The transfer of symbols and meanings: the case of the 'horns of consecration'

Marina Milićević Bradač

Department of Archaeology, Faculty of Philosophy, University of Zagreb, Croatia
mladen.bradac@zg.htnet.hr

ABSTRACT – *Sir Arthur Evans first used the term "horns of consecration" in 1901. Since then they have been interpreted in various ways as Moon idols (Mondidole), boat models, pot stands, loom stands, spit supports, and fire supports. Most, however, can be seen as abstracted bull's horns. Abstraction should have taken place in Anatolia or northern Mesopotamia, and "horns of consecration" spread very early, appearing, as already defined symbols in various cultural settings. The question is whether they stood for the same set of ideas wherever they appeared, or if meaning varied from one cultural setting to another.*

IZVLEČEK – *Izraz »rogovi posvetitve« je prvi uporabil Sir Arthur Evans leta 1901. Od takrat so jih interpretirali na razne načine, kot lunine idole (Mondidole), modele ladij, podstavke za posodo, podstavke za statve, podpornike za raženj ali ogenj. Večina pa jih lahko predstavlja abstraktne bikove rogove. Abstraktna upodobitev se morda pojavi v Anatoliji ali severni Mezopotamiji, »rogovi posvetitve« pa so se zelo hitro razširili in se pojavili kot že določeni simboli v različnih kulturnih okvirih. Vprašanje je, če so povsod, kjer so se pojavili, predstavljali enak niz idej ali pa se je njihov pomen v različnih kulturnih okvirjih spreminjal.*

KEY WORDS – *horns of consecration; bulls' heads; bucrania; representations of bucrania*

The objects known as "horns of consecration" have presented a scholarly problem for more than a century now. The first to use the term "horns of consecration" was Arthur Evans¹. Since then they have been discovered throughout the Middle East, many of them from older contexts than the Cretan examples. They have also been found in Europe, ranging from the Early Neolithic to the Late Iron Age. The diversity of their dates, shapes and dimensions has raised questions as to their meanings and functions.

It was obvious from the beginning that we were dealing with an abstract symbol with a long history of developing meaning and perhaps, function. Since the symbol lacks a verbal context, we are forced to look for parallels from cultural and social environments which yield more data. This in turn raises problems of great temporal and geographical gaps and

probable solutions for them. The questions are: are these methods always justified, and is the transfer of symbol from one culture to another also a transfer of meaning?

Archaeologists are the great obstacles because they often project what they wish to see onto an object. This affects the formulation of hypothesis, and is the reason there are so many different portraits of the same civilization (*Ripinsky-Naxon 1989.220*). Our reconstructions of symbolic systems are deduced from ancient cultural models and are susceptible to our perception of them. As Ripinski-Naxon (*1989.219*) put it: the perception (output) modifies the concept (input). On the other hand, deconstruction negates the possibility of the reconstruction of *logoi* (*Davis 1992.335*). In short, according to deconstruction theory, we are left with material only, unable

1 A. Evans, Mycenaean Tree and Pillar Cult. *The Journal of Hellenic Studies* 21, 1901.135 ff.

to reconstruct the reasons, ideas and values of the symbol's creator. The theory of the "structure of meaning" offers a way out of the deconstructionist's blind alley². When considering the structure of the organized material in the "long range context" (e.g. Neolithic), similar meanings can be attributed to similar objects (Davis 1992.334). "Structure of meaning" theory can attribute a noun or an adjective to an abstract symbol and thus incorporate it into the abstract semantic structure of the cultural environment (Davis 1992.344).

The term "horns of consecration" belongs to such a category. And we ask ourselves: is this the designation of an object or of an abstract idea susceptible to acculturation? Does the object represent an abstracted *bucranium*, and did it reach the European Neolithic as a direct indicator of a bull cult, or did it arrive as an already detached symbol of a religious

Fig. 2. Bucranium from Vinkovci, Croatia, Vučedol culture (after Hoti 1989.T. 3,1).

idea, which does not necessarily denote the bull, but a whole complex of ideas (although it directly originated from the veneration of bulls at its source). The problem lies in the fact that symbols imply a complex interpretation in the eyes of their creators, and the process of either widening or narrowing the meaning of the same sign/symbol (Manetti 1987.12). For example, in the process of the development of writing in Mesopotamia a drawing (immediately recognizable) of a bull's head, in the first instance, literally denoted "bull", but through the semantic broadening of the sign, in the second instance, it denoted "cow" or "any large animal" (Manetti 1987.12). The other example comes from a much later date in Crete. The sign "horns of consecration" does not exist in Linear A repertory, but it appears in Linear B in the so-called canonical shape. The meaning of the sign is pte. No connection whatsoever between the phonetic group pte (suggested as the name of the object) and the horns could be established (Dow 1980.600, Fig. 17; Rutkowski 1981.82) (Fig. 1).

