be attributed to the fact that the same primary innovation (i.e. the use of stamp seals) was adapted differently in certain areas which in later times were parts of two alien culture provinces with a different level of development. The South-East European C seals had but only casual connections with Crete because in most cases they maintained cultural ties with Anatolia.

What the LN clay stamps and cylinders of South-East Europe were actually used for can never be guessed from their motifs and shapes. It has been suggested that the "roll-cylinders" of Sitagroi could have been used to stamp moist clay, to ornament a vase, a fixed clay hearth or a container. It has been pointed out elsewhere¹²² that European cylinders were never used in this way. The question now arises whether South-East European stamp seals were used to decorate pottery. A study of the Nea Nikomedeia seal patterns has convincingly shown that decorative motifs on the pottery of Nea Nikomedeia differ considerably from seal designs.¹²³ In general, patterns are very rarely comparable to any on the pottery. While Mellaart does not find any seal-made decorative impressions on Neolithic pottery,¹²⁴ Milojčić and Milojčić-v. Zumbusch do not exclude that a pattern very similar to the Pyrasos piece (Cat. No. 199) can be seen on a sherd found in Sesklo (which is, moreover, dated to the Protosesklo phase on the basis of this similarity).¹²⁵ Pini compares other seal patterns with Neolithic painted motifs, i.e. the Nea Nikomedeia (Cat. Nos 50 and 153) and the Sesklo B (Cat. No. 227) pieces.¹²⁶ Indeed, he refers to two unpublished occurrences which imply that stamp seals were perhaps used to decorate pottery.¹²⁷ In the full lack of evidence to the contrary we can conclude that the South-East European A, B and C stamp seals were never used to decorate pottery.

It is necessary to mention some further occurrences where the decorative motifs of pottery resemble stamp seal patterns. An incised motif on a sherd from Donia Branjevina, Northern Yugoslavia, dated to the early phase of the Körös-Starčevo culture is very similar to the patterns of the Tsani seal (Cat. No. 271) and that of a specimen of unknown proveniance from Greece (Cat. No. 83). 128 Two further Körös-Starčevo sherds, on which the relief decorations resemble stamp seal patterns should also be mentioned. The Tsani stamp seal (Cat. No. 271) is again very strikingly the best parallel to the first piece (Fig. II: 3).¹²⁹ An exact painted parallel of this motif decorates a pedestalled bowl of the Sesklo culture.¹³⁰ The second fragment (Fig. II: 2) with a human-like relief decoration¹³¹ has parallels among the Greek stamp seals decorated with interlocking meanders and labyrinthine motifs. The very strong similarity between the labyrinthine pattern of the Endrőd piece (Cat. No. 53) and the labyrinthine motifs of Thessalian early seals supports the theory of a common-probably Anatolian-origin of the European stamp seal industry. On the other hand, the same motif appears as the decoration of a clay figurine of the Middle Neolithic Alföld Linear Pottery (see the

details under Cat. No. 53. Endrőd). This striking similarity suggests far-reaching historic implications which, however, exceed the scope of this study. It is interesting that while in Greece the painted motifs of the pottery resemble stamp seal patterns, in the Körös–Starčevo culture it is the reliefs and impressed motifs which resemble seal patterns. This could mean that there were basic differences between these two cultural areas as regards the system and art of pottery decoration. The south mostly preferred painting, and the more northern regions (i.e. cultures) of South-East Europe preferred cruder decorating techniques. This difference can be generalized to a wider range of artifacts and may furthermore be the reason underlying the very low percentage of painted wares in the Körös–Starčevo culture as opposed to the Protosesklo culture. This phenomenon has already been discussed.¹³²

The similarities between stamp seal motifs and pottery decorations cover the whole time span of the A and B horizons. The background to the use of similar motifs to decorate both pottery and stamp seals in unknown as yet, but these patterns can be considered unique, with the exception of the simple spiral. As noted in the Cataloque, Bagolini observed strong similarities between the interesting spiral pattern of the Trn stamp seal (Cat. No. 268) and certain pottery decorations, ¹³³ but the use of stamp seals to decorate pottery cannot be established on this evidence alone.

Turning to the C stamp seals, one finds that there is nothing which can be considered as a *seal impression* in the LN and Copper Age cultures of South-East Europe. The genuine use of stamp and cylinder seals for producing impressions was restricted exclusively to Bronze Age Crete, the Cyclades and the Greek mainland where sealings appear to have come into use at the beginning of the EBA II or slightly earlier. This occurred at the very same time that the Middle and Late Copper Age of the Carpathian Basin and the contemporary latest Gumelnita phase witnessed the disappearance of stamp seals. Certain disputable—and fully unproven—occurrences of alleged sealings from the Gumelnita culture have been discussed in the Catalogue.¹³⁴

The first finds, considered to be sealings, are from the Middle Bronze Age Wietenberg culture of Transylvania. Here, two large, flat clay hearths or altar plates were decorated with a band of running spirals, impressed probably with cylinders or some sort of stencilling tods.¹³⁵ These probably sacrificial features can be regarded as good parallels to Aegean Early and Middle Bronze Age sacrificial hearths decorated with seal impressions, reliefs or painted motifs.¹³⁶ Since the Wietenberg altars date to the middle of the 2nd millennium B.C., they may exhibit strong connections with the sacrificial hearths of the megarons in Mycenaean palaces.¹³⁷ As regards the nature of these connections, it may be extremely important, as pointed out by N. Sandars, that there was a strong similarity between the Hittite "Royal sign" or "Cappadocian symbol" and a decorative element of the Wietenberg culture.¹³⁸ This connection confirms an earlier observation¹³⁹ that the Middle Bronze Age of the eastern part of the Carpathian Basin (i.e. cultures like Gyulavarsánd, Ottomány–Wietenberg) had strong Aegean affinities. A part of these resemblances have associations on the Greek mainland and the islands, while a few of them are closer to Anatolia, with limited contacts with Greece and Crete. On the other hand, the existence of the so-called "Cappadocian symbol" in Transylvania does not exclude strong Mycenaean influences, since the motif has also been found in Greek Thracia.¹⁴⁰

When considering all objects of the C horizon one may say that these stamp seals, although similar to their Anatolian or Aegean parallels as regards their patterns, were not manufactured and used for the same purpose as genuine stamp and cylinder seals: i.e. to indentify the owner of the seal and authenticate the object to which the impression is affixed. As a matter of fact, it cannot be confirmed whether Anatolian EBA I–II seals were used in this way.

A similar conclusion can be drawn as regards related small objects, i.e. the *stoppers* (= *Fr. bouchon*).¹⁴¹ Although Milojčić and Milojčić-v. Zumbusch mention some stoppers possibly dating as early as the Protosesklo phase,¹⁴² it is clear that these were objects of rather undistinguished form. Thus they cannot be considered real stoppers. There is no evidence for the use of stoppers from the Early and Middle Neolithic either in Greece or in South-East Europe. The first stoppers which can be assigned to a specific date are from the Aegean EBA.¹⁴³ There are several similar clay artifacts from Bulgaria which can be dated to the (late?) Gumelnita culture. One was found at Balbunar,¹⁴⁴ another at Okol-Glava,¹⁴⁵ one at Mrtvica,¹⁴⁶ and a further probably at Vinica.¹⁴⁷ These pieces may be contemporary with the majority of the Gumelnita stamp seals dated to the C horizon. They appear to be imitations of the EBA stoppers of Anatolia and the Aegean. The purpose served by these objects is not always clear since with the exception of the piece from Balbunar evidence of find circumstances and traces of repeated insertion and removal in the orifices of vessels are lacking.

Thus, the evidence for the dating and geograpical setting of the stamp seals, cylinders and stoppers of the C horizon is very clear. This fact tends to support the suggestion that their common occurrence was not merely the result of chance. Nor can the use of these objects be considered identical to the original purpose of seals in the contemporary Near East. The C stamp seals did not continue local traditions as a long time gap divides them from the Early and Middle Neolithic seals. There is no evidence for the continuous manufacture of stamp seals from the A–B horizons to the C. At the same time, it is also clear that in spite of some typological similarities they differ very much from the newly established Aegean seal industry of the Early Bronze Age. One of the reasons for these differences is that only the later part of their time-span was contemporary with the Aegean EBA seals. This would imply that the origins of the LN stamp seal industry of South-East Europe may be traced to external, Anatolian influences. This suggestion would correspond to a situation in which these industries were being newly established in South-East Europe, where there was no previous strong local tradition. Such statements are made on the basis

of available evidence from Anatolia and a number of individual comparisons between seal designs. But typological comparisons made in this way may overlook some real evidence. It is extremely difficult to determine if current synchronizations between the Anatolian EBA and the South-East European LN and EBA cultures have any real validity.

It is worth mentioning that the distribution territory of South-East European early gold artifacts from the 3rd millennium B.C.¹⁴⁸ coincides with the distribution of the C seals. Since the Eastern Aegean and Anatolia are usually considered as the source of the earliest European metal technology, this coincidence also supports the theory of an Anatolian origin for the C seal industry.

III. Stamp seals of the D horizon

Stamp seals belonging to the D group are very few in number and limited in range of type. The only fact worth noting concerning their chronology is that a part of them date to the Central European Lasinja-Balaton-Furchenstich pottery.¹⁴⁹ Others are of a Late Copper Age date and belong to the Boleráz-Baden cultures, primarily to the first, Boleráz phase. The D horizon can be considered an afterlife of the South-East and Central European stamp seal industry. There is, however, some evidence for a gradual transition between types of the C and D groups since the quartered circle motif (Cat. Nos 118. Kaposvár, 282. Záhorska Ves) resembles the main pattern of the C group. The distribution of the presently-known D pieces corresponds to the western territory of the C group in Central Europe, i.e. the distribution territory of the Lengyel, Moravian and Polish painted potteries. On the other hand, only isolated pieces are known from the Balkans (see the map). This is in striking contrast to the contemporary emergence and richness of the Aegean seal industry which does not appear to have exerted much influence in more northern areas. The total lack of stamp seals in regions east of the Carpathian Range can be traced to the break in the continuous cultural development there, i.e. to the arrival of the peoples of the Pit Grave culture to the territory of the eastern Notenkopfbased LN cultures. It is very interesting that at the same time the more eastern regions developed flourishing stamp and cylinder seal industries, but under direct Near Eastern influences.¹⁵⁰ A further discussion of this issue exceeds the scope of this section.

