



# AMBER IN ARCHAEOLOGY

Proceedings of the Fifth International Conference on Amber in Archaeology

BELGRADE 2006

NATIONAL MUSEUM



## THE NORTHERN SECTION OF THE FIRST AMBER TRAIL. AN OUTLINE OF SIGNIFICANCE FOR CIVILIZATION DEVELOPMENT<sup>1</sup>

### INTRODUCTION

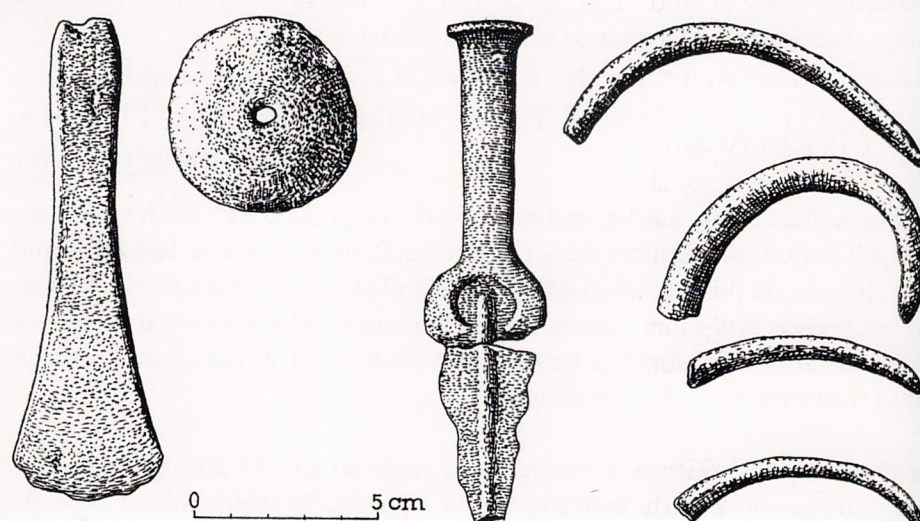
In the relevant literature, the subject of the amber trail has been discussed since the 1920s when it was first taken up by J.M. de Navarro (J.M. de Navarro 1925). Both he and most of his successors concentrated chiefly on the late period in prehistory, namely, the period of Roman influence (e.g. J. Wielowiejski 1980, see there for detailed literature), while the history of the amber trail is much longer. For it was a dynamic phenomenon, both in terms of space (shifts in trail course depending on changes in Europe's cultural configuration) and time (stages of varied intensity in the exchange of goods along the trail). In this short contribution, I shall touch upon questions concerning, in terms of geography, the northern portion of the trail covering the area north of the Sudeten and Carpathians line; in terms of time, I shall dwell on the oldest stages of its development that coincided with the Early Bronze Age in central Europe. I shall focus on amber itself, ignoring the questions of moving other material goods along the trail. However, I shall discuss several fundamental issues related to the significance of the amber trail for the development of civilization.

To begin with, I wish to draw your attention to or rather remind this audience of certain properties of amber as raw material. It is light, transparent, sun-coloured, and easily burnt, giving out an uncommon aroma. In addition, it must be stressed that it is a "stone" that is easily destroyed. It can be easily crumbled (pulverized) or burnt. It readily oxidizes too: after some time it turns into cloddy "gravel". Taking this into account, there is no doubt that amber finds from the Bronze Age, which have survived to our times, represent only a small percentage of the raw material that was in circulation at those times. Another characteristic of amber is its ease of transport. Owing to its low specific gravity, it can be

1 This study has been financed by the Polish Ministry of Science (project no. 1 H01H 027 28).



**Fig. 2.** *Brusy cemetery, graves goods with an amber bead (Foll. Sarnowska 1969)*



single system of values, namely to the solar cult (J. Czebreszuk 2002). Amber was found mainly in graves as a gift to or an element of a deceased's ritual dress (R. Mazurowski 1983). The first signs of the prestige significance of amber are already visible in the Neolithic, specifically in the Globular Amphora culture (M. Szmyt 1996: 53-56). However, a major breakthrough occurred among the societies of the northern frontier of the Únětice culture in the early centuries of the 2<sup>nd</sup> millennium BC (J. Czebreszuk 2006) – apart from the ritual and religious value, amber became an indicator of the highest prestige. Together with gold and bronze, it formed a “prestige triad”. There are rich grave finds like Łęki Małe (J. Czebreszuk 2001: 84-88) that besides the triad are marked by a monumental character (mounds with complex stone structures) and internal hierarchy (central and lateral burials) (Fig. 1). Of similar rank were rich graves from Przysieka Polska (S. Schwenzer 2004) or Brusy (W. Sarnowska 1969: 130) (Fig. 2). Equally important were certain hoards, e.g. at Wąsosz (W. Sarnowska 1969: 141-143).