Fig. 1. Linear B sign no. 62 (after Guarducci 1967. 55, Fig. 4a).

Ritual is another way of distorting the meaning of a symbol. Ritual creates boundaries within which a real object becomes unreal and begins to denote a connection between the object and the context (Napier 1992.XVIII). Within the boundaries of ritual a symbol becomes an ideograph (*ibid.* XIX). Here we confront another barrier: rituals consist of regularly performed conventional stereotypes; they have emotional value, and represent a type of communication embedded in specific cultural codes (Rappaport 1971.62–63) which can be decoded only by members of the same culture. They are systems of activities organized in time and space having a strict structure, which makes them "quasi-linguistic system" (Rappaport 1971; Burkert 1990.54 ff). Once again we lack the verbal context for a symbol or an ideograph.

Every culture has its own conventions for creating images and symbols. The simpler the form of the

Fig. 3. Bull's head – mask from Kition, Cyprus (after Karageorghis 1975.Fig.4).

2 I. Hodder, *The Domestication of Europe: Structure and Contingency in Neolithic Societies*. Oxford 1990: 21.

3 The bucranium is 80 cm in diameter and was originally situated above the entrance to the Vučedol house. When the structure collapsed the bucranium fell in front of it together with the piece of plaster it was fixed on (Hoti 1989.35, T. 3.1–2).

Fig. 4. Çatal Hüyük, Turkey, shrine E VI,8 (after Mellaart 1963.64, Fig.10).

symbol, the more difficult is the decoding of it for someone who does not know the codes (Morgan 1985.7). Codes are acquired during a lifetime of learning within a given community. Any symbol can acquire many meanings (social, mythical, cultic etc.) as Lyvia Morgan puts it: "Variability of meaning is perhaps partly explicable in the light of multiplicity of meaning" (Morgan 1985.6).

The bull's head or *bucranium* began as a real object, and persisted from the Çatal Hüyük to the historical times. An example could be the *bucranium* from Vinkovci (Eastern Croatia) found in the Vučedol layer, dated to the 1st half of the 3rd millennium BC³ (Fig. 2). A further example could be the masks made of bulls' skulls found in Kition (Cyprus) in Temple 5, dated to the 12th or 11th centuries BC (Karageorghis 1975.402, Fig. 4) (Fig. 3). Both examples are immediately recognized as such and could be well connected to the complex bull veneration in the Old World.

The *bucranium* from Vinkovci is interesting because the lower part of the skull is missing and was made of clay. This mode of recreating *bucrania* resembles distant origins in Çatal Hüyük, where the horns of the *bos primigenius* were inserted into heads or stands made of plaster (Mellaart 1967.T. 16; cf. Mellaart 1963.T. 6b – shrine VI, 6, T. 22, 23 – plaster heads with inserted with real bull horns). (Fig. 4) The same method can be found in Egypt: the

tomb of the king Uadji from the 1st Dynasty shows clay bull heads with real horns inserted (Conrad 1959.75 and figure) (Fig. 5). This tomb is roughly contemporary with the Vučedol culture. We can discuss the nuances of the treatment of the bulls and reverence for them in different cultures, but the framework is clear – it must be religious, and bull must have played a great part in that religious context.

The next step is the three-dimensional representation of the bull's head

in some other material (clay, plaster, stone or bone). Such are the heads from Çatal Hüyük (Fig. 6), or the clay *bucranium* from Vinča (Vasić 1936.Fig. 86 a–b) (Fig. 7), or Banjica (Vinča culture) (Tasić 1973.T. XI, 33) (Fig. 8). Dated to c2300 BC there is a clay model of a shrine found in Kothati (Cyprus). The shrine ends in stylised bull heads. A small female figure is probably making a sacrifice in front of a shrine (Karageorghis 1974.353; 1991.Pl. CII.2; Kallicz & Raczky 1981.18, T. 7. 3; Burkert 1990.37)

Fig. 5. Egypt, the tomb of King Uadji (after Conrad 1959.Fig. p. 75).