Among the D stamp seals one rarely finds recurring types. The great similarity between the pieces from Pilismarót (Cat. No. 186), Vrbové (Cat. No. 281) and Znojmo (Cat. No. 289) may be interpreted as being due to their adjacent geographical location and the fact that all date to the same, the Boleráz phase of the Baden culture. The above-mentioned pieces from Kaposvár (Cat. No. 118) and Záhorska Ves (Cat. No. 282) may date to the Middle Copper Age or the the latest, surviving phase of the Lengyel culture (contemporary with Early Copper Age cultures of the Great Hungarian Plain and Transylvania). Possible parallels for types of the D group are to be found in the same Anatolian-Aegean EBA phases, to which the C types were related (for parallels to the Kaposvár, Manolé and Szeghalom pieces, see Cat. Nos 118, 145 and 241). These fall into different phases of the EBA and therefore have very limited chronological value. These similarities may be complemented by certain other resemblances¹⁵¹ in the case of the specimens from Bajč (Cat. No. 17),¹⁵² Emen (Cat. No. 52)¹⁵³ and Nagykanizsa (Cat. No. 147).¹⁵⁴

On the basis of these parallels, neither the origins, nor the connections of the D stamp seals can yet be solved. It has been shown¹⁵⁵ that during contemporary Aegean periods (i.e. in phases II and III of the EBA) we find an independent and flourishing Aegean seal industry. Central Europe and the Balkans did not partake in this progress. The D group had no essential connections with this Aegean industry. On the other hand, there is no evidence which would demonstrate that the Late Copper Age Boleráz and Baden stamp seals played any role in the emergence of the different, but homogenous group of Central European and Middle Bronze Age seals.¹⁵⁶ This decadence in the seal industry during the Baden period contradicts the theory of strong Aegean–Anatolian influences in the Baden culture.¹⁵⁷

SUMMARY

In the hope that few important questions have remained unanswered, the author deliberately refrains from providing a detailed synthesis as a summary. Instead we may conclude with some general reflexions.

The main aim of this study has been to discover when and how the use and manufacture of stamp seals began in South-East Europe and to delineate its spread from its first appearance through its subsequent development.

(a) The survey revealed that the South-East European stamp seal manufacture falls into four distinct chronological groups/phases:

A: the Early Neolithic,

B: the Middle Neolithic,

C: the Late Neolithic,

D: the Copper Age of Central Europe, and the earliest Bronze Age in the Northern and Eastern Balkans.

(b) Of these, only groups A and C can be considered as independent, sophisticated industries which exhibit considerable homogeneity and typological characteristics. The single group of isolated objects dated between phases A and C (as group B) and after C (as group D) show that clay stamp seals were far less popular in these intermediary phases than in the Early and Late Neolithic. Apart from this, the development of South-East European early seals cannot be considered continuous, in the sense that these four generations of stamp seals followed one another successively both as regards their typological criteria and cultural heritage. One may conclude that the production of clay stamp seals was introduced and transplanted to South-East Europe twice, both times as a result of Anatolian influences. Both the A and C group came to a nearly total standstill after a long local development. The Middle Neolithic of Greece may be an exception to this rule.

(c) The distribution territories of each group/phase of the South-East European stamp seals were always determined by given cultural factors. In the Early Neolithic they did not transgress territories inhabited by the cultures of the secondary village farming communities of ultimately southeastern origins (i.e. the Greek Early Neolithic, the Karanovo I-II and Körös-Starčevo cultures). The fact that not a single clay stamp seal has yet been recovered in western regions of the Körös-Starčevo culture supports the claim for their southeastern, Anatolian origin. Thus, the origin of clay stamp seals was definitely related to the general emergence of the earliest South-East European pottery industry under formative Anatolian influences. The total lack of clay stamp seals in the whole area of the Linear Pottery cultures fits well into this general picture. This is in strange contrast to the origin of their pottery industry which evolved under Körös–Starčevo influences and especially to the fact that their genetic successors, the Late Neolithic Notenkopf-based painted potteries, did manufacture and use clay stamp seals. All circumstances considered, there must have existed very distinctive cultural differences between the Körös–Starčevo and Linear Pottery cultural regions (populations) which differences, however, gradually decreased by the Late Neolithic. It is very surprising however that the LN Tisza culture which inhabited the northern part of the former Körös–Starčevo distribution territory, did not use clay stamp seals.

(d) There is no reason to believe that the LN C stamp seal industry followed local heritage. It may have been introduced by indirect external—possibly Anatolian—influences. The final confirmation of this hypothesis, however, needs further investigation.¹⁵⁸

(e) While the A stamp seals represent an organic, western part of an Anatolian–South-East European EN group, the C stamp seals were not used in the way genuine stamp seals of the Near East and the Aegean were used at the same time. This negative statement is supported by the undeniable fact that not one single seal-impression (sealing) has been found in the whole area of the C stamp seals. Therefore they may have been used to imprint patterns on textiles, leather, walls, or for body painting. However, there is no direct evidence to support this theory either.

(f) The different use of South-East European C and early Aegean stamp seals may be understood in the light of the differences in their subsequent development, i.e. the total cessation of the South-East European industry at the time of the manufacture of true Aegean seals. This is in striking, but not antagonistic contrast to their supposedly Anatolian origin. This contradiction can be solved if we accept that the influences were indirect. On the other hand, parallels of the C seals in the Anatolian Early Bronze Age may have belonged to the same category of doubtful stamp seals.

(g) The evidence of clay cylinders in the C group also proves such indirect influences from Near Eastern and Anatolian/Levantine cylinder seals. These clay cylinders are fully contemporaneous with the greatest part of the C stamp seals and clearly represent simple imitations of Near Eastern-Anatolian/Levantine prototypes.

(h) In the case of South-East European clay cylinders and stamp seals, one sees the results of direct or indirect influences, but at the same time one witnesses the signs of a simplified technique and use. Early and Late Neolithic cultures adopted the manufacture of these artifacts and adapted them to their own heritage and needs. Accordingly, the EN stamp seals do not seem to have differed from their Anatolian parallels either as regards their typology or their use. On the contrary, this adaptation involved a change in their real sealing function during the Late Neolithic. This means that in the Near East, stamp seals also had a long development from the oldest appearance of small circular seals until the emergence of seals as documents for administrative use within the framework of writing. The South-East European Early and Late Neolithic stamp seals did not follow this development.

NOTES

¹ Castiglioni 1956. – Bagolini 1977. – Castiglioni–Calegari 1978.

² Cf. Makkay 1976b.

³ For details see Makkay 1974, p. 150, note 128.

⁴ Makkay 1974, p. 152. – Makkay 1978b, pp. 445–448. – Cf. Schachermeyr 1976, p. 44, and Weinberg 1965a pp. 290–291.

⁵ Rodden 1964a, p. 605. The Çatal Höyük stamp seal inventory will be cited here in the following numbering:

Level VI:

a. Mellaart 1964a, Fig. 41:10.

b. Mellaart 1964a, Fig. 41:8.

c. Mellaart 1964a, Fig. 41:9. – Mellaart 1967, Fig. 56:5. – Mellink-Filip 1974, Pl. 14: bottom. Level IV:

d. Mellaart 1964a, Fig. 41:1.

e. Mellaart 1962, Pl. VII: c, top row, right. - Mellaart 1964a, Fig. 41: 2.

f. Mellaart 1962, Pl. VII: c, top row, centre. - Mellaart 1964a, Fig. 41: 3.

g. Mellaart 1962, Pl. VII: c, upper row, left. - Mellaart 1964a, Fig. 41: 4.

h. Mellaart 1964a, Fig. 41:5.

i. Mellaart 1964a, Fig. 41 : 6. – Mellaart 1964b, Fig. 9, p. 272. – Mellaart 1965, Fig. 64: bottom right. – Mellaart 1967, Pl. 121: centre and Fig. 56 : 2.

j. Mellaart 1964a, Fig. 41: 7. - Mellaart 1967, Fig. 56: 6.

k. Mellaart 1967, Pl. 121: bottom row, right. – Mellaart 1975, Fig. 53: left. – Mellink-Filip 1974, Pl. 14: right.

Level III:

1. Mellaart 1962, Pl. VII: c, second row, left. - Mellaart 1964a, Fig. 40: 8. - Mellaart 1967, Pl. 121: top row, right. - Mellaart 1975, Fig. 53: bottom right.

m. Mellaart 1962, Pl. VII: c, below. – Mellaart 1964a, Fig. 40: 9. – Mellaart 1967, Pl. 121: bottom left. – Mellaart 1975, Fig. 53: top row, second from the left.

n. Mellaart 1962, Pl. VII: c, centre. – Mellaart 1964a, Fig. 40: 10. – Mellaart 1967, Pl. 121: top row, centre. – Mellaart 1975, Fig. 53: top row, third piece from the left. Level II:

o. Mellaart 1962, PL. VII: c, second row, right. - Mellaart 1964a, Fig. 40: 1. Mellaart 1967, Pl. 121: top row, left. - Mellaart 1975, Fig. 53: top row, right.

p. Mellaart 1964a, Fig. 40: 2.

r. Mellaart 1964a, Fig. 40: 3.

s. Mellaart 1964a, Fig. 40: 4. – Probably Mellaart 1967, Pl. 121: bottom row, centre and Fig. 56: 1. – Mellaart 1975, Fig. 53: bottom left. – Mellink–Filip 1974, Pl. 14: mentioned as coming from Level IV, the courtyard.

t. Mellaart 1964a, Fig. 40: 5. - Mellaart 1967, Fig. 56: 3. - Mellink-Filip 1974, Pl. 14: left.

u. Mellaart 1964a, Fig. 40: 6. - Mellaart 1967, Fig. 56: 4.

v. Mellaart 1964a, Fig. 40:7.