A system attaching such a high prestige value to amber was unexpectedly reproduced far south at the beginnings of the Mycenaean culture (A. Harding, H. Hughes-Brock 1974). Unusual abundance of amber is found in assemblages coming from shaft graves at Mycenae. This is the first time that amber appeared in the context of a Mediterranean civilization in spectacularly large amounts, being evidence of a great demand for it among Early Mycenaean elites. In the circles of shaft graves, the triad is supplemented by other imported raw materials such as lapis lazuli, ivory or silver.

Entering the reach of urban civilization societies resulted in including amber in long-distance circulation of goods of a para-trade character. Amber became a commodity and not only in the south, where a commodity character of goods was by no means anything new at that time, but also in the north. A Mycenaean recipient did not expect societies in the north of the continent to deliver any specific amber goods, but rather as much raw amber as possible. One may venture to say that through amber Early Bronze central European societies en-

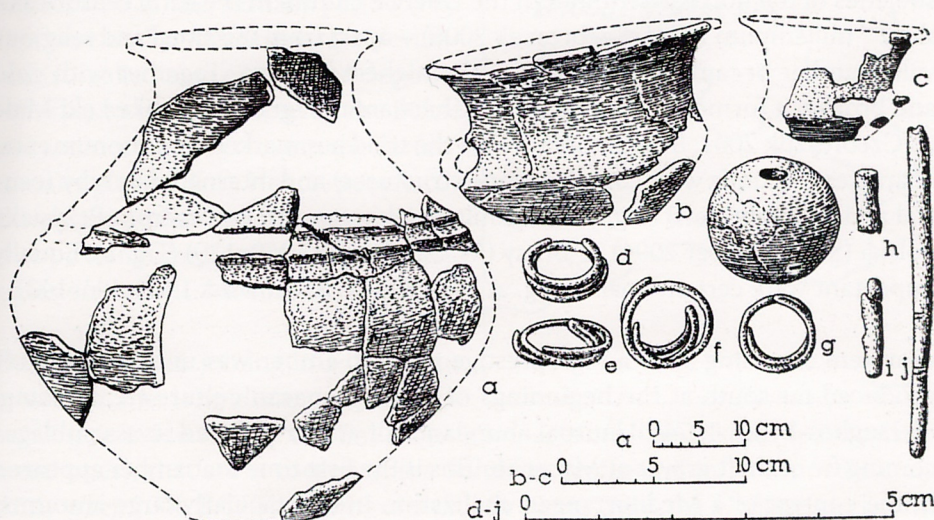


transported easily in large amounts over long distances using simple means of transport and without developed transport infrastructure.

## WHAT IS KNOWN?

The beginnings of the amber trail reach back to ca. 2000 BC. With varied intensity, it continued until the early centuries AD, hence for over two thousand years. There were periods when it flourished and others when it suffered stagnation but there is ever more data indicating that once amber entered the network of long-distance exchange as a strategic raw material, it stayed continuously in it until the times of the Roman Empire.

The discovery of amber as a strategic raw material sought throughout prehistoric Europe and the Mediterranean was a process in which inland deposits played a crucial role. The deposits had been formed by a glacier that moved amber-bearing strata from the Baltic area and spread them over vast expanses from the coasts of the British Isles to the western part of the East European Lowlands. Thanks to the outcrops, usually of limited reserves, societies inhabiting many regions of the then Europe could encounter this extraordinary "stone" (Pl. I).



**Fig. 1.** *Łęki Małe*  
cemetery, graves  
goods: d-f – gold,  
amber bead –  
without number  
(Foll. Sarnowska  
1969)

It can be safely assumed that when amber reached the Mediterranean (in southern France) together with the Bell Beakers towards the end of the 3<sup>rd</sup> millennium BC (J. Czebreszuk 2003: 176), it was a raw material of a stable ritual and religious value (J. Czebreszuk 2002). Having been discovered by urban civilizations, it took on prestige and para-trade significance as well.