Fig. 6. Çatal Hüyük, Turkey, shrine VII,1 (after Mellaart 1964.56, Fig. 14).

Fig. 7. Clay bucranium from Vinča, Serbia and Montenegro, Vinča Culture (after Vasić 1936.Fig. 86 a-b).

(Fig. 9). Finally, we have the famous bone plaque in the form of a bull head, with a female figure carved on the snout. It is from the Cucuteni culture, and was found in Bilcze Złote Cave in NW Ukraine, with other Cucuteni B objects (Soudsky & Pavlu 1966.117; Gimbutas 1982.293, Pl. 178) (Fig. 10).

These examples are already on the way to schematisation, distanced from the original object, but highly

Fig. 9. Kotsiates (Kothati), Cyprus, clay model of a sanctuary (after Karageorghis 1991.Pl. CII, 2).

Fig. 8. Clay bucranium from Banjica, Serbia and Montenegro, Vinča Culture (after Tasić 1973.T. XI, 33).

recognizable. Their meaning remains moderately recognizable. They obviously refer to a set of ideas surrounding bulls connected with the female principle. When the schematisation goes a step further, discarding the superfluous iconic additions and approaches the sphere of symbols, our ambiguity grows, perhaps less in recognizing the symbol than in interpreting it. Some objects are still recognizable as *bucrania*, for example, the “benches” from Çatal Hüyük (Mellaart 1963.53, Fig. 4 – shrine A VI, 1) (Fig. 11). Interpretation diverges: they are obviously sacred, but in what way? They might signify the bull’s role in a religion of the female principle. But they can equally be a gift given in return for a successful hunt. This theory tries to explain why there are rows of horns in benches: do many horns sanctify a space more efficiently than a single pair? Probably not, but they can be a ritual method of restoring to a goddess what has been taken from her world (Hodder 1987) in a system of gift exchange with the gods.

For some other examples we can infer that they stem from bucrania, like the small altar table from Sarvaš

Fig. 10. Bone figurine from Bilcze Złote, Ukraine, Cucuteni Culture (after Soudsky and Pavlu 1966. Fig. 17).

Fig. 11. *Çatal Hüyük, Turkey, shrine A VI,1 (after Mellaart 1963.53, Fig. 4).*

Fig. 12. *Clay "altar" from Sarvaš, Croatia, Vučedol Culture (?), Archives of the Archaeological Museum, Zagreb.*

(Eastern Croatia) (Schmidt 1945. *Textbild* 74–3, 145 f; 184), only 15.5 cm long, 14 cm wide and 10.5 cm high (Fig. 12); or the very similar object from the Kodžadermen tell in Bulgaria (Radunčeva 1971.59, Fig. 2, 3) (Fig. 13). The small objects are probably ritual paraphernalia connected with bull worship. They have no obvious domestic function. On the other hand, when we find schematised horns on the rim of an Early Minoan I vessel from Eileithyia's Cave on Crete (Zervos 1956. Fig. 90) (Fig. 14), we must ask ourselves if they are merely the decoration of an otherwise simple bowl, or if they are the horns which sanctify the use of the vessel and the substance served in it. We do not know whether their meanings remained the same or were abstracted, even if they were broadened and acquired some additional

Fig. 13. *Clay figurine from Kodžadermen, Bulgaria (after Radunčeva 1971. Fig. 2).*

meaning in respect to the symbol's distant Early Neolithic origins.

When the object is further abstracted into the form of "horns of consecration", the direct connection with the original image is lost. Now there is no agreement on their origin from the *bucranium*, nor on their function and cultic meaning (if any). "Horns of consecration" became the smallest definable iconographical unit, meaning that nothing could be removed from the object without it losing its recognizable form (Morgan 1985.10). As a result they are difficult to interpret within a specific culture, to say nothing of the transfer from one community to another. The smallest iconographic unit acquires meaning within a culture's set of instruments for its interpretation.