⁶ Weinberg 1965b, pp. 31-32. - Schachermeyr 1964, p. 7.

7 Nandris 1972, p. 68.

8 Mellaart 1960, p. 92. - Mellaart 1971, pp. 136-137.

⁹ Mellaart 1970, Fig. 187: 4, and 187: 1–3, and the pieces from Nea Nikomedeia (Cat. No. 151), Tečić (Cat. No. 247) and especially a slightly later seal from Tsani (Cat. No. 271).

¹⁰ Mellaart 1970, Fig. 187: 7, and the Hódmezővásárhely–Vata farm (Cat. No. 97), Verbita (Cat. No. 277), and probably the slightly later Sesklo pieces (Cat. No. 220).

¹¹ Mellaart 1970, Fig. 187: 6, and Nea Nikomedeia (Cat. No. 159), and probably the Sesklo piece (Cat. No. 218).

¹² Mellaart 1970, Fig. 187: 5, and Nea Nikomedeia (Cat. No. 170).

¹³ Mellaart 1970, Fig. 187: 10, and the later Danilo piece (Cat. No. 45). See the Servia piece of uncertain date (Cat. No. 215).

14 Mellaart 1975, p. 261.

15 Mellaart 1975, pp. 14-17.

¹⁶ Homès-Fredericq 1970. – Dollfus 1973.

17 Contenson 1977, p. 17, Fig. 11.

18 Kuschke 1962, p. 261, Pl. XII: No. 7, p. 286.

¹⁹ Contenson 1962, p. 507, Fig. 32. The piece can probably be dated to the UA 3 horizon on the basis of recently published evidence: Contenson 1977, p. 2.

²⁰ Contenson 1973a, p. 29, Figs 12-13.

²¹ Dunand 1973, Figs 48-52, pp. 84-88: EN seals from Byblos.

²² Byblos: *Dunand 1973*, Fig. 48: No. 32939 and Fig. 50: No. 29007; Çatal Höyük: No. l (see note 5). Cf. a piece from Hacilar: *Mellaart 1970*, Fig. 187: 1 (stray find) and *Dunand 1973*, Fig. 49: No. 35386 and *Mellaart 1970*, Fig. 187: 7.

²³ Byblos: Dunand 1973, Fig. 48: No. LI and Fig. 49: No. 26114 and Velušina (Cat. No. 275); Byblos: Dunand 1973, Fig. 52: No. 33119 and Nessonis (Cat. No. 173); Byblos: Dunand 1973, Fig. 48: No. 32939 and Fig. 50/No. 29007 and Grabovac (Cat. No. 77) and Rug Bair (Cat. No. 205). Cf. note 22, since these latter Byblos pieces also have parallels among Catal Höyük stamps.

²⁴ Byblos: *Dunand 1973*, Fig. 76: Nos 23671 and 29564 (the quadranted circle and angle filled cross motifs) and pieces from Verbita (Cat. No. 277), Gradeshnitza (Cat. Nos 79–80) and especially Sesklo (Cat. No. 220); Byblos: *Dunand 1973*, Pl. CXVI: No. 33332 and pieces from Zelenikovo (Cat. Nos 286), Čavdar (Cat. No. 36) and Cakran (Cat. No. 34).

²⁵ For example Byblos: *Dunand 1973*, Pl. CXVI: No. 35151, a Middle Neolithic clay piece and a steatite stamp seal from Hama, Level L2: *Fugman 1958*, p. 19, Fig. 13b: 7A 766. The Hama piece 7A 767 (p. 19, Fig. 13b) has a good parallel in Byblos: *Dunand 1973*, Pl. CXVII and Fig. 110: No. 34862. Cf. No. 30370.

²⁶ Cf. Nea Nikomedeia (Cat. Nos 157–159), Öcsöd (Cat. No. 182) and Sesklo (Cat. No. 218), this latter piece being from group B.

²⁷ Singh 1974, p. 53, with further literature.

28 Dornemann 1961, p. 69.

²⁹ Braidwood-Braidwood 1959, p. 63, Fig. 37 and p. 94, Fig. 68.

³⁰ Braidwood-Howe 1960, p. 44. - Cf. Goff 1963, Fig. 52.

³¹ Tatton-Brown 1979, p. 24, No. 37.

32 Merpert-Munchaev 1973, p. 106.

³³ Merpert-Munchaev-Bader 1977, p. 95, Pl. XXV. - Merpert-Munchaev-Bader 1978, p. 44, from copper.

³⁴ Singh 1974, p. 147. - Cf. es-Soof 1968, pp. 3-16 and Yasin 1970, Fig. 33: gypsum disc decorated with three impressed sealings.

35 Merpert-Munchaev-Bader 1977, p. 84, Pl. XI: 20.

³⁶ Merpert-Munchaev-Bader 1978, p. 36, Pl. VIII: 5.

37 Ibid. p. 36, Pl. VIII: 4.

38 Singh 1974, p. 147.

³⁹ Merpert-Munchaev 1973, p. 112, Pl. XLII: 6, and Merpert-Munchaev 1971, p. 31, Fig. 11: Yarim Tepe II, tholos 20.

⁴⁰ Tobler 1950, Pls CLVIII – CLXII. – Cf. Homès-Fredericq 1970, pp. 17–42, "époque préobeidienne et obeidienne".

⁴¹ For the earliest stone figurines and vessels of the Northern Balkans and the Carpathian Basin see *Makkay 1974*, p. 148, note 125. – *Makkay 1976a*, pp. 18–19, notes 41–44. – A broken stone figurine has recently been found in a rubbish pit of the Körös–Starčevo culture at Szarvas, site 23. Unpublished, the author's excavation. 42 For details see Makkay 1974.

43 See Makkay 1978a, passim and Makkay 1980a.

44 See note 43.

45 Makkay 1969a, passim.

⁴⁶ Grbić et al. 1960, pp. 109–110. – Grbić 1956a, pp. 7–18 = Grbić 1956b, pp. 1–9. – Hauptmann 1967, pp. 5–15. – Garašanin 1975, pp. 20–21. – Schachermeyr 1976, pp. 133–135 has a different opinion on the chronological position of the Porodin group.

⁴⁷ For details see Makkay 1980a.

⁴⁸ For a short summary of the chronological questions see Todorova 1978, pp. 13-18.

⁴⁹ Todorova 1978, p. 21. On p. 31, however, she writes that there may have been a continuous transition between the phases Marica and Kodjadermen–Gumelnita–Karanovo VI. See also p. 33.

⁵⁰ For Körös-Starčevo sites to the east of the Carpathian Range see Markevič 1974, Fig. 1 on p. 14. – Ursulescu 1978, pp. 81–85. – Popuşoi 1980, pp. 7–17.

⁵¹ For chronological problems see *Makkay 1976b* passim and the chronological chart of the Copper and Early Bronze Ages of the Carpathian Basin, compiled by I. Ecsedy. I am greatly indebted to him for allowing me to make use of this unpublished chart. For a detailed study of the related questions see *Podzuweit 1979* and *Georgiev et al. 1979*, passim. It would not be possible to discuss here these questions. Recently Prof. S.S. Weinberg noted some pottery types in the inventory of the late Gumelnita settlement of Hotnita which appear to be local imitations of Early Cycladic I pottery. (His letter of 27 April, 1980.)

⁵² Pieces from Sesklo (Cat. No. 220) and Verbița (Cat. No. 277). On the other hand, these two pieces have parallels which can be dated later: Chalcolithic pieces from the Alishar Höyük (*Von der Osten 1937*, Fig. 87: e1909, c576, c1481). Cf. pieces with similar patterns published by *Dollfus 1973*, Fig. 1: 2–7. – Cf. *Braidwood–Braidwood 1959*, p. 129, Fig. 101: 3, etc. These earlier parallels cannot prove the Early Neolithic dating of the Sesklo and Verbița pieces.

53 Childe 1940, pp. 34-35.

54 Kenna 1968, pp. 1-9, Fig. 1: 2-8. - Cf. Kenna 1971, pp. 109-112.

55 Braidwood-Braidwood 1959, p. 253, Fig. 191: 4.

56 Ibid. p. 329, Fig. 253: 4, 5.

57 Goldman 1956, Fig: 392: 7 and 15; Fig. 393: 27.

⁵⁸ Von der Osten-Schmidt 1932, p. 44, Fig. 35: 3094, Period I. – Schmidt 1932, Fig. 87: a184, Level 2 on mound A. – Von der Osten 1937, Fig. 186: c740, e119, e456.

59 Koşay 1951, p. 192, Pl. CVIII, Figs 1-2: "Age du cuivre".

60 Koşay 1934, Ab. 457 on p. 71.

61 Esin 1970, Pl. 11: 5. - Esin 1972, pp. 154 and 156, Pl. 109: 3, Pl. 110: 3. EBA II and III levels.

⁶² Bernabò-Brea 1964, Pl. 168:9 = CMS V, 2, No. 518, Pl. 170:4-5.

63 CMS V, 2, No. 486, House A, unstratified.

64 Caskey 1964, p. 319, Pl. 48: 5, and CMS V, 2, Nos 470-472 (EBA II).

65 CMS V, I, No. 38, Lerna IV, Phase 5 (with further literature).

66 CMS V, 1, No. 52 (EBA III).

67 CMS II, 1, No. 116 and CMS V, 2, No. 603.

68 CMS II, 1, No. 22, 74, 96: Agia Triadha, tholos A, EM I-II.

⁶⁹ Kunst der Kykladen, No. 453 on p. 369 and p. 538, with full literature. See also pp. 570–573. – Cf. Makkay 1976a, pp. 25–31.