The ritual and religious significance of amber dates back to the very beginnings of its use by Decline Palaeolithic and Mesolithic societies (J. Burdukiewicz 1999). The properties of amber listed earlier made different societies tie it to a



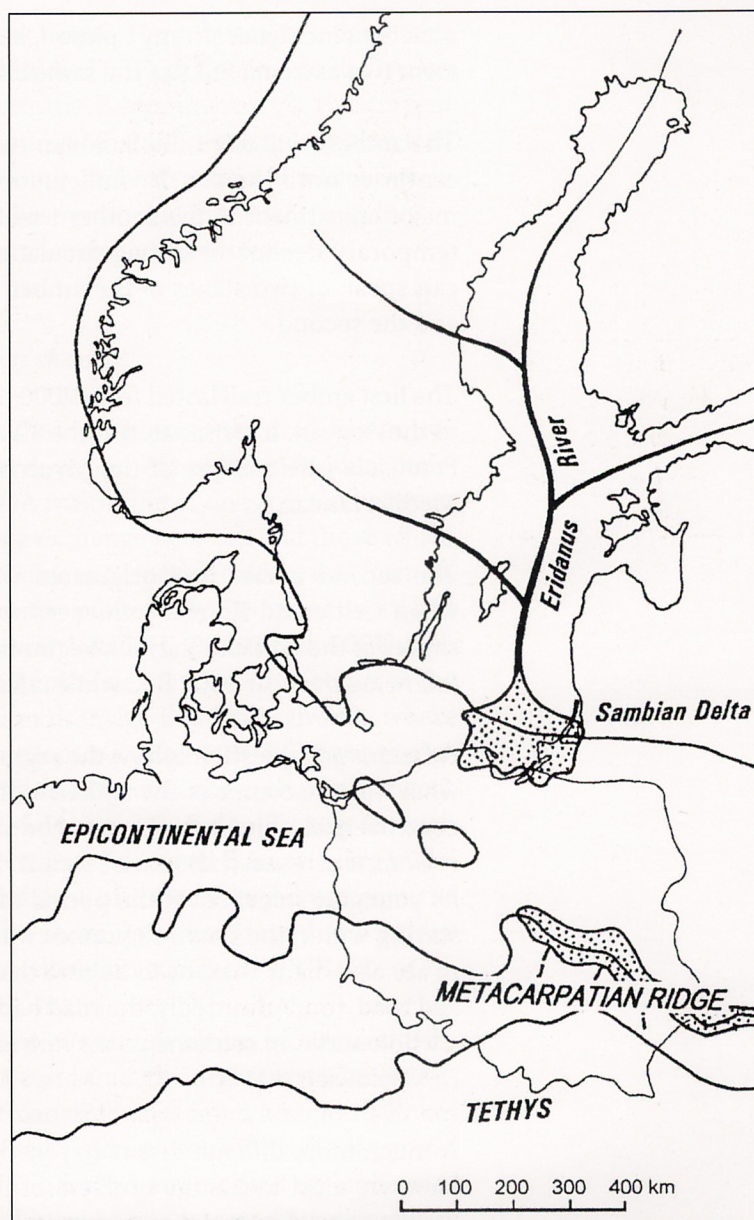
countered another type of supragroup circulation of objects that went beyond the framework of ritual exchange.

In sum, as several hundred years earlier the need for large and stable sources of metal resulted in Europe being criss-crossed by new trade routes, the same happened in this case: the network was expanded to include areas that guaranteed a regular supply of the raw material.

In the then Europe, there was only one place that in terms of the geology of deposits and their cultural use met the conditions specified above. The place was the stretch of the Baltic coast from the mouth of the Vistula to the mouth of the Neman, known in the literature as the Sambian centre. For it was there that the estuary of the Eridanus River was located in the Tertiary period (Fig. 3) where amber-bearing strata developed (so-called blue earth). The deposits continue to be washed out by the Baltic and are located very close to the surface in many places (Pl. I). Hence, people could obtain amber by picking it on beaches or using simple extracting technologies on land (R. Mazurowski 1999).