These instruments are mostly lost to us. When we find the syntax of symbols in different cultures, e.g. woman + double axe + horns of consecration + small bird, we can speak of a certain affinity of meaning, but when the smallest iconographic unit appears alone, we do not know its meaning within the specific set of conventions. This is why there is no universally accepted theory of the origin, meaning and function of the "horns of consecration". Not everyone would agree that "horns of consecration" even derived from bucrania. They were understood as pot stands, loom stands, pot supports, spit supports (Diamant & Rutter 1969. 147), or fire supports (Gazdapusztai 1957; Rutkowski 1981.88).

The different opinions on their function are in most cases based on their dimensions. Cretan examples

Fig. 14. *Vessel from Eileithyia's Cave, Crete (after Zervos 1956. Fig. 90).*

are classified according to their size: monumental, found on architecture; medium (from 10 cm to 1m); miniature (not more than 10 cm) (*D'Agata 1992.250*). Prehistoric sites in Central and SE Europe lack monumental examples, but medium and miniature ones are abundant. For the monumental Cretan "horns of consecration" most would say that they had a religious or cultic function. Miniature specimens, Cretan, Middle Eastern or European prehistoric are equally understood as cultic objects, amulets or tokens (*Budja 2003*). Miniature examples appear very early in Europe, in the Sesklo culture from the site at Xynias Ombriaki in Greece (*Sampson 1981.Fig. 17*) (Fig. 15). They have holes, which suggests they were worn as amulets or simple pendants, although the object was described as a loom weight. Small "horns of consecration" are known from the site at Ruse in Bulgaria, of the Gumelnița culture (*Gimbutas 1982.93, Figs. 49.1, 49.2*) (Fig. 16), and from the site at Vinča and the Vinča culture in Serbia (*Gimbutas 1982.Fig. 49.3*) (Fig. 17). They adorn the rim of a vessel from Vestő-Magor, Hungary, from the Tisza culture (*Hegedus & Makkay 1987.Fig. 11*) (Fig. 18). Even if some of them served as tokens in inter-communal communication networks, no one really doubts that they originated from *bucrania*. The same goes for some highly abstract "amulets" (*Tasić 1973. T. XVIII. 61; Stanković 1989/90.42; Budja 2003*) (Figs. 19 and 20).

The medium-size objects, although very similar to the monumental and the miniature examples, pose a problem. They are easily made, easily accessible to almost anyone (*D'Agata 1992.250*), and they are most often interpreted as having a domestic, not cultic, function. Such controversial examples are the "horns of consecration" from Vučedol (Gradac), found in 1938 (35.5 cm long, 31 cm high, 18.5 cm wide, *Schmidt 1945.36, T. 18.2; 50.3*) (Fig. 21); horns from Vučedol (Streim's Vineyard) found in 1986 (50 cm long, 27 cm high, *Hoti 1989.T. 1.2*) (Fig. 22); or the horns from Vinkovci (Hotel) belonging to the Vučedol culture found in 1977 (35 m long, 17. 5 cm high, *Dimitrijević 1977/78.Abb. 3, 11; Težak 1979.Abb. 6;*

Fig. 15. Clay "amulet" from Xynias Ombriaki, Greece, Sesklo Culture (after Sampson 1980.Fig. 17).

Fig. 16. Miniature clay "horns of consecration", Ruse, Bulgaria, Gumelnița Culture (after Gimbutas 1982.93, Fig. 49,1 and 49,2).

Fig. 17. Clay "horns of consecration", Vinča, Serbia and Montenegro, Vinča Culture (after Gimbutas 1982.Fig. 49,3).

Fig. 18. Fragments with horns on the rim, Vestő-Magor, Hungary, Tisza Culture (after Hegedus & Makkay 1987.Fig. 11).

Fig. 19. "Amulet", Divostin, Serbia and Montenegro (after Budja 2003.119, Fig. 3).

Fig. 20. "Amulet", Vinča, Serbia and Montenegro, Vinča Culture (after Tasić 1973.T. XVIII, 61).

Fig. 21. Clay "horns of consecration", Vučedol/Gradac, Croatia, Vučedol Culture (after Schmidt 1945.T. 18.2).

Fig. 22. Clay "horns of consecration", Vučedol/Streim's Vineyard, Croatia, Vučedol Culture (after Vučedol 1988.cat. no. 39).