⁷⁰ Alaça Höyük: Koşay-Akok 1973, Pl. LXXVII: Al R 202 (EBA I-II); Alishar Höyük: Von der Osten 1937, Fig. 186: e456 (EBA I-II).

⁷¹ Childe 1957, p. 98, note 2. – It is worth mentioning, that in some opinions the first appearance of certain spiraloid motifs in ancient Egyptian art was a result of Aegean influences. Cf. *Helck 1979*, pp. 21–23. For the origins of the spiral see *Matz 1974b*, pp. 171–183. – *Matz 1974a*, pp. 78–85.

⁷² See note 24.

73 Braidwood-Braidwood 1959, p. 329, Fig. 253: 7.

74 Ertem 1974, pp. 68-69, Pl. 60: 1 (anti-clockwise).

75 Koşay 1976b, p. 190, Pl. 115: Y72-6 (anti-clockwise).

⁷⁶ Koşay 1976a, p. 189, Nos 358, 360, 370, Pl. 69: 360 and Pl. 88: 370.

⁷⁷ CMS V, 1, Nos 41-42 and partly No. 39, with further literature. There are more parallels as regards their shapes (round base, long perforated handle), material (clay) and manufacture: CMS V, 2, No. 501 (Corinth), No. 516 (Argissa Magula, Early MBA), No. 603 (Naxos, Grotta).

78 CMS V, 2, Nos 456-457.

¹⁷⁹ CMS II, 1, No. 307 (Platanos, tholos B, EM II-MM I). - CMS II, 1, No. 430 (the Trapeza cave, perhaps MM I).

⁸⁰ Özgüç 1968, Pl. XXXIX: 2a-b (Kültepe, Level Ib). – CMS II, 1, No. 456 (Knossos, "prepalatial period", with an incorrect drawing).

⁸¹ Koşay 1934, Ab. 217 on page 71 (Ahlatlibel, EBA) – CMS V, 2, Nos 458–459 (Agia Irini, sealings).

82 Teutsch 1903, Fig. 14c on page 369.

83 CMS V, 2, No. 534.

⁸⁴ CMS V, I, Nos 121-125.

85 CMS II, 1, No. 42 (EM I-II).

86 CMS II, 1, No. 194 (EM II-MM Ia).

⁸⁷ Özgüç 1968, Pl. XXXVII: 1Aa-b and 5.

88 CMS II, 1, No. 81.

89 CMS II, 1, No. 303.

⁹⁰ Koşay 1971a, Pl. 79, chronological table, seal from level VIII = Koşay 1972, Pl. 97, chronological chart = Koşay 1976a, Pl. 111 = Koşay 1971b, pp. 149–151, chronological chart on page 150.

91 CMS II, 1, Nos 25, 82, 110, 180, 243, 405, 446a, 472, etc. - CMS V, 1, No. 288.

⁹² The earliest parallel may be the piece from the tholos A of Agia Triadha (EM I-II): CMS II, 1, No. 92.

93 Goldman 1956, p. 236, Fig. 396: 5, seal impression.

94 Koşay 1976a, p. 189, No. 353 (Pl. 69: 12), p. 190, Nos 362-363.

95 Koşay 1976b, p. 190, Pl. 115: Y72-33 (Level III).

96 Von der Osten-Schmidt 1930-1932, p. 45, Fig. 37: 1147, 1526 (Period II). - Schmidt 1932-1933,

p. 147, Fig. 184: b Nos 2366 and 2428 (Level 2).

97 CMS V, 2, Nos 451-455.

98 Özgüç 1968, Pl. XXXIX: 6a-b, Kültepe Ib.

99 CMS V, 1, p. 188, No. 286, Monastiraki, Crete (MN II).

¹⁰⁰ Schmidt 1932-1933, p. 146, Fig. 183: b, 484 (Period II).

¹⁰¹ Goldman 1956, p. 232, Fig. 393: 18 (EBA III), Fig. 393: 26 (unstratified).

¹⁰² Braidwood-Braidwood 1959, p. 329, Fig. 253:1 (Phase G).

103 Özgüç1968, Pl. XXXIX : 5a-b, Pl. XL : 2a-b.

¹⁰⁴ Erlenmeyer-Erlenmeyer 1965, p. 60, Pl. 18: 2, 4.

105 Warren 1972, p. 227, Fig. 97: 131 (EM II).

¹⁰⁶ CMS I, No. 422 (Crete, EM). – CMS II, I, Nos 13–14, 17–18, 31–33, 35 (Agia Triadha, tholos A, EM I–II).

¹⁰⁷ Koşay-Akok 1973, Pl. LXV: 4 = LXXXII: 4, p. 109 (Alaca Höyük, without secure dating). – Erlenmeyer-Erlenmeyer 1965, p. 60, Pl. 18: 4. – Von der Osten-Schmidt 1930–1932, p. 45, Fig. 37: 1651 and 2242 (Alishar Höyük, Period II). – Schmidt 1932–1933, p. 144, Fig. 180: b 2559 (Alishar Höyük, Level 2). – CMS II, 1, No. 29 (Agia Triadha, tholos A, EM I-II), No. 335 (Platanos, tholos B, EM II-MMI), No. 479 (Palaikastro, prepalatial period).

¹⁰⁸ Koşay 1938, p. 135, Pl, CVI: A1/A7. Alaca Höyük, EBA, from a depth of 6.3 ms.

¹⁰⁹ Koşay 1934, Ab. 29, Ab. 321, Ab. 209 on pp. 72-73 (Ahlatlibel).

¹¹⁰ Goldman 1956, Fig. 394: 43-44 (unstratified).

¹¹¹ Warren 1972, p. 227, Fig. 97: 128. Cf. CMS V, 1, No. 15.

¹¹² CMS V, 1, Nos 163-164 (Kokkolata, LH IIIB-C).

¹¹³ Von der Osten 1937, Fig. 186: e 728 (Alishar Höyük EBA).

¹¹⁴ Goldman 1956, p. 232, Fig. 392: 11 (EBA II).

115 Koşay 1934, Ab. 207 and Ab. 250 on p. 71.

116 Ibid. Ab. 323 on p. 71; Ab. 322 on p. 72.

¹¹⁷ Goldman 1956, Fig. 392: 6, p. 232 (EBA II).

¹¹⁸ CMS II, 1, No. 438 (the Trapeza cave, the beginning of MM I).

¹¹⁹ Makkay 1971b, pp. 1–9. A further good parallel: CMS II, I, No. 105 (Agios Onouphrios, tholos grave, perhaps EM II–III).

¹²⁰ The piece is inventorized in the Tessedik Sámuel Museum at Szarvas, Hungary. Inv. No. 73.1.23. It dates to the Late Neolithic Tisza culture and was found in the settlement of the same culture at Szarvas–Botanical gardens (site 1 of *MRT IV*, 2).

¹²¹ Makkay 1976a, passim, with further literature. – Helck 1979, pp. 9–13. – It must be noted, that the so- called clay cylinders of the Körös–Starčevo culture are actually net weights of large dimensions. This artifact category was regarded as clay cylinders by V. Popovič 1965, pp. 13–14, Fig. 6; this misleading interpretation has since been adopted by other scholars. Similar net weights can be found in Körös–Starčevo settlements by thousands.

¹²² Makkay 1976a, passim. - Cf. the introduction to the Sitagroi finds in the Catalogue (Nos 228-232).

123 Rodden 1962, pp. 267-268. - Rodden 1964a, pp. 564-565.

124 Mellaart 1962, p. 56. - Mellaart 1970, p. 164.

125 Milojčić-Milojčić-v. Zumbusch 1971, p. 130. - For the painted vessel see Tsountas 1908, Fig.

98.

¹²⁶ CMS V, I, p. xvii, note 11.

¹²⁷ Ibid., note 12, with further literature.

128 Karmanski 1968, p. 12, Pl. XXII: 1.

¹²⁹ From the Körös-Starčevo settlement, Szarvas, site 23, trench I/1974, 90-110 cms. Tessedik Sámuel Museum, Szarvas, Inv. No. 78.31.12. Scale cca 5:8.

130 Ridley-Wardle 1979, Fig. 9: 23.

¹³¹ From the Körös-Starčevo settlement, Endrőd (Co. Békés, Hungary), site 39, trench XX/1978, 0-50 cms. Scale 5:8.

132 Makkay 1971, pp. 44-45.

133 Bagolini 1977, Figs 74-75.

¹³⁴ See note 122.

¹³⁵ Schroller 1933, p. 15, Pl. 15; 1–3, with further literature. – Cf. Horedt 1960. pp. 107–131. – Chidiosan 1968, pp. 155–175. – Horedt-Seraphim 1971, pp. 74–76, Figs 59–60. The larger clay plaque with a diameter of 150 cms was found in the centre of the site. It was considered a "Brandopferplatz" and its spiral decoration was compared to the impressed spiral bands on clay hearths of the Mycenaean palaces. The second plaque was found at a distance of 7.5 ms from the central piece with a diameter of 1 m.

¹³⁶ The predecessors of these sacral fireplaces of the Mycenaean palaces may have been the similar fireplaces of the Aegean EBA. Their edges were decorated with running spirals in the mainland (Tiryns, Lerna, Zygouries) and with separate sealings in Agia Irini. This difference was at first recognised by *Younger 1974*, p. 172. Cf. CMS V, 2, Nos 452–453, 462–463, 466, 468–474, 476–478 (Agia Irini). – CMS V, 2, p. 413, and pp. 353–354, chronological data. – CMS V, 1, pp. 31–32, Nos 146–149 (Lerna). – CMS V, 2, Nos 508–509 (Zygouries?). – Nos 530, 534–536, 538, 557–559, 562–563a-b, 566 (Tiryns).