The process of joining the Sambian centre to the long-distance exchange network is evidenced by the finds, being imports of various kinds (particularly metal ones), that are recorded in the Sambian centre and in its immediate vicinity after 2000 BC. These imports chiefly come from the Únětice circle and include such spectacular objects as halberds and daggers, but also objects of more distant provenience. Among them are a gold lunula from Wąsosz genetically related to the British Isles, a gold halberd from Inowrocław (probably of the same origin) or a bronze winged pin from Kleszczewko (characteristic of the Alpine region). More spectacular is a figurine from Šerniai, which has no clear chronology but genetically has to be connected with eastern Mediterranean area (S. Przeworski 1929).

It is very unlikely that the appearance of metal imports from different metallurgical centres of Europe on the south-eastern coast of the Baltic after 2000 BC and the influx of great amounts of amber to Greece around the same time were



**Fig. 3.** *The Eridanus from the Tertiary period (Foll. Kasiński, Tołkanowicz 1999)*



a mere coincidence. In my opinion, just the opposite was true: the two regions form two extreme links of the same chain – the amber trail.

The amber trail, from the Sambian centre to the Aegean, was used for several centuries until the late 2<sup>nd</sup> millennium BC. In the early 1<sup>st</sup> millennium BC, a major adjustment of the southern section of the trail took place, followed by a temporary decline in amber circulation. Hence, in the history of Europe, one can speak of two stages of the amber trail, or about two amber trails: the first and the second.

The first amber trail lasted from 2000 to 1200 BC and joined the Sambian centre to the Aegean. It terminated at the 1200 BC crisis affecting not only the Aegean Peninsula (the collapse of the Mycenaean culture), but also the whole eastern Mediterranean.

The second amber trail originated with the Hallstatt culture and developed when Celtic and Roman influences were at their peak. It joined the southern shores of the Baltic to Italy. Its beginnings can be dated to the years immediately following the year 1000 BC, while it lasted until the first centuries AD.

A fascinating question is how the regions were joined to each other. Specifically, what was the course of the amber trail? The answers to these questions are uncontroversial only in the case of the second amber trail. We know well which regions it crossed (J. Bouzek 1993; Z. Bukowski 1999; J. Wielowiejski 1980). In its youngest stage, i.e. in the period of Roman influences, its southern section staying within the Empire's bounds was clearly marked in the countryside. There are also many reasons to believe that further north the trail ran along a marked road, too. Admittedly, the road had no permanent course but it was fixed by a whole series of settlements serving as lodgings or trading posts along the trail (J. Wielowiejski 1980).

A much more difficult task is to reconstruct the course of the first amber trail. First, we must tackle the problem of the approach to space that was typical of the then societies and that was entirely different from ours. The way we think of space is cartographic: we see space through maps. The societies settling Europe four thousand years ago can be called pre-cartographic. There may have been certain images passed on by the word of mouth that together made up a kind of "mental map". Such a "map" consisted of elements of countryside, forming barriers to or providing channels of contact, such as seas, rivers, mountain ranges, great waterlogged areas, and cultural elements in the form of culturally defined communities. Such "mental maps" were used by chroniclers writing in the late ancient times about, for instance, the course of the Roman amber trail (J. Wielowiejski 1980).

By projecting the roads of contact that seem to be the "simplest" to the then people onto a contemporary map we may get an incredibly complex picture. I shall now advance one of the possible hypotheses concerning the course of the first amber trail. It is as follows: Sambian centre – Lower Vistula – Kujawy –



Wielkopolska – Lower Silesia – Moravia – Upper Tisza drainage – down this river – across the Danube – as far as the Middle Drava drainage – to the Istrian Peninsula – south across the Adriatic – to the Peloponnesus. At the current stage of research, we cannot exclude a possibility that there existed another trail parallel to the one sketched above or that our reconstruction is inaccurate in some parts. Yet, this proposal seems to be best grounded in the source evidence and has a long standing in the history of archaeological research.

### *The first amber trail ushered in civilization changes*

The key to the reconstruction of the northern portion of the trail lies in understanding the differences in the cultural development of the individual communities settling this part of Europe then. A major line of division ran between communities taking part in the Bronze Age exchange network and those which did not. Since the metallurgical centre of the classic Únětice culture was formed, i.e. since ca. 2100-2000 BC, the eastern frontier of the Early Bronze network had been set by Kujawy, Wielkopolska and Lower Silesia (J. Czebreszuk 2001). The area over which extended the oldest metal culture expanded soon south of the Carpathian arch to include the upper Tisza drainage and Transylvania, where important deposits of copper and gold were located. After 2000 BC, “amber modification” took place, i.e. the extending of the long-distance exchange network by adding to it the Sambian centre mentioned above joined to Kujawy through the areas on the lower Vistula. The other regions of central Europe, lying in the drainage of upper and middle Vistula and east of it, were excluded from the circulation of new goods and ideas and the communities settling these regions continued to live according to Eneolithic civilization standards (Pl. II/1).