Fig. 23. Clay "horns of consecration", Vinkovci, Croatia, Vučedol Culture (after Vučedol 1988.cat. no. 38).

Fig. 24. Clay "horns of consecration", Tell Brak, Iraq, halcolithic (after Diamant & Rutter 1969.Fig. 28).

Fig. 25. Clay "horns of consecration", Alishar, Iran (after Müller Karpe 1974.T. 303, B 5).

Vučedol 1988 Cat. No. 38, p. 78; Hoti 1989.34, T. 3.2) (Fig. 23) to mention only a few of the best known. These were found in deposit pits with no other context. Some fragmented examples were found in the houses (*Hoti 1989.34*) or near them, and were automatically under suspicion as domestic objects (e.g. fire supports). The same is the case with the Middle Eastern examples (*Diamant & Rutter 1969, passim*) such as those from Tell Brak, Iraq (*Diamant & Rutter 1969.Fig. 28*) (Fig. 24) or Alishar Hüyük, Iran (*Müller Karpe 1974.T. 303, B 5*) (Fig. 25).

Even if we sometimes reach a consensus that they are sacred or cultic objects, we cannot agree why.

Fig. 26. The ornament of the Mycenaean crater from Salamis, Cyprus (after Gimbutas 1982.Fig. 151).

Evans (*op. cit. n. 1*) insisted that they were schematised *bucrania* connected with a bull cult; Gärtte thought that they were a derivation of the Egyptian hieroglyphic sign for horizon⁴. The suggestion that they derived from the crescent shape of the moon also had quite a lot of supporters, as well as the assumption that the original image was a boat. Two theories were then connected into one: the “horned” shape represented a moon boat carrying the moon across the sky (Zervos 1956.41; Rutkowski 1981. 88). One suggestion was that the shape derived from a female figure with hands raised (Levy 1948. 230).

Further difficulties arise when we consider two-dimensional representations of a three-dimensional object. Representations are truly the smallest definable iconographic units. We have already mentioned the Linear B sign *pte*. Evans was convinced that the “horns of consecration” stood for *bucrania* because of the representation on the Mycenaean crater from Cyprus (D’Agata 1992.248, n. 7) (Fig. 26). They are easily discernible here, and functionally interchangeable. Earlier representations of *bucrania*, however schematised, are easily recognizable, as on the Mid-

Fig. 27a. Detail of Fig. 27 (after Mellaart 1975.Fig. 150).

Fig. 27. Assemblage of middle Halaf pottery, Yunus, Turkey (after Mellaart 1975.233, Fig. 150).

dle Halaf pottery (5000–4500 BC) from Yunus near Carchemish (Mellaart 1975.232, Fig. 150) (Fig. 27). Highly stylised, but still recognizable, are the representations of *bucrania* on Cucuteni B2 pottery (Dodd-Oprîtescu 1981.Fig. 4. 23) (Fig. 28). Representations of the “horns of consecration” are a bigger problem. We are usually not sure if they really represent “horns of consecration” and not some similar horned shape. Such is the case with an object (seal? loom-weight? shuttle?) from the Neolithic layer in Knossos. It has an almost perfectly incised drawing of “horns of consecration” (Makkay 1984. 22–24, Fig. 1. 2b) (Fig. 29). But the sign has also been described as the Egyptian hieroglyphic sign for mountain (*ibid.*). The object is dated to the Middle or Late Neolithic, so it is too early for both interpretations. Its explicit drawing enables us to recognize a more vague representation on a clay object

Fig. 28. Repertory of Cucuteni B2 ornaments in the form of bucrania (after Dodd-Oprîtescu 1981. Fig. 4,23).

⁴ W. Gärtte, Die Bedeutung der kretisch-minoischen Horns of Consecration. *Archiv für Religionswissenschaft* 21, 1922.72–98 quoted by D’Agata 1992.247, n.6.

Fig. 29. Clay object from Knossos, Crete, Neolithic (after Makkay 1984.Fig. 1.2b).

Fig. 31. Drawing of the same object from Sesklo as in Fig. 30 (after Makkay 1984.Fig. 1.4).

from Sesklo, Greece, dated to the Sesklo culture (Teocharis 1973.Fig. 212c; Makkay 1984.24, n. 11, Fig. 1.4) (Figs. 30, 31). This drawing has disintegrated, but is still recognizable as a type of schematised “horns of consecration”, although the meaning is far from clear.