¹³⁷ Blegen-Rawson 1966, pp. 79-92, esp. 85-87. - Blegen-Rawson 1962, Figs 7-8, 15, 21 (Pylos, The Throne Room and the Queen's Hall). - Wace 1949, Figs 96, 97a. - Marinatos 1973, pp. 162-163, Fig. 166. - Hägg 1968, pp. 41-42, with further literature. - Rutkowski 1972, pp. 68-69. - See also Makiewicz 1977, pp. 184-185.

138 Sandars 1971, pp. 631-640, esp. Fig. 3: bottom right.

¹³⁹ Makkay 1967, pp. 31–41. – Makkay 1969b, pp. 93–98. – Makkay 1971c, pp. 19–28. – For the single stamp seal of the Wietenberg culture see Lazarovici–Cristea 1979, p. 438, Fig. 3: 9.

¹⁴⁰ Tsimpides-Pentazos 1973, Pl. 109: β.

¹⁴¹ For the use of stoppers (Fr. bouchon) see Homès-Fredericq 1970, Fig. on p. 7.

142 Milojčić-Milojčić-v. Zumbusch 1971, pp. 60, 89, 142.

¹⁴³ Heurtley 1939, pp. 85, 187, Fig. 59 = Pl. XXXVII: 2-3 (Góna, EBA). -CMSV, *I*, pp. 29-31 and the respective finds.

144 Mikov 1927, p. 263, Fig. 94.

¹⁴⁵ Petkov 1950, p. 167, Fig. 104: b top right. A similar find from Sultana is mentioned by Mikov 1931, Fig. 75.

146 Radunčeva 1968, Fig. 1.

147 Radunčeva 1976, Fig. 20: 5.

148 Hardmayer 1976, map 2.

¹⁴⁹ The Hungarian name of this cultural group (i.e. the Balaton I–II and III cultures or phases) is the result of N. Kalicz's unsuccessful attempt to name the corresponding material of Transdanubia using the modern Hungarian name of Lake Balaton. Finds of groups under this name belong to different phases and markedly different cultural regions.

¹⁵⁰ For these questions, see *Masson-Sarianidi 1972*, s.v. seals. - *Amiet 1978*, pp. 153-164, with further literature.

¹⁵¹ Kaposvár: Koşay 1934, Ab. 496 on p. 71. – Manolé: CMS II, 1, No. 271 (Platanos, tholos B, EM II-MM I). – Heath 1958, Pl. 22: 563 (Lerna_y, House of Tiles).

¹⁵² CMS II, I, No. 153 (Koumasa, tholos¹⁷ grave A, perhaps MM I-II).; CMS II, I, No. 484 (Vrokastro). – Özgüç 1968, Pl. XXXVIII: 1–3 (Level Ib).

¹⁵³ Goldman 1956, p. 232, Fig. 392: 3-5 (EBA II) and a perfect parallel: Von der Osten-Schmidt 1930-1932, Part 2, p. 45, Fig. 37: 2350 (period uncertain).

¹⁵⁴ Perhaps CMS II, 1, No. 144 (Koumasa, tholos grave A, perhaps MM I-II).

¹⁵⁵ For chronological synchronizations between the Copper Age of the Carpathian Basin and the Aegean Early Bronze Age, see *Makkay 1976b*, passim.

156 Bándi 1974, pp. 237-252. - Hundt 1974, pp. 143-177, Fig. 26.

¹⁵⁷ This final statement is in strong contrast to the conclusions reached by Kalicz 1963, passim.

¹⁵⁸ For a comprehensive survey of the Anatolian EBA seals which can be related to the C stamps of South-East Europe, see *Mora 1980* and *Mora 1982*.

ABBREVIATIONS

AA	Archäologischer Anzeiger, Berlin
AAA	Athens Annals of Archaeology, Athens
Acta Arch. Hung.	Acta Archaeologica Hungarica Academiae Scientiarum Hungaricae, Budapest
AJA	American Journal of Archeology, Baltimore-Norwood
AMN	Acta Musei Napocensis, Cluj-Napoca
Anat. St.	Anatolian Studies, London
Arch. Au.	Archaeologia Austriaca, Vienna
Arch. Ért.	Archaeologiai Értesítő, Budapest
Arch. Delt.	Archaiologikon Deltion, Athens
Arch. Iug.	Archaeologia Iugoslavica, Belgrade
Arh. Mold.	Arheologia Moldovei, Iași
Arh. Rozhl.	Arheologické Rozhledy, Prague
Arh. Sofia	Arheologija, Sofia
Arh. Vestnik	Arheološki Vestnik, Ljubljana
BASPR	Bulletin of the American School of Prehistoric Research, Old Lyme
BAR	British Archaeological Reports, Oxford
BCH	Bulletin de Correspondence Hellénique, Athens-Paris
ВММК	A Békés Megyei Múzeumok Közleményei, Békéscsaba
BRGK	Bericht der Römisch-Germanischen Komission, Frankfurt
BSA	Annual of the British School at Athens, London
Dolg.	Dolgozatok az Erdélyi Nemzeti Múzeum Érem- és Régiségtárából, vols 1-10
	(1910-1919), Kolozsvár and Dolgozatok a Magyar Királyi Ferencz József
	Tudományegyetem Archaeologiai Intézetéből, vols 1-19 (1925-1943), Szeged
GNM Plovdiv	Godishnik na Narodnija Arheologicheski Muzej, Plovdiv
GNM Sofia	Godishnik na Naroden Muzej, Sofia
ILN	Illustrated London News, London
IAI	Isvestija na Archeologicheskija Institut, Sofia
JdI	Jahrbuch des Deutschen Archäologischen Instituts, Berlin
JPEK	Jahrbuch für Prähistorische und Ethnographische Kunst, Berlin
JPMÉ	A Janus Pannonius Múzeum Évkönyve, Pécs
JRGZM	Jahrbuch des Römisch-Germanischen Zentralmuseums, Mainz
MCA	Materiale și Cercetări Arheologice, Bucharest
MFMÉ	A Móra Ferenc Múzeum Évkönyve, Szeged
MIA	Materiali i Issledovanija po Arheologii SSSR, Moscow
Mitt. Arch. Inst.	Mitteilungen des Archäologischen Instituts der Ungarischen Akademie der
	Wissenschaften, Budapest
OIP	Oriental Institute Publications, Chicago
Pam. Arch.	Památky Archeologické, Prague
PPS	Proceedings of the Prehistoric Society, Cambridge
PZ	Praehistorische Zeitschrift, Berlin
RF	Régészeti Füzetek, Budapest
RVM	Rad Vojvodanskih Muzeja, Novi Sad
SAOC	Studies in Ancient Oriental Civilization, Chicago
SCIV	Studii și Cercetări de Istorie Veche, Bucharest
Slov. Arch.	Slovenská Archeológia, Bratislava
SMEA	Studi Micenei ed Egeo-Anatolici, Rome
Sov. Arch.	Sovetskaja Archeologija, Moscow
Štud. Zvesti	Študijné Zvesti AÚSAV, Nitra
WPZ	Wiener Prähistorische Zeitschrift, Vienna

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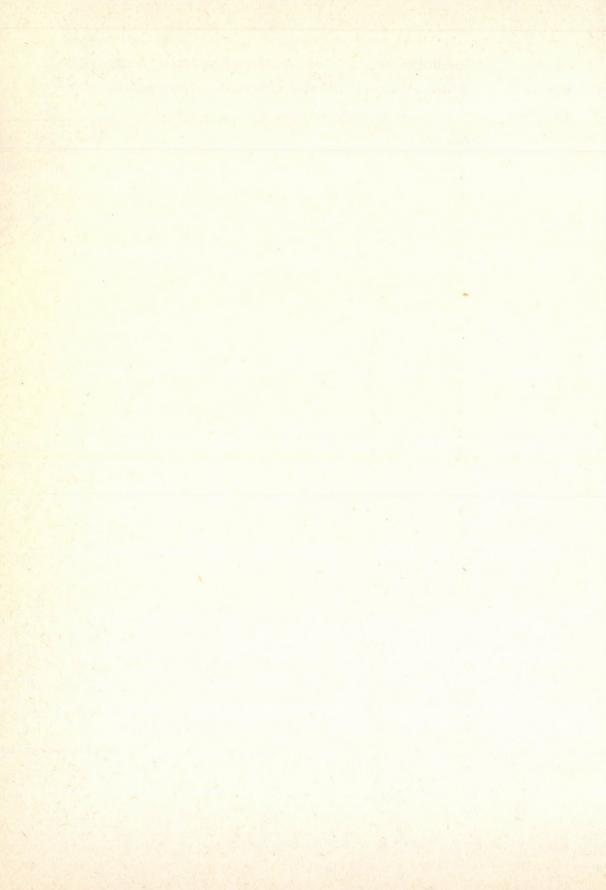
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FIGURES





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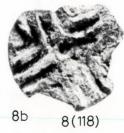
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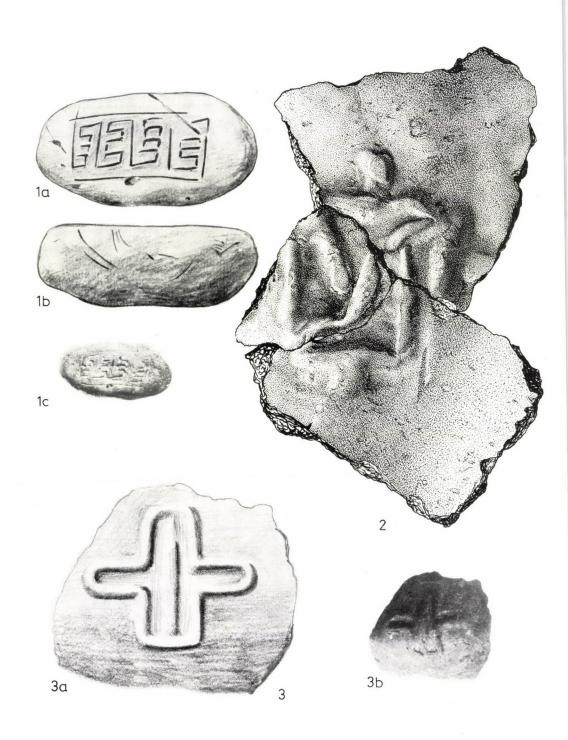