Moving on to the way the trail was realized in space, it has to be stressed that, unlike the clearly linear character of the second trail, the first one was quite different. North of the Sudeten and Carpathian arch, it formed a region 100 km wide stretching from the mouth of the Vistula, across Pomerania, Kujawy, and Wielkopolska and as far as Lower Silesia. The region was marked by: amber finds, metal imports from different directions, gold finds, spectacular cemeteries with “princely tumuli”, complex settlement structures.

The region was settled by communities that took part in the long-distance exchange network. Hence, there was no single road with trading posts placed along it, as was the case with the trail from the Roman times. Rather, there was a system of alternative connections between individual places (more or less stable settlements). The system was dynamic, hence unstable, which was a rather disadvantageous circumstance for the development of long-distance exchange. It can be safely assumed, however, that “lying on the trail” (specifically: amber trail) ushered in important settlement and cultural processes. Of fundamental importance in this respect was the factor of settlement stability. The long-distance exchange simply forced communities to occupy specific places for as long as possible. Such places were usually of crucial importance in terms of topography and hydrology, and stood out thanks to their rich and diversified ecosy-



stem. One of the best examples of such places is the settlement in Bruszczewo together with its whole microregion (J. Czebreszuk, J. Müller 2004).

Around 2000 BC, with much effort, a defensive settlement was built there. It was circular in plan, 120 m in diameter, consisting of palisades, a moat and wattle walls. The settlement was continuously inhabited for at least 300 years, and repaired and renovated on many occasions. There was a metallurgist's workshop within the settlement and goods of clay, antler and bone were made as well. Quite probably textiles were produced there, too. Palaeobotanical and archaeozoological data indicate also that a landscape of a cultural nature developed in the microregion surrounding the settlement at that time. Its inhabitants used amber as well, which is evidenced by a well-preserved round bead found at the site in the 2005 season.

The need to occupy permanently certain places was conducive to the rise of more stable communities of a local character. Such communities were to ever greater degree based on territory and less and less on kinship. For they were tied by the need to stay in a given place or to live together in a specific microregion. Staying in a given place was becoming a value worth of ever-greater engagement. Hence, communities began to organize themselves socially and politically. There emerged organizers of community life and others for whom life was organized. Periodic contacts with travellers moving along the trail contributed to the rise of differences as well. For a given community it was advantageous to be efficiently ruled by a leading group. In the vicinity of Bruszczewo, this is seen in cemeteries with "princely tumuli" as, for instance, at Łęki Małe (J. Czebreszuk 2001) or Przysieka Polska (S. Schwenzer 2004). The latter locality is found next to the defensive settlement, across the River Samica.

Such a long occupation brings about changes in the environment consisting in the emergence of a cultural landscape. An area settled by a given community becomes an anthropogenized island, which makes it even more attractive. Palaeoecologists claim that the vicinity of Bruszczewo in the Early Bronze Age was comparable to the contemporary landscape of the region. Hence, it was worth putting more effort into its maintenance. This is seen in the efforts to fortify settlements. The art of fortification began to develop. The construction and later maintenance of fortifications, which can be seen at Bruszczewo, was a challenge for the group's internal organization, enforcing ever-greater efficiency in this respect (J. Czebreszuk, J. Müller 2004). Thus, a process was initiated that had social, political and economic dimensions as well as an impact on the relationship between man and the environment (Pl. II/2).

So long as there was a *constant* demand for amber in the south, the factors listed above stimulated each other:

- To develop ever clearer social stratification,
- To develop a ruling stratum ever richer in prestige objects and wielding ever more power,
- To adapt ever more sophisticated and specialized technologies both in crafts and subsistence,
- To work out ever more hierarchical methods of space use.



The decline of individual communities of this type, following from natural causes such as, for instance, the breaking of the efficiency barrier of a given ecological niche, disturbed the exchange along the trail, but did not stop it. The role of such a declined community was taken over by other communities living in the neighbourhood, in the belt where trail phenomena occurred. Similarly, any cultural changes occurring in the regions crossed by the trail were not critically important. For example, the replacement of the Únětice culture by the Tumulus culture did not alter the course of the trail's northern section. As a result, however, the Alpine foothills grew in importance. The final end to the trail was put by a crisis (decline) in the south that generated a demand for amber. This happened ca. 1200 BC.