In this context we must mention a bone object from Mežiriči, Ukraine (Filippov 1984.Fig. 8.9) (Fig. 32). It is decorated with incised drawings, among them motifs which in some other context would be immediately recognized as “horns of consecration”. Since this object belongs to the Upper Palaeolithic, we cannot but say that we are dealing with a crescent shape with a flat base. Small circles can be seen between the “horns”. Perhaps this time we could say that these shapes might really represent the sun and moon, because here we have a somewhat more subtle syntax of iconographic units. This occurrence makes one cautious: when we are dealing with the utmost schematisation the possibility presents itself

Fig. 30. Clay object from Sesklo, Greece, Sesklo Culture (after Teocharis 1973.Fig. 212 c).

Fig. 32. Bone object from Mežiriči, Ukraine, Upper Palaeolithic (after Filippov 1984.Fig. 8.9).

that two or three or more different original images (*bucranium*, crescent moon, mountain, boat) could be schematised in the same way and still have different meanings. Meanings would vary from culture to culture according to inherent codes of cultural communication inside a given community.

In conclusion we could say that the oldest finds still represent the literal transposition of the object (bull's head) to a culture. With the passing of time and widening of geographical radius, abstractions appeared, followed by symbols. These were very remote from the original image in appearance, and we wonder how remote they were in meaning.

REFERENCES

- BUDJA M. 2003. Seals, contracts and tokens in the Balkans Early Neolithic: where in the puzzle. In M. Budja (ed.), *10th Neolithic Studies. Documenta Praehistorica 30*: 115–130.
- BURKERT W. 1990. *Greek Religion, Archaic and Classical*. Harvard University Press. Cambridge Mass.
- CONRAD J. R. 1959. *The Horn and the Sword. The History of the Bull as Symbol of Power and Fertility*. Macgibbon and Kee. London.
- D'AGATA A. L. 1992. Late Minoan Crete and Horns of Consecration: s Symbol in Action. In R. Laffineur & J. T. Crowley (eds.), *EIKON, Aegean Bronze Age Iconography: Shaping a Methodology (Proceedings of the 4th International Aegean Conference), University of Tasmania, Hobart, Australia 6–9 April 1992*, *Aegeum* 8: 247–256.
- DAVIS W. 1992. The deconstruction of intentionality in Archaeology. *Antiquity* 66: 334–347.
- DIAMANT S. & RUTTER J. 1969. Horned objects in Anatolia and the Near East and possible connections with Minoan "Horns of Consecration". *Anatolian Studies* 19: 147–178.
- DIMITRIJEVIĆ S. 1977/78. Zur Frage der Genese der Gliederung der vučedoler Kultur in dem Zwischenstromlande Donau-Drau-Sawe. *Vjesnik Arheološkog muzeja u Zagrebu* 3. ser. 10–11: 1–96.
- DODD-OPRITESCU A. 1981. La céramique décorée à la corde dans l'aire des civilisations de Cucuteni et Cernavoda I. *Studii se cercetari de istorie veche si arheologie (Bucuresti)* 32/4: 511–528.
- DOW S. 1980. The Linear Scripts and the Tablets as Historical Documents. *Cambridge Ancient History II, Part 1*: 584 ff.
- FILIPPOV O. K. 1984. Obrabotka i ispolzovanie predmetov na poznopaleolitičeskom poselenije Mežiriči. *Arheologija (Kijev)* 48: 35–47.
- GAZDAPUSZTAI G. 1957. Ein Leuchter vom Ende des Neolithikums aus Hódmezővásárhely. *Archaeologiai Értesítő* 84/2: 211–213.
- GIMBUTAS M. 1982. *Goddesses and Gods of Old Europe, Myths and Cult Images*. Thames & Hudson. London.
- GUARDUCCI M. 1967. *Epigrafia greca I*. Istituto poligrafico dello stato. Roma.
- HEGEDUS K. & MAKKAY J. 1987. Vésztő Mágor. In P. Raczy (ed.), *The Late Neolithic of the Tisza Region*: 85–104.
- HODDER I. 1987. The contextual analysis of symbolic meanings. In I. Hodder (ed.), *The Archaeology of Contextual Meaning*. Cambridge University Press. Cambridge: 1–10.
- HOTI M. 1989. Novi nalazi konsekrativnih rogova na Vučedolu. *Opuscula Archaeologica (Zagreb)* 14: 33–43.
- KALICZ N. & RACZKY P. 1981. The Precursors to the "Horns of Consecration" in the South-east European Neolithic. *Acta Archaeologica Academiae Scientiarum Hungaricae* 33: 5–20.
- KARAGEORGHIS V. 1974. Cypriot Civilization in the Mycenaean Period. In G. A. Christopoulos (ed.), *Prehistory and Protohistory*: 346–360.
1975. Excavations at Kition, Cyprus, 1975. *Journal of Field Archaeology* 2/4: 399–404.
1991. *The Coroplastic Art of Ancient Cyprus I: Chalcolithic – Late Cypriot I*. A. G. Levenis Foundation. Nicosia.
- LEVY G. R. 1948. *The Gate of Horn. A Study of the Religious Conceptions of the Stone Age and their Influence upon European Thought*. Faber and Faber Limited. London.
- MAKKAY J. 1984. Chronological links between Neolithic cultures of Thessaly and the Middle Danube Region. *Acta Archaeologica Academiae Scientiarum Hungaricae* 36: 21–28.
- MANETTI G. 1987. *Le teorie del segno nell'antichità classica*. Bompiani. Milano.
- MELLAART J. 1963. Excavations at Çatal Hüyük, Second Preliminary Report 1962. *Anatolian Studies* 13: 43–103.
1964. Excavations at Çatal Hüyük Third Preliminary Report 1963. *Anatolian Studies* 14: 39–119.