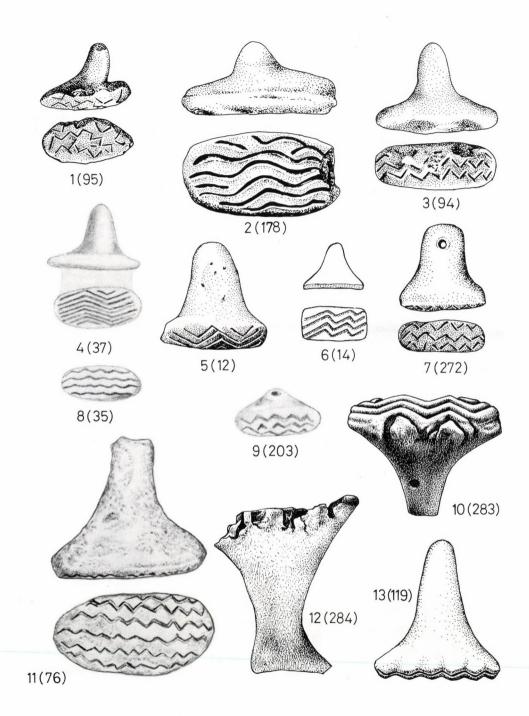
Fig. II



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Fig. IV





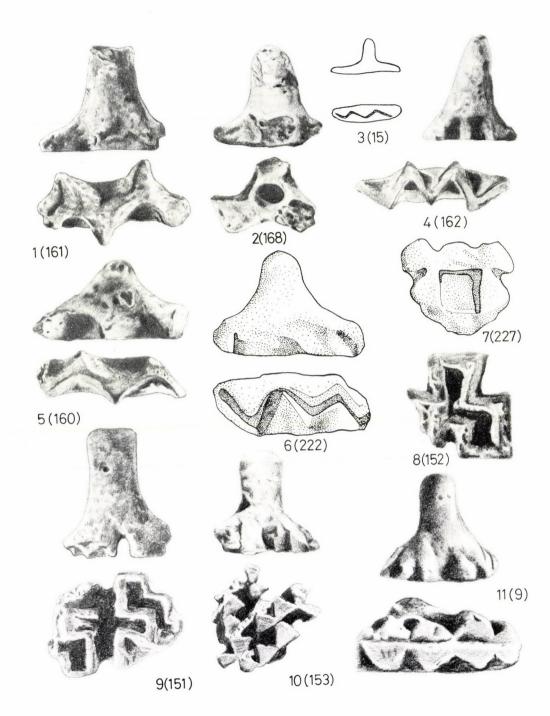
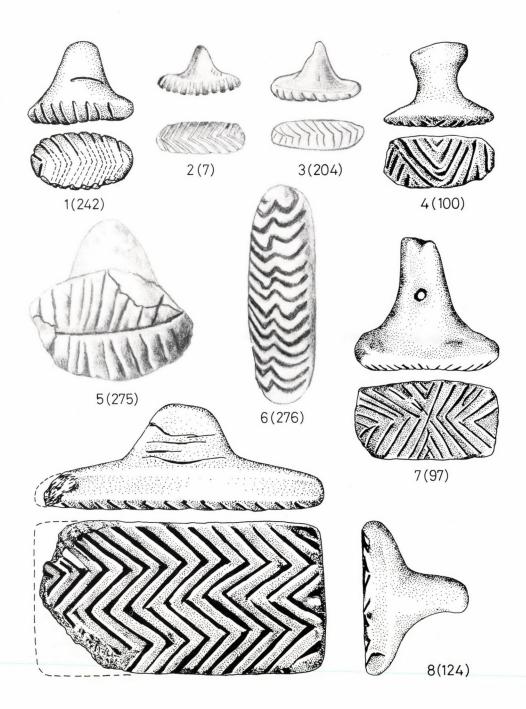


Fig. VI



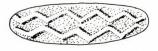


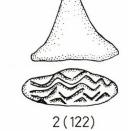


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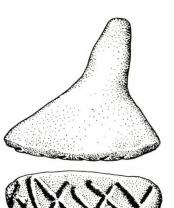


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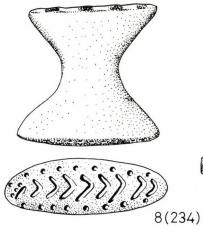




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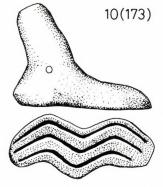


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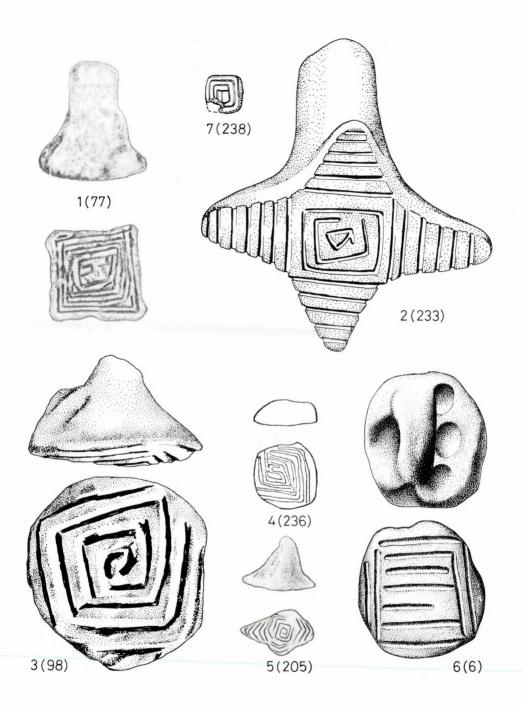
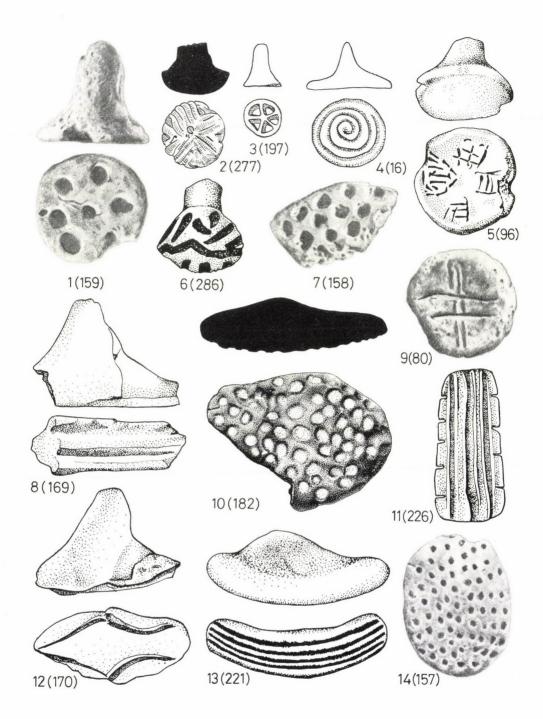


Fig. IX





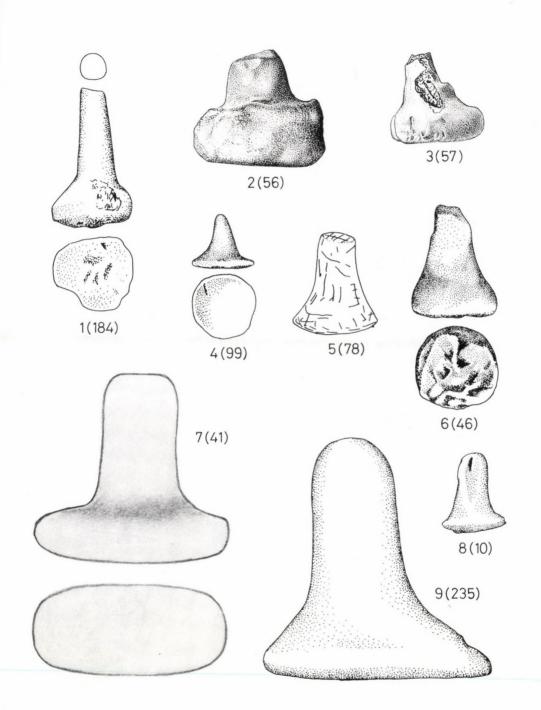
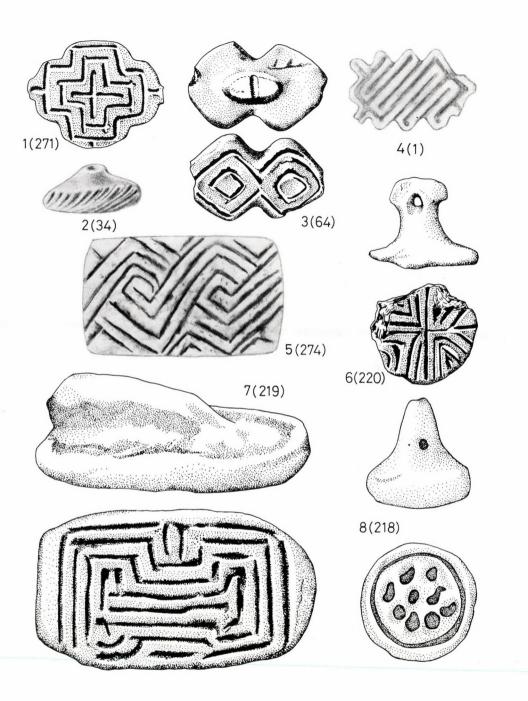