South of the Sudeten and Carpathians, the trail moved southeast along the southern slopes of the mountains to the centre of the Otomani culture. The course of the trail in the Carpathian Basin, however, is not clear. Thanks to the work of K. Markova (K. Markova 2003), we know the distribution of Early Bronze amber finds over this area. Apart from the northern rim of the Basin, they are found along the middle Danube and Tisza rivers and as far as the Adriatic coast at the Istrian Peninsula.

## CONCLUSIONS

In the light of the arguments presented above, there is no doubt that the history of the amber trail is long and complicated. It had a crucial moment, ca. 1200-1000 BC, when a change in the trail's southern destination occurred. Relying on the dispersion of amber finds and other significant goods, it is possible to reconstruct the major course of the trail.

The outline of the civilizational significance, shown here, of the oldest amber trail for central European societies, illustrates how the need to possess a single specific raw material shown by societies at one end of the continent may seriously affect the life of people at its other end. This is naturally a hypothetical scenario to a considerable degree. Yet, it may turn out an interesting subject of a broader research project. It is this path that I intend to follow in my future research.



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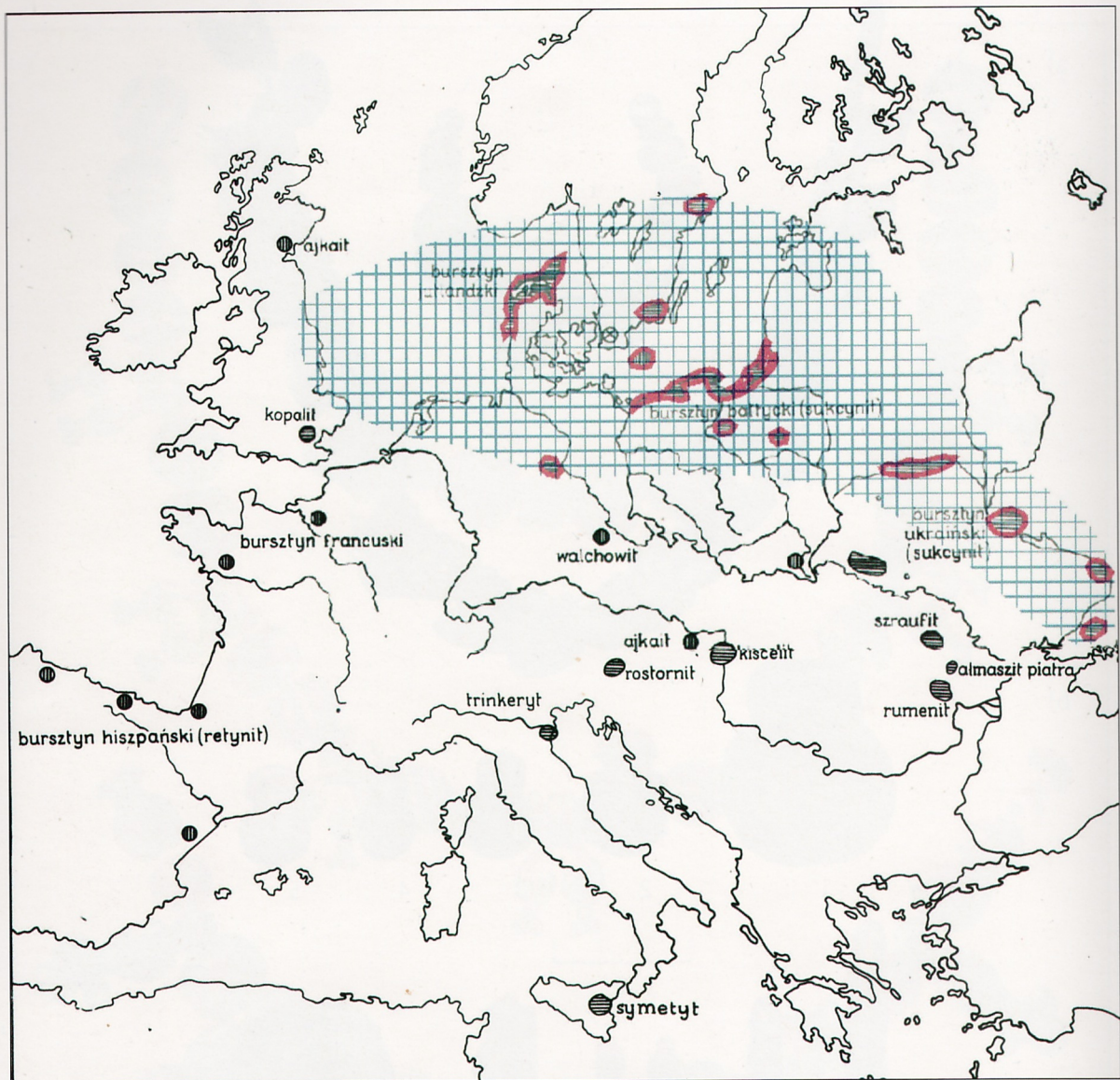
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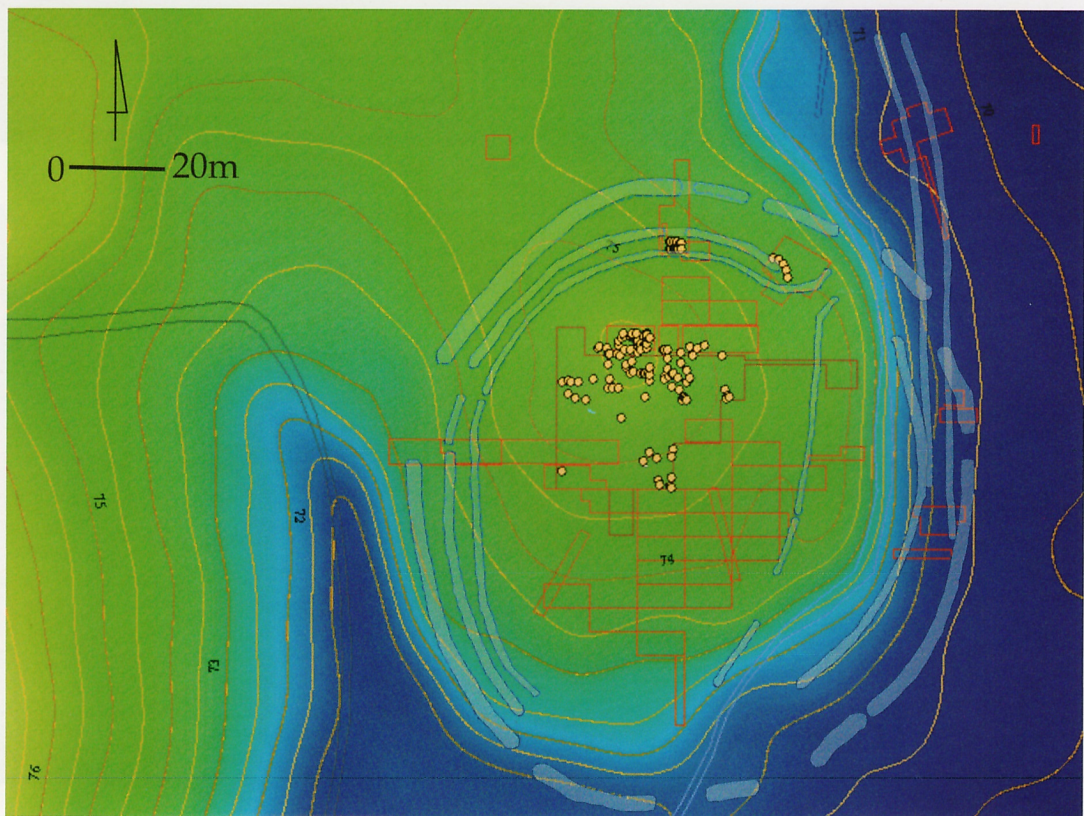


CZEBRESZUK • PLATE I



Places of fossil resin occurrence in Europe. Foll. B. Kosmowska-Cyranowicz 1983: fig. 32.  
Deposits edged in red refer to Baltic amber (succinite). Cross-hatched areas refer to dispersed  
amber finds.





- 1 A major lines of division of different communities in discuss part of Europe.
2. A fortified settlement in Bruszczewo (Wielkopolska, Poland). Red lines – trenches, brown dotes – pits. In the picture are also marked fortification. Preparation of the picture: courtesy of B. Ducke and P. Suchowska.