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Midlife changes: the Sopot burial ground at Alsónyék

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Introduction

Archaeological research on the Neolithic of western Hungary started on sites of the Linear-bandkeramik (LBK) and Lengyel cultures in the late nineteenth century. The existence of assemblages of the Starčevo culture, representing the earliest Neolithic of Transdanubia, became known much later, in the 1970s. In the late 1960s, a close connection began to be recognised between some previously discovered grave assemblages in western Hungary and what was then called the Sopot-Lengyel (Sopotsko-Lendelska) culture in the Slavonian region of eastern Croatia; this was later labelled as the Sopot culture. However, the full integration of this material into the regional framework of the Neolithic was not without difficulties.

It had already been noted that the pottery in question looked to be closely related to assemblages of the Lengyel culture, the extensive fifth millennium cal BC entity of western Hungary and beyond. Working within the Three Age system, traditional classifications of the prehistoric archaeological record have often chosen tripartite subdivisions. The study of the Neolithic of western Hungary was no different, in that an early, a middle and a late period were distinguished: broadly equivalent to the Starčevo, LBK and Lengyel cultures

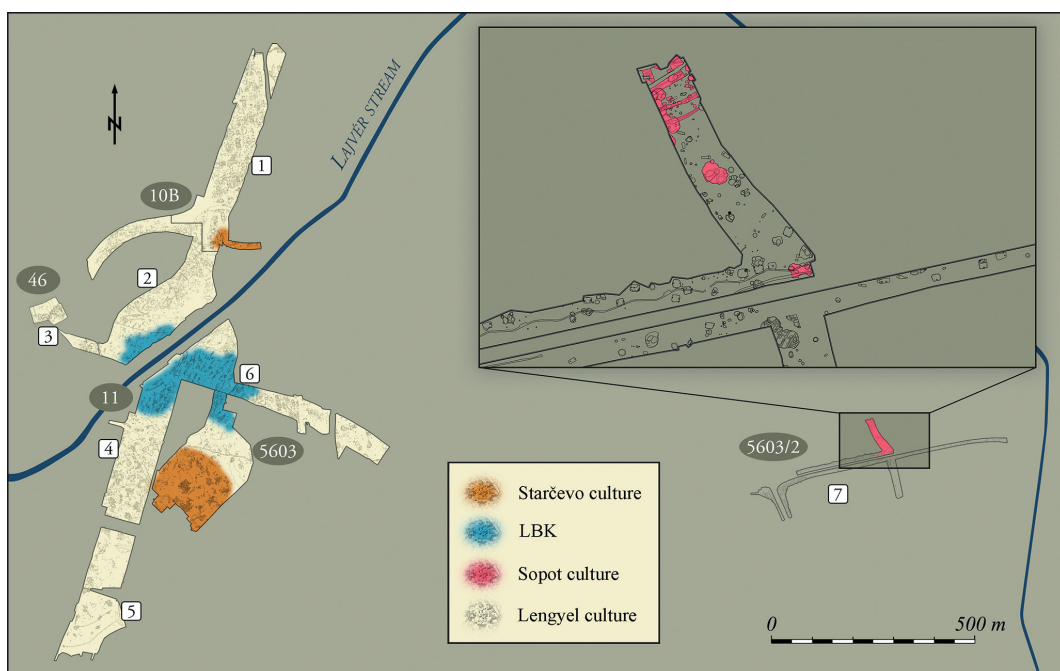


Fig. 1. Location of the Sopot culture burial ground and ditches in the Alsónyék complex.

respectively. Sopot assemblages posed a real challenge to this neat system, as they could not be attributed simply to either the middle or the late Neolithic. Beyond purely typo-chronological studies, their evidently transitional position between LBK and Lengyel posed many further questions concerning the emergence of the Lengyel culture, and the extent and nature of the Sopot contribution to this process.

Using radiocarbon dates on human and animal bone from the largest Sopot burial ground from Hungary currently known, modelled within a Bayesian statistical framework, this paper seeks to offer new approaches to the chronology of the Sopot culture in Hungary. In so doing, it also aims to add new insight into the emergence of Lengyel communities.

The Sopot occupation at Alsónyék

Following the discovery of the site complex at Alsónyék, further fieldwork was carried out some 1–1.5 km to the east of the main motorway excavations on subsite 5603/2 in 2008–9 (*fig. 1*). Settlement features of the Sopot culture came to light in the small area investigated, which included ten large, complex pits (with diameters of 2–7 m), a well, and short stretches of four more or less parallel ditches. According to the stratigraphy, most of the pits are earlier than the ditches. Ditch 211 is the third ditch, counting outwards from the centre of the encircled area. This feature, where excavated, was approximately 1–2.5 m wide and 80–100 cm deep from the level of the machined surface. It had a single excavated fill that was fairly homogeneous and contained 38 sherds, four fragments of worked Szentgál radiolarite (the well known source being about 125 km from Alsónyék), and an animal bone assemblage which has not yet been fully evaluated.

In 2011, 30 hectares were investigated by a large-scale geomagnetic survey to gain additional information on the Sopot occupation. According to preliminary interpretation of the



Fig. 2. Ditch 211 cut by Grave 210.

results, two overlapping double ditches could be detected, which ran less regularly than previously expected on the basis of the excavated portion, but the existence of the four ditches was confirmed over a much larger area. The greatest east–west extent of the ditches is about 300 m, while the inner circuit runs for c. 250 m. The northern limit of the enclosed area is formed by an ancient riverbed that possibly marks a previous course of the Sárköz River. The southern parts of the ditches run south-west to north-east. Some five hectares in all are enclosed.

Traces of four houses, possibly belonging to the Sopot occupation, were also identified. Many additional features were detected both inside and outside the ditch system, but excavation and field survey have shown that the investigated area was used in different archaeological periods. That is why the density of the Sopot occupation is hard to judge from the geophysical survey alone (RASSMANN et al. 2015, 7–8 figs 11–12). The excavated surface with the uncovered graves of the burial ground is located on the south-eastern edge of the enclosed area.

Eighteen graves with the remains of 20 individuals were also excavated and identified by their associated material culture as belonging to the Sopot occupation. Five graves (434, 210, 372, 373 and 396) cut Ditch 211 (fig. 2). Two further graves cut other ditches, with Grave 471 cutting the innermost Ditch 189 and Grave 272 cutting Ditch 195. Nine graves containing ten individuals are located between Ditches 195 and 211. In Grave 475 the skeleton was in a supine position with articulated cattle ribs below the skull. The excavation notes and plans showed that this grave, and 476 next to it, were both overlain by Grave 464. Grave 463 was possibly cut by Grave 282 but their relationship could not be securely reconstructed from the excavation records. The relationship between Graves 282 and 240 is also unknown since the grave pit of the latter was not detected. Grave 470 contained a single individual presumably in a four-post grave, although the construction was



overlain by another pit and the context is hard to understand (*fig. 3*). Two graves (219 and 220) containing three individuals were uncovered between Ditches 211 and 222.

Most of the deceased were buried in a crouched position. Half of the 20 Sopot burials were left-crouched, while three were right-crouched. Two individuals (Graves 475 and 476) were buried in an extended (*fig. 4*), supine position. In Grave 470, the upper part of the body was lying on its back, but the lower part was destroyed, so it is impossible to decide whether it was a supine burial as well. The body position of a further two inhumed individuals (Graves 272 and 396) could not be determined. Two cremation burials were found. The small pit of Grave 219 contained a small amount of human ashes and a vessel characteristic of Vinča C assemblages. Only a few burnt fragments of skull and a chipped stone artefact were found below the three vessels deposited upside down in the pit of Grave 434. There were no traces of secondary burning on the pots in either of these cremation graves.

The orientation of 14 out of the 16 measurable burials varied between NE–SW and SE–NW; within these, a NE–SW orientation was found in 11 cases. In Grave 220 there were two NW–SE oriented individuals. No orientation could be recorded for the two cremation graves or for two further burials (272 and 396).

In comparison to earlier periods of the Neolithic in western Hungary, the number and variety of grave goods increased considerably. Three-quarters of the graves were furnished. All except one of them contained pots; six vessels in Grave 476 was the highest count. *Spondylus* objects are frequent, including beads, bracelets and a large pendant with multiple perforations (*figs 3–4*). The latter form was also found in a Sopot settlement feature. A few ornaments of perforated red deer canine teeth were present (*fig. 4*). Chipped and polished stone artefacts were included among the grave goods.

The pottery from the pits and ditches proved to be very homogeneous, without observable typological differences. Some forms from settlement features, such as large storage vessels with cylindrical necks and S-profiles, or (more rarely) with a biconical body below a cylindrical neck, did not occur among the grave goods, but some coarse-ware types found in settlement features, such as flat, oval dishes, were recorded with the burials (*fig. 4*). The pottery can definitely be attributed to the Sopot culture. The number of coarse-ware sherds which might be connected with the LBK on the grounds of their production technique and surface elaboration is very limited. No significant typological links could be observed between LBK and Sopot pottery production within the site complex. Only one S-profiled storage vessel was decorated below its rim with a row of impressed dot-like fingerprints that is typical in the LBK assemblage at Alsónyék.

Gravel-tempered coarse ware is characteristic, but the use of organic temper is absent. Much of the material consists of flat ‘baking dishes’ and storage vessels with cylindrical necks and an S-profiled or biconical body. The storage vessels were frequently decorated with pointed, triangular handles.

Fine-ware pottery was regularly made of fine clay; there was some gravel temper. The most frequent pots are different variants of biconical vessels with a concave upper part. Bowls and jars can be distinguished among them, based on the ratio of the upper and the lower parts. On the outer surface, particularly on the upper part, they were decorated with red painting consisting of narrow stripes, in some cases in a zig-zag pattern. The so-called star-shaped clay objects appeared first in Sopot contexts in the Hungarian Neolithic (KALICZ / MAKKAY 1972c, 13 *fig. 4,6–7*; 1972a, 96 *Abb. 8,15–16*). At Alsónyék they were found both in settlement contexts and graves.



Fig. 3. Grave 470 and associated grave goods.



Some vessels demonstrate connections with the pottery traditions of adjacent regions. Close parallels to large bowls with bulging shoulders decorated with wide channels (*fig. 4*) and vessels with punched stripes can be found in Vinča C assemblages. Sherds with panels of incised meandric patterns resemble the decorated ware of the Tisza culture. Conversely, typical Sopot shapes have been found on the Tisza culture tell settlements of the southern Alföld region (HORVÁTH 2005, 58–60 *figs* 8–9).

The wider Sopot culture context

Though this paper cannot deal in detail with the historiography of typo-chronological and other research on the Sopot phenomenon, some brief introduction to the wider context is useful.

The first evidence for the presence of communities that had a material culture later attributed to the Sopot culture in Hungary was discovered at Bicske-Galagonyás in the 1930s (MAROSI 1932; 1934). The unique character of the pottery was noted when the graves were published in the 1950s (PETRES 1954; 1959), although the assemblage was then connected with the Banat culture (BANNER / PÁRDUCZ 1948): that is to say with Vinča assemblages east of the Tisza river on the northern fringes of that culture (PETRES 1954, 25). Some furnished graves found in the late LBK – in late Zseliz / Želiezovce contexts at Nagytétény (GALLUS 1936; TOMPA 1942, 22; 26 *fig.* 3,1–4) and Békásmegyer (TOMPA 1942 *fig.* 1,16; PETRES 1954, 26–27; KALICZ / MAKKAY 1972a, 96; 103 *Abb.* 6,1–4) – showed vessels like deep biconical bowls different to those typical of early LBK contexts and with Bükk-type incised decoration that originated from north-east Hungary. These assemblages pointed to the cultural complexity of the expiring LBK world in Transdanubia. In the 1960s, when archaeological investigations were started again at Bicske-Galagonyás, one part of the finds was connected again with the Banat / Vinča culture, and particularly with the finds from Ószentiván VIII, a site south of Szeged on the Hungarian–Serbian border. Typo-chronological analysis of the pottery paralleled the assemblage with the Vinča B period (MAKKAY 1969).

The Sopot culture is an archaeological concept denoting Neolithic farming communities which appeared in the Dráva–Sava interfluvium, south of Hungary, in the second half of the sixth millennium cal BC (DIMITRIJEVIĆ 1968; 1969a; 1979). The phenomenon was characterised in the late 1960s as the Sopot–Lengyel culture. At that time the process of development was partly traced to a local component in the form of the Early Neolithic Starčevo culture, but was also seen as having substantial influence from the Vinča culture (DIMITRIJEVIĆ 1968, 53–59; 118–119; 1969a). What we would now recognise as Sopot material from the tell settlement of Bapska was then associated with the Lengyel culture (SCHMIDT 1945, 121). Identical assemblages were also discussed by Vladimir Milojević as Slavonian–Syrmanian culture (MILOJEVIĆ 1949, 82–90). Early Sopot sites in Slavonia and in the western Srem region (both in north-east Croatia) were seen as contemporary with the settlements of the LBK in Transdanubia and beyond, in central Europe (DIMITRIJEVIĆ 1968). Slovakian researchers described the process discussed here from the viewpoint of the north-west Carpathian basin and as closely connected with the emergence of the Lengyel culture north of the Danube.



Fig. 4. Grave 476 and associated grave goods.

Until recently, ideas about the formation of the Sopot culture were exclusively based on the typological analysis of ceramic assemblages. Identifying the LBK occupation as the most important source of its origin became the dominant trope. The terms *Vorlengyel* and *Protolengyel* were introduced to describe the transition to Lengyel, but the content of those definitions varied in different publications, and also changed over the past four decades (TOČIK 1969; PAVÚK 1962; 1969b; 2007; 2009). The process of transition to Lengyel was associated with characteristic pottery material such as biconical vessels with a concave upper part, pots with an S-profile and large vessels with a broad belly and cylindrical neck. All forms were seen to have their origins in the Slavonian Sopot culture. In the chronological system of Juraj Pavúk three subsequent phases were introduced, although partial overlaps were not *a priori* excluded. In this framework, the Zseliz / Želiezovce III phase meant the *Vorlengyel* horizon followed by the Bőna-Bicske phase, the earlier *Protolengyel* horizon. The latter term is confusing as both Bicske and Bőna are the eponymous sites for an early LBK phase as well. Finally, the younger *Protolengyel* horizon was represented by the Lužianky-type assemblages in Slovakia and by sites such as Sé-Malomi-dűlő in western Hungary (PAVÚK 2007, 11–16; 23 Abb. 8; 2009, 258–262). Despite heated debates on chronology and cultural definition (LICHARDUS / VLADÁR 2003; PAVÚK 2004), the Sopot culture remained a connecting link between the LBK and the Lengyel culture, at least in the eastern part of south-western Slovakia.

Following the first publication of Stojan DIMITRIJEVIĆ (1968), the Sopot culture was also recognised as an independent cultural unit in western Hungary. It was first labelled as Sopot–Bicske culture after the largest known Hungarian site. Its presence in Hungary was regarded as coeval with the Sopot Ib and II phases (KALICZ / MAKAY 1972c; 1972a, 95–96). Despite this, the archaeological record remained very incomplete, with most of the known sites lying in the eastern part of Transdanubia, particularly along the Danube (KALICZ / MAKAY 1972c; MAKAY et al. 1996). One other group of settlements was localised in south-west Transdanubia, with Becsehely Bükkaljai-dűlő as a key site (KALICZ 1980a). As a consequence, the Hungarian Sopot distribution was discussed in two distinct areas, and the different character of pottery assemblages was also emphasised. While eastern Transdanubia was directly connected with the Slavonian Vinča distribution, the south-west Transdanubian Sopot sites were associated with the so-called Brezovljani type of north-west Croatia (KALICZ 1988, 110; REGENYE 2002a, 31).

The appearance of the Sopot culture north of its core area is often considered to be a catalyst in the emergence of the Lengyel culture out of late LBK groups, and thus the beginning of the local Late Neolithic broadly at the turn of the fifth millennium cal BC (KALICZ 1988). The contradiction caused by obvious relationships with sixth millennium cal BC cultural units in the Carpathian basin was resolved in a division of the Sopot development into an earlier and a younger phase. The earlier phase was characterised by sharply biconical vessels with a concave upper part and thought to be coeval with the *Vorlengyel* horizon of Pavúk. The vessels of the younger phase, however, usually had an S-profile and were dated to the *Protolengyel* horizon (KALICZ 1988, 114–115). The *Protolengyel* horizon was set coeval with the second half of the Vinča B2 phase and with the start of Vinča C (KALICZ 1988, 116). This is the main reason why the Vinča B2–C horizon was summoned many times to date the Hungarian Sopot context.

When the Sopot assemblages were being compared with the relative chronology of the Vinča culture, until the late 1990s Milošević's framework was generally used (MILOJEVIĆ 1949), but when Wolfram Schier analysed the pottery of Vinča-Belo Brdo, he found that the changes marking later Vinča culture occurred slightly earlier in the stratigraphic sequence. More precisely, Milošević had argued for the start of the younger Vinča culture at a

depth of 6.0 m. Schier, however, regarded phase 6, equating to levels between 6.4 m and 6.1 m, as the initial phase of the younger Vinča culture and labelled that Vinča C1. As a result, some forms previously attributed to the Vinča B2 phase were subsequently assigned to C1 (SCHIER 1996, 147–148). That fact needs to be considered when different approaches to the relationship between the Sopot and Vinča cultures are analysed.

Later on, a geographical explanation for the same problem was the idea that the earliest Lengyel culture already existed in north-west and some other parts of western Transdanubia, while Sopot culture sites were present in the eastern and south-western part of the region. At this stage of research, already inspired by the results of Schier, it was also emphasised that the typical Sopot shapes of Hungarian assemblages can be found among the finds of the Vinča C period (REGENYE 2002a).

Research was also carried out north of Lake Balaton at Ajka and Nemesvámos-Balácsa (REGENYE 1994; 1996a; 1996b; 1998). More recently, in addition to Alsónyék, the most important research on Sopot culture sites along the Danube has been at Fajsz-Garadomb and Fajsz-Kovácsalom, on the left (that is, east) bank. The latter site could be the northernmost tell settlement of the culture. Field and geomagnetic surveys were carried out on both sites, and Fajsz-Garadomb was excavated from 2006–2008 (BÁNYFY et al. 2014; RASSMANN et al. 2015).

Research on the south-west Transdanubian settlement group of the Sopot culture was substantially intensified by excavations preceding motorway construction. Becsehely Bükkaljai-dűlő was investigated over a much larger area than previously possible (KALICZ et al. 2007b), while another Sopot site was excavated at Petrivente-Újkúti dűlő (HORVÁTH / KALICZ 2003; KALICZ et al. 2007b). Two other extended settlements are known from Sormás-Török-földek (BARNA 2010; 2011a; 2015) and Sormás-Mántai-dűlő (BARNA 2009; 2011a; 2015). Numerous Sopot houses were recorded there (BARNA 2009; 2011a; 2011b), as well as at Petrivente (KALICZ et al. 2007b, 34 fig. 2,6).

In contrast to the former two-phase classification, Nándor Kalicz regarded the recently excavated south-west Transdanubian assemblages as uniform. He also noted that Sé-type figurines were uncovered at Becsehely in one of the Sopot features. This fact was interpreted as possible evidence for the contemporaneity of the *Protolengyel* horizon and the Sopot culture for at least a short period of time, but territorial overlaps between the two were regarded as arguments against their coeval existence (KALICZ et al. 2007b, 44).

Unlike Lengyel culture enclosures, Sopot culture ditches have not previously been a research focus. The Sopot ditch at Becsehely Bükkaljai dűlő was already found in the first investigations (KALICZ 1983–1984, 272–273), and large-scale excavations then confirmed the existence of the multiple ditch system there (KALICZ et al. 2007b, 31–33 Abb. 1,2–5). A very similar ditch system was recorded at Petrivente-Újkúti-dűlő both by geomagnetic survey and excavation (KALICZ et al. 2007b, 31–34 Abb. 2,1–5). Another, not completely circular, ditch was uncovered at Sormás-Mántai-dűlő (BARNA 2011a, 70–71; 2015, 402 fig. 1,1–2). One of the two enclosures (number II) at Sormás-Török-földek was constructed in the Sopot period (BARNA 2010, 95–98; 2011a, 159–163; 2015, 402 fig. 1,1–2). With the exception of this enclosure, the known ditch systems of the Sopot culture in Hungary are less regular than the rondels of the Lengyel culture and similar to those detected at Alsónyék.

A detailed chronology has been proposed for Sormás-Török-földek, where settlement phases 3a1 and 3a2 represent the occupation of the Sopot culture, while phase 3b is already the transition to the Lengyel culture (BARNA 2010, 95–98). Phases 4a and 4b are associated with the Lengyel culture (BARNA 2010, 98–102). On this basis, Judit P. Barna has questioned whether former suggestions of a territorial separation of the (at least partly) contemporaneous Sopot and Sé-type *Protolengyel* assemblages within the western Car-

pathian basin can be valid (BARNÁ 2011a, 260). She has also suggested that the establishment of some of the more easterly sites of the Sopot culture and that of the early phase of the Lengyel culture could have been the work of the south-west Transdanubian settlement group, which probably played a more significant role in the development of the Lengyel culture than the eastern Transdanubian Sopot groups (BARNÁ 2011a, 267–274).

The largest known burial ground of the Sopot culture in Hungary is now that of Alsónyék, with 20 individuals from 18 graves. Another important burial ground was found at Bicske-Galagonyás. Nine graves arranged in three rows had previously been destroyed (MAROSI 1932, 62). Arnold Marosi excavated seven graves in 1933. There were three left-crouched burials and one supine burial, oriented E–W, and one extended, SE–NW oriented, in which the body lay on its left side. Two further damaged graves were recorded (MAROSI 1934, 39–40; PETRES 1954; 1959). Another E–W supine grave (Grave 1/1974) was excavated in 1974. The grave was furnished with four vessels at the head of the deceased, a *Spondylus* belt with over 300 pieces and an antler pierced pick (MAKKAY 1975; MAKKAY et al. 1996, 20; 23 figs 6–7).

There are four inhumation graves at Fajsz-Garadomb. Two are supine burials, and in one further case the human remains were carefully deposited in a secondary position (BÁNYFY et al. 2014, 354 Abb. 6). Two burials were recorded in settlement pits at Nemesvámos-Balácsa. One individual was discovered in Feature 10 in a prone body position with a NE–SW oriented upper body, while the body in Feature 13 was left-crouched and SE–NW oriented (REGENYE 1996b, 25; 27 Abb. 17–18). One supine E–W oriented inhumation grave was disturbed by construction works at the Szentendre-Dr. Nagy Lajos utca-Római sánc utca sarok site. The grave was furnished with two vessels, 28 chipped stone artefacts, six cylindrical shell beads, a chipped stone tool and red ochre (PATAY 1966–1967, 8; 10 figs 5–6). Another inhumation grave in Szentendre, at the HÉV-végállomás site (MRT 7, site 28/22) was also destroyed in the course of construction works. The body was probably oriented NW–SE and it was furnished with a biconical vessel that has a concave upper part and striped red painting (DINNYÉS et al. 1986, 279 tab. 3,13).

The Sopot burial dataset consists of 36 burials. The most frequent body position is left-crouched (39% of all burials; 47% of the precisely recorded ones). Supine burials constitute 19% of all Sopot graves (23% of the ones where body position has been determined), while a right-crouched position was recorded in 8% of the graves (10% of the those where body position has been determined). Further possible supine, prone and extended bodies are also known.

The left-crouched body position was dominant during the Early Neolithic Starčevo occupation of Alsónyék (OROSS et al. this volume a). A similar picture could be drawn for the Starčevo-Körös-Criş cultural complex in general (LICHTER 2001, 173–175 Abb. 81; PALUCH 2004, 34–35; 2007, 247). The same dominance has been recorded on LBK sites in Transdanubia (OROSS/MARTON 2012, 264–267; 292 figs 2–3; OROSS 2013a, 282–285; 445). In a wider central European LBK context, both settlement burials (VEIT 1996, 182–183 Abb. 9; ORSCHIEDT 1998, 19 Abb. 21) and formal cemeteries share a similar pattern (PESCHEL 1992, 230; NIESZERY 1995, 78).