Fig. XII





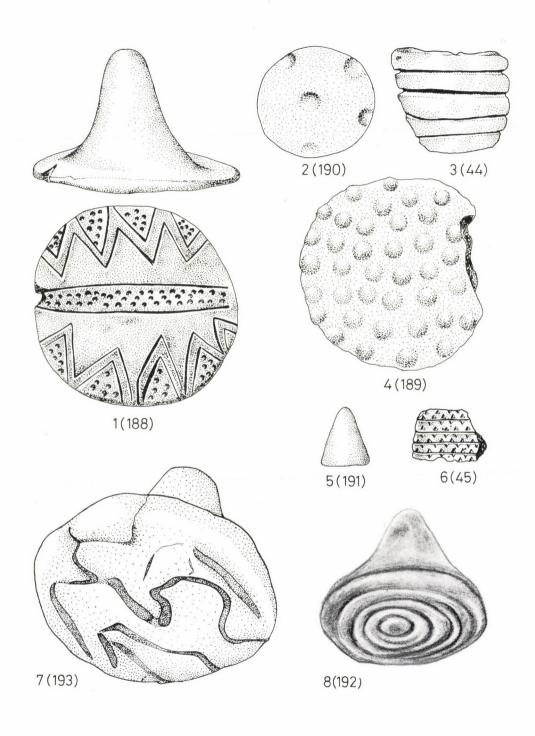
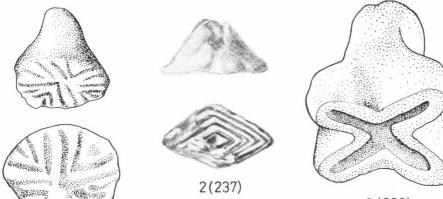
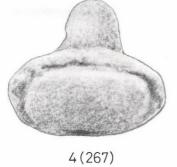


Fig. XIV

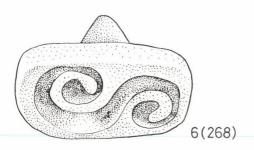


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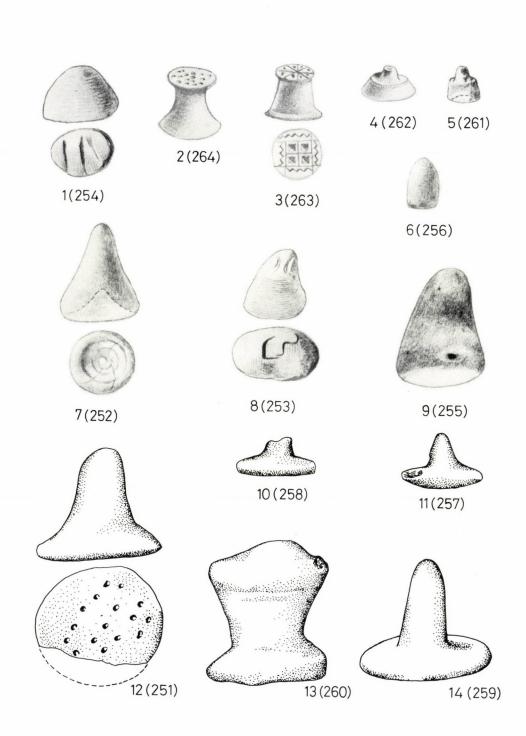
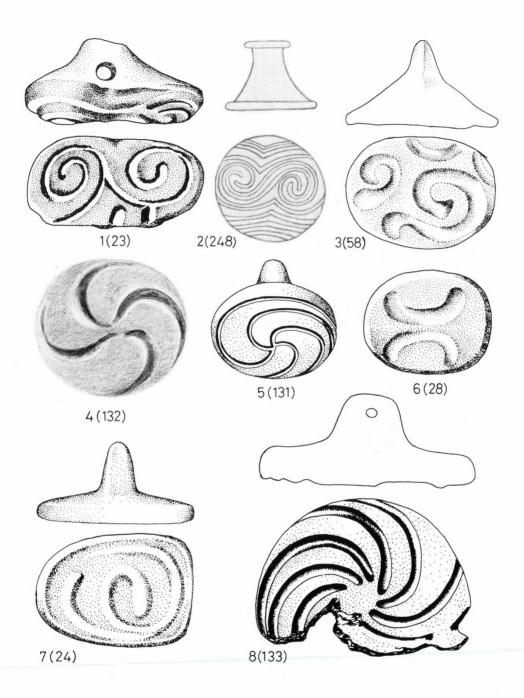
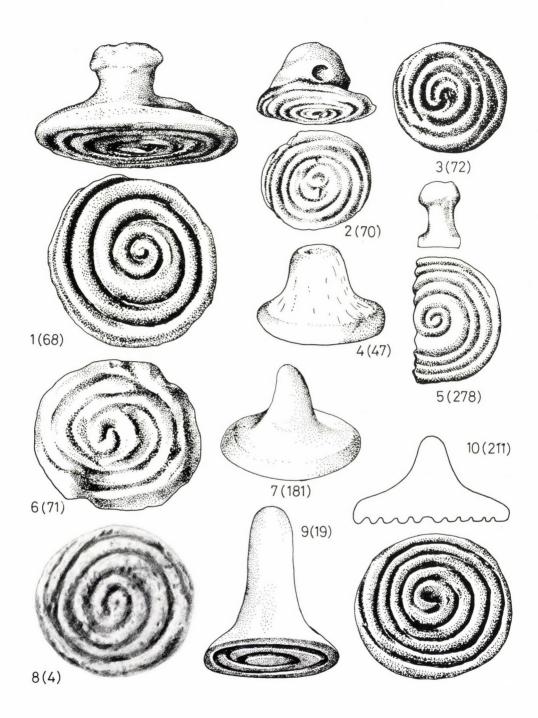


Fig. XVI









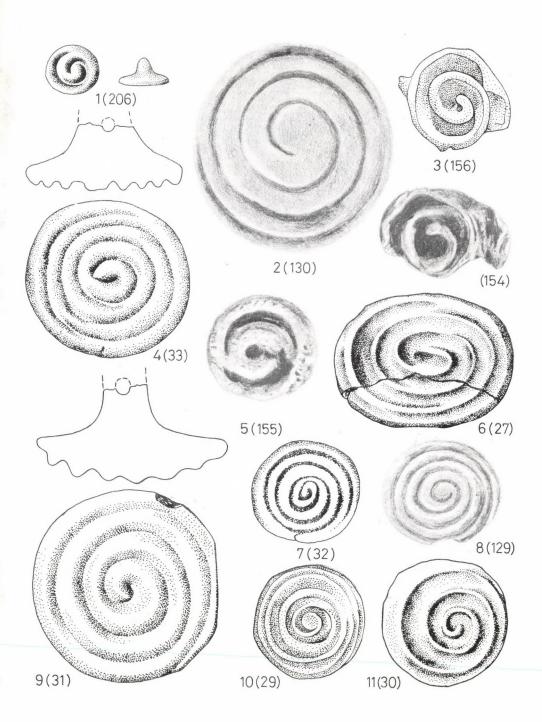


Fig. XIX

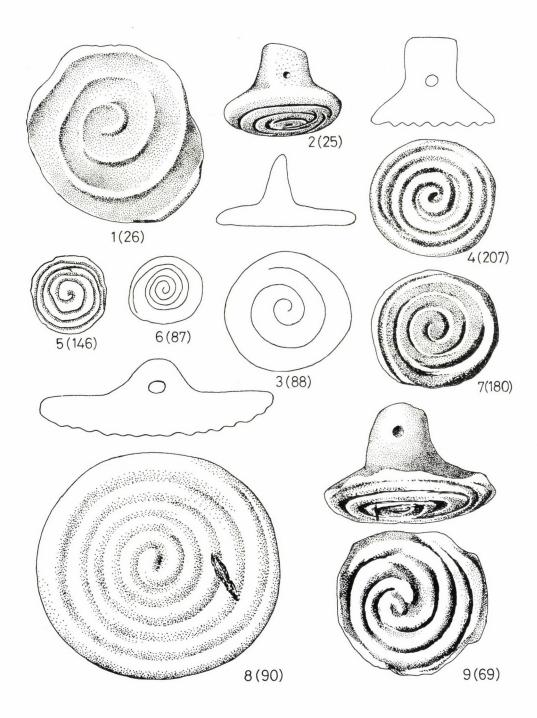


Fig. XX

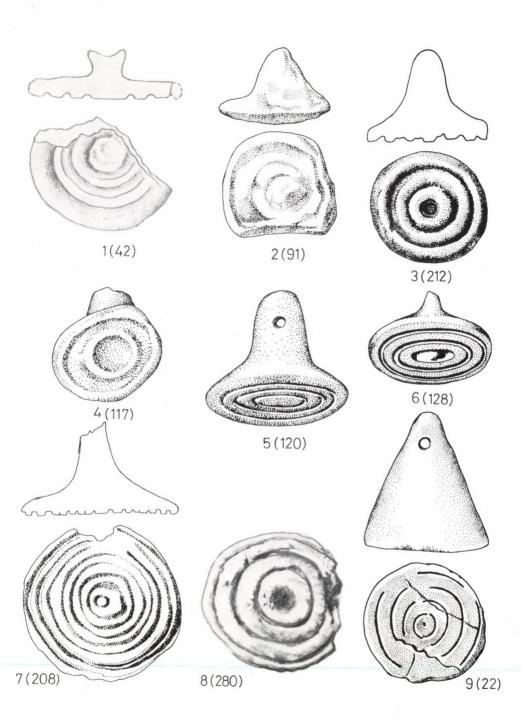


Fig. XXI

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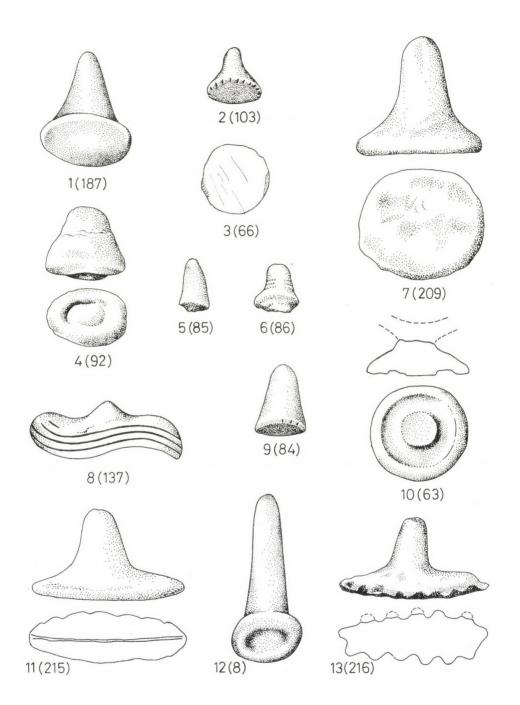