1967. *Çatal Hüyük. A Nolithic Town in Anatolia*. Thames & Hudson. London.
1975. *The Neolithic of the Near East*. Charles Scribner's Sons. New York.
- MORGAN L. 1985. Idea, Idiom and Iconography. *Bulletin de Correspondance Hellénique, Supplement XI, L'iconographie minoenne*: 5–19.
- MÜLLER KARPE H. 1974. *Handbuch der Vorgeschichte III*. C. H. Beck. München.
- NAPIER A.D. 1992. *Foreign Bodies. Performance, Art and Symbolic Anthropology*. University of California Press. Berkeley-Los Angeles-London.
- RADUNČEVA A. 1971. Sur la signification de certaines figurines animals en argile de l'Enéolithique. *Arheologija (Sofija)* 2: 58–66.
- RAPPAPORT R. A. 1971. Ritual Sanctity and Cybernetics. *American Anthropologist* 73/1: 59–76.
- RIPINSKY-NAXON M. 1989. Hallucinogenes, Shamanism, and the Cultural Process. *Athropos* 84: 219–224.
- RUTKOWSKI B. 1981. *Frühgriechische Kultdarstellungen*. Mitteilungen des deutschen archäologischen Instituts, Athenische Abteilung, Beiheft 8. Berlin.
- SAMPSON A. 1981. A Settlement of "Sesklo" Period at Xynias Ombriaki. *Athens Annals of Archaeology* 14/1: 104–133.
- SCHMIDT R. R. 1945. *Die Burg Vučedol*. Ausgabe des Kroatischen archäologischen Staatsmuseums. Zagreb.
- SOUDSKY P. & PAVLU I. 1966. Interpretation historique de l'ornement linéaire. *Památky archeologické* 57/1: 91–125.
- STANKOVIĆ S. 1989/90. Predstave bika u starijem neolitu. *Starinar* 40–41: 35–42.
- TASIĆ N. 1973. *Neolitska plastika*. Katalog izložbe Muzej grada Beograda. Beograd.
- TEOCHARIS D. 1973. *Neolithic Greece*. National Bank of Greece.
- TEŽAK T. 1979. Vučedoler Kultgeräte aus Vinkovci. *Archaeologia Iugoslavica* 16: 3.13.
- VASIĆ M. M. 1936. *Praistoriska Vinča II*. Državna štamparija Kraljevine Jugoslavije. Beograd.
- VUČEDOL 1988. *Vučedol. Three Thousand Years BC*. Catalogue of the Exhibition. Muzejski prostor. Zagreb.
- ZERVOS C. 1956. *L'Art de la Crète, néolithique et minoenne*. Cahiers d'art. Paris.