Cremation graves had not previously been recorded either in Hungarian Sopot sites or in other earlier, sixth millennium cal BC contexts in Transdanubia. However, this burial custom occurs in different LBK cemeteries in central Europe. Birutal cemeteries are frequent in the central part of the LBK distribution, at sites like Arnstadt, Wandersleben, Niederdorla, Aiterhofen-Ödmühle and Stephansposching (SCHMOTZ 1985; PESCHEL 1992, 11; 65–69; 77–78; 95–98 Abb. 29; 35; 42; NIESZERY 1995, 53–56 Abb. 18–19; 245–246). It may also be significant that at Györe, in an early phase of the Lengyel culture in south-east

Transdanubia, besides seven crouched inhumation graves, there were eight un-urned and scattered cremation graves and one further, unexcavated cremation grave (ZALAI-GAÁL / ÓDOR 2008, 554–556 tab. 1). Cremation graves have also been reported from the Lengyel sites of Aszód-Papi-földek (KALICZ 1985, 33–35) and Szentgál (REGENYE 1993–1994, 75).

The orientation of 28 Sopot graves from Hungary is known. The most frequent is NE–SW, but E–W and SE–NW were also quite common. The more easterly orientation of the head is definitely preferred. NW–SE oriented graves are exclusively known from Alsónyék. Westerly orientation was probably not definitely proscribed but was avoided in most cases, as in the preceding Starčevo-Körös-Criș complex and in the LBK across central Europe (LICHTER 2001, 175 Abb. 82; 197–198 Abb. 91; OROSS / MARTON 2012, 293–294 figs 16–17). The orientation of supine Sopot burials varies between NE–SW and SE–NW.

Grave 470 probably had a four-post construction over it. This is not unknown from central European LBK sites, as at Wiedecken, Sondershausen and Rixheim, but does not occur in the Hungarian distribution of the LBK (HORVÁTH 1989–91, 1944–45). Similar features are first found in Hungary on earlier fifth millennium cal BC sites of the Tisza culture in south-east Hungary, such as at Hódmezővásárhely-Kökénydomb, Grave 3/1985 (HORVÁTH 1989–1991, 37–38 figs 1–2; tabs 1–2) and Hódmezővásárhely-Gorzsa, Grave 51 (HORVÁTH 1989–1991, 38 fig. 3; tab. 3). The phenomenon is known too from the Lengyel culture context at Alsónyék, from graves such as 813, 4414, 3060 and 1473. The Lengyel graves also had four posts in each corner and inside the grave pit, very similar to Grave 470 of the Sopot burial ground. The Lengyel four-post graves were exceptionally richly furnished (ZALAI-GAÁL / OSZTÁS 2009a fig. 1,8; 2,2.3.7; ZALAI-GAÁL et al. 2012b). Nonetheless, because of the disturbed character of Grave 470, further observations are required to reinforce the use of post-framed grave constructions in Sopot burial grounds.

The number and combination of grave goods recorded at Alsónyék can be regarded as typical for the Sopot distribution in eastern Transdanubia. Sopot graves remain unknown in western Transdanubia. Grave goods were normally deposited by the head or legs of the deceased (MAKKAY et al. 1996; BÁNFFY et al. 2014). The physical anthropological data neither confirm nor refute suggestions of possible population influx connected with the appearance of Sopot material culture (ZOFFMANN 1978; 1996).

Aims of the dating programme

The number of published radiocarbon dates for Sopot contexts in Hungary is very limited. There is one date from Ajka and another from Nemesvámos-Balácsa, in northern Transdanubia (REGENYE 1996a, 168). The other four dated sites lie within 15 km of one another in south-west Transdanubia. There are four dates from Becsehely Bükkaljai-dűlő (KALICZ et al. 2007b, 45), but one of them (VERA-3538) was also published as dating the early Lengyel occupation of Sormás-Török-földek (BARNA 2007, 367; 2011a, 245; BARNA 2015, 406 tab. 2). There is a series of twelve dates from Petrivente-Újkúti-dűlő (KALICZ et al. 2007b, 45). Four dates have been published from Sormás-Török-földek (BARNA 2007, 367; 2011a, 243; 245; 2015, 406 tab. 2). The initially published series for Sormás-Mántai-dűlő consists of three dates (BARNA 2007, 367; 2011a, 243; 245; 2015, 406 tab. 2); two others were regarded as dating the LBK occupation of the site (BARNA / PÁSZTOR 2011, 189 tab. 1). The latter two dates, however, were mentioned in a table of late Sopot and Lengyel dates, most probably in error (BARNA 2015, 406 tab. 2). To sum up, if we accept VERA-3538 as a Lengyel result from Sormás-Török-földek, there are 24 published Sopot radiocarbon dates from the Hungarian distribution.

Eastern Transdanubia, the territory along the right bank of the Danube, seems to have had a key role in the spread of Sopot culture communities in Hungary. One aim in dating the Sopot burial activity at Alsónyék was to obtain the first absolute chronological dates from this region. We also wanted to answer two fundamental questions, by providing formally modelled date estimates. The first is the specific, local, chronological issue, concerning the relationship of the Sopot community with the extended settlements of the LBK and the Lengyel culture at Alsónyék. The second is a more general question regarding the possible overlap of those cultural groups in Transdanubia.

Sampling strategy

The first radiocarbon dates from the site were obtained from the five burials (Graves 210, 220A, 396, 463 and 471) which were involved in the aDNA project *Bevölkerungsgeschichte des Karpatenbeckens in der Jungsteinzeit und ihr Einfluss auf die Besiedlung Mitteleuropas*. They are located in different parts of the burial ground; two of them cut Ditch 211. The dating project reported here concentrated on those human remains where further stratigraphic information was recorded. These cut Ditch 211 or each other. In one case (Grave 470), an exceptional funerary practice was dated. Animal bone samples were selected from Ditch 211, and the articulated bone of Grave 475 was also dated.

The samples and the structure of the model

A total of 12 samples of human bone from 11 individuals produced 14 results (*tab. 1; fig. 5*). Additionally, three samples of animal bones from two different features gave three results. The Curt Engelhorn-Zentrum Archäometrie in Mannheim (MAMS) provided nine results and the Oxford Radiocarbon Accelerator Unit (OxA) eight results. The pretreatment and measurement methodologies used by each of these laboratories for bone samples have been discussed in BAYLISS et al. (this volume).

The chronological model was constructed as described by BAYLISS et al. (this volume), using OxCal v.4.2 and IntCal13 (*fig. 6*).

From Ditch 211, two samples of cattle bone were submitted for radiocarbon dating. The first result (OxA-27308) was from a juvenile, right metatarsal proximal diaphysis, while OxA-27872 came from a juvenile metatarsal distal epiphysis from a different animal. The two results are statistically consistent ($T' = 1.1$; $T'(5\%) = 3.8$; $v = 1$; WARD / WILSON 1978) and so the samples could be the same radiocarbon age. The nature of the deposit, animal bones in disarticulation, results in these dates providing a *terminus post quem* for the overlying graves.

Having been filled, Ditch 211 was cut by four inhumations, a cremation, and two pits. Of these, the four definite Sopot inhumations were dated. MAMS-14813 is from a femur of a slightly crouched inhumation of a male, 35–45 years old, placed on his left side, in Grave 210. MAMS-20487 is from the right tibia of a crouched inhumation of a female, 18–20 years old, placed on her left side in Grave 372. OxA-27579 is from the left tibia of a crouched inhumation of a female, 25–35 years old, placed on her left side in Grave 373. MAMS-14815 is from a humerus of a disturbed burial of a child approximately seven years old in Grave 396.

From between Ditch 211 and the outermost Ditch 222, there is a result (MAMS-14814) from a femur of burial A from Grave 220, which was one of two individuals ex-

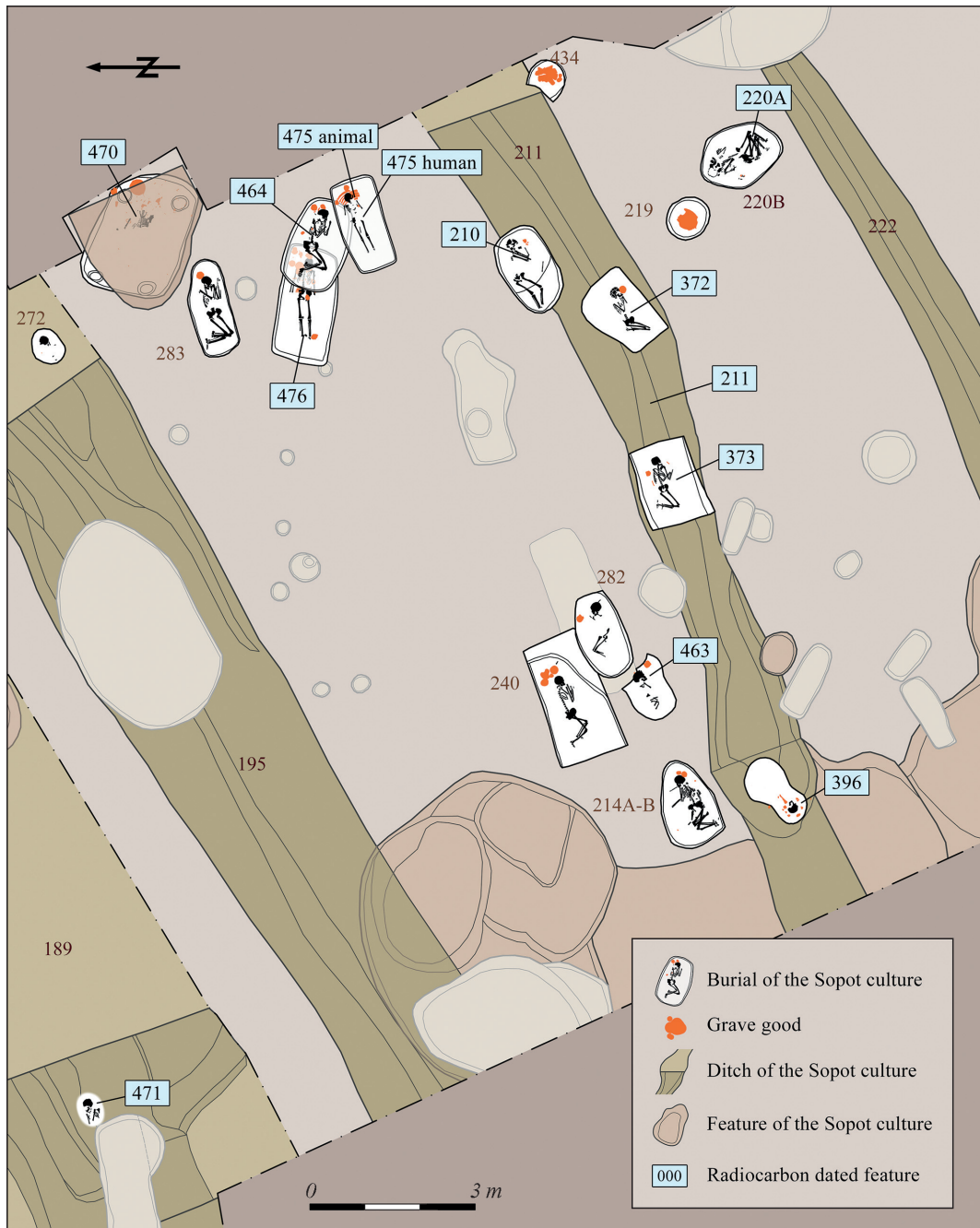


Fig. 5. Overall plan of the Sopot burial ground with radiocarbon samples and dated features.

cavated in a double grave. This burial is a crouched male, aged 35–45 years old, lying on his left side.

Five burials were dated from between the second Ditch 195 and the third Ditch 211. MAMS-14817 is from a tibia of the skeleton in Grave 463. The individual was placed in the left-crouched position, and is an approximately six-year-old child.

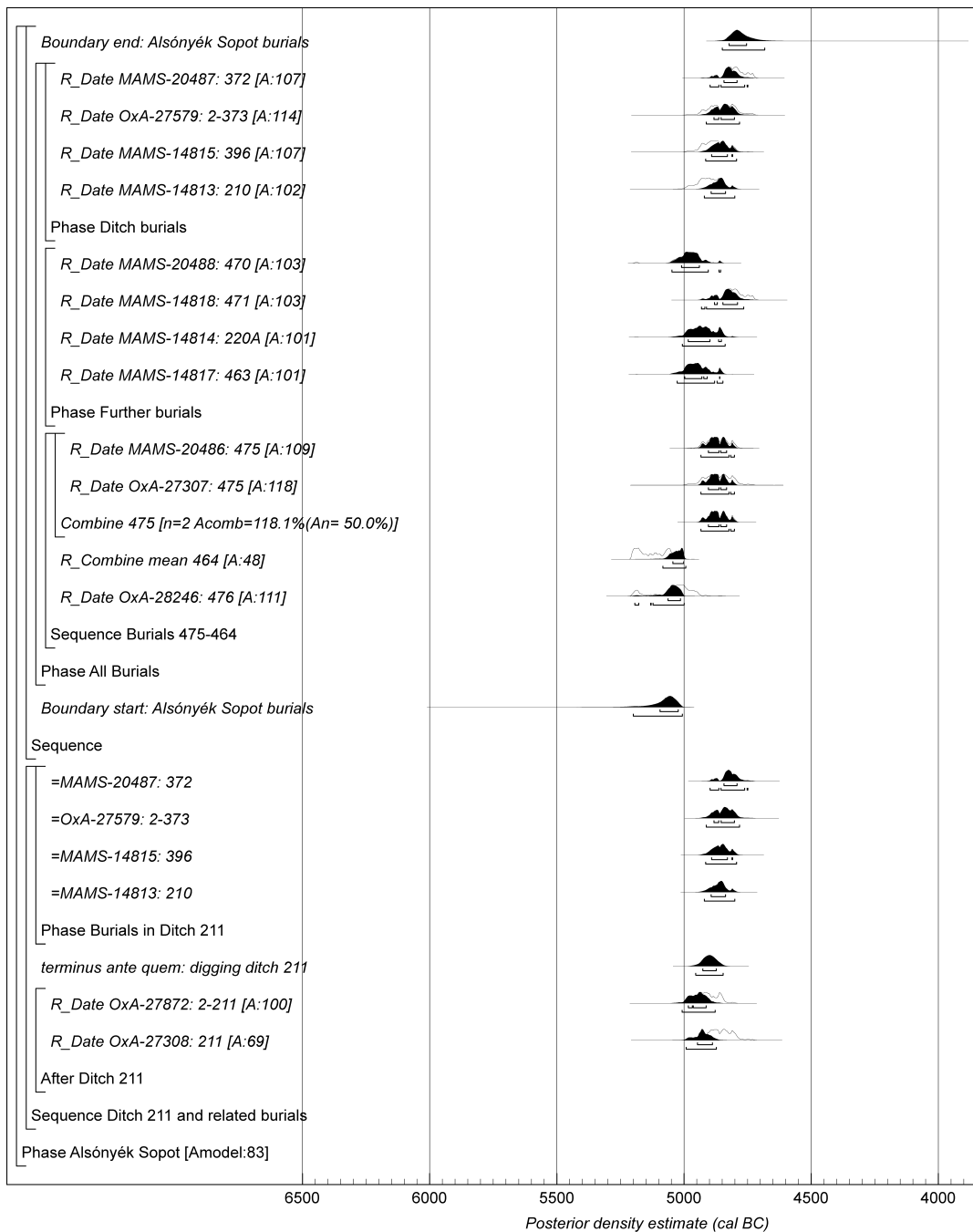


Fig. 6. Probability distributions of radiocarbon dates from the Sopot burial ground at Alsónyék. Each distribution represents the relative probability that an event occurs at a particular time. For each of the dates two distributions have been plotted: one in outline, which is the result of simple radiocarbon calibration, and a solid one, based on the chronological model used. Distributions other than those relating to particular samples correspond to aspects of the model. For example, the distribution ‘start: Alsónyék Sopot burials’ is the estimated date when Sopot burial on the site began. The large square brackets down the left-hand side along with the OxCal keywords define the overall model exactly.

There is a sequence of intercutting graves that lie to the north of Ditch 211. The lower, Grave 476, is a supine inhumation of an adult aged between 18 and 20 years. OxA-28246 is from a rib of this individual. The burial is covered by Grave 464, a left-crouched inhumation of a male, aged 40–45 years old. There are two results from the left tibia (OxA-27578 and OxA-29068), while the other two are from the right ulna (MAMS-20485 and OxA-30283) of the individual in Grave 464. All four measurements are statistically consistent ($T' = 5.8$; $T'(5\%) = 7.8$; $v = 3$). The measurements have been combined prior to calibration to form mean 464 (6151 ± 16 BP).

According to the excavation documentation, Grave 464 also cut Grave 475. Grave 475 is a supine inhumation, of an adolescent aged 14–15 years old. MAMS-20486 is from the left tibia of this individual, who was inhumed with the head on a rack of cattle ribs. The cattle ribs were almost certainly placed fresh in the grave, as they remained completely articulated, thus providing a ‘perfect pair’ of contemporary human and animal bone samples from the grave (OxA-27307). The two results are statistically consistent ($T' = 0.0$; $T'(5\%) = 3.8$; $v = 1$) and the samples could be the same radiocarbon age.

MAMS-20488 is from the right humerus of an adult male, aged between 35 and 45 years in Grave 470. The disturbed body was possibly laid in an extended, supine position. This grave was especially intriguing because of the traces of the four posts marking the grave.

Finally, MAMS-14818 is from a rib of the skeleton in Grave 471, which is cut into the innermost Ditch 189 and contained a crouched individual, approximately 13 years old, placed on the right side.

The Bayesian model for the Sopot burials has two primary elements. The main element regards the burials as representing a continuous period of activity in this area of the site, and this is modelled in OxCal as a *Phase with Boundaries* used to estimate the start and end of this activity. Although there is a significant amount of activity that pre-dates the burials in this area, such as the ditched enclosure and earlier large pits, the chronology of the Sopot burials is what we are considering directly with this model. The dated material from within Ditch 211 is almost certainly reworked and in a secondary context; it therefore provides a *terminus post quem* for the infilling of the ditch and thus aids in constraining the dates of the overlying burials from Graves 210, 372, 373 and 396.

Results

The initial model showed poor agreement between the radiocarbon dates and the archaeology ($A_{\text{model}} = 4$). This is solely the result of inverted stratigraphic relationships amongst Graves 464, 475 and 476 (*figs 4–5*). The stratigraphy was derived directly from the excavation report and so it was initially thought that a problem might exist with one or more of the dates. However, after carefully reviewing the stable isotope measurements and C:N values, there was no reason to suspect a problem with actual dating, and so the entire basis of the stratigraphic relationships between these three graves was re-examined from the photographs and excavation drawings, as well as the finalised publication report and plans.

In two points a fundamental modification of the archaeological record was necessary. The first attempt to date Grave 470 yielded a result that dated the individual to cal AD 660–770 (95% probability; OxA-28165). Since a *Spondylus* bracelet was uncovered on the right arm of the skeleton, we investigated carefully the human bones attributed to the burial. It has turned out that the remains of two different persons were mixed up following the excavation, and one of them belongs to the burial ground of the Avar period uncovered

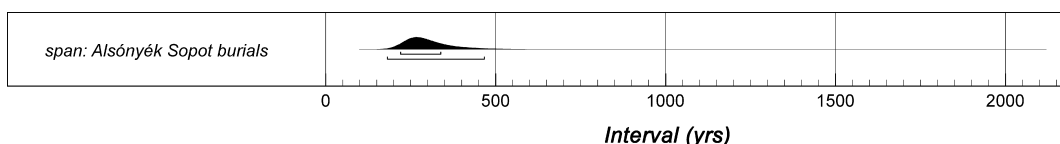


Fig. 7. Probability distributions for the number of years during which the Sopot burial ground at Alsónyék was used, derived from the model defined in fig. 6.

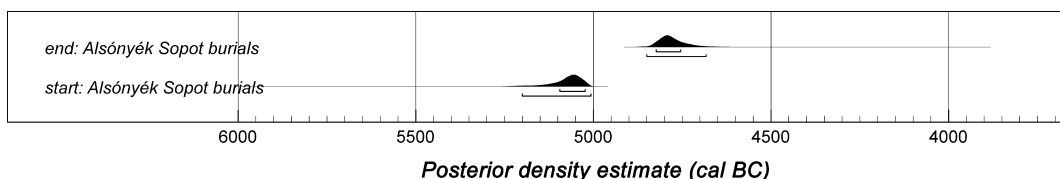


Fig. 8. Key parameters for the start and end of the Sopot burial activity at Alsónyék, derived from the model defined in fig. 6.

in the immediate vicinity. The right humerus of the Neolithic individual directly associated with the *Spondylus* bracelet could be identified unambiguously and yielded an expected date for the burial.

In the group of Graves 464, 475 and 476, according to the excavation plan Grave 464 sealed the other two. The two dates from Grave 475, however, were significantly younger than the four results from Grave 464. After a thorough investigation of the drawings and photographs of Graves 464 and 475, it turned out that the documentation had been wrongly compiled and that the skull of Grave 464 is lying outside the line of the cut of the grave pit of Grave 475. As Grave 464 was lying on the top, exactly 20 cm under the artificial surface of the excavation, it was recognised and excavated first. In the process of the excavation, the north-west cut of Grave 475 was unwittingly destroyed from the outside and it was not observed that the latter grave, with a depth of 43 cm, was a later cut. The excavation mistake together with the incorrect positioning of the grave on the overall plan resulted in a false reading of the stratigraphy of the graves.

The two case studies above provide good examples of how absolute chronological dating and Bayesian modelling can help to verify or amend the archaeological record and to correct mistakes made during the post-excavation processing of the documentation and finds.

The revised model (fig. 6), correcting these stratigraphic errors and incorporating the information that Grave 475 cut Grave 464, has good agreement between the radiocarbon dates and the archaeological prior information ($A_{\text{model}} = 83$). The model estimates that the Sopot burials began in 5200–5005 cal BC (95% probability; fig. 8; *start: Alsónyék Sopot burials*), probably in 5095–5020 cal BC (68% probability). The burials lasted for 180–470 years (95% probability; fig. 7; *span: Alsónyék Sopot burials*), probably for 220–340 years (68% probability). The burials ended in 4850–4680 cal BC (95% probability; fig. 8; *end: Alsónyék Sopot burials*), probably in 4825–4750 cal BC (68% probability).

The model also provides a *terminus ante quem* date for the digging of Ditch 211. This estimate is 4955–4845 cal BC (95% probability; fig. 9; *terminus ante quem: digging ditch 211*), probably 4930–4870 cal BC (68% probability).

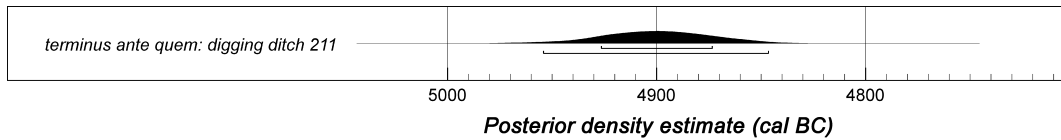


Fig. 9. Probability distributions of the *terminus ante quem* for the digging of Ditch 211, derived from the model defined in *fig. 6*.

Sensitivity analysis

A sensitivity analysis was run using the Mix_Curves function in OxCal, a freshwater reservoir of 545 ± 70 years for the Danube calculated by BONSALL et al. (2015), and the percent freshwater protein input for each burial (BAYLISS et al. this volume). The model followed the same overall structure as the primary model. The results of the sensitivity analysis showed no appreciable difference between the start and end dates for the Sopot burial at the site (the median values for the boundaries shown in *fig. 8*, for example, vary by a maximum of seven years).

Discussion

The model suggests quite a long period of burial compared with the number of graves discovered. The results suggest that Sopot burial lasted *180–470 years (95% probability; fig. 7; span: Alsónyék Sopot burials)* – perhaps 7–19 human generations – probably for *220–340 years (68% probability)* – perhaps 9–14 generations. In contrast to some former interpretations, a longer period must be taken into account when Sopot communities in Transdanubia are discussed.

The use of the burial ground probably began in the last century of the sixth millennium cal BC (*fig. 8; start: Alsónyék Sopot burials*). This result means that the first individuals buried in the Sopot culture burial ground at Alsónyék very probably witnessed the occupation of the LBK settlement 1.5 km away, and that activity was surely contemporaneous with the last generations which populated the LBK settlements of Transdanubia and across even wider areas of central Europe (OROSS et al. this volume [b], with further references).

The first attempts at the absolute chronological dating of the Sopot culture produced ambiguous results. Radiocarbon dates from sites in south-west Transdanubia (BARNA 2007, 366–367; KALICZ et al. 2007b, 44–45) appeared to be coeval with early Lengyel features from the same region such as the mass grave of Esztergályhorváti (BARNA 1996; BRONK RAMSEY et al. 1999). The informal analysis of the dates for the latter indicated the start of the Lengyel culture very soon after the beginning of the fifth millennium cal BC. The results of our chronological modelling may suggest that the excavated site at Alsónyék was used as a burial place for the Sopot culture at a time when the earliest, formative Lengyel culture (also labelled as Protolengyel and Lengyel Ia in different publications) already existed elsewhere in Transdanubia. That in turn will require further formal modelling.

Dating the Sopot occupation in Croatia, Bogomil Obelić and his colleagues presented 25 conventional radiocarbon dates from six different sites; in 21 cases charcoal samples were dated. Following an informal analysis of the dates, very broad estimates were given for the different phases of the culture. Sopot I-B was dated to 5480–5070 cal BC, phase II-A to 5030–4770 cal BC and phase II-B to 4800–4250 cal BC (OBELIĆ et al. 2004).

Later on, a dataset of 29 results was published dating the tell settlement at Sopot by Vinkovci; the majority of the samples were again charcoal. The Sopot culture occupation of the site was dated to 5050–4040 cal BC without formal modelling (KRZNARIĆ ŠKRIVANKO 2011, 218–223 tabs 1–3). These dates, both conventional and AMS measurements, were used for a Bayesian approach, dating the earlier house units of the site between the 49th and 46th centuries cal BC (SRAKA 2012, 362–366 fig. 7; 2014, 374–375 fig. 4). Marcel Burić listed available radiocarbon dates related to Sopot culture contexts, emphasising the value of AMS measurements on short-lived material, for example from sites like Bapska. He suggested a time span for the Croatian Sopot distribution between the end of the sixth and the middle of the fifth millennium cal BC, but no formal analysis was carried out. The framework of Obelić and colleagues was strongly challenged (BURIĆ 2015). In conclusion, it is hard to make any appropriate comparison between the results from Alsónyék and the Croatian Sopot datasets, although one horizon of the Sopot culture south of Hungary is definitely younger than the burial ground dated here.

The estimates presented here for Alsónyék do not substantially contradict other previous suggestions, based on typo-chronological studies, of the transitional character of Sopot assemblages. On the other hand, the formal estimates enable further inferences to be made. We can exclude the proposed coexistence between Sopot and earliest Lengyel being just a local or a micro-regional phenomenon. Even if a succession from Sopot to earliest Lengyel can be shown at some sites, such as Sormás-Török-földek, that need not define the situation everywhere, especially in complex micro-regions which were contact zones between the two material culture variants. In conclusion, the archaeological record indicates that the two cultures may have been at least partly coeval across some parts of the western half of the Carpathian basin.

Recent discoveries in south-west Transdanubia suggest the importance of the foothills in the processes of transmission of new cultural traits towards the north. Following the excavations at Alsónyék and investigations at sites around Fajsz, however, the role of the Danube valley must also be highlighted as a route into central Europe, including during the period of the Sopot culture. Its significance is unambiguous in the post-LBK development of the western Carpathian basin and in the formation of the Lengyel culture. The radius of Sopot occupation and impacts reaches the region of modern Budapest and even as far as tributaries of the Danube in southern Slovakia, such as the Hron and Žitava. Sopot cultural impact was substantial, and its spatial and temporal dimensions begin to be a little better understood, even if many details remain unclear. The question of direct population influx requires further aDNA research, for example.

Acknowledgments

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Summary · Zusammenfassung · Résumé

SUMMARY To the east of the main excavated area at Alsónyék, a small investigation took place which revealed a Sopot culture occupation, represented by pits, four ditches and 18 graves with the remains of 20 individuals. Some time-depth to the occupation is seen in the ditches cutting the pits, and some of the graves cutting the third ditch. The enclosed area was about five hectares, based on geomagnetic survey, but it is not possible to estimate the entire size of the occupation.

The Sopot culture is normally regarded as a horizon with a questionable chronological position on the boundary between the Middle and Late Neolithic in western Hungary. Its role in the formation of the large-scale Lengyel complex remains controversial. Scholars can agree that it was brought to the region from the south, but there have been different views concerning the timing of its spread in the western Carpathian basin. Some have seen it as an entirely pre-Lengyel development, and others as at least partly contemporaneous with the early Lengyel culture.

Dating within the ERC-funded project, *The Times of Their Lives*, aimed to provide formally modelled estimates of the timing and duration of the Sopot occupation at Alsónyék, and in so doing also to contribute to better understanding of the context and development of the Sopot culture in Hungary. The paper presents 17 dates on human and animal bone (including five existing dates from burials), which are modelled in a Bayesian statistical framework. The model concentrates on the samples available from the burials, and its main element regards the burials as representing a continuous period of activity in this area of the Alsónyék complex. The model estimates that the Sopot burials probably began in 5095–5020 cal BC (68% probability), probably lasted for 220–340 years (68% probability), and probably ended in 4825–4750 cal BC (68% probability). The model also estimates a *terminus ante quem* for the digging of Ditch 211 of probably 4930–4870 cal BC (68% probability).

These estimates help to inform debate about the relative sequence of cultural developments in the region, and the relationship of Sopot communities to those of the LBK and the Lengyel cultures. As Alsónyék is the largest currently known Sopot burial ground in Hungary in eastern Transdanubia, this chronology is particularly valuable for modelling cultural interactions along the Danube between the northern Balkans and the Carpathian basin. The Sopot component also contributes significantly to the construction of a robust chronology for the long sequence of occupations at Alsónyék.

ZUSAMMENFASSUNG Östlich des Hauptgrabungsareals in Alsónyék wurde in einem kleinen Bereich eine Belegung der Sopot-Kultur dokumentiert, die Gruben, vier Gräben und 18 Gräber mit 20 Individuen umfasst. Die zeitliche Tiefe dieser Besiedlung stellt sich durch die Stratigraphie dar: Die Gräben schneiden die Gruben und einige Gräber wiederum den dritten Graben. Basierend auf den geomagnetischen Untersuchungen deutet sich ein umschlossenes Areal von etwa fünf Hektar Größe an; es ist jedoch nicht möglich, die gesamte Ausdehnung der Ansiedlung zu ermitteln.

Die Sopot-Kultur wird generell als Horizont am Übergang vom Mittel- zum Jungneolithikum in Westungarn angesehen, ihre genaue zeitliche Stellung ist indes fraglich. Ihre Rolle in der Entwicklung der Lengyel-Kultur bleibt kontrovers. In der Forschung besteht weitgehend Einigkeit darüber, dass die Sopot-Kultur vom Süden aus in die Region gelangte, jedoch ist der Zeitpunkt der Ausbreitung in das westliche Karpatenbecken umstritten. Einerseits wird sie als eine vollkommen vorlengyelzeitliche Entwicklung angesehen, andererseits als zumindest teilweise gleichzeitig mit der frühen Lengyel-Kultur.

Im Rahmen des ERC-Projektes *The Times of Their Lives* durchgeführten Datierungen zielten auf formale Modellberechnungen für die zeitliche Einordnung und Dauer der Sopot-zeitlichen Belegung in Alsónyék und dienten somit einem besseren Verständnis des Kontextes und der Entwicklung der Sopot-Kultur in Ungarn. Es wurden 17 Radiokarbondaten aus menschlichem und tierischem Knochenmaterial gewonnen, inklusive fünf bereits existierender Daten aus Bestattungen. Diese wurden innerhalb eines Bayes'schen statistischen Rahmens ermittelt. Das Modell konzentriert sich auf die Proben aus den Gräbern und sein Hauptelement bewertet die Bestattungen als Anzeichen einer kontinuierlichen Aktivität in diesem Bereich von Alsónyék. Daraufhin setzen die Sopot-Bestattungen wohl um 5095–5020 cal BC (68% Wahrscheinlichkeit) ein, wurden etwa 220–340 Jahre (68% Wahrscheinlichkeit) fortgesetzt und endeten schließlich um 4825–4750 cal BC (68% Wahrscheinlichkeit). Außerdem konnte ein *terminus ante quem* für das Ausheben des Grabens 211 um vermutlich 4930–4870 cal BC (68% Wahrscheinlichkeit) kalkuliert werden.

Diese Kalkulationen helfen, die Debatte um die relative Abfolge kultureller Entwicklungen in der Region und das Verhältnis von Gemeinschaften der Sopot-Kultur zu denjenigen der LBK- und Lengyel-Kulturen zu beeinflussen. Da es sich in Alsónyék um das größte Gräberfeld der Sopot-Kultur im ungarischen Osttransdanubien handelt, ist seine Chronologie entscheidend für das Verständnis kultureller Interaktionen entlang der Donau zwischen dem Nordbalkan und dem Karpatenbecken. Außerdem trägt die Sopot-zeitliche Belegung von Alsónyék erheblich dazu bei, eine robuste Chronologie für die lange Siedlungsabfolge in Alsónyék zu erstellen. (M.E.)

RÉSUMÉ Un petit sondage, mené à l'est de la zone principale de fouille à Alsónyék, révéla une occupation de la culture de Sopot sous forme de fosses, de quatre fossés et de 18 sépultures contenant les restes de 20 individus. Des recoupements entre fossés et fosses, et de quelques tombes avec le troisième fossé, indiquent une certaine profondeur chronologique de l'occupation. Selon la prospection géomagnétique l'aire délimitée faisait environ cinq hectares, il est cependant impossible d'évaluer les dimensions totales de l'occupation.

La culture de Sopot passe habituellement pour un horizon dont la position chronologique située au passage du Néolithique moyen jusqu'au Néolithique récent en Hongrie occidentale reste discutable. Son rôle dans la formation du grand complexe Lengyel reste de plus controversé. Alors que les spécialistes s'accordent sur l'origine méridionale de cette culture, ils divergent sur le moment de son expansion vers le bassin occidental des Carpates. Certains y ont vu un développement exclusivement pré-Lengyel, d'autres un développement au moins partiellement contemporain au Lengyel ancien. Les datations établies dans le cadre du projet *The Times of Their Lives* financé par l'ERC, étaient destinées à fournir des estimations modélisées de la chronologie et de la durée de l'occupation Sopot à Alsónyék, et ce faisant, à contribuer à une meilleure compréhension du contexte et du développement général de la culture de Sopot en Hongrie. Cet article présente 17 datations à partir d'os humains et de faune (dont cinq datations dors et déjà existantes de sépultures) qui furent modélisées dans un cadre statistique bayésien. Le modèle se base en grande partie sur les échantillons provenant des sépultures et son élément central considère les sépultures comme témoins d'une période d'activité continue dans cette zone du complexe d'Alsónyék. Selon ledit modèle, les premières sépultures Sopot auraient été aménagées vers 5095–5020 cal BC (68% de probabilité), avec une activité funéraire de 220 – 340 ans (68 % de probabilité) s'achevant vers 4825–4750 cal BC (68% de probabilité). Le modèle estime également un *terminus ante quem* à l'aménagement du fossé 211, probablement situé entre 4930–4870 cal BC (68 % de probabilité). (Y.G. / E.P.)

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Lab ID	Context no.	Context description [Sample ID]	Material	$\delta^{13}\text{C}_{\text{AMS}}$ (‰)	$\delta^{13}\text{C}_{\text{IRMS}}$ (‰)	$\delta^{15}\text{N}$ (‰)	C:N	Radio-carbon age (BP)	Modelled date (95% probability)
MAMS-14813	210	Grave of left-crouched male, aged 35–45 years. The skeleton is in a fragmentary condition and was disturbed by machining. Possible grave goods: three pottery fragments. Cuts Ditch 211. [5603/2-210]	Human bone: femur	-27.0	-20.4 ± 0.2	9.6 ± 0.1	3.2	6008 ± 32	4925–4800 cal BC
OxA-27872	211	Ditch 211 is a short section cut by Graves 372 and 373. The ditch was c. 80–100 cm deep and the stripped surface was homogenous, suggesting a rapid infill. This sample belongs to a different animal to that sampled as 211.2. [5603/2-211.1]	Animal bone: juvenile cattle; metatarsal distal epiphysis (disarticulated)		-20.4 ± 0.2	6.5 ± 0.3	3.1	6025 ± 30	
OxA-27308	211	Ditch 211 is a short section cut by Graves 372 and 373. The ditch was c. 80–100 cm deep and the stripped surface was	Animal bone: juvenile cattle; right metatarsal proximal		-21.3 ± 0.2	7.1 ± 0.3	3.1	5976 ± 35	

Tab. 1. Radiocarbon and stable isotopic results from Sopot culture features at Alsónyék. The results are presented in ascending order by context number. All results are from subsite 5603/2. (OxA-28165 is presented in the list of results but was excluded from the modelling of the Sopot culture at the site for reasons described in the text.)

Lab ID	Context no.	Context description [Sample ID]	Material	$\delta^{13}\text{C}_{\text{AMS}}$ (‰)	$\delta^{13}\text{C}_{\text{IRMS}}$ (‰)	$\delta^{15}\text{N}$ (‰)	C:N	Radio-carbon age (BP)	Modelled date (95% probability)
		homogenous, suggesting a rapid infill. This sample belongs to a different animal to that sampled as 211.1. [5603/2-211.2]	diaphysis (dis-articulated)						
MAMS-14814	220A	Burial of a left-crouched male in Grave 220, aged 35–45 years. The skeleton is in a fragmentary condition and was disturbed by machining. It was situated directly on burial B of Grave 220. Possible grave goods: two pottery fragments. [5603/2-220A]	Human bone: femur	–25.0	–20.6 ± 0.2	9.0 ± 0.1	3.2	6032 ± 32	5010–4835 cal BC
MAMS-20487	372	Grave of left-crouched adult female, aged 18–20 years. Cuts Ditch 211. Grave good: one pot. [5603/2-372]	Human bone: right tibia	–28.0	–20 ± 0.08	9.7 ± 0.09	3.1	5931 ± 28	4900–4760 cal BC
OxA-27579	373	Grave of left-crouched adult female, aged 25–35 years. Cuts Ditch 211. Grave goods: one vessel and two animal bones. [5603/2-373]	Human bone: left tibia		–19.4 ± 0.2	9.4 ± 0.3	3.1	5966 ± 36	4915–4780 cal BC

Lab ID	Context no.	Context description [Sample ID]	Material	$\delta^{13}\text{C}_{\text{AMS}}$ (‰)	$\delta^{13}\text{C}_{\text{IRMS}}$ (‰)	$\delta^{15}\text{N}$ (‰)	C:N	Radio-carbon age (BP)	Modelled date (95% probability)
MAMS-14815	396	The probably ruined grave of a c. 7-year-old child, only the skull remained. Cuts Ditch 211. No grave goods. [5603/2-396]	Human bone: humerus	-28.1	-20.8 ± 0.2	9.1 ± 0.1	3.3	5989 ± 32	4915–4790 cal BC
MAMS-14817	463	Grave of left-crouched c. 6-year-old child. Skeleton is in a fragmentary condition due to machining. Grave goods: one fragmented pottery and a flint blade. Stratigraphic relationship with Grave 282 is unclear. [5603/2-463]	Human bone: tibia	-15.2	-20.9 ± 0.2	9.0 ± 0.1	3.3	6049 ± 29	5030–4880 cal BC (88%) or 4875–4845 cal BC (7%)
OxA-27578	464	Grave of a left-crouched adult male, aged 40–45 years. Cuts Grave 476, and cut by Grave 475. Grave goods: two vessels, two chipped stone implements, a polished stone adze and a bone tool. [5603/2-464]	Human bone: left tibia		-19.4 ± 0.2	10.9 ± 0.3	3.1	6111 ± 36	

Tab. 1. (continued)

Lab ID	Context no.	Context description [Sample ID]	Material	$\delta^{13}\text{C}_{\text{AMS}}$ (‰)	$\delta^{13}\text{C}_{\text{IRMS}}$ (‰)	$\delta^{15}\text{N}$ (‰)	C:N	Radio-carbon age (BP)	Modelled date (95% probability)
OxA-29068	464	Replicate of OxA-277578. Same bone. [5603/2-464]	Human bone: left tibia		-20.7 ± 0.2	10.1 ± 0.3	3.3	6209 ± 31	
MAMS-20485	464	Replicate of OxA-29068. Different bone. [5603/2-464]	Human bone: right ulna	-24.3	-20.9 ± 0.08	10.6 ± 0.09	3.3	6124 ± 27	
OxA-30283	464	Replicate of OxA-29068. Different bone. [5603/2-464]	Human bone: right ulna		-20.4 ± 0.2	10.4 ± 0.3	3.2	6157 ± 34	
Mean 464				^{14}C : $T' = 5.8$, $T'(5\%) = 7.8$, $v = 3$, 6151 ± 16 BP; $\delta^{13}\text{C}$: $T' = 50.4$, $T'(5\%) = 7.8$, $v = 3$, $-20.7 \pm 0.07\text{‰}$; $\delta^{15}\text{N}$: $T' = 4.1$, $T'(5\%) = 7.8$, $v = 3$, $10.6 \pm 0.08\text{‰}$					5085–4990 cal BC
OxA-28165*	470	Thought to be from Grave 470, but the result suggests that another inhumation was mixed in the bag with Grave 470 [5603/2-470]	Human bone: right tibia		-17.0 ± 0.2	10.5 ± 0.3	3.2	1306 ± 22	
MAMS-20488	470	Grave of an adult male, aged 35–45 years, probably buried in a supine position. Cut by Pit 206, which displaced the lower part of the skeleton. Grave goods: three vessels, <i>Spondylus</i> necklace and a <i>Spondylus</i> arm ring.	Human bone: right humerus	-19.2	-20.0 ± 0.08	11.2 ± 0.3	3.3	6069 ± 28	5050–4900 cal BC (94%) or 4865–4855 cal BC (1%)

Lab ID	Context no.	Context description [Sample ID]	Material	$\delta^{13}\text{C}_{\text{AMS}}$ (‰)	$\delta^{13}\text{C}_{\text{IRMS}}$ (‰)	$\delta^{15}\text{N}$ (‰)	C:N	Radio-carbon age (BP)	Modelled date (95% probability)
		flints, perforated red deer canine teeth and polished stone adze. [5603/2-470]							
MAMS-14818	471	Disturbed grave of a c. 13-year-old child. Lower part of the skeleton is totally missing. Cut by pit 188. [5603/2-471]	Human bone: rib	-25.7	-20.7 ± 0.2	9.0 ± 0.1	3.2	5937 ± 32	4935–4765 cal BC
MAMS-20486	475	Supine inhumation of an older child / early adolescent (14–15 years old) buried with their head lying on a rack of cattle ribs and one pot in grave 475. Cuts Grave 464. Grave good: one pot. [5603/2-475]	Human bone: left tibia	-22.7	-20.3 ± 0.08	9.5 ± 0.09	3.3	5981 ± 26	
OxA-27307	475	Cattle ribs rested under the head of the deceased in Grave 475. Five ribs found in articulation. [5603/2-475a]	Animal bone: adult cattle; articulated right rib		-20.0 ± 0.2	6.6 ± 0.3	3.1	5979 ± 37	

Tab. 1. (continued)

Lab ID	Context no.	Context description [Sample ID]	Material	$\delta^{13}\text{C}_{\text{AMS}}$ (‰)	$\delta^{13}\text{C}_{\text{IRMS}}$ (‰)	$\delta^{15}\text{N}$ (‰)	C:N	Radio-carbon age (BP)	Modelled date (95% probability)
Combine 475		Acomb = 118.2% (An = 50.0%); n = 2							4935–4800 cal BC
OxA-28246	476	Grave of an adult, aged 18–20 years. The body is in a supine position. Cut by Grave 464. The complete skeleton was well preserved. Grave goods: six vessels, <i>Spondylus</i> pendant, <i>Spondylus</i> bracelet, <i>Spondylus</i> beads, perforated red deer canine teeth, chipped stone implement. [5603/2-476a]	Human bone: rib		–20.0 ± 0.2	9.5 ± 0.3	3.2	6103 ± 34	5195–5175 (2%) or 5135–4995 cal BC (93%)

Tab. 1. (continued)

Bibliography

ACSÁDI / NEMESKÉRI 1970

G. ACSÁDI / J. NEMESKÉRI, History of human life span and mortality (Budapest 1970).

ADAMS / ADAMS 1991

W. Y. ADAMS / E. W. ADAMS, Archaeological typology and practical reality. A dialectical approach to artefact classification and sorting (Cambridge 1991).

AGNEW 1987

J. A. AGNEW, Place and politics. The geographical mediation of state and society (Boston 1987).

AITCHISON et al. 1991

T. AITCHISON / B. OTTAWAY / A. S. AL-RUZAIZA, Summarizing a group of ^{14}C dates on the historical time scale. With a worked example from the late Neolithic of Bavaria. *Antiquity* 65, 1991, 108–116.

AMIT 2002

V. AMIT, Reconceptualizing community. In: V. Amit (ed.), Realizing community. Concepts, social relationships and sentiments (London 2002) 1–20.

AMMERMAN / CAVALLI-SFORZA 1984

A. J. AMMERMAN / L. L. CAVALLI-SFORZA, The Neolithic transition and the genetics of populations in Europe (Princeton 1984).

ANDERS / SIKLÓSI 2012

A. ANDERS / Zs. SIKLÓSI (eds), The first Neolithic sites in central / south-East European transect III. The Körös culture in eastern Hungary. BAR Internat. Ser. 2334 (Oxford 2012).

ANDERSON / HARRISON 2010

B. ANDERSON / P. HARRISON (eds), Taking-place: non-representational theories and geography (Farnham 2010).

ANDRÁSFALVY 1975

B. ANDRÁSFALVY, Duna mente népének ártéri gazdálkodása Tolna és Baranya megyében az ármentesítés befejezéséig (Szekszárd 1975).

ANTONI 1982

J. ANTONI, Régészeti kutatások a Dunántúlon. Őskori elődeink Csabdiiban. Komárom Megyei Múz. és Fejér Megyei Múz. Rég. kiállításai I (Tata 1982).

ARADI 1992

Cs. M. ARADI, Vörs-Máriaasszony-sziget (Somogy m.) (XIV). Rég. Füzetek 44, 1992, 26–27.

ASCOUGH et al. 2007

P. L. ASCOUGH / G. T. COOK / M. J. CHURCH / A. J. DUGMORE / T. H. MCGOVERN / E. DUNBAR / Á. EINARSSON / A. FRIÐRIKSSON / H. GESTSDÓTTIR, Reservoirs and radiocarbon: ^{14}C dating problems in Mývatnssveit, northern Iceland. *Radiocarbon* 49, 2007, 947–961.

BALÁZS KOVÁCS 2006

S. BALÁZS KOVÁCS, A régi Sárköz. Sárpilis és környéke a középkorban. In: S. Balázs Kovács (ed.), Fejezetek Sárpilis történetéből (Szekszárd 2006) 5–31.

BANDY 2010

M. S. BANDY, Population growth, village fissioning, and alternative early village trajectories. In: M. S. Bandy / J. R. Fox (eds), Becoming villagers. Comparing early village societies (Tucson 2010) 19–36.

BANDY / FOX 2010a

M. S. BANDY / J. R. FOX (eds), *Becoming villagers. Comparing early village societies* (Tucson 2010).

BANDY / FOX 2010b

M. S. BANDY / J. R. FOX, *Becoming villagers: the evolution of early village societies*. In: M. S. Bandy / J. R. Fox (eds), *Becoming villagers. Comparing early village societies* (Tucson 2010) 1–16.

BÁNYFY 1986

E. BÁNYFY, *Cultic finds from the Middle Copper Age of Hungary – connections to South East Europe*. In: A. Bonanno (ed.), *Archaeology and fertility cult in the Ancient Mediterranean* (Amsterdam 1986) 69–77.

BÁNYFY 1992

E. BÁNYFY, *Funde der späten Lengyel- und frühen Balaton-Lásinja-Kultur aus dem Kleinbalaton-Gebiet. Probleme des Übergangs*. Stud. Praehist. 11–12, 1992, 308–312.

BÁNYFY 1995a

E. BÁNYFY, *Early Chalcolithic settlement at Zalaszentbalázs-Szőlőhegyi mező*. Antaeus 22, 1995, 71–108.

BÁNYFY 1995b

E. BÁNYFY, *Neolithic and Copper age settlements at Hahót and Zalaszentbalázs (Zalaszentbalázs-Pusztatető, Hahót-Szartóri I–II)*. Antaeus 22, 1995, 35–50.

BÁNYFY 1995c

E. BÁNYFY, *South West Transdanubia as a mediating area. On the cultural history of the Early and Middle Chalcolithic*. Antaeus 22, 1995, 157–196.

BÁNYFY 1999

E. BÁNYFY, *Kompolt-Kistér: újkőkori telep (Kompolt-Kistér: Neolithic)*. In: A. Vaday / E. Bánffy / L. Bartosiewicz / K. T. Biró / F. Gogáltan / F. Horváth / A. Nagy, *Kompolt-Kistér. Újkőkori, bronzkori, szarmata és avar lelőhely. Leletmentő ásatás az M3 nyomvonalán (A Neolithic, Bronze Age, Sarmatian and Avar site. Rescue excavation at the M3 motorway)* (Eger 1999) 13–170.

BÁNYFY 2000

E. BÁNYFY, *The Late Starčevo and the earliest Linear Pottery groups in western Transdanubia*. Doc. Praehist. 27. Neolithic Stud. 7 (Ljubljana 2000) 173–185.

BÁNYFY 2001

E. BÁNYFY, *Neue Funde der Starčevo-Kultur in Südtransdanubien*. In: F. Draşovean (ed.), *Festschrift für Gheorghe Lazarovici. Zum 60. Geburtstag (Timişoara 2001)* 41–58.

BÁNYFY 2003

E. BÁNYFY, *Fajsz határa*. In: J. Kisfaludi (ed.), *Régészeti kutatások Magyarországon 2001 (Archaeological Investigations in Hungary 2001)* (Budapest 2003) 162.

BÁNYFY 2004

E. BÁNYFY, *The 6th millennium BC boundary in western Transdanubia and its role in the central European Neolithic transition. The Szentgyörgyvölgy-Pityerdomb settlement*. Varia Arch. Hungarica 15 (Budapest 2004).

BÁNYFY 2013a

E. BÁNYFY, *The Early Neolithic in the Danube-Tisza interfluvium* (Oxford 2013).

BÁNYFY 2013b

E. BÁNYFY, *On Neolithic frontiers in the Carpathian Basin*. In: A. Anders / G. Kulcsár (eds), *Moments in time. Papers presented to Pál Raczyk on his 60th birthday* (Budapest 2013) 35–45.

BÁNYFY / OROSS 2009

E. BÁNYFY / K. OROSS, *Entwicklung und Dynamik der Linearbandkeramik in Transdanubien*. In: A. Zeeb-Lanz (ed.), *Krisen – Kulturwandel – Kontinuitäten. Zum Ende der Bandkeramik in Mitteleuropa. Beiträge der Internationalen Tagung in Herxheim bei Landau (Pfalz) vom 14.–*

17. Juni 2007. Internat. Arch. – Arbeitsgemeinschaft, Symposium, Tagung, Kongress 10 (Rahden 2009) 219–240.
- BÁNYFY / OROSS 2010
E. BÁNYFY / K. OROSS, The earliest and earlier phase of the LBK in Transdanubia. In: D. Gronenborn / J. Petrasch (eds), *Die Neolithisierung Mitteleuropas* (The spread of the Neolithic to central Europe). Internationale Tagung Mainz, 24.–26. Juni 2005 (Mainz 2010) 255–272.
- BÁNYFY / SÜMEGI 2011
E. BÁNYFY / P. SÜMEGI, The [environ-]mental contexts of earliest Neolithic settlement and architecture in western Hungary. In: A. Hadjikoumis / E. Robinson / S. Viner (eds), *The dynamics of Neolithisation in Europe. Studies in honour of Andrew Sherratt* (Oxford 2011) 231–265.
- BÁNYFY / SÜMEGI 2012
E. BÁNYFY / P. SÜMEGI, The early neolithic agro-ecological barrier in the Carpathian Basin: a zone for interaction. In: P. Anreiter / E. Bánffy / L. Bartosiewicz / W. Meid / C. Metzner-Nebelsick (eds), *Archaeological, cultural and linguistic heritage: Festschrift for Erzsébet Jerem in honour of her 70th birthday* (Budapest 2012) 57–69.
- BÁNYFY et al. 2007
E. BÁNYFY / W. J. EICHMANN / T. MARTON, Mesolithic foragers and the spread of agriculture in western Hungary. In: J. K. Kozłowski / M. Nowak (eds), *Mesolithic/Neolithic interactions in the Balkans and in the Middle Danube basin*. BAR Intern. Ser. 1726 (Oxford 2007) 53–62.
- BÁNYFY et al. 2010
E. BÁNYFY / T. MARTON / A. OSZTÁS, Early Neolithic settlement and burials at Alsónyék-Bátaszék. In: J. K. Kozłowski / P. Raczky (eds), *Neolithization of the Carpathian Basin: northernmost distribution of the Starčevo/Körös culture* (Kraków, Budapest 2010) 37–51.
- BÁNYFY et al. 2014
E. BÁNYFY / I. ZALAI-GAÁL / T. MARTON / K. OROSS / A. OSZTÁS / J. PETRASCH, Das Sárköz im südungarischen Donauebiet – ein Korridor zwischen dem Balkan und Mitteleuropa im 6.–5. Jt. v. Chr. In: W. Schier / F. Draşovean (eds), *The Neolithic and Eneolithic in southeast Europe. New approaches to dating and cultural dynamics in the 6th to 4th millennium BC* (Rahden 2014) 347–368.
- BÁNYFY et al. this volume
E. BÁNYFY / A. OSZTÁS / K. OROSS / I. ZALAI-GAÁL / T. MARTON / É. Á. NYERGES / K. KÖHLER / A. BAYLISS / D. HAMILTON / A. WHITTLE, The Alsónyék story: towards the history of a persistent place.
- BANNER 1943
J. BANNER, Az újabbkőkori lakóházkutatás mai állása Magyarországon (L'état actuel de la recherche des habitations néolithiques en Hongrie). *Arch. Ért. Ser.* 3,4, 1943, 1–25.
- BANNER / PÁRDUZ 1948
J. BANNER / M. PÁRDUZ, Újabb adatok Dél-Magyarország újabbkőkorához (Contributions nouvelles à l'histoire du Néolithique en Hongrie). *Arch. Ért. Ser.* 3,7–9, 1948, 19–41.
- BARNA 1996
J. P. BARNA, A lengyeli kultúra tömegsírja Esztergályhorvátiban (The common grave of the Lengyel Culture in Esztergályhorváti [County Zala]). *Zalai Múz.* 6, 1996, 149–160.
- BARNA 2004
J. P. BARNA, Becsehely-Homokos. Előzetes az M7 gyorsforgalmi út 71. sz. lelőhelyén feltárt neolitikus telep kutatásáról (1999–2000) (Becsehely-Homokos. Preliminary report on the exploration of the Neolithic settlement at site 71 of M7 Motorway [1999–2000]). *Momos* 2, 2004, 33–44.
- BARNA 2005
J. P. BARNA, Sormás-Török-földek településtörténeti áttekintése. A középső neolitikum (The history of the settlement at Sormás-Török-földek. Middle Neolithic). *Zalai Múz.* 14, 2005, 17–36.

BARNÁ 2007

J. P. BARNÁ, A new site of the Lengyel culture in Sormás-Török-földek (County Zala, south-western Transdanubia). Preliminary report. In: J. K. Kozłowski / P. Raczky (eds), *The Lengyel, Polgár and related cultures in the Middle / Late Neolithic in central Europe* (Kraków 2007) 365–380.

BARNÁ 2009

J. P. BARNÁ, A Sopot kultúra házai és települése Sormás-Mántai-dűlő lelőhelyen. *Zalai Múz.* 18, 2009, 11–27.

BARNÁ 2010

J. P. BARNÁ, Sormás-Török-földek. Településtörténeti áttekintés II. A késő neolitikum. The history of a settlement at Sormás-Török-földek II. Late Neolithic. *Zalai Múz.* 19, 2010, 93–115.

BARNÁ 2011a

J. P. BARNÁ, A lengyeli kultúra kialakulása a DNY-Dunántúlon (The emergence of the Lengyel culture in southwestern Transdanubia). PhD thesis, Eötvös Loránd University (Budapest 2011).

BARNÁ 2011b

J. P. BARNÁ, Adatok a dunántúli késő neolitikus háztípusokhoz. A Sopot- és a korai lengyeli kultúra házai Sormás-Török-földek lelőhelyen (Beiträge zu spätneolithischen Haustypen in Transdanubien. Häuser der Sopot und der frühen Lengyel-Kultur am Fundort Sormás-Török-földek). *Stud. Arch. (Szeged)* 12, 2011, 11–27.

BARNÁ 2012

J. P. BARNÁ, Újabb adatok a Délnyugat-Dunántúl középső neolitikuma időrendjéhez (New data on the chronology of the Middle Neolithic period of south-western Transdanubia). *Momos* 5, 2012, 171–190.

BARNÁ 2015

J. P. BARNÁ, Socio-historical background of cultural changes in south-western Hungary as reflected by archaeological data during post-LBK times. *Anthropologie* 53, 2015, 399–412.

BARNÁ / PÁSZTOR 2011

J. P. BARNÁ / E. PÁSZTOR, Different ways of using space: traces of domestic and ritual activities at a Late Neolithic settlement at Sormás-Török-földek. *Doc. Praehist.* 38. Neolithic Stud. 18 (Ljubljana 2011) 185–206.

BARNÁ et al. 2015

J. P. BARNÁ / M. Z. TOKAI / I. EKE / E. PÁSZTOR, A késő neolitikus körárkok kutatásának helyzete Zala megyében (Current research on late neolithic rondels in Zala County). *Archeometriai Műhely* 12, 2015, 75–88.

BARRETT 2001

J. C. BARRETT, Agency, the duality of structure, and the problem of the archaeological record. In: I. Hodder (ed.), *Archaeological theory today* (Oxford 2001) 141–164.

BARTA et al. 2013

P. BARTA / P. DEMJÁN / K. HLADÍKOVÁ / P. KMET'OVÁ / K. PIATNIČKOVÁ, Database of radiocarbon dates measured on archaeological samples from Slovakia, Czechia, and adjacent regions. *Archaeological Chronometry in Slovakia*, Slovak Research and Development Agency Project No. APVV-0598-10, 2011–2014, Dept. of Archaeology, Faculty of Arts, Comenius University in Bratislava <<http://www.c14.sk>>.

BARTON et al. 1995

R. N. E. BARTON / P. J. BERRIDGE / M. J. C. WALKER / R. E. BEVINS, Persistent places in the Mesolithic landscape: an example from the Black Mountain uplands of south Wales. *Proc. Prehist. Soc.* 61, 1995, 81–116.

BAYES 1763

T. R. BAYES, An essay towards solving a problem in the doctrine of chances. *Phil. Transactions Royal Soc.* 53, 1763, 370–418.

BAYLISS 2009

A. BAYLISS, Rolling out revolution: using radiocarbon dating in archaeology. *Radiocarbon* 51, 2009, 123–147.

BAYLISS 2015

A. BAYLISS, Quality in Bayesian chronological models in archaeology. *World Arch.* 47, 2015, 677–700.

BAYLISS / BRONK RAMSEY 2004

A. BAYLISS / C. BRONK RAMSEY, Pragmatic Bayesians: a decade of integrating radiocarbon dates into chronological models. In: C. E. Buck / A. R. Millard (eds), *Tools for constructing chronologies. Crossing disciplinary boundaries* (New York 2004) 25–41.

BAYLISS / WHITTLE 2007

A. BAYLISS / A. WHITTLE (eds), *Histories of the dead: building chronologies for five southern British long barrows*. *Cambridge Arch. Journal* 17,1 Suppl. (Cambridge 2007).

BAYLISS et al. 2007

A. BAYLISS / C. BRONK RAMSEY / J. VAN DER PLICHT / A. WHITTLE, Bradshaw and Bayes: towards a timetable for the Neolithic. In: A. BAYLISS / A. WHITTLE (eds), *Histories of the dead: building chronologies for five southern British long barrows*. *Cambridge Arch. Journal* 17,1 Suppl. (Cambridge 2007) 1–28.

BAYLISS et al. 2014

A. BAYLISS / S. FARID / T. HIGHAM, Time will tell: practising Bayesian chronological modeling on the East Mound. In: I. Hodder (ed.), *Çatalhöyük excavations. The 2000–2008 seasons* (Los Angeles 2014) 53–90.

BAYLISS et al. this volume

A. BAYLISS / N. BEAVAN / D. HAMILTON / K. KÖHLER / É. Á. NYERGES / C. BRONK RAMSEY / E. DUNBAR / M. FECHER / T. GOSLAR / B. KROMER / P. REIMER / K. OROSS / A. OSZTÁS / A. WHITTLE, *Peopling the past: creating a site biography in the Hungarian Neolithic*.

BEAVAN ATHFIELD et al. 2001

N. R. BEAVAN ATHFIELD / B. G. MCFADGEN / R. J. SPARKS, Environmental influences on dietary carbon and ^{14}C ages in modern rats and other species. *Radiocarbon* 43, 2001, 7–14.

BEAVAN ATHFIELD et al. 2008

N. R. BEAVAN ATHFIELD / R. C. GREEN / J. CRAIG / B. MCFADGEN / S. BICKLER, Influence of marine sources on ^{14}C ages: isotopic data from Watom Island, Papua New Guinea inhumations and pig teeth in light of new dietary standards. *Journal Royal Soc. New Zealand* 38, 2008, 1–23.

BEDAULT 2009

L. BEDAULT, First reflections on the exploitation of animals in Villeneuve-Saint-Germain society at the end of the early Neolithic in the Paris Basin (France). In: D. Hofmann / P. Bickle (eds), *Creating communities. New advances in central European research* (Oxford 2009) 111–131.

BERNERT 2005a

Zs. BERNERT, Paleoantropológiai programcsomag. *Folia Anthr.* 3, 2005, 71–74.

BERNERT 2005b

Zs. BERNERT, Anthropological data of Kereki-Homokbánya cemetery. *Anthr. Data Hungarian Hist. Populations* 3, 2005, 3–26.

BERTÓK / GÁTI 2011

G. BERTÓK / Cs. GÁTI, Neue Angaben zur spätneolithischen Siedlungsstruktur in Südosttransdanubien. *Acta Arch. Acad. Scien. Hungaricae* 62, 2011, 1–28.

BERICHT RGK 94, 2013

BERTÓK / GÁTI 2014

G. BERTÓK / Cs. GÁTI, Régi idők – új módszerek. Roncsolásmentes régészet Baranya megyében 2005–2013 (Old times – new methods. Non-invasive archaeology in Baranya County [Hungary] 2005–2013) (Budapest / Pécs 2014).

BERTÓK et al. 2008

G. BERTÓK / Cs. GÁTI / O. VAJDA, Előzetes jelentés a Szemely-Hegyes lelőhelyen (Baranya megye) található neolitikus körárok-rendszer kutatásáról (Preliminary report on the research at the neolithic Kreisgrabenanlage at Szemely-Hegyes, Baranya county, Hungary). *Arch. Ért.* 133, 2008, 85–106.

BERTSCH McGRAYNE 2011

S. BERTSCH McGRAYNE, The theory that would not die. How Bayes' rule cracked the enigma code, hunted down Russian submarines, and emerged from two centuries of controversy (Yale 2011).

BICKLE / WHITTLE 2013a

P. BICKLE / A. WHITTLE, LBK lifeways: a search for difference. In P. Bickle / A. Whittle (eds), *The first farmers of central Europe. Diversity in LBK lifeways* (Oxford 2013) 1–27.

BICKLE / WHITTLE 2013b

P. BICKLE / A. WHITTLE (eds), *The first farmers of central Europe. Diversity in LBK lifeways* (Oxford 2013).

BIRCH 2012

J. BIRCH, Coalescent communities: settlement aggregation and social integration in Iroquoian Ontario. *Am. Ant.* 77, 2012, 646–670.

BIRCH 2013a

J. BIRCH, *From prehistoric villages to cities. Settlement aggregation and community transformation* (New York 2013).

BIRCH 2013b

J. BIRCH, Between villages and cities: settlement aggregation in cross-cultural perspective. In: J. Birch (ed.), *From prehistoric villages to cities. Settlement aggregation and community transformation* (New York 2013) 1–22.

BIRCH / WILLIAMSON 2013

J. BIRCH / R. E. WILLIAMSON, Organizational complexity in ancestral Wendat communities. In: J. Birch (ed.), *From prehistoric villages to cities. Settlement aggregation and community transformation* (New York 2013) 153–178.

BIRÓ 2003

K. T. BIRÓ, The Late Neolithic in Transdanubia. In: Zs. Visy (ed.), *Hungarian archaeology at the turn of the millennium* (Budapest 2003) 102–103.

BISTÁKOVÁ / PAŽINOVÁ 2010

A. BISTÁKOVÁ / N. PAŽINOVÁ, (Un)Usual Neolithic and Early Eneolithic mortuary practices in the area of the North Carpathian Basin. *Doc. Praehist.* 37. *Neolithic Stud.* 17 (Ljubljana 2010) 147–159.

BOCQUET-APPEL 2008

J.-P. BOCQUET-APPEL, Explaining the Neolithic Demographic Transition. In: J.-P. Bocquet-Appel / O. Bar-Yosef (eds), *The Neolithic Demographic Transition and its consequences* (New York 2008) 35–56.

BOCQUET-APPEL et al. 2014

J.-P. BOCQUET-APPEL / J. DUBOULOZ / R. MOUSSA / J.-F. BERGER / A. TRESSSET / E. ORTU / J.-D. VIGNE / R. BENDREY / S. BRÉHARD / D. SCHWARTZ / A. SALAVERTE / M.-F. SANCHEZ-GOÑI / D. ERTLÉN / Y. GAUVRY / G. DAVTIAN / M. VANDER LINDEN / E. LENNEIS / A. GUILLAUMONT / M. O'CONNOR, Multi-agent modelling of the trajectory of the LBK Neolithic. A study in pro-

- gress. In: A. Whittle / P. Bickle (eds), *Early farmers. The view from archaeology and science*. Proc. Brit. Acad. 198 (Oxford 2014) 53–69.
- BÖKÖNYI 1959
S. BÖKÖNYI, Die Frühalluviale Wirbeltierfauna Ungarns (vom Neolithikum bis zur La Tène Zeit). *Acta Arch. Acad. Scien. Hungaricae* 11, 1959, 39–102.
- BÖKÖNYI 1960
S. BÖKÖNYI, A lengyeli kultúra gerinces faunája I (Die Vertebratenfauna der Fundorte der Lengyeller Kultur I). *Janus Pannonius Múz. Évk.* 1960 (1961) 85–133.
- BÖKÖNYI 1961
S. BÖKÖNYI, A lengyeli kultúra gerinces faunája II (Die Vertebratenfauna der Fundorte der Lengyel Kultur II). *Janus Pannonius Múz. Évk.* 1961 (1962) 91–103.
- BÖKÖNYI 1962
S. BÖKÖNYI, A lengyeli kultúra gerinces faunája III (Die Wirbeltierfauna der Fundorte der Lengyeller Kultur III). *Janus Pannonius Múz. Évk.* 1962 (1963) 73–101.
- BOELICKE et al. 1988
U. BOELICKE / D. VON BRANDT / J. LÜNING / P. STEHLI / A. ZIMMERMANN, Der bandkeramische Siedlungsplatz Langweiler 8, Gemeinde Aldenhoven, Kreis Düren (Köln 1988).
- BOELICKE et al. 1994
U. BOELICKE / J. LÜNING / J. SCHALICH / P. STEHLI, Vier bandkeramische Siedlungsplätze im Merzbachtal. In: J. Lüning / P. Stehli (eds), *Die Bandkeramik im Merzbachtal auf der Aldenhovener Platte* (Köln 1994) 1–78.
- BOGAARD 2012
A. BOGAARD, Middening and manuring in Neolithic Europe: issues of plausibility, intensity and archaeological method. In: R. L. Jones (ed.), *Manure matters. Historical, archaeological and ethnographic perspectives* (Farnham 2012) 25–39.
- BOGAARD et al. 2007
A. BOGAARD / T. H. E. HEATON / P. POULTON / I. MERBACH, The impact of manuring on nitrogen isotope ratios in cereals: archaeological implications for reconstruction of diet and crop management practices. *Journal Arch. Scien.* 34, 2007, 335–343.
- BOGAARD et al. 2013
A. BOGAARD / R. FRASER / T. H. E. HEATON / M. WALLACE / P. VIAGLOVA / M. CHARLES / G. JONES / R. P. EVERSLED / A. K. STYRING / N. H. ANDERSEN / R.-M. ARBOGAST / L. BARTOSIEWICZ / A. GARDEISEN / M. KANSTRUP / U. MAIER / E. MARINOVA / L. NINOV / M. SCHÄFER / E. STEPHAN, Crop manuring and intensive land management by Europe's first farmers. *Proc. National Acad. Scien.* 110, 2013, 12589–12594. <<http://doi: 10.1073/pnas.1305918110>>.
- BONSALL et al. 2015
C. BONSALE / R. VASIĆ / A. BORONEANȚ / M. ROKSANDIĆ / A. SOFICARU / K. MCSWEENEY / A. EVATT / Ü. AGURAIUJA / C. PICKARD / V. DIMITRIJEVIĆ / T. HIGHAM / D. HAMILTON / G. COOK, New AMS ¹⁴C dates for human remains from Stone Age sites in the Iron Gates reach of the Danube, Southeast Europe. *Radiocarbon* 57, 2015, 33–46.
- BORIĆ 2015
D. BORIĆ, The end of the Vinča world: modelling Late Neolithic to Copper Age culture change and the notion of archaeological culture. In: S. Hansen / P. Raczky / A. Anders / A. Reingruber (eds), *Neolithic and Copper Age between the Carpathians and the Aegean Sea. Chronologies and technologies from the 6th to 4th millennia BCE*. *Arch. Eurasien* 31 (Bonn 2015) 157–217.
- BORIĆ et al. 2004
D. BORIĆ / G. GRUPE / J. PETERS / Z. MIKIĆ, Is the Mesolithic-Neolithic subsistence dichotomy real? New stable isotope evidence from the Danube Gorges. *European Journal Arch.* 7, 2004, 221–248.
- BERICHT RGK 94, 2013

BREUNIG 1987

P. BREUNIG, ^{14}C -Chronologie des vorderasiatischen, südost- und mitteleuropäischen Neolithikums. *Fundamenta A* 13 (Köln-Wien 1987).

BROCK et al. 2010

F. BROCK / T. F. G. HIGHAM / P. DITCHFIELD / C. BRONK RAMSEY, Current pretreatment methods for AMS radiocarbon dating at the Oxford Radiocarbon Accelerator Unit (ORAU). *Radiocarbon* 52, 2010, 103–112.

BROECKER et al. 1960

W. S. BROECKER / R. GERARD / M. EWING / R. C. HEEZEN, Natural radiocarbon in the Atlantic Ocean. *Journal Geophysical Research* 65, 1960, 2903–2931.

BRONK RAMSEY 1995

C. BRONK RAMSEY, Radiocarbon calibration and analysis of stratigraphy: The OxCal Program. *Radiocarbon* 36, 1995, 425–30.

BRONK RAMSEY 1998

C. BRONK RAMSEY, Probability and dating. *Radiocarbon* 40, 1998, 461–474.

BRONK RAMSEY 2000

C. BRONK RAMSEY, Comment on ‘The use of Bayesian statistics for ^{14}C dates of chronologically ordered samples: a critical analysis’. *Radiocarbon* 42, 2000, 199–202.

BRONK RAMSEY 2001

C. BRONK RAMSEY, Development of the radiocarbon calibration program. *Radiocarbon* 43, 2001, 355–363.

BRONK RAMSEY 2009a

C. BRONK RAMSEY, Bayesian analysis of radiocarbon dates. *Radiocarbon* 51, 2009, 337–360.

BRONK RAMSEY 2009b

C. BRONK RAMSEY, Dealing with outliers and offsets in radiocarbon dating. *Radiocarbon* 51, 2009, 1023–1045.

BRONK RAMSEY / LEE 2013

C. BRONK RAMSEY / S. LEE, Recent and planned developments of the program OxCal. *Radiocarbon* 55, 2013, 720–730.

BRONK RAMSEY et al. 1999

C. BRONK RAMSEY / P. B. PETTTTT / R. E. M. HEDGES / G. W. L. HODGINS, Radiocarbon dates from the AMS system: datelist 27. *Archaeometry* 41, 1999, 197–206.

BRONK RAMSEY et al. 2004a

C. BRONK RAMSEY / T. HIGHAM / A. BOWLES / R. E. M. HEDGES, Improvements to the pre-treatment of bone at Oxford. *Radiocarbon* 46, 2004, 155–163.

BRONK RAMSEY et al. 2004b

C. BRONK RAMSEY / T. HIGHAM / P. LEACH, Towards high-precision AMS: progress and limitations. *Radiocarbon* 46, 2004, 17–24.

BRONK RAMSEY et al. 2007

C. BRONK RAMSEY / T. HIGHAM / A. WHITTLE / L. BARTOSIEWICZ, Radiocarbon chronology. In: A. Whittle (ed.), *The Early Neolithic on the Great Hungarian plain: investigations of the Körös culture site of Ecsefalva 23, County Békés*. *Varia Arch. Hungarica* 21 (Budapest 2007) 173–188.

BRONK RAMSEY et al. 2010

C. BRONK RAMSEY / M. DEE / S. LEE / T. NAKAGAWA / R. STAFF, Developments in the calibration and modeling of radiocarbon dates. *Radiocarbon* 52/3, 2010, 953–961.

BROWN et al. 1988

T. A. BROWN / D. E. NELSON / J. S. VOGEL / J. R. SOUTON, Improved collagen extraction by modified Longin method. *Radiocarbon* 30, 1988, 171–177.

BUCK / CHRISTEN 1998

C. E. BUCK / J. A. CHRISTEN, A novel approach to selecting samples for radiocarbon dating. *Journal Arch. Scien.* 25, 1998, 303–310.

BUCK et al. 1992

C. E. BUCK / C. D. LITTON / A. F. M. SMITH, Calibration of radiocarbon results pertaining to related archaeological events. *Journal Arch. Scien.* 19, 1992, 497–512.

BUCK et al. 1996

C. E. BUCK / W. G. CAVANAGH / C. D. LITTON, Bayesian approach to interpreting archaeological data (Chichester 1996).

BURIĆ 2015

M. BURIĆ, Problems of the Late Neolithic absolute chronology in eastern Croatia. In: S. Hansen / P. Raczky / A. Anders / A. Reingruber (eds.), *Neolithic and Copper Age between the Carpathians and the Aegean Sea. Chronologies and technologies from the 6th to 4th millennia BCE.* *Arch. Eurasien* 31 (Bonn 2015) 143–56.

BUTTLER / HABEREY 1936

W. BUTTLER / W. HABEREY, *Die bandkeramische Ansiedlung bei Köln-Lindenthal* (Berlin / Leipzig 1936).

CANUTO / YAEGER 2000

M.-A. CANUTO / J. YAEGER (eds), *The archaeology of communities. A New World perspective* (London 2000).

CARNEIRO 2002

R. L. CARNEIRO, The tribal village and its culture: an evolutionary stage in the history of human society. In: W. A. Parkinson (ed.), *The archaeology of tribal societies* (Ann Arbor 2002) 34–52.

CASEY 1996

E. CASEY, How to get from space to place in a fairly short stretch of time. In: S. Feld / K. Basso, *Senses of place* (Santa Fe 1996) 14–51.

ČERMÁKOVÁ 2007

E. ČERMÁKOVÁ, *Postavení ženy, muže a dítěte ve společnosti tvůrců lengyelské kultury* (Die Stellung der Frau, des Mannes und des Kindes in der Gesellschaft der Begründer der Lengyel-Kultur). In: E. Kazdová / V. Podborský (eds), *Studium sociálních a duchovních struktur pravěku* (Studium der sozialen und geistlichen Strukturen der Urzeit) (Brno 2007) 207–255.

CHADWICK / GIBSON 2013

A. M. CHADWICK / C. D. GIBSON (eds), *Memory, myth and long-term landscape inhabitation* (Oxford 2013).

CHAPMAN 1981

J. CHAPMAN, *The Vinča culture of south-east Europe: studies in chronology, economy and society.* BAR Internat. Ser. 117 (Oxford 1981).

CHAPMAN 1991

J. CHAPMAN, The origins of warfare in the prehistory of central and eastern Europe. In: J. Carman / A. Harding (eds), *Ancient warfare. Archaeological perspectives* (Stroud 1991) 101–142.

CHAPMAN 2000

J. CHAPMAN, *Fragmentation in archaeology: people, places and broken objects in the prehistory of south-eastern Europe* (London, New York 2000).

CHILDE 1949

V. G. CHILDE, Neolithic house-types in temperate Europe. *Proc. Prehist. Soc.* 15, 1949, 77–86.

CHRISTEN 1994

J. A. CHRISTEN, Summarizing a set of radiocarbon determinations: a robust approach. *Journal Royal Statistical Soc. Ser. C (Applied Statistics)* 43/3, 1994, 489–503.

BERICHT RGK 94, 2013

ČIŽMÁŘ et al. 2008

Z. ČIŽMÁŘ / P. KALÁBKOVÁ / E. KAZDOVÁ / J. KOVÁRNÍK, Lid s moravskou malovanou keramikou lengyelské kultury. Das Volk mit mährischer bemalter Keramik der Lengyelkultur (The people with Moravian Painted Pottery of the Lengyel culture). In: Z. Čižmář (ed.), Život a smrt v mladší době kamenné (Leben und Tod in der Jungsteinzeit – Life and death in the New Stone Age) (Znojmo 2008) 76–87.

COALE / DEMÉNY 1966

A. J. COALE / P. G. DEMÉNY, Regional model life tables and stable populations (Princeton 1966).

COHEN 1985

A. P. COHEN, The symbolic construction of community (Chichester 1985).

COLES / MILLS 1998

G. COLES / C. M. MILLS, Clinging on for a grim life: an introduction to marginality as an archaeological issue. In: C. M. Mills / G. Coles (eds), Life on the edge. Human settlement and marginality. Oxbow Monogr. 100 (Oxford 1998) vii–xii.

CONOVER 1980

W. J. CONOVER, Practical nonparametric statistics (2nd ed.) (Chichester 1980).

COOK et al. 2001

G. T. COOK / C. BONSALE / R. E. M. HEDGES / K. MCSWEENEY / V. BORONEANȚ / P. B. PETTITT, A freshwater diet-derived ^{14}C reservoir effect at the stone age sites in the Iron Gates gorge. Radiocarbon 43, 2001, 453–460.

COOK et al. 2002

G. T. COOK / C. BONSALE / R. E. M. HEDGES / K. MCSWEENEY / V. BORONEANȚ / L. BARTOSIEWICZ / P. B. PETTITT, Problems of dating human bones from the Iron Gates. Antiquity 76, 2002, 77–85.

COWLES / CARLIN 1996

M. K. COWLES / B. P. CARLIN, Markov Chain Monte Carlo convergence diagnostics: a comparative review. Journal Am. Statistical Assoc. 91, 1996, 883–904.

CRAIG 1957

H. CRAIG, The natural distribution of radiocarbon and the exchange time of carbon dioxide between atmosphere and sea. Tellus 9, 1957, 1–17.

CREESE 2012

J. L. CREESE, The domestication of personhood: a view from the Northern Iroquois longhouse. Cambridge Arch. Journal 22, 2012, 365–386.

CRESSWELL 2015

T. CRESSWELL, Place. An introduction (2nd ed.) (Chichester 2015).

CULLETON 2006

B. J. CULLETON, Implications of a freshwater radiocarbon reservoir correction for the timing of late Holocene settlement of the Elk Hills, Kern County, California. Journal Arch. Scien. 33, 2006, 1331–1339.

CZERNIK / GOSLAR 2001

J. CZERNIK / T. GOSLAR, Preparation of graphite targets in the Gliwice radiocarbon laboratory for AMS ^{14}C dating. Radiocarbon 43, 2001, 283–291.

DAEHNKE 2009

J. DAEHNKE, Tidy footprints, changing pathways, and persistent places: landscape and place in the Portland Basin. Arch. Washington 15, 2009, 33–63.

DAHL / HJORT 1976

G. DAHL / A. HJORT, Having herds. Pastoral herd growth and household economy (Stockholm 1976).

DEE/BRONK RAMSEY 2000

M. DEE / C. BRONK RAMSEY, Refinement of graphite target production at ORAU. Nuclear Instruments and Methods Physics Research B 172, 2000, 449–453.

DEEVEY et al. 1954

E. S. DEEVEY JR / M. A. GROSS / G. W. HUTCHINSON / H. L. KRAYBILL, The natural ^{14}C contents of materials from hard-water lakes. Proc. National Acad. Scien. USA 40, 1954, 285–288.

DEMJÁN 2012

P. DEMJÁN, Grave typology and chronology of a Lengyel culture settlement: formalized methods in archaeological data processing. In: J. Kolář / F. Trampota (eds), Theoretical and methodological considerations in central European Neolithic archaeology (Oxford 2012) 77–93.

DENIRO 1985

M. J. DENIRO, Post-mortem preservation and alteration of *in vivo* bone collagen isotope ratios in relation to paleodietary reconstruction. Nature 317, 1985, 806–809.

DIAMOND 2005

J. DIAMOND, Collapse. How societies choose to fail or succeed (New York 2005).

DIMITRIJEVIĆ 1968

S. DIMITRIJEVIĆ, Sopotsko-Lendelska kultura (Zagreb 1968).

DIMITRIJEVIĆ 1969a

S. DIMITRIJEVIĆ, Das Neolithikum in Syrmien, Slawonien und Nordwestkroatien. Einführung in den Stand der Forschung. Arch. Jugoslavica 10, 1969, 39–76.

DIMITRIJEVIĆ 1969b

S. DIMITRIJEVIĆ, Starčevačka kultura u Slavonsko-srijemskom prostoru i problem prijelaza ranog u srednji neolit u srpskom i hrvatskom podunavlju (Die Starčevo-Kultur im slawonisch-syrmischen Raum und das Problem des Übergangs vom älteren zum mittleren Neolithikum im serbischen und kroatischen Donaugebiet). Simpozij neolit i eneolit u Slavoniji. Vukovar, 4–5th lipnja 1966 (Beograd 1969) 9–97.

DIMITRIJEVIĆ 1974

S. DIMITRIJEVIĆ, Das Problem der Gliederung der Starčevo-Kultur mit besonderer Rücksicht auf den Beitrag der südpannonischen Fundstellen zur Lösung dieses Problems. Materijali 10, 1974, 59–121.

DIMITRIJEVIĆ 1979

S. DIMITRIJEVIĆ, Sjevernaja zona. In: A. Benac (ed.), Praistorija jugoslavenskih zemalja II, Neolitsko doba (Sarajevo 1979) 229–363.

DINNYÉS et al. 1986

I. DINNYÉS / K. KÓVÁRI / Zs. LOVAG / S. TETTAMANTI / J. TOPÁL / I. TORMA, Pest megye régészeti topográfiája. A budai és a szentendrei járás (Budapest 1986).

DOBRES / ROBB 2000

M.-A. DOBRES / J. ROBB, Agency in archaeology: paradigm or platitude? In: M.-A. Dobres / J. Robb (eds), Agency in archaeology (London 2000) 3–17.

DOMBAY 1939

J. DOMBAY, A zengővárkonyi őskori telep és temető. The prehistoric settlement and cemetery at Zengővárkony. Arch. Hungarica 23 (Budapest 1939).

DOMBAY 1958

J. DOMBAY, Kőrézkori és kora vas-kori település nyomai a pécsváradi Aranyhegyen (Überreste einer Aeneolithischen und Früheisenzeitlichen Ansiedlung an Berg Arany [Goldberg] bei Pécsvárad). Janus Pannonius Múz. Évk., 1958, 53–102.

DOMBAY 1959

J. DOMBAY, Próbaásatás a villánykövesdi kőrézkori lakótelepen (Probegrabung an der aeneo-

- lithischen Ansiedlung bei Villánykövesd [Kom. Baranya]). Janus Pannonius Múz. Évk., 1959, 55–71.
- DOMBAY 1960
J. DOMBAY, Die Siedlung und das Gräberfeld in Zengővárkony. Beiträge zur Kultur des Aeneolithikums in Ungarn. Arch. Hungarica, Ser. Nova 37 (Budapest 1960).
- DOMBORÓCZKI 2010a
L. DOMBORÓCZKI, Report on the excavation at Tiszaszőlős-Domaháza-pusztá and a new model for the spread of the Körös Culture. In: J. K. Kozłowski / P. Raczky (eds), Neolithization of the Carpathian Basin: northernmost distribution of the Starčevo/Körös culture (Kraków / Budapest 2010) 137–176.
- DOMBORÓCZKI 2010b
L. DOMBORÓCZKI, Neolithisation in northeastern Hungary: old theories and new perspectives. In: D. Gronenborn / J. Petrasch (eds), Die Neolithisierung Mitteleuropas (The spread of the Neolithic to central Europe). Internationale Tagung Mainz, 24.–26. Juni 2005 (Mainz 2010) 175–187.
- DRAȘOVEAN et al. forthcoming
F. DRAȘOVEAN / W. SCHIER / A. BAYLISS / B. GAYDARSKA / A. WHITTLE, The houses of their lives: durations, contexts and histories at Neolithic Uivar.
- EGRY 1996
I. M. EGRY, Mosonszentmiklós-Egyéni földek (Győr-Moson-Sopron m.). Rég. Füzetek 1,47, 1996, 17–18.
- EGRY 1997
I. M. EGRY, Mosonszentmiklós-Egyéni földek (Győr-Moson-Sopron m.). Rég. Füzetek 1,48, 1997, 18–19.
- EGRY 2001
I. M. EGRY, Beszámoló a Győr – Marcalváros-Bevásárlóközpont területén végzett megelőző régészeti feltárásokról (Report on the preliminary exploration carried out on the area of Győr – Marcalváros-Shopping Centre). Arrabona 39,1–2, 2001, 57–78.
- EGRY 2003a
I. M. EGRY, Mosonszentmiklós-Egyéni földek: a Neolithic village in Transdanubia. In: Zs. Visy (ed.), Hungarian archaeology at the turn of the millennium (Budapest 2003) 104–106.
- EGRY 2003b
I. M. EGRY, Rézkori településrészlet Mosonszentmiklós-Egyéni földek lelőhelyen (Das Detail einer kupferzeitlichen Siedlung auf dem Fundort Mosonszentmiklós-Egyéni földek). Stud. Arch. (Szeged) 9, 2003, 95–100.
- EICHMANN et al. 2010
W. J. EICHMANN / R. KERTÉSZ / T. MARTON, Mesolithic in the LBK heartland of Transdanubia, western Hungary. In: D. Gronenborn / J. Petrasch (eds), Die Neolithisierung Mitteleuropas. The spread of the Neolithic to central Europe. Internationale Tagung Mainz, 24.–26. Juni 2005 (Mainz 2010) 211–233.
- ENDRŐDI 1993
A. ENDRŐDI, Törökbálint-Dulácska (MRT 7. k. 36/7. lh.) (Pest m.). Rég. Füzetek 1,45, 1993, 27–28.
- ENDRŐDI 1994
A. ENDRŐDI, Törökbálint-Dulácska (MRT 7. k. 36/7. lh.) (Pest m.). Rég. Füzetek 1,46, 1994, 28.
- EVERSHED et al. 2008
R. P. EVERSHERD / S. PAYNE / A. G. SHERRATT / M. S. COPLEY / J. COOLIDGE / D. UREM-KOTSU / K. KOTSAKIS / M. ÖZDOĞAN / A. E. ÖZDOĞAN / O. NIEUWENHUYSE / P. M. M. G. AKKERMANS /

- D. BAILEY / R.-R. ANDEESCU / S. CAMPBELL / S. FARID / I. HODDER / N. YALMAN / M. ÖZBAŞARAN / E. BIÇAKCI / Y. GARFINKEL / T. LEVY / M. M. BURTON, Earliest date for milk use in the Near East and southeastern Europe linked to cattle herding. *Nature* 455, 2008, 528–531.
- FERNANDES et al. 2014
R. FERNANDES / A. R. MILLARD / M. BRABEC / M.-J. NADEAU / P. GROOTES, Food reconstruction using isotopic transferred signals (FRUITS): a Bayesian model for diet reconstruction. *PLoS ONE* 9,2, 2014, e87436. <<http://doi:10.1371/journal.pone.0087436>> <<http://journals.plos.org/plosone/article/asset?id=10.1371%2Fjournal.pone.0087436.PDF>>.
- FIGLER et al. 1997
A. FIGLER / L. BARTOSIEWICZ / GY. FÜLEKY / E. HERTELENDI, Copper Age Settlement and the Danube water system: a case study from north western Hungary. In: J. Chapman / P. Dolukhanov (eds), *Landscapes in flux. Central and eastern Europe in Antiquity*. Coll. Pontica 3 (Oxford 1997) 209–230.
- FILDES 1986
V. A. FILDES, *Breasts, bottles and babies. A history of infant feeding* (Edinburgh 1986).
- FOGEL et al. 1989
M. L. FOGEL / N. TUROSS / D. OWSLEY, Nitrogen isotope tracers of human lactation in modern and archaeological populations. *Annu. Report Director Geophysical Laboratory Carnegie Inst. Washington 1988-1989*, 1989, 111–117.
- FOWLER 2004
C. FOWLER, *The archaeology of personhood. An anthropological approach* (London 2004).
- FRASER et al. 2013
R. A. FRASER / A. BOGAARD / M. SCHÄFER / R. ARBOGAST / T. H. E. HEATON, Integrating botanical, faunal and human stable carbon and nitrogen isotope values to reconstruct land use and palaeodiet at LBK Vaihingen an der Enz, Baden-Württemberg. *World Arch.* 45, 2013, 492–517.
- FREEMAN et al. 2010
S. P. H. T. FREEMAN / G. T. COOK / A. B. DOUGANS / P. NAYSMITH / K. M. WILCKEN / S. XU, Improved SSAMS performance. *Nuclear Instruments and Methods Physics Research B* 268, 2010, 715–717.
- FULLER et al. 2006
B. T. FULLER / J. L. FULLER / D. A. HARRIS / R. E. M. HEDGES, Detection of breastfeeding and weaning in modern human infants with carbon and nitrogen stable isotope ratios. *Am. Journal Physical Anthr.* 129, 2006, 279–293.
- GALLINA et al. 2010
Zs. GALLINA / P. HORNOK / T. PALUCH / K. SOMOGYI, Előzetes jelentés az M6 AP TO 10/B és 11. számú lelőhelyrészen végzett feltárásról. Alsónyék-Bátaszék (Tolna megye) 2006–2009 (Vorbericht über die präventive Ausgrabung am Fundortsteil Nr. M6 AP TO 10/B und 11. Alsónyék-Bátaszék [Komitat Tolna] 2006–2009). *Wosinsky Mór Múz. Évk.* 32, 2010, 7–100.
- GALLUS 1936
S. GALLUS, A nagytétényi neolitikus sír. *Arch. Ért.* 49, 1936, 85–86.
- GELENCSÉR 2010
Á. GELENCSÉR, Alsónyék / Bátaszék-Malomréti-dűlő (Tolna megye, TO 11. lelőhely). Évkönyv és jelentés a Kulturális Örökségvédelmi Szakszolgálat 2008. évi feltárássairól (Field Service for Cultural Heritage 2008). *Yearbook and Rev. Arch. Investigation* 2010, 16–17.

GEYH / MARET 1982

M. GEYH / P. DE MARET, Histogram evaluation of ^{14}C dates applied to the first Iron Age sequence from West Central Africa. *Archaeometry* 24, 1982, 158–163.

GILKS et al. 1996

W. R. GILKS / S. RICHARDSON / D. J. SPIEGELHALTHER, *Markov Chain Monte Carlo in practice* (London 1996).

GILMAN 2010

P. A. GILMAN, Substantial structures, few people, and the question of early villages in the Mimbres region of the North American Southwest. In: M. S. Bandy / J. R. Fox (eds), *Becoming villagers. Comparing early village societies* (Tucson 2010) 119–139.

GLÄSER 1991

R. GLÄSER, Bemerkungen zur absoluten Datierung des Beginns der westlichen Linienbandkeramik. *Banatica* 11, 1991, 53–64.

GLÄSER 1993

R. GLÄSER, *Die Linienbandkeramik in Transdanubien. Beiträge zu ihrer Chronologie und Entstehung. Dissertation, Universität Heidelberg* (Heidelberg 1993).

GOSLAR et al. 2004

T. GOSLAR / J. CZERNIK / E. GOSLAR, Low-energy ^{14}C AMS in Poznan Radiocarbon Laboratory, Poland. *Nuclear Instruments and Methods Physics Research B* 223–224, 2004, 5–11.

GREENACRE 2007

M. J. GREENACRE, *Correspondence analysis in practice* (2nd ed.) (Boca Raton 2007).

GRONENBORN 1994

D. GRONENBORN, Überlegungen zur Ausbreitung der bäuerlichen Wirtschaft in Mitteleuropa – Versuch einer kulturhistorischen Interpretation ältestbandkeramischer Silexinventare. *Prähist. Zeitschr.* 69, 1994, 135–151.

GRONENBORN 1997

D. GRONENBORN, *Silexartefakte der ältestbandkeramischen Kultur* (Bonn 1997).

GRONENBORN 1998

D. GRONENBORN, Ältestbandkeramische Kultur, La Hoguette, Limburg, and ... what else? Contemplating the Mesolithic-Neolithic transition in southern central Europe. *Doc. Praehist.* 25. *Neolithic Stud.* 5 (Ljubljana 1998) 189–202.

GRONENBORN 1999

D. GRONENBORN, A variation on a basic theme: the transition to farming in southern central Europe. *Journal World Prehist.* 13, 1999, 123–210.

GRONENBORN 2010

D. GRONENBORN, Climate, crises and the “neolithisation” of central Europe between IRD-events 6 and 4. In: D. Gronenborn / J. Petrasch (eds), *Die Neolithisierung Mitteleuropas* (The spread of the Neolithic to central Europe). *Internationale Tagung Mainz*, 24.–26. Juni 2005 (Mainz 2010) 61–80.

HACHEM 2011

L. HACHEM, Le site néolithique de Cuiry-lès-Chaudardes I. De l’analyse de la faune à la structuration sociale. *Internat. Arch.* 120 (Rahden 2011).

HALSTEAD 2014

P. HALSTEAD, *Two oxen ahead. Pre-mechanized farming in the Mediterranean* (Chichester 2014).

HALSTEAD / O’SHEA 1982

P. L. J. HALSTEAD / J. O’SHEA, A friend in need is a friend indeed: social storage and the origins of social ranking. In: C. Renfrew / S. Shennan (eds), *Ranking, resource and exchange* (Cambridge 1982) 92–99.

HARRIS 2013

O. J. T. HARRIS, Relational communities in prehistoric Britain. In: C. Watts (ed.), *Relational archaeologies. Humans, animals, things* (London 2013) 173–189.

HARRIS 2014

O. J. T. HARRIS, (Re)assembling communities. *Journal Arch. Method and Theory* 21, 2014, 76–97.

HEDGES / REYNARD 2007

R. E. M. HEDGES / L. M. REYNARD, Nitrogen isotopes and the trophic level of humans in archaeology. *Journal Arch. Scien.* 34, 2007, 1240–1251.

HERR 2001

S. A. HERR, *Beyond Chaco. Great Kiva communities on the Mogollon Rim frontier* (Tucson 2001).

HERTELENDI 1995

E. HERTELENDI, ¹⁴carbon dating of Zalaszentbalázs-Szőlőhegyi mező 1992–1993. *Antaeus* 22, 1995, 105–107.

HIGHAM et al. 2006

T. F. G. HIGHAM / R. M. JACOBI / C. BRONK RAMSEY, AMS radiocarbon dating of ancient bone using ultrafiltration. *Radiocarbon* 48, 2006, 179–195.

HODDER 2012

I. HODDER, *Entangled. An archaeology of the relationships between humans and things* (Chichester 2012).

HODDER 2013

I. HODDER, From diffusion to structural transformation: the changing roles of the Neolithic house in the Middle East, Turkey and Europe. In: D. Hofmann / J. Smyth (eds), *Tracking the house in Neolithic Europe. Sedentism, architecture and practice* (New York 2013) 349–362.

HOFMANN 2013

R. HOFMANN, Okolište 2. Spätneolithische Keramik und Siedlungsentwicklung in Zentralbosnien. *Universitätsforsch. Prähist. Arch.* 243 (Bonn 2013).

HOGGETT 1997

P. HOGGETT (ed.), *Contested communities. Experiences, struggles, policies* (Bristol 1997).

HORVÁTH 1989–1991

F. HORVÁTH, Újkőkori sírépítmények nyomai Hódmezővásárhely-Kökénydombon és Gorzsán (Spuren von Grabanbauten im Neolithikum an dem Fundort Hódmezővásárhely-Kökénydomb und in Gorzsa). *Móra Ferenc Múz. Évk.* 1989–91 (1992) 37–47.

HORVÁTH 1994

F. HORVÁTH, Az Alföldi Vonaldíszes Kerámia első önálló települése a Tisza-Maros szögében: Hódmezővásárhely-Térek fok (The first independent settlement of the Alföld Linear Pottery Culture in the Tisza-Maros region: Hódmezővásárhely-Térek fok). In: G. Lőrinczy (ed.), *A kőkortól a középkorig. Tanulmányok Trogmayer Ottó 60. születésnapjára. Von der Steinzeit bis zum Mittelalter. Studien zum 60. Geburtstag von Ottó Trogmayer* (Szeged 1994) 95–124.

HORVÁTH 2005

F. HORVÁTH, Gorzsa. Előzetes eredmények az újkőkori tell 1978 és 1996 közötti feltárásáról. In: L. Bende / G. Lőrinczy (eds), *Hétköznapiak vénusai* (Hódmezővásárhely 2005) 51–83.

HORVÁTH 2004

L. A. HORVÁTH, Középső neolitikus település Törökbálint-Dulácskán. A Middle Neolithic settlement at Törökbálint-Dulácska. *Aquincumi Füzetek* 10, 2004, 156–159.

HORVÁTH / KALICZ 2003

L. A. HORVÁTH / N. KALICZ, Újkőkori település feltárása Petriventén (Zala megye) (Excavation of a Neolithic site at Petrivente [Zala county]). In: J. Kisfaludi (ed.), *Régészeti kutatások Magyarországon 2001. Archaeological investigations in Hungary 2001* (Budapest 2003) 5–29.

HORVÁTH / SIMON 2003

L. A. HORVÁTH / K. H. SIMON, *Das Neolithikum und die Kupferzeit in Südwesttransdanubien. Siedlungsgeschichte und Forschungsstand* (Budapest 2003).

HORVÁTH / SIMON 2004

L. A. HORVÁTH / K. H. SIMON, *Bemerkungen zur Baukunde der Körös-Kultur* (Megjegyzések a Körös-kultúra házépítészetéhez). *Stud. Arch.* (Szeged) 10, 2004, 9–23.

ILETT 2012

M. ILETT, *Linear Pottery and Blicquy/Villeneuve-Saint-Germain settlement in the Aisne valley and its environs. An overview*. In: K. Kreienbrink / M. Cladders / H. Stäuble / T. Tischendorf / S. Wolfram (eds), *Siedlungsstruktur und Kulturwandel in der Bandkeramik* (Dresden 2012) 69–79.

ILETT et al. 1982

M. ILETT / C. CONSTANTIN / A. COUDART / J. P. DEMOULE, *The Late Bandkeramik of the Aisne valley: environment and spatial organisation*. Papers presented at a colloquium, held in honour of Professor Dr. P. J. R. Modderman, Leiden, 3–7 May 1982. *Analecta Praehist. Leidensia* 15 (Leiden 1982) 45–61.

ILON 2004

G. ILON, *Szombathely őskori településtörténetének vázlata* (Outline of the pre-historic settlement of Szombathely). *Őskorunk* 2 (Szombathely 2004).

ILON 2013

G. ILON, *Transdanubian Linear Pottery culture in Vas County: current research achievements* (2008). In: A. Anders / G. Kulcsár (eds), *Moments in time*. Papers presented to Pál Raczky on his 60th birthday (Budapest 2013) 133–146.

ILON / FARKAS 2001

G. ILON / Cs. FARKAS, *Houses of the late-Lengyel settlement at the boundary of Szombathely* (county Vas, Western Hungary). In: J. Regenye (ed.), *Sites and stones: Lengyel culture in western Hungary and beyond*. A review of the current research (*Veszprém* 2001) 55–60.

INGOLD 1993

T. INGOLD, *The temporality of the landscape*. *World Arch.* 25/2, 1993, 152–174.

ISBELL 2000

W. H. ISBELL, *What we should be studying: the “imagined community” and the “natural community”*. In: M.-A. Canuto / J. Yaeger (eds), *The archaeology of communities. A New World perspective* (London 2000) 243–266.

JAKUCS / VOICSEK 2015

J. JAKUCS / V. VOICSEK, *The northernmost distribution of the early Vinča culture in the Danube valley: a case study from Szederkény-Kukorica-dűlő* (Baranya county, southern Hungary). *Antaeus* 33, 2015, 13–54.

JAKUCS et al. in press

J. JAKUCS / E. BÁNFFY / K. OROSS / V. VOICSEK / C. BRONK RAMSEY / E. DUNBAR / B. KROMER / A. BAYLISS / D. HOFMANN / P. MARSHALL / A. WHITTLE, *Between the Vinča and Linearbandkeramik worlds: the diversity of practices and identities in the 54th–53rd centuries cal BC in south-west Hungary and beyond* *Journal of World Prehistory* 29, 2016.

JAY et al. 2008

M. JAY / B. T. FULLER / M. P. RICHARDS / C. J. KNÜSEL / S. S. KING, *Iron Age breastfeeding practices in Britain: isotopic evidence from Wetwang Slack, East Yorkshire*. *Am. Journal Physical Anthr.* 136, 2008, 327–337.

JONES / NICHOLLS 2001

M. JONES / G. NICHOLLS, Reservoir offset models for radiocarbon calibration. *Radiocarbon* 43, 2001, 119–124.

KALÁBEK et al. 2010

M. KALÁBEK / P. KALÁBKOVÁ / J. PEŠKA, A settlement burial in Hulín-Pravčice and its contribution to absolute dating of the Lengyel culture. In: J. Šuteková / P. Pavúk / P. Kalábková / B. Kovár (eds), *PANTA RHEI. Studies on the chronology and cultural development of south-eastern and central Europe in earlier prehistory presented to Juraj Pavuk on the occasion of his 75th birthday*. *Stud. Arch. Mediaevalia* 11 (Bratislava 2010) 255–262.

KALICZ 1974

N. KALICZ, Neue Forschungen bezüglich der Lengyelkultur in Ungarn. *Sborník Prací Fil. Fak. Brno* 20–21, 1974 (1975–1976) 51–61.

KALICZ 1977

N. KALICZ, Früh- und spätneolithische Funde in der Gemarkung des Ortes Lánycsók (Vorbild). *Janus Pannonius Múzeum. Évk. 22*, 1977, 137–156.

KALICZ 1980a

N. KALICZ, Becsehely I (Körmény, Kreis Nagykanizsa). *Mitteilungen des Archäologischen Instituts der Ungarischen Akademie der Wissenschaften* 8–9, 1980, 201–203.

KALICZ 1980b

N. KALICZ, Funde der ältesten Phase der Linienbandkeramik in Südtransdanubien. *Mitt. Arch. Inst. Ungar. Akad.* 8–9, 1980, 13–46.

KALICZ 1983

N. KALICZ, Die Körös-Starčevo-Kulturen und ihre Beziehungen zur Linearbandkeramik. *Nachr. Niedersachsen Urgesch.* 52, 1983, 91–130.

KALICZ 1983–1984

N. KALICZ, Übersicht über den Forschungsstand der Entwicklung der Lengyel-Kultur und die ältesten „Wehranlagen“ in Ungarn. *Mitt. Österr. Arbeitsgemeinschaft Ur- u. Frühgesch.* 33–34, 1983–84, 271–293.

KALICZ 1985

N. KALICZ, Kőkori falu Aszódon (Neolithisches Dorf in Aszód). *Múzeum. Füzetek* 32 (Aszód 1985).

KALICZ 1988

N. KALICZ, Beiträge zur Entstehungsfrage der Lengyel-Kultur. *Slovenská Arch.* 36, 1988, 105–118.

KALICZ 1990

N. KALICZ, Frühneolithische Siedlungsfunde aus Südwestungarn. *Quellenanalyse zur Geschichte der Starčevo-Kultur. Inv. Praehist. Hungariae* 4 (Budapest 1990).

KALICZ 1991

N. KALICZ, Die Keszthely-Gruppe der Transdanubischen (Mitteleuropäischen) Linienbandkeramik im Licht der Ausgrabung in Kustánszeg (Westungarn). *Commun. Arch. Hungariae* 1991, 5–32.

KALICZ 1994

N. KALICZ, A Dunántúli (Közép-európai) vonaldíszes kerámia legidősebb leletei és a korai Vinča kultúra (Die ältesten Funde der transdanubischen [mitteleuropäischen] Linienbandkeramik und die frühe Vinča-Kultur). In: G. Lőrinczy (ed.), *A kőkortól a középkorig. Tanulmányok Trogmayer Ottó 60. születésnapjára. Von der Steinzeit bis zum Mittelalter. Studien zum 60. Geburtstag von Ottó Trogmayer* (Szeged 1994) 67–84.

KALICZ 1995

N. KALICZ, Die älteste transdanubische (mitteleuropäische) Linienbandkeramik. Aspekte zu Ursprung, Chronologie und Beziehungen. *Acta Arch. Acad. Scien. Hungaricae* 47, 1995, 23–59.

KALICZ 2000

N. KALICZ, Unterscheidungsmerkmale zwischen der Körös- und der Starčevo-Kultur in Ungarn. In: S. Hiller / V. Nikolov (eds), *Karanovo III. Beiträge zum Neolithikum in Südosteuropa* (Wien 2000) 295–309.

KALICZ 2001

N. KALICZ, Der neuere Forschungsstand über die Lengyel Kultur. In: J. Regenye (ed.), *Sites and stones: Lengyel culture in Western Hungary and beyond. A review of the current research. Lengyel'99 and IGCP-442 Conference, Veszprém, 1999* (Veszprém 2001) 7–12.

KALICZ 2003

N. KALICZ, Az újkőkorszaki és rézkori megtelepedés maradványai a nagykanizsai Inkey-kápolna mellett (Kr.e. 5. évezred első harmadától a 3. évezred első feléig) (Endneolithische und kupferzeitliche Besiedlung bei Nagykanizsa [Inkey-Kapelle]). *Zalai Múz.* 12, 2003, 7–47.

KALICZ 2011

N. KALICZ, Forschung über die Starčevo-Kultur in Südtransdanubien (Ungarn). In: K. Botić / S. Kovačević / D. Ložnjak Dizdarević (eds), *Panonski prapovijesni osviti. Zbornik radova posvećenih Korneliji Minichreiter uz 65. obljetnicu života* (Zagreb 2011) 105–129.

KALICZ / MAKKAY 1972a

N. KALICZ / J. MAKKAY, Südliche Einflüsse im frühen und mittleren Neolithikum Transdanubiens. In: J. Fitz / J. Makkay (eds), *Die aktuellen Fragen der Bandkeramik. Akten der Pannonia Konferenzen I. A vonaldíszes kerámia időszaki kérdései. Az I. Pannonia konferencia actái* (Budapest 1972) 93–105.

KALICZ / MAKKAY 1972b

N. KALICZ, A medinai koraneolithikus leletek. Die frühneolithischen Funde von Medina (Szekszárd 1972).

KALICZ / MAKKAY 1972c

N. KALICZ / J. MAKKAY, A neolitikus Sopot-Bicske kultúra. *Arch. Ért.* 99, 1972, 3–13.

KALICZ / MAKKAY 1977

N. KALICZ / J. MAKKAY, Die Linienbandkeramik in der Grossen Ungarischen Tiefebene. *Stud. Arch.* 7 (Budapest 1977).

KALICZ / RACZKY 1987

N. KALICZ / P. RACZKY, The Late Neolithic of the Tisza region. A survey of recent archaeological research. In: L. Tóth / P. Raczky (eds), *The Late Neolithic of the Tisza region* (Budapest, Szolnok 1987) 11–30.

KALICZ et al. 1998

N. KALICZ / Zs. M. VIRÁG / K. T. BIRÓ, The northern periphery of the Early Neolithic Starčevo culture in south-western Hungary: a case study on an excavation at Lake Balaton. *Doc. Praehist.* 25. Neolithic Stud. 5 (Ljubljana 1998) 151–187.

KALICZ et al. 2002

N. KALICZ / K. T. BIRÓ / Zs. M. VIRÁG, Vörs, Máriaasszony-sziget (Somogy megye). In: E. Marton / J. Kisfaludi (eds), *Régészeti kutatások Magyarországon 1999* (Archaeological Investigations in Hungary 1999) (Budapest 2002) 15–26.

KALICZ et al. 2007a

N. KALICZ / S. MOLNÁR / M. RÓZSÁS, Az élelemtermelés kezdetei Somogy megyében a Kr. e. 7.–6. évezred fordulóján. Az újkőkorszak (neolitikum) legidősebb szakasza (Beginnings of food production in Somogy county at the turn of the 7th–6th millennia B.C. The earliest phase of the Neolithic period). *Commun. Arch. Hungariae* 2007, 19–64.

KALICZ et al. 2007b

N. KALICZ, / E. KREITER / Z. M. TOKAI, Die Rolle der Sopot-Kultur in der Entstehung der Lengyel-Kultur auf Grund der neuen Ausgrabungen in Südwestungarn. In: J. K. Kozłowski / P. Raczky (eds), *The Lengyel, Polgár and related cultures in the Middle/Late Neolithic in central Europe* (Kraków 2007) 29–47.

KALICZ et al. 2012

N. KALICZ / A. KREITER / E. KREITER / Z. M. TOKAI / M. TÓTH / B. BAJNÓCZI, A neolitikum történeti és kronológiai kérdései Becsehely-Bükkaljai-dűlő lelőhelyen (The Neolithic historical and chronological questions in the Becsehely–Bükkaljai dűlő). In: B. Kolozsi (ed.), *Momos 4. Ős-koros kutatók IV. Összejövetelének konferenciakötete*, Debrecen, 2005, Március 22–24 (Debrecen 2012) 87–170.

KARLSBERG 2006

A. J. KARLSBERG, *Flexible Bayesian methods for archaeological dating*. PhD thesis, University of Sheffield (Sheffield 2006).

KARMANSKI 2005

J. KARMANSKI, Donja Branjevina. A neolithic settlement near Deronje in the Vojvodina (Serbia) (Trieste 2005).

KATZENBERG et al. 1996

M. A. KATZENBERG / D. A. HERRING / S. R. SAUNDERS, Weaning and infant mortality: evaluating the skeletal evidence. *Yearbook Physical Anthr.* 39, 1996, 177–199.

KELLY 2000

R. C. KELLY, *Warless societies and the origin of war* (Ann Arbor 2000).

KERTÉSZ / SÜMEGI 1999

R. KERTÉSZ / P. SÜMEGI, Teóriák, kritika és egy modell: miért állt meg a Körös-Starčevo kultúra terjedése a Kárpát-medence centrumában? (Theories, critiques and a model: why did the expansion of the Körös-Starčevo culture stop in the centre of the Carpathian Basin?) *Tisicum* (Szolnok) 11, 1999, 9–23.

KNIPPER et al. 2013

C. KNIPPER / D. PETERS / C. MEYER / A.-F. MAURER / A. MUHL / B. R. SCHÖNE / K. W. ALT, Dietary reconstruction in Migration Period central Germany: a carbon and nitrogen isotope study. *Arch. and Anthr. Scien.* 5, 2013, 17–35.

KÖHLER 2004

K. KÖHLER, Anthropological finds of the Lengyel culture from Csabdi-Télizöldes. *Alba Regia* 33, 2004, 7–24.

KÖHLER 2012

K. KÖHLER, A késő neolitikus lengyeli kultúra népességének biológiai rekonstrukciója (Biological reconstruction of the Late Neolithic Lengyel culture). PhD thesis, Eötvös Loránd University (Budapest 2012).

KÖHLER 2013

K. KÖHLER, Biological reconstruction of the Late Neolithic Lengyel culture. *Diss. Arch.* 3,1, 2013, 179–204.

KÖHLER 2015

K. KÖHLER, A Starčevo kultúra embertani leletei Alsónyék-Bátaszék lelőhelyről (Anthropological examination of the Starčevo culture burials excavated at the site of Alsónyék-Bátaszék). *Anthr. Közlemények* 56, 2015, 3–26.

KÖHLER et al. 2013

K. KÖHLER / B. G. MENDE / A. PÓSA, The emergence of tuberculosis in Late Neolithic Transdanubia. *Hungarian Arch. E-Journal*, 2013 Summer. <http://www.hungarianarchaeology.hu/wp-content/uploads/2013/08/eng_Kohler_13ny1.pdf>.

BERICHT RGK 94, 2013

KÖHLER et al. 2014

K. KÖHLER / G. PÁLFI / E. MOLNÁR / I. ZALAI-GAÁL / A. OSZTÁS / E. BÁNFFY / K. KIRINÓ / K. K. KISS / B. G. MENDE, A Late Neolithic case of Pott's Disease from Hungary. *International Journal Osteoarch.* 24, 2014, 697–703. <<http://DOI:10.1002/oa.2254>>.

KOHL / QUITTA 1963

G. KOHL / H. QUITTA, Berlin-Radiokarbonaten archäologischer Proben I. Ausgr. u. Funde 8, 1963, 281–301.

KOHL / QUITTA 1964

G. KOHL / H. QUITTA, Berlin Radiocarbon measurements I. *Radiocarbon* 6, 1964, 308–317.

KOÓS / KALICZ 2014

J. KOÓS / N. KALICZ, Mezőkövesd-Mocsolyás. A neolitikus Szatmár-csoport (AVK I) települése és temetője a Kr.e. 6. évezred második feléből (Miskolc 2014).

KOSSE 1979

K. KOSSE, Settlement ecology of the Körös and Linear Pottery cultures in Hungary. *BAR International. Ser. 64* (Oxford 1979).

KOWALEWSKI 2006

S. A. KOWALEWSKI, Coalescent societies. In: T. J. Pluckhahn / R. Ethridge (eds), *Light on the path. The anthropology and history of the Southeastern Indians* (Tuscaloosa 2006) 94–122.

KOWALEWSKI 2013

S. A. KOWALEWSKI, The work of making community. In: J. Birch (ed.), *From prehistoric villages to cities. Settlement aggregation and community transformation* (New York 2013) 201–218.

KOZŁOWSKI / RACZKY 2007

J. K. KOZŁOWSKI / P. RACZKY (eds), *The Lengyel, Polgár and related cultures in the Middle/Late Neolithic of central Europe* (Kraków 2007).

KROMER et al. 2013

B. KROMER / S. LINDAUER / H.-A. SYNAL / L. WACKER, MAMS – a new AMS facility at the Curt-Engelhorn-Centre for Archaeometry, Mannheim, Germany. *Nuclear Instruments and Methods Physics Research B* 294, 2013, 11–13.

KRZNARIĆ ŠKRIVANKO 2011

M. KRZNARIĆ ŠKRIVANKO, Radiokarbonski datumi uzoraka sa Sopota. In: K. Botić / S. Kovačević / D. Ložnjak Dizdār (eds), *Panonski prapovijesni osviti. Zbornik radova posvećenih Korneliji Minichreiter uz 65. obljetnicu života* (Zagreb 2011) 209–225.

KUČA et al. 2009

M. KUČA / A. PRICHYSTAL / Z. SCHENK / Z. ŠKRDLA / P. VOKAČ, Lithic raw material procurement in the Moravian Neolithic: the search for extra-regional networks. *Doc. Praehist. 36. Neolithic Stud.* 36 (Ljubljana 2009) 313–326.

KUTZIÁN 1944

I. KUTZIÁN, *A Körös-kultúra* (Budapest 1944).

KUTZIÁN 1947

I. KUTZIÁN, *The Körös culture* (Budapest 1947).

LANTING / VAN DER PLICHT 1998

J. N. LANTING / J. VAN DER PLICHT, Reservoir effects and apparent ¹⁴C ages. *Journal Irish Arch.* 9, 1998, 151–165.

LARINA 2009

O. V. LARINA, The extreme eastern periphery of the Linearbandkeramik: the landscape and geographical context. In: D. Hofmann / P. Bickle (eds), *Creating communities. New advances in central European Neolithic research* (Oxford 2009) 50–70.

LEE / BRONK RAMSEY 2012

S. LEE / C. BRONK RAMSEY, Development and application of the trapezoidal model for archaeological chronologies. *Radiocarbon* 54, 2012, 107–122.

LENNEIS 2012

E. LENNEIS, Zur Anwendbarkeit des rheinischen Hofplatzmodells im östlichen Mitteleuropa. In: F. Kreienbrink / M. Cladders / H. Stäuble / T. Tischendorf / S. Wolfram (eds), *Siedlungsstruktur und Kulturwandel in der Bandkeramik* (Dresden 2012) 47–52.

LENNEIS / LÜNING 2001

E. LENNEIS / J. LÜNING, Die altbandkeramischen Siedlungen von Neckenmarkt und Strögen (Bonn 2001).

LENNEIS / STADLER 1995

E. LENNEIS / P. STADLER, Zur Absolutchronologie der Linearbandkeramik aufgrund von ^{14}C -Daten. *Arch. Österr.* 6,2, 1995, 4–13.

LENNEIS et al. 1996

E. LENNEIS / P. STADLER / H. WINDL, Neue ^{14}C -Daten zum Frühneolithikum in Österreich. *Préhist. Européenne* 8, 1996, 97–116.

LICHARDUS / VLADÁR 2003

J. LICHARDUS / J. VLADÁR, Gliederung der Lengyel-Kultur in der Slowakei. Ein Rückblick nach vierzig Jahren. *Slovenská Arch.* 51, 2003, 195–216.

LICHTER 2001

C. LICHTER, Untersuchungen zu den Bestattungssitten des südosteuropäischen Neolithikums und Chalkolithikums (Mainz 2001).

LILLIE et al. 2009

M. LILLIE / C. BUDD / I. POTEKHINA / R. E. M. HEDGES, The radiocarbon reservoir effect: new evidence from the cemeteries of the middle and lower Dnieper basin, Ukraine. *Journal Arch. Scien.* 36, 2009, 256–264.

LINDLEY 1985

D. V. LINDLEY, *Making decisions* (2nd ed.) (London 1985).

LINK 2006

T. LINK, Das Ende der neolithischen Tellsiedlungen. Ein kulturgeschichtliches Phänomen des 5. Jahrtausends v. Chr. im Karpatenbecken (Bonn 2006).

LINK 2012

T. LINK, „Hofplatz“ und „Zeilensiedlung“: konkurrierende Modelle oder zwei Seiten derselben Medaille? In: F. Kreienbrink / M. Cladders / H. Stäuble / T. Tischendorf / S. Wolfram (eds), *Siedlungsstruktur und Kulturwandel in der Bandkeramik* (Dresden 2012) 43–46.

LONGIN 1971

R. LONGIN, New method of collagen extraction for radiocarbon dating. *Nature* 230, 1971, 241–242.

LÜNING 1982a

J. LÜNING, Forschungen zur bandkeramischen Besiedlung der Aldenhovener Platte im Rheinland. In: B. Chropovský / J. Pavúk (eds), *Siedlungen der Kultur mit Linearkeramik in Europa. Internationales Kolloquium Nové Vozokany*, 17.–20. November 1981 (Nitra 1982) 125–156.

LÜNING 1982b

J. LÜNING, Research into the Bandkeramik settlement of the Aldenhovener Platte in the Rhineland. *Analecta Praehist. Leidensia* 15, 1982, 1–29.

LÜNING 1988

J. LÜNING, Frühe Bauern in Mitteleuropa im 6. und 5. Jahrtausend v. Chr. *Jahrb. RGZM* 35, 1988 (1991) 27–93.

BERICHT RGK 94, 2013

LÜNING 2005

J. LÜNING, Bandkeramische Hofplätze und die absolute Chronologie der Bandkeramik. In: J. Lüning / Ch. Frirdich / A. Zimmermann (eds), *Die Bandkeramik im 21. Jahrhundert. Symposium in der Abtei Brauweiler bei Köln vom 16.9.–19.9.2002* (Rahden 2005) 49–74.

MAJERIK et al. 2010

V. MAJERIK / N. LARSSON / Á. GELENCSEÉR, Bátaszék–Kanizsai-dűlő / Lajvér (Tolna megye, TO 46. Lelőhely). Évkönyv és jelentés a Kulturális Örökségvédelmi Szakszolgálat 2008. évi feltárásairól (Field Service for Cultural Heritage 2008). Yearbook and Rev. Arch. Investigations 2010, 17–18.

MAKKAY 1969

J. MAKKAY, Die neolithischen Funde von Bicske. *Štud. Zvesti Arch. Ústavu* 17, 1969, 253–270.

MAKKAY 1975

J. MAKKAY, A bicskei neolitikus telep és temető. Az István király Múzeum Közleményei. Bull. Mus. Roi Saint-Étienne D 104 (Székesfehérvár 1975).

MAKKAY 1978

J. MAKKAY, Excavations at Bicske. I. The Early Neolithic – The Earliest Linear Band Ceramic. *Alba Regia* 16, 1978, 9–60.

MAKKAY 1982a

J. MAKKAY, A magyarországi neolitikum kutatásának új eredményei. Az időrend és a népi azonosítás kérdései (Budapest 1982).

MAKKAY 1982b

J. MAKKAY, A magyarországi neolitikum rendszere és fejlődésének főbb vonásai (The system of the Hungarian Neolithic and the main features of its development) (Budapest 1982).

MAKKAY 1996

J. MAKKAY, Theories about the origin, the distribution and the end of the Körös culture. In: L. Tóth (ed.), *At the fringes of three worlds. Hunter-gatherers and farmers in the middle Tisza valley* (Szolnok 1996) 35–53.

MAKKAY et al. 1996

J. MAKKAY / E. STARNINI / M. TULOK, Excavations at Bicske-Galagonyás III. The Notenkopf and Sopot-Bicske cultural phases. *Quaderno* 6 (Trieste 1996).

MANGERUD 1972

J. MANGERUD, Radiocarbon dating of marine shells, including a discussion of apparent age of recent shells from Norway. *Boreas* 1, 1972, 143–172.

MANNING et al. 2014

K. MANNING / A. TIMPSON / S. COLLEDGE / E. CREMA / K. EDINBOROUGH / T. KERIG / S. SHENNAN, The chronology of culture: a comparative assessment of European Neolithic dating approaches. *Antiquity* 88, 2014, 1065–1080.

MARCINIAK 2005

A. MARCINIAK, Placing animals in the Neolithic. Social zooarchaeology of prehistoric farming communities (London 2005).

MARINESCU-BILCU 1981

S. MARINESCU-BILCU, *Tîrpești: from prehistory to history in eastern Romania* (Oxford 1981).

MAROSI 1932

A. MAROSI, A bicskei kőkori telep. *Székesfehérvári Szemle* 2, 1932, 62–63.

MAROSI 1934

A. MAROSI, Ásatás a bicskei kőkori telepen. 1933 szept. 18–okt. 28. *Székesfehérvári Szemle* 4, 1934, 39–42.

MAROSI / SOMOGYI 1990

S. MAROSI / S. SOMOGYI, Magyarország kistájainak katasztere I–II (Budapest 1990).

MARTON 2003

T. MARTON, Mezolitikum a Dél-Dunántúlon. A somogyi leletek újraértékelése (Das Mesolithikum im südlichen Transdanubien. Die Neubewertung der Funde aus dem Komitat Somogy). Stud. Arch. (Szeged) 9, 2003, 39–48.

MARTON 2008

T. MARTON, Development of pottery style on the LBK settlement of Balatonszárszó-Kis-Erdei-dűlő in Hungary. Acta Terrae Septemcastrensis 7, 2008, 197–216.

MARTON 2013

T. MARTON, LBK Households in Transdanubia: a case study. In: A. Anders / G. Kulcsár (eds), Moments in time. Papers presented to Pál Raczky on his 60th birthday (Budapest 2013) 159–172.

MARTON 2015

T. MARTON, A dunántúli vonaldíszes kerámia kultúrájának kerámialeletei Balatonszárszóról (Pottery finds of the Transdanubian Linear Pottery culture from Balatonszárszó). PhD thesis, Eötvös Loránd University (Budapest 2015).

MARTON / OROSS 2012

T. MARTON / K. OROSS, Siedlungsforschung in linienbandkeramischen Fundorten in Zentral- und Südtransdanubien – Wiege, Peripherie oder beides? In: F. Kreienbrink / M. Cladders / H. Stäuble / T. Tischendorf / S. Wolfram (eds), Siedlungsstruktur und Kulturwandel in der Bandkeramik (Dresden 2012) 220–239.

MASSEY 1997

D. MASSEY, A global sense of place. In: T. Barnes / D. Gregory (eds), Reading human geography (London 1997) 315–323.

MASSON et al. 2014

M. MASSON / E. MOLNÁR / H. D. DONOGHUE / G. S. BESRA / D. E. MINNIKIN / H. H. T. WU / O. Y.-C. LEE / I. D. BULL / GY. PÁLFI, Osteological and biomolecular evidence of a 7000-year-old case of hypertrophic pulmonary osteopathy secondary to tuberculosis from Neolithic Hungary. PLoS ONE 8,10, e78252, 2014. <<http://dx.doi.org/10.1371/journal.pone.0078252>>.

MASSON et al. 2015

M. MASSON / Z. BEREZKI / E. MOLNÁR / H. D. DONOGHUE / D. E. MINNIKIN / O. Y.-C. LEE / H. H. T. WU / G. S. BESRA / I. D. BULL / GY. PÁLFI, 7000 year-old tuberculosis cases from Hungary – osteological and biomolecular evidence. In: Gy. Pálfi / O. Dutour / P. Perrin / Ch. Sola / A. Zink (eds), Tuberculosis in Evolution. Proceedings of the 'ICEPT2 – TB Evolution Meeting', 23–25th March 2012, University of Szeged, Szeged, Hungary. Tuberculosis Suppl. 95,1 (Amsterdam 2015) S13–S17.

MCGUIRE / SAITTA 1996

R. H. MCGUIRE / D. J. SAITTA, Although they have petty captains, they obey them badly: the dialectics of Prehispanic Western Pueblo social organization. Am. Ant. 61, 1996, 197–216.

MCPHERRON / SREJOVIĆ 1988

A. MCPHERRON / D. SREJOVIĆ (eds), Divostin and the Neolithic of central Serbia (Pittsburgh 1988).

MENOTTI 2004

F. MENOTTI (ed.), Living on the lake in prehistoric Europe. 150 years of lake-dwelling research (London 2004).

MEYER et al. 2014

CH. MEYER / CH. LOHR / O. KÜRBIS / V. DRESELY / W. HAAK / C. J. ADLER / D. GRONENBORN / K. W. ALT, Mass graves of the LBK: patterns and peculiarities. In: A. Whittle / P. Bickle (eds),

BERICHT RGK 94, 2013

- Early farmers: the view from archaeology and science. *Proc. Brit. Acad.* 198 (Oxford 2014) 307–325.
- MILISAUSKAS 1986
S. MILISAUSKAS, Early Neolithic settlement and society at Olszanica (Ann Arbor 1986).
- MILLEKER 1893
B. MILLEKER, Szerb keresztúri őstelep (Torontál m.). *Arch. Ért.* 13, 1893, 300–307.
- MILOJČIĆ 1949
V. MILOJČIĆ, Chronologie der jüngeren Steinzeit Mittel- und Südosteuropas (Berlin 1949).
- MINICHREITER 1992
K. MINICHREITER, Starčevačka kultura u sjevernoj Hrvatskoj. *Diss. et Monogr.* 1 (Zagreb 1992).
- MINICHREITER 2001
K. MINICHREITER, The architecture of Early and Middle Neolithic settlements of the Starčevo culture in Northern Croatia. *Doc. Praehist.* 28. *Neolithic Stud.* 8 (Ljubljana 2001) 199–214.
- MINICHREITER 2007
K. MINICHREITER, Slavonski Brod, Galovo. Deset godina arheoloških istraživanja. Slavonski Brod, Galovo. Ten years of archaeological excavations (Zagreb 2007).
- MINICHREITER / BOTIĆ 2010
K. MINICHREITER / K. BOTIĆ, Early Neolithic burials of Starčevo culture at Galovo, Slavonski Brod (northern Croatia). *Doc. Praehist.* 37. *Neolithic Stud.* 17 (Ljubljana 2010) 105–124.
- MINICHREITER / KRAJCAR BRONIĆ 2006
K. MINICHREITER / I. KRAJCAR BRONIĆ, Novi radiokarbonski datumi rane starčevačke culture u Hrvatskoj (New radiocarbon dates for the Early Starčevo culture in Croatia). *Prilozi* (Zagreb) 23, 2006, 5–16.
- MITHAY 1966
S. MITHAY, Zselizi típusú leletek a Győr, Pápai vámi újabb-kőkori lakótelepen (Funde Zselizer Typus auf einem jungsteinzeitlichen Siedlungsorte bei der Pápaer Maut in Győr). *Arrabona* 8, 1966, 5–52.
- MODDERMAN 1970
P. J. R. MODDERMAN, Linearbandkeramik aus Elsloo und Stein *Analecta Praehist.* *Leidensia* 3 (Leiden 1970).
- MODDERMAN 1972
P. J. R. MODDERMAN, Die Hausbauten und Siedlungen der Linienbandkeramik in ihrem westlichen Bereich. In: H. Schwabedissen (ed.), *Die Anfänge des Neolithikums vom Orient bis Nordeuropa* (Köln, Wien 1972) 77–84.
- MOORE / THOMPSON 2012
C. R. MOORE / V. D. THOMPSON, Animism and Green River persistent places: a dwelling perspective of the Shell Mound Archaic. *Journal Social Arch.* 12, 2012, 264–284.
- NAGY 2005
E. GY. NAGY, Adatok az alföldi vonaldíszes kerámia kultúrájának településtörténeti képéhez a Felső-Tisza-vidéken. PhD thesis, Eötvös Loránd University (Budapest 2005).
- NAROLL 1962
R. NAROLL, Floor area and settlement population. *Am. Ant.* 27, 1962, 587–589.
- NEHLICH et al. 2010
O. NEHLICH / D. BORIĆ / S. STEFANOVIĆ / M. P. RICHARDS, Sulphur isotope evidence for freshwater fish consumption: a case study from the Danube Gorges, SE Europe. *Journal Arch. Scien.* 37, 2010, 1131–1139.

NĚMEJCOVÁ-PAVÚKOVÁ 1986

V. NĚMEJCOVÁ-PAVÚKOVÁ, Vorbericht über die Ergebnisse der systematischen Grabung in Svodín in den Jahren 1971–1983. *Slovenská Arch.* 34, 1986, 133–176.

NĚMEJCOVÁ-PAVÚKOVÁ 1995

V. NĚMEJCOVÁ-PAVÚKOVÁ, Svodín I. Zwei Kreisgrabenanlagen der Lengyel-Kultur (Bratislava 1995).

NÉMETH 1994

T. G. NÉMETH, Vorbericht über spätneolithische und frühkupferzeitliche Siedlungsspuren bei Lébény (Westungarn) (*Késő neolit és rézkori településnyomok Lébény határában*). *Nyíregyházi Jósza András Múz. Évk.* 36, 1994, 241–261.

NEUGEBAUER / NEUGEBAUER-MARESCH 2003

J.-W. NEUGEBAUER / C. NEUGEBAUER-MARESCH, Die Doppel-Sonderbestattung der Bemaltkeramik von Reichersdorf, Marktgemeinde Nussdorf ob der Traisen, Niederösterreich. In: E. Jerem / P. Raczky (eds), *Morgenrot der Kulturen. Frühe Etappen der Menschheitsgeschichte in Mittel- und Südosteuropa. Festschrift für Nándor Kalicz zum 75. Geburtstag* (Budapest 2003) 327–334.

NEUGEBAUER / TRNKA 2005

W. NEUGEBAUER / G. TRNKA, Totenbrauchtum. In: F. Daim / W. Neubauer (eds), *Zeitreise Heldenberg. Geheimnisvolle Kreisgräben. Kat. Niederöstr. Landesausstellung 2005* (Horn, Wien 2005) 223–224.

NEUGEBAUER-MARESCH 1995

C. NEUGEBAUER-MARESCH, Mittelneolithikum: Die Bemaltkeramik. In: E. Lenneis / C. Neugebauer-Maresch / E. Ruttikay (eds), *Jungsteinzeit im Osten Österreichs. Forschungsber. Ur- u. Frühgesch. 17. Wiss. Schriftenr. Niederöstr. 102/103/104/105* (St. Pölten, Wien 1995) 57–107.

NEUGEBAUER-MARESCH / TESCHLER-NICOLA 2006

C. NEUGEBAUER-MARESCH / M. TESCHLER-NICOLA, Zu den perimortalen Beschädigungen und postmortalen Lageveränderungen der Bestattungen von Friebritz (NÖ) und ihre Bedeutung für die mittelneolithische Kreisgrabenanlage. In: A. Krenn-Leeb / K. Grömer / P. Stadler (eds), *Ein Lächeln für die Jungsteinzeit. Ausgewählte Beiträge zum Neolithikum Ostösterreichs. Festschrift für Elizabeth Ruttikay. Arch. Österr.* 17,2 (Wien 2006) 31–40.

NEUGEBAUER-MARESCH et al. 2002

C. NEUGEBAUER-MARESCH / J.-W. NEUGEBAUER / K. GROSZSCHMIDT / U. RANDL / R. SEEMANN, Die Gräbergruppe vom Beginn der Bemaltkeramik im Zentrum der Kreisgrabenanlage Friebritz-Süd, Niederösterreich. *Preist. Alpina* 37, 2002, 187–253.

NEUMANN et al. 2014

D. NEUMANN / Zs. SIKLÓSI / R. SCHOLZ / M. SZILÁGYI, Preliminary report on the first season of fieldwork in Berettyóújfalu-Szilhalom. *Diss. Arch.* 3,2, 2014, 377–403.

NIESZERY 1995

N. NIESZERY, Linearbandkeramische Gräberfelder in Bayern. *Internat. Arch.* 16 (Espelkamp 1995).

NIU et al. 2013

M. NIU / T. J. HEATON / P. G. BLACKWELL / C. E. BUCK, The Bayesian approach to radiocarbon calibration curve estimation: the IntCal13, Marine13 and SHCal13 methodologies. *Radiocarbon* 55, 2013, 1905–1922.

NYERGES 2013

É. Á. NYERGES, Preliminary report on the neolithic archaeozoological finds from Alsónyék-Bátaszék, Hungary (*Előzetes jelentés Alsónyék-Bátaszék neolitikus lelőhely archaeozoológiai leletanyagáról*). *Archeometriai Műhely* 10, 2013, 209–214.

O'CONNELL et al. 2012

T. C. O'CONNELL / C. J. KNEALE / N. TASEVSKA / G. G. C. KUHNLE, The diet-body offset in human nitrogen isotopic values: a controlled dietary study. *Am. Journal Physical Anthr.* 149, 2012, 426–434.

OBELIĆ et al. 2004

B. OBELIĆ / M. KRZNARIĆ ŠKRIVANKO / B. MARIJAN / I. KRAJCAR BRONIĆ, Radiocarbon dating of Sopot culture sites (Late Neolithic) in Eastern Croatia. *Radiocarbon* 46, 2004, 245–258.

OGDEN 2011

L. A. OGDEN, *Swamlife. People, gators and mangroves entangled in the Everglades* (Minneapolis 2011).

OGRINC / BUDJA 2005

N. OGRINC / M. BUDJA, Paleodietary reconstruction of a Neolithic population in Slovenia: a stable isotope approach. *Chemical Geol.* 218, 2005, 103–116.

OROSS 2004

K. OROSS, Das neolithische Dorf von Balatonszárszó. *Forschungen zwischen 2000–2002. Antaeus* 27, 2004, 61–80.

OROSS 2009

K. OROSS, Sag mir, wo die Pfosten sind, wo sind sie geblieben? Bemerkungen zur Frage der linearbandkeramischen Hausgrundrisse mit drei Pfostenreihen in Ungarn. *Ősrég. Levelek* 10, 2009, 77–88.

OROSS 2010

K. OROSS, Architecture of the Linearbandkeramik settlement at Balatonszárszó–Kis-erdei-dűlő in central Transdanubia. In: D. Gheorghiu (ed.), *Neolithic and Chalcolithic archaeology in Eurasia: building techniques and spatial organisation. Proceedings of the 15. World Congress UISPP, Lisbon, 4–9 September 2006. BAR Internat. Ser. 2097* (Oxford 2010) 63–80.

OROSS 2013a

K. OROSS, Balatonszárszó–Kis-erdei-dűlő lelőhely középső neolit településszerkezete és közép-európai párhuzamai (The Middle Neolithic settlement structure of the site at Balatonszárszó–Kis-erdei-dűlő in a central European context). PhD thesis, Eötvös Loránd University (Budapest 2013).

OROSS 2013b

K. OROSS, Regional traits in the LBK architecture of Transdanubia. In: A. Anders / G. Kulcsár (eds), *Moments in time. Papers presented to Pál Raczky on his 60th birthday* (Budapest 2013) 187–202.

OROSS / BÁNFFY 2009

K. OROSS / E. BÁNFFY, Three successive waves of Neolithisation: LBK development in Transdanubia. *Doc. Praehist.* 36. *Neolithic Stud.* 16 (Ljubljana 2009) 175–189.

OROSS / MARTON 2012

K. OROSS / T. MARTON, Neolithic burials of the Linearbandkeramik settlement at Balatonszárszó and their European context. *Acta Arch. Acad. Scien. Hungaricae* 63, 2012, 257–299.

OROSS / SIKLÓSI 2012

K. OROSS / Zs. SIKLÓSI, Relative and absolute chronology of the Early Neolithic in the Great Hungarian Plain. In: A. Anders / Zs. Siklósi (eds), *The first Neolithic sites in central / south-east European transect III. The Körös culture in eastern Hungary. BAR Internat. Ser. 2334* (Oxford 2012) 129–159.

OROSS et al. 2010

K. OROSS / T. MARTON / A. WHITTLE / R. E. M. HEDGES / L. J. E. CRAMP, Die Siedlung der Balaton-Lasinja-Kultur in Balatonszárszó–Kis-erdei-dűlő. In: J. Šuteková / P. Pavúk / P. Kalábková / B. Kovár (eds), *PANTA RHEI. Studies on the chronology and cultural development of*

- south-eastern and central Europe in earlier prehistory presented to Juraj Pavúk on the occasion of his 75th birthday. *Stud. Arch. Mediaevalia* 11 (Bratislava 2010) 379–405.
- OROSS et al. this volume (a)
K. OROSS / E. BÁNFFY / A. OSZTÁS / T. MARTON / É. Á. NYERGES / A. SZÉCSÉNYI-NAGY / K. KÖHLER / K.W. ALT / C. BRONK RAMSEY / T. GOSLAR / B. KROMER / D. HAMILTON, The early days of Neolithic Alsónyék: the Starčevo occupation.
- OROSS et al. this volume (b)
K. OROSS / A. OSZTÁS / T. MARTON / É. Á. NYERGES / K. KÖHLER / Zs. GALLINA / K. SOMOGYI / E. BÁNFFY / C. BRONK RAMSEY / T. GOSLAR / B. KROMER / D. HAMILTON, Longhouse times: dating the Alsónyék LBK settlement.
- OROSS et al. this volume (c)
K. OROSS / A. OSZTÁS / T. MARTON / K. KÖHLER / J. G. ÓDOR / A. SZÉCSÉNYI-NAGY / E. BÁNFFY / K. W. ALT / C. BRONK RAMSEY / B. KROMER / A. BAYLISS / D. HAMILTON / A. WHITTLE, Midlife changes: the Sopot burial ground at Alsónyék-Bátaszék.
- ORSCHIEDT 1998
J. ORSCHIEDT, Bandkeramische Siedlungsbestattungen in Südwestdeutschland. *Archäologische und anthropologische Befunde* (Rahden 1998).
- ORTNER 2003
D. J. ORTNER, Identification of pathological conditions in human skeletal remains (2nd ed.) (San Diego 2003).
- OSZTÁS et al. 2004
A. OSZTÁS / T. MARTON / A. SÓFALVI, Szólád–Kisaszó. In: Sz. Honti / K. Belényesy / Sz. Fábíán / Zs. Gallina / Á. D. Hajdú / B. Hansel / T. Horváth / V. Kiss / I. Koós / T. Marton / P. G. Németh / K. Oross / A. Oszás / P. Polgár / J. P-Szeőke / G. Serlegi / Zs. Siklósi / A. Sófalvi / G. Virágos, A tervezett M7-es autópálya Somogy megyei szakaszának megelőző régészeti feltárása (2002–2003). *Előzetes jelentés III. Somogyi Múz. Közl.* 16, 2004, 61–63.
- OSZTÁS et al. 2012
A. OSZTÁS / I. ZALAI-GAÁL / E. BÁNFFY, Alsónyék–Bátaszék: a new chapter in the research of Lengyel culture. *Doc. Prehist.* 39. Neolithic Stud. 19 (Ljubljana 2012) 377–396.
- OSZTÁS et al. this volume (a)
A. OSZTÁS / E. BÁNFFY / I. ZALAI-GAÁL / K. OROSS / T. MARTON / K. SOMOGYI, Alsónyék-Bátaszék: introduction to a major Neolithic settlement complex in south-east Transdanubia, Hungary.
- OSZTÁS et al. this volume (b)
A. OSZTÁS / I. ZALAI-GAÁL / E. BÁNFFY / T. MARTON / É. Á. NYERGES / K. KÖHLER / K. SOMOGYI / Zs. GALLINA / C. BRONK RAMSEY / E. DUNBAR / B. KROMER / A. BAYLISS / D. HAMILTON / P. MARSHALL / A. WHITTLE, Coalescent community at Alsónyék: the timings and duration of Lengyel burials and settlement.
- OTTAWAY 1973
B. OTTAWAY, Dispersion diagrams: a new approach to the display of ^{14}C dates. *Archaeometry* 15, 1973, 5–12.
- PALUCH 2004
T. PALUCH, A Körös-Starčevo kultúra temetkezései (Die Bestattungen der Körös-Starčevo-Kultur). *Nyíregyházi Jósza András Múz. Évk.* 46, 2004, 23–51.
- PALUCH 2007
T. PALUCH, The Körös culture graves. In: J. Makkay (ed.), The excavations of the Early Neolithic Sites of the Körös culture in the Körös valley, Hungary. The final report. I. The excavations: stratigraphy, structures and graves (Trieste 2007) 247–254.

PARET 1942

O. Paret, Vorgeschichtliche Wohngruben? *Germania* 26, 1942, 84–103.

PARKINSON et al. 2002

W. A. PARKINSON / A. GYUCHA / R. W. YERKES, The Neolithic-Copper age transition on the Great Hungarian Plain: recent excavations at the Tiszapolgár culture settlement at Vésztő-Bikeri. *Antiquity* 76, 2002, 619–620.

PARKINSON et al. 2004

W. A. PARKINSON / A. GYUCHA / R. W. YERKES, The transition to the Copper Age on the Great Hungarian Plain. The Körös Regional Archaeological Project: excavations at Vésztő-Bikeri and Körösladány-Bikeri, Hungary, 2000–2002. *Journal Field Arch.* 29, 2004, 101–121.

PARZINGER 1993

H. PARZINGER, Studien zur Chronologie und Kulturgeschichte der Jungstein-, Kupfer- und Frühbronzezeit zwischen Karpaten und Taurus (Mainz 1993).

PARZINGER 2015

H. PARZINGER, Die Kinder des Prometheus. Eine Geschichte der Menschheit vor der Erfindung der Schrift (München 2015).

PATAKI 1936

J. PATAKI, A Sárköz gazdaság- és településföldrajza. *Geogr. Pannonica* 21 (Szigetvár 1936).

PATAY 1966–1967

P. PATAY, Adatok Budapest környékének újkőkörához és rézkörához. Angaben zum Neolithikum und zur Kupferzeit der Umgebung von Budapest. *Folia Arch.* 18, 1966–67, 7–26.

PAVLŮ 2000

I. PAVLŮ, Life on a Neolithic site. Bylany – a situational analysis of artefacts (Prague 2000).

PAVŮK 1962

J. PAVŮK, Gliederung der Volutenkeramik in der Slowakei. *Štud. Zvesti Arch. Ústavu* 9, 1962, 5–20.

PAVŮK 1969a

J. PAVŮK, Chronologie der Želiezovce-Gruppe. *Slovenská Arch.* 17, 1969, 269–367.

PAVŮK 1969b

J. PAVŮK, Anteil des Želiezovce-Typus an der Genesis der Lengyel-Kultur. *Štud. Zvesti Arch. Ústavu* 17, 1969, 345–360.

PAVŮK 1980

J. PAVŮK, Ältere Linearkeramik in der Slowakei. *Slovenská Arch.* 28, 1980, 7–90.

PAVŮK 1994

J. PAVŮK, Štúrovo. Ein Siedlungsplatz der Kultur mit Linearkeramik und der Želiezovce-Gruppe (Nitra 1994).

PAVŮK 1997

J. PAVŮK, The Vinča culture and beginning of the Linear Pottery. In: M. Lazić (ed.), *Antidoron: Completis LXV annis Dragoslavo Srejšović ab amicis collegis discipulis oblatum* (Belgrade 1997) 168–178.

PAVŮK 2003

J. PAVŮK, Hausgrundrisse der Lengyel-Kultur in der Slowakei. In: J. Eckert / U. Eisenhauer / A. Zimmermann (eds), *Archäologische Perspektiven. Analysen und Interpretationen im Wandel. Festschrift für Jens Lüning zum 65. Geburtstag*. *Internat. Arch. Stud. Honoraria* 20 (Rahden 2003) 455–469.

PAVŮK 2004

J. PAVŮK, Kommentar zu einem Rückblick nach vierzig Jahren auf die Gliederung der Lengyel-Kultur. *Slovenská Arch.* 52, 2004, 139–160.