Fig. XXII

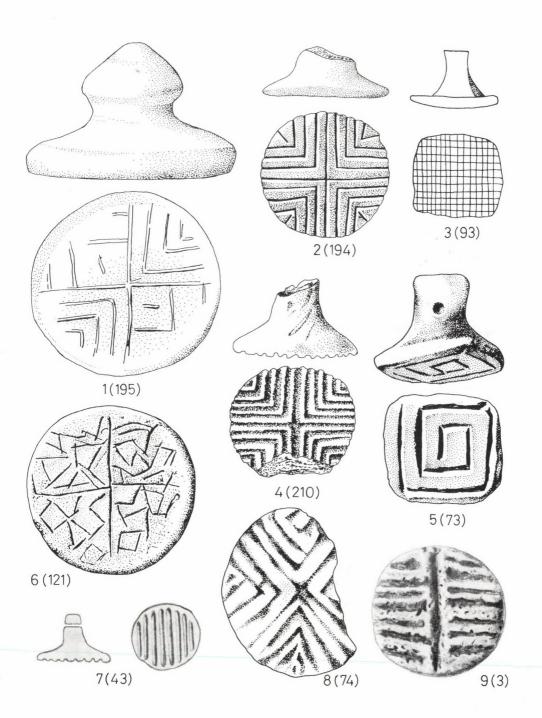


Fig. XXIII

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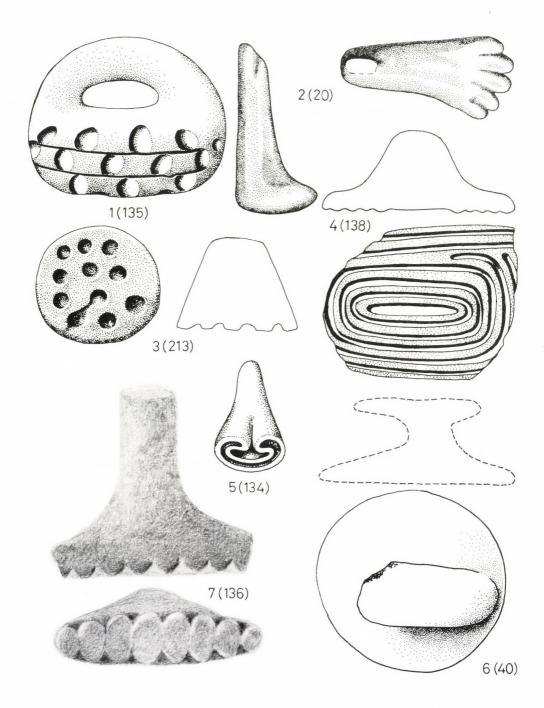
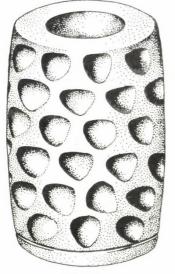


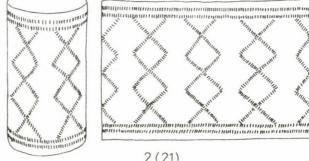
Fig. XXIV



Fig. XXV



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นี้และหมายในการหลังการหมือการหมายในการหมายใส่ เพลง เป็น และออกการหมายการหมายเมืองการหมายการเล่า (เพลง (เพลง) (เพลง) (เพลง) (เพลง) (เพลง) (เพลง) (เพลง) (เพลง) (เพลง) (เ

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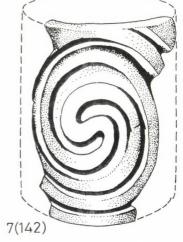


Fig. XXVI

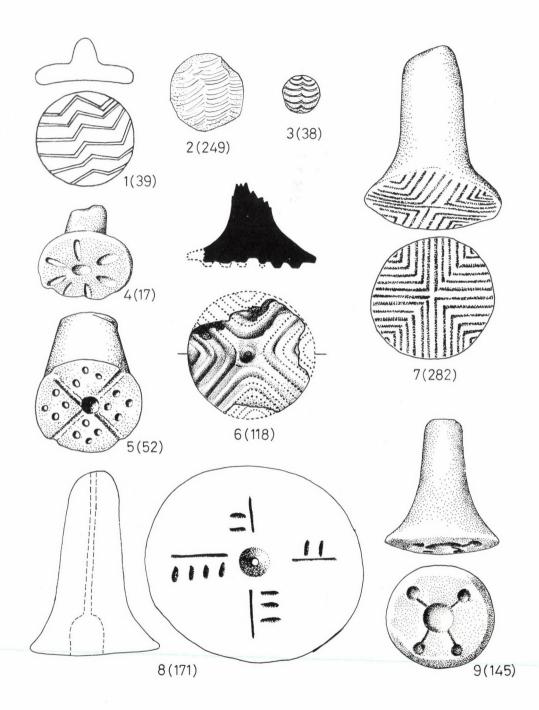


Fig. XXVII

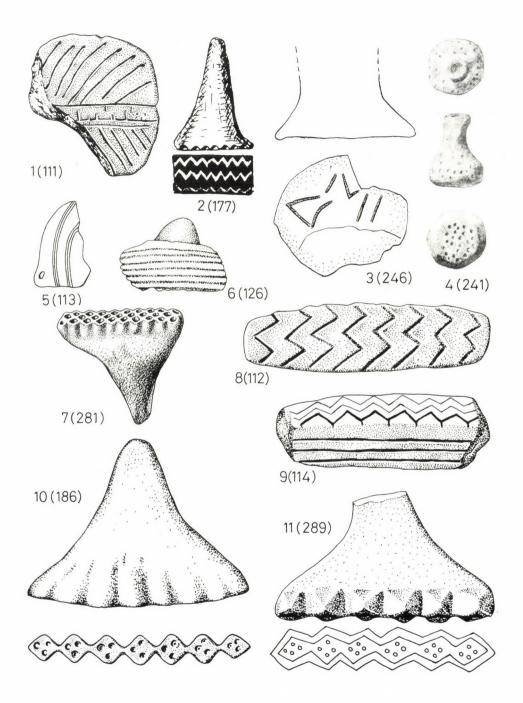


Fig. XXVIII

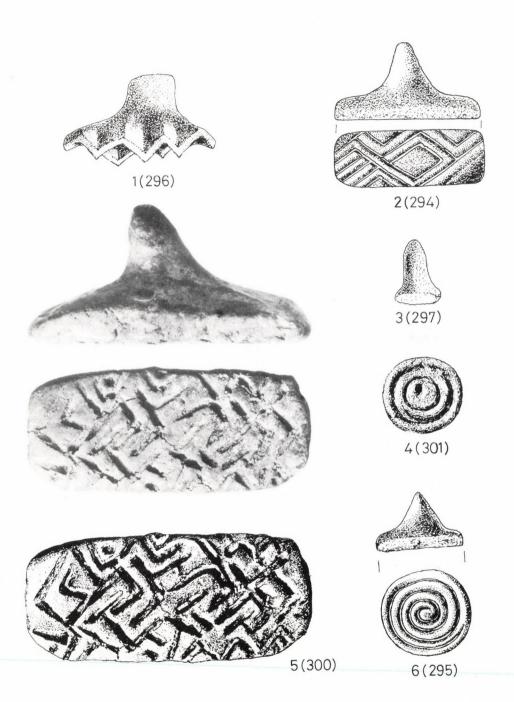


Fig. XXIX





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Fig. XXX

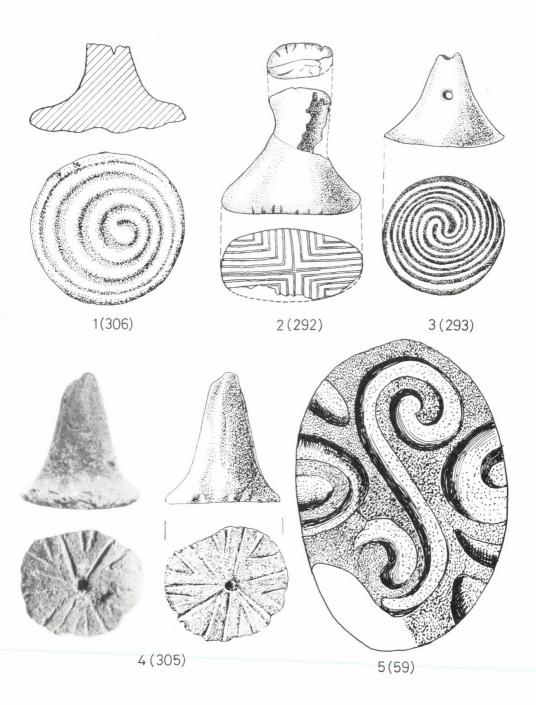


Fig. XXXI