PAVÚK 2007

J. PAVÚK, Zur Frage der Entstehung und Verbreitung der Lengyel-Kultur. In: J. K. Kozłowski / P. Raczky (eds), *The Lengyel, Polgár and related cultures in the Middle/Late Neolithic in central Europe* (Kraków 2007) 11–28.

PAVÚK 2009

J. PAVÚK, Die Entwicklung der Želiezovce-Gruppe und die Entstehung der Lengyel-Kultur. In: A. Zeeb-Lanz (ed.), *Krisen – Kulturwandel – Kontinuitäten. Zum Ende der Bandkeramik in Mitteleuropa. Beiträge der Internationalen Tagung in Herxheim bei Landau (Pfalz) vom 14.–17. Juni 2007. Internat. Arch. – Arbeitsgemeinschaft, Symposium, Tagung, Kongress 10* (Rahden 2009) 249–266.

PÉCSI 1959

M. PÉCSI, *A magyarországi Duna-völgy kialakulása és felszínalakítása* (Budapest 1959).

PERÉZ 2011

V. R. PERÉZ, Rethinking violence: behavioural and cultural implications for ancestral Pueblo populations (AD 900–1300). In: K. T. Lillios (ed.), *The American southwest (AD 900–1600) and the Iberian peninsula (3000–1500 BC)* (Oxford 2011) 121–151.

PESCHEL 1992

CH. PESCHEL, Regel und Ausnahme. Linearbandkeramische Bestattungssitten in Deutschland und angrenzenden Gebieten, unter besonderer Berücksichtigung der Sonderbestattungen. *Internat. Arch.* 9 (Buch am Erlbach 1992).

PETCHEY / GREEN 2005

F. PETCHEY / R. C. GREEN, Use of three isotopes to calibrate human bone radiocarbon determinations from Kainapirina (SAC), Watom Island, Papua New Guinea. *Radiocarbon* 47, 2005, 181–192.

PETCHEY et al. 2011

F. PETCHEY / M. SPRIGGS / F. LEACH / M. SEED / C. SAND / M. PIETRUSEWSKY / K. ANDERSON, Testing the human factor: radiocarbon dating the first peoples of the South Pacific. *Journal Arch. Scien.* 38, 2011, 29–44.

PETRASCH 2001

J. PETRASCH, „Seid fruchtbar und mehret euch und füllet die Erde und machet sie euch untertan“: Überlegungen zur demographischen Situation der bandkeramischen Landnahme. *Arch. Korrb.* 31, 2001, 13–25.

PETRES 1954

É. F. PETRES, Újabb-kőkori sírok Bicskén. *Folia Arch.* 6, 1954, 22–28.

PETRES 1959

É. F. PETRES, Neolithic graves at Bicske. *Az István király Múzeum Közleményei. Bull. Mus. Roi Saint-Étienne* 9 (Székesfehérvár 1959).

PHILLIPS / GREGG 2003

D. L. PHILLIPS / J. W. GREGG, Source partitioning using stable isotopes: coping with too many sources. *Oecologia* 136, 2003, 261–269.

PLUCKHAHN 2010

T. PLUCKHAHN, The sacred and the secular revisited: the essential tensions of early village society in the Southeastern United States. In: M. S. Bandy / J. R. Fox (eds), *Becoming villagers. Comparing early village societies* (Tucson 2010) 100–118.

PODBORSKÝ 1984

V. PODBORSKÝ, Domy lidu s moravskou malovanou keramikou. Die Häuser des Volkes mit mährischer bemalter Keramik. *Sborník Prací Fil. Fak. Brno* E 29, 1984, 27–66.

PODBORSKÝ 2004

V. PODBORSKÝ, Über das geistige Leben der Träger der Lengyel-Kultur. In: B. Hänsel / E. Stude-

- níková (eds), *Zwischen Karpaten und Ägäis. Neolithikum und Ältere Bronzezeit. Gedenkschrift für Viera Němejcová-Pavúková*. Internat. Arch. Stud. Honoraria 21 (Rahden 2004) 271–283.
- PÓSA et al. 2015
A. PÓSA / F. MAIXNER / B. G. MENDE / K. KÖHLER / A. OSZTÁS / C. SOLA / O. DUTOUR / M. MASSON / E. MOLNÁR / Gy. PÁLFI / A. ZINK, Tuberculosis in Late Neolithic-Early Copper Age human skeletal remains from Hungary. In: Gy. Pálfi / O. Dutour / P. Perrin / C. Sola / A. Zink (eds), *Tuberculosis in Evolution. Proceedings of the 'ICEPT2 – TB Evolution Meeting', 23–25th March 2012, University of Szeged, Hungary*. Tuberculosis Suppl. 95,1 (Amsterdam 2015) S18–S22. <<http://dx.doi.org/10.1016/j.tube.2015.02.011>>.
- PULSZKY 1882
F. PULSZKY, Szegedi leletek. Arch. Ért. 1, 1882, 1–6.
- QUITTA / KOHL 1969
H. QUITTA / G. KOHL, Neue Radiocarbonaten zum Neolithikum und zur frühen Bronzezeit Südosteuropas und der Sowjetunion. Zeitschr. Arch. 3, 1969, 223–255.
- QUITTA / KOHL 1970
H. QUITTA / G. KOHL, Berlin radiocarbon measurements IV. Radiocarbon 12, 1970, 400–420.
- RACZKY 1974
P. RACZKY, A lengyeli kultúra legkésőbbi szakaszának leletei a Dunántúlon (Funde der spätesten Phase der Lengyel-Kultur in Westungarn). Arch. Ért. 101, 1974, 185–210.
- RACZKY 1976
P. RACZKY, A Körös kultúra leletei Tiszajenőn (Funde der Körös-Kultur in Tiszajenő). Arch. Ért. 103, 1976, 171–189.
- RACZKY 1987
P. RACZKY, Öcsöd-Kováshalom. In: L. Tálás (ed.), *The Late Neolithic of the Tisza region* (Budapest, Szolnok 1987) 61–83.
- RACZKY 2005
P. RACZKY, Újkőkori ház kísérleti rekonstrukciója Polgár-Csőszhalom településéről (Experimental reconstruction of a Neolithic house at the Polgár-Csőszhalom settlement). Ősrég. Levelek 7, 2005, 24–49.
- RACZKY 2012
P. RACZKY, Research on the settlements of the Körös culture in the Szolnok area: the excavations at Szajol-Felsőföld and Szolnok-Szanda. In: A. Anders / Zs. Siklósi (eds), *The first Neolithic sites in central / south-east European transect III. The Körös culture in eastern Hungary*. BAR Internat. Ser. 2334 (Oxford 2012) 85–95.
- RACZKY 2015
P. RACZKY, Settlements in south-east Europe. In: C. Fowler / J. Harding / D. Hofmann (eds), *The Oxford handbook of Neolithic Europe* (Oxford 2015) 235–253.
- RACZKY / ANDERS 2008
P. RACZKY / A. ANDERS, Late Neolithic spatial differentiation at Polgár-Csőszhalom, eastern Hungary. In: D. W. Bailey / A. Whittle / D. Hofmann (eds.), *Living well together? Settlement and materiality in the Neolithic of south-east and central Europe* (Oxford 2008) 35–53.
- RACZKY / ANDERS 2010a
P. RACZKY / A. ANDERS, The times they are a-changin': revisiting the chronological framework of the Late Neolithic settlement complex at Polgár-Csőszhalom. In: J. Šuteková / P. Pavúk / P. Kalábková / B. Kovár (eds), *PANTA RHEI. Studies on the chronology and cultural development of south-eastern and central Europe in earlier prehistory presented to Juraj Pavúk on the occasion of his 75th birthday*. Stud. Arch. Mediaevalia 11 (Bratislava 2010) 357–378.

RACZKY / ANDERS 2010b

P. RACZKY / A. ANDERS, Activity loci and data for spatial division at a Late Neolithic site-complex (Polgár-Csőszhalom: a case study). In: S. Hansen (ed.), *Leben auf dem Tell als soziale Praxis* (Bonn 2010) 143–163.

RACZKY / SIKLÓSI 2013

P. RACZKY / Zs. SIKLÓSI, Reconsideration of the Copper Age chronology of the eastern Carpathian basin: a Bayesian approach. *Antiquity* 87, 2013, 555–573.

RACZKY et al. 1985

P. RACZKY / M. SELEANU / G. RÓZSA / Cs. SIKLÓDI / G. KALLA / B. CSORNAY / H. ORAVECZ / M. VICZE / E. BÁNFFY / S. BÖKÖNYI / P. SOMOGYI, Öcsöd-Kováshalom. The intensive topographical and archaeological investigation of a late neolithic site. Preliminary report. *Mitt. Arch. Inst. Ungar. Akad.* 14, 1985, 251–278.

RACZKY et al. 2015

P. RACZKY / A. ANDERS / K. SEBŐK / P. CSIPPÁN / Zs. TÓTH, The times of Polgár-Csőszhalom: chronologies of human activities in a Late Neolithic settlement in northeastern Hungary. In: S. Hansen / P. Raczky / A. Anders / A. Reingruber (eds), *Neolithic and Copper Age between the Carpathians and the Aegean Sea. Chronologies and technologies from the 6th to 4th millennia BCE*. *Arch. Eurasien* 31 (Bonn 2015), 21–48.

RASSMANN et al. 2015

K. RASSMANN / C. MISCHKA / M. FURHOLT / R. OHLRAU / K. RADLOFF / K. WINKELMANN / G. SERLEGI / T. MARTON / A. OSZTÁS / K. OROSS / E. BÁNFFY, Large scale geomagnetic prospection on Neolithic sites in Hungary I. *Hungarian Arch. E-Journal*, 2015 Spring. <http://files.archaeolingua.hu/2015TA/Rassmann_E15TA.pdf>.

RAUTMAN 2013

A. E. RAUTMAN, Social integration and the built environment of aggregated communities in the North American Puebloan Southwest. In: J. Birch (ed.), *From prehistoric villages to cities. Settlement aggregation and community transformation* (New York 2013) 111–133.

REGENYE 1993–1994

J. REGENYE, Előzetes jelentés a lengyeli kultúra szentgáli telepének kutatásáról (Preliminary report of the Lengyel culture settlement from Szentgál). *Veszprém Megyei Múz. Közl.* 19–20, 1993–1994, 69–88.

REGENYE 1994

J. REGENYE, Die Funde der Sopot-Kultur in Ajka. *Nyíregyházi Jósa András Múz. Évk.* 34, 1994, 203–219.

REGENYE 1996a

J. REGENYE, Die Sopot-Kultur in Transdanubien und ihre südliche Beziehungen. In: F. Draşovean (ed.), *The Vinča culture, its role and cultural connections* (Timișoara 1996) 163–174.

REGENYE 1996b

J. REGENYE, A Sopot kultúra lelőhelyei a Balaton-felvidéken (Fundorte der Sopot-Kultur auf dem Balatonhochland). *Commun. Arch. Hungariae* 1996, 13–42.

REGENYE 1998

J. REGENYE, Some questions concerning the end of the Middle Neolithic in western Hungary (Transdanubia). In: F. Draşovean (ed.), *The Late Neolithic of the Middle Danube region* (Timișoara 1998) 109–116.

REGENYE 2002a

J. REGENYE, Chronological situation of the Sopot culture in Hungary. *Veszprém Megyei Múz. Közl.* 22, 2002, 31–42.

REGENYE 2002b

J. REGENYE, Transdanubian Linear Pottery culture in Balatonalmádi-Vörösbény. *Antaeus* 25, 2002, 221–236.

REGENYE 2004

J. REGENYE, Háztípusok és településszerkezet a késői lengyeli kultúrában veszprémi és szentgáli példák alapján (House types and settlement structure in the Late Lengyel culture, based in the examples at Veszprém and Szentgál). *Veszprém Megyei Múz. Közl.* 23, 2004, 25–47.

REGENYE 2007a

J. REGENYE, A Starčevo-kultúra települése a Tihanyi-félszigeten (A settlement of the Starčevo culture on the Tihany peninsula). *Ősrég. Levelek* 8–9, 2007, 5–15.

REGENYE 2007b

J. REGENYE, The Late Lengyel culture in Hungary as reflected by the excavation at Veszprém. In: J. K. Kozłowski and P. Raczky (eds), *The Lengyel, Polgár and related cultures in the Middle / Late Neolithic in central Europe* (Kraków 2007) 381–396.

REGENYE 2010

J. REGENYE, What about the other side: Starčevo and LBK settlements north of Lake Balaton. In: J. K. Kozłowski / P. Raczky (eds), *Neolithization of the Carpathian basin: northernmost distribution of the Starčevo/Körös culture* (Kraków / Budapest 2010) 53–64.

REGENYE 2011a

J. REGENYE, Tihany-Apáti, a Starčevo Culture site in Western Hungary. In: K. Botić / S. Kovačević / D. Ložnjak Dizdār (eds), *Panonski prapovijesni osviti. Zbornik radova posvećenih Korneliji Minichreiter uz 65. obljetnicu života* (Zagreb 2011) 131–149.

REGENYE 2011b

J. REGENYE, Kő és agyag. Település és életmód a neolitikum-rézkor fordulóján a Dunántúlon. *Stone and clay. Settlement and way of life at the Neolithic/Copper age transition in Transdanubia* (Veszprém 2011).

REIMER et al. 2013

P. J. REIMER / E. BARD / A. BAYLISS / J. W. BECK / P. BLACKWELL / C. BRONK RAMSEY / C. E. BUCK / H. CHENG / R. L. EDWARDS / M. FRIEDRICH / P. M. GROOTES / T. P. GUILDERTSON / H. HAFLIDASON / I. HAJDAS / C. HATTÉ / T. J. HEATON / D. L. HOFFMANN / A. G. HOGG / K. A. HUGHEN / K. F. KAISER / B. KROMER / S. W. MANNING / M. NIU / R. W. REIMER / D. A. RICHARDS / E. M. SCOTT / J. R. SOUTHON / R. A. STAFF / C. S. M. TURNER / J. VAN DER PLICHT, IntCal13 and Marine13 radiocarbon age calibration curves 0–50,000 years cal BP. *Radiocarbon* 55, 2013, 1869–1887.

REIMER et al. 2015

P. J. REIMER / S. HOPER / J. McDONALD / R. REIMER / S. SVYATKO / M. THOMPSON, The Queen's University, Belfast: laboratory protocols used for AMS radiocarbon dating at the ¹⁴CHRONO Centre. *English Heritage Research Report* 5 (Swindon 2015).

REITSEMA 2013

L. J. REITSEMA, Beyond diet reconstruction: stable isotope applications to human physiology, health, and nutrition. *Am. Journal Human Biol.* 25,4, 2013, 445–456. <<http://doi:10.1002/ajhb.22398>>.

RICHARDS et al. 2001

M. P. RICHARDS / B. T. FULLER / R. E. M. HEDGES, Sulphur isotopic variation in ancient bone collagen from Europe: implications for human palaeodiet, residence mobility, and modern pollutant studies. *Earth and Planetary Scien. Letters* 191, 2001, 185–190.

RICHARDS et al. 2002

M. P. RICHARDS / S. MAYS / B. T. FULLER, Stable carbon and nitrogen isotope values of bone

- and teeth reflect weaning age at the medieval Wharram Percy site, Yorkshire, UK. *Am. Journal Physical Anthr.* 119, 2002, 205–210.
- RICOEUR 1984
P. RICOEUR, *Time and narrative* vol. 1 (trans. K. Blamey / D. Pellauer). (Chicago, London 1984).
- ROSCOE 1996
P. B. ROSCOE, War and society in Sepik New Guinea. *Journal Royal Anthr. Inst. Great Britain* 2, 1996, 645–666.
- ROTH / HOBSON 2000
J. D. ROTH / K. A. HOBSON, Stable carbon and nitrogen isotopic fractionation between diet and tissue of captive red fox: implications for dietary reconstruction. *Canadian Journal Zool.* 78, 2000, 848–852.
- RÜCK 2007
O. RÜCK, *Neue Aspekte und Modelle in der Siedlungsforschung zur Bandkeramik. Die Siedlung Weisweiler 111 auf der Aldenhovener Platte*, Kr. Düren (Rahden 2007).
- RÜCK 2012
O. RÜCK, Vom Hofplatz zur Häuserzeile. Das bandkeramische Dorf – Zeilenstrukturen und befundfreie Bereiche offenbaren ein neues Bild der Siedlungsstrukturen. In: F. Kreienbrink / M. Cladders / H. Stäuble / T. Tischendorf / S. Wolfram (eds), *Siedlungsstruktur und Kulturwandel in der Bandkeramik* (Dresden 2012) 20–42.
- RUSSELL 1998
N. RUSSELL, Cattle as wealth in Neolithic Europe: where's the beef? In: D. Bailey (ed.), *The archaeology of value. Essays on prestige and the process of valuation*. BAR Internat. Ser. 730 (Oxford 1998) 42–54.
- RUTTKAY 1976
E. RUTTKAY, Beitrag zum Problem des Epilengyel-Horizontes in Österreich. *Arch. Austriaca* 13, 1976, 285–319.
- RUTTKAY 1983–84
E. RUTTKAY, Zusammenfassender Forschungsstand der Lengyel-Kultur in NÖ. *Mitt. Österr. Arbeitsgemeinschaft Ur- u. Frühgesch.* 33–34, 1983–84, 221–246.
- RUTTKAY 1985
E. RUTTKAY, Ein Brandgrab der Lengyelkultur mit einer Henkelschale aus Ursprung, Niederösterreich. *Ann. Naturhist. Mus. Wien* A89, 1985, 211–224.
- RUTTKAY / TESCHLER-NICOLA 1983
E. RUTTKAY / M. TESCHLER-NICOLA, Zwei Lengyel-Gräber aus Niederösterreich. *Ann. Naturhist. Mus. Wien* A87, 1983, 211–235.
- SALQUE et al. 2013
M. SALQUE / P. I. BOGUCKI / J. PYZEL / I. SOBKOWIAK-TABAKA / R. GRYGIEL / M. SZMYT / R. P. EVERSLED, Earliest evidence for cheese making in the sixth millennium BC in northern Europe. *Nature* 493, 2013, 522–525.
- SAYLE et al. 2014
K. L. SAYLE / G. T. COOK / P. L. ASCOUGH / H. GESTSDÓTTIR / W. D. HAMILTON / T. H. MCGOVERN, Utilization of $\delta^{13}\text{C}$, $\delta^{15}\text{N}$, and $\delta^{34}\text{S}$ analyses to understand ^{14}C dating anomalies within a Late Viking Age community in Northeast Iceland. *Radiocarbon* 56, 2014, 811–821.
- SCHIER 1996
W. SCHIER, The relative and absolute chronology of Vinča: new evidence from the type site. In: F. Draşovean (ed.), *The Vinča culture, its role and cultural connections* (Timişoara 1996), 141–162.
- BERICHT RGK 94, 2013

SCHIER 2008

W. SCHIER, Uivar: a late Neolithic-early Eneolithic fortified tell site in western Romania. In: D. Bailey / A. Whittle / D. Hofmann (eds), *Living well together? Settlement and materiality in the Neolithic of south-east and central Europe* (Oxford 2008) 54–67.

SCHLANGER 1992

S. H. SCHLANGER, Recognising persistent places in Anasazi settlement systems. In: J. Rossignol / L. Wandsnider (eds), *Space, time and archaeological landscapes* (New York 1992) 91–112.

SCHMIDT 1945

R. R. SCHMIDT, *Die Burg Vučedol* (Zagreb 1945).

SCHMOTZ 1985

K. SCHMOTZ, Das linearbandkeramische Gräberfeld von Stephansposching, Ldkr. Degendorf, Niederbayern. *Arch. Jahr Bayern* 1985 (1986) 31–33.

SCHULTING / FIBIGER 2012

R. SCHULTING / L. FIBIGER (eds), *Sticks, stones, and broken bones. Neolithic violence in a European perspective* (Oxford 2012).

SCHWARZ 2013

K. R. SCHWARZ, Through the rearview mirror: rethinking the Classic Maya Collapse in the light of Postclassic rural social transformation. *Journal Social Arch.* 13, 2013, 242–265.

SCOTT et al. 2010a

E. M. SCOTT / G. T. COOK / P. NAYSMITH, A report on phase 2 of the fifth international radiocarbon intercomparison (VIRI). *Radiocarbon* 52, 2010, 846–858.

SCOTT et al. 2010b

E. M. SCOTT / G. T. COOK / P. NAYSMITH, The fifth radiocarbon intercomparison (VIRI): an assessment of laboratory performance in stage 3. *Radiocarbon* 52, 2010, 859–865.

SELMECZI 1969

L. SELMECZI, Das Wohnhaus der Körös-Gruppe von Tiszajenő. Neuere Angaben zu den Haustypen des Frühneolithikums. *Móra Ferenc Múz. Évk.* 2, 1969, 17–22.

SERLEGI et al. 2013

G. SERLEGI / K. RASSMANN / A. OSZTÁS / C. MISCHKA / M. FURHOLT / R. OHLRAU / K. WINKELMANN / E. BÁNFFY, Large-surface magnetometer survey of Neolithic sites in the Kalocsa and Tolna Sárköz. *Hungarian Arch. E-journal*, Spring 2013. <http://www.hungarianarchaeology.hu/wp-content/uploads/2013/05/eng_Serlegi_13T.pdf>.

SHENNAN 2013

S. SHENNAN, Demographic continuities and discontinuities in Neolithic Europe: evidence, methods and implications. *Journal Arch. Method and Theory* 20, 2013, 300–311.

SHENNAN et al. 2013

S. J. SHENNAN / S. S. DOWNEY / A. TIMPSON / K. EDINBOROUGH / S. COLLEDGE / T. KERIG / K. MANNING / M. G. THOMAS, Regional population collapse followed initial agriculture booms in mid-Holocene Europe. *Nature Commun.* 4, 2013, 2486. <<http://doi:10.1038/ncomms3486>>.

SHERRATT 1983a

A. G. SHERRATT, The development of Neolithic and Copper Age settlement in the Great Hungarian Plain. II: site survey and settlement dynamics. *Oxford Journal Arch.* 2, 1983, 13–41.

SHERRATT 1983b

A. G. SHERRATT, Early agrarian settlement in the Körös region of the Great Hungarian Plain. *Acta Arch. Acad. Scien. Hungaricae* 35, 1983, 155–169.

SHISHLINA et al. 2007

N. I. SHISHLINA / J. VAN DER PLICHT / R. E. M. HEDGES / E. P. ZAZOVSKAYA / V. S. SEVASTYANOV / O. A. CHICHAGOVA, The catacomb culture of the north-west Caspian steppe: ¹⁴C chronology, reservoir effect and palaeodiet. *Radiocarbon* 49, 2007, 713–726.

SIKLÓSI 2010

Zs. SIKLÓSI, A társadalmi egyenlőtlenség nyomai a késő neolitikumban a Kárpát-medence keleti felén (Traces of social inequality during the Late Neolithic in the eastern Carpathian basin). PhD thesis, Eötvös Loránd University (Budapest 2010).

SIKLÓSI 2012

Zs. SIKLÓSI (ed.), Catalogue. In: A. Anders / Zs. Siklósi (eds), The first Neolithic sites in central / south-east European transect III. The Körös culture in eastern Hungary. BAR Internat. Ser. 2334 (Oxford 2012) 231–329.

SIMON 1994

K. H. SIMON, Frühneolithische Kultgegenstände bei Gellénháza (Kom. Zala). In: G. Lőrinczy (ed.), A kőkortól a középkorig. Tanulmányok Trogmayer Ottó 60. születésnapjára. Von der Steinzeit bis zum Mittelalter. Studien zum 60. Geburtstag von Ottó Trogmayer (Szeged 1994) 53–65.

SIMON 1996

K. H. SIMON, Ein neuer Fundort der Starčevo-Kultur bei Gellénháza (Kom. Zala, Ungarn) und seine südlichen Beziehungen. In: F. Draşovean (ed.), The Vinča culture, its role and cultural connections (Timişoara 1996) 59–92.

SIMON 2003

K. H. SIMON, The Neolithic in Transdanubia up to the appearance of the Lengyel culture. In: Zs. Visy (ed.), Hungarian archaeology at the turn of the millennium (Budapest 2003) 102.

SLOTA et al. 1987

P. J. SLOTA JR / A. J. T. JULL / T. W. LINICK / L. J. TOOLIN, Preparation of small samples for ^{14}C accelerator targets by catalytic reduction of CO. Radiocarbon 29, 1987, 303–306.

SOMOGYI 2007

K. SOMOGYI, Die besonderen Grabenanlagen der Lengyel-Kultur in Kaposújlak-Várdomb-dűlő im Komitat Somogy (SW-Ungarn). In: J. K. Kozłowski / P. Raczky (eds), The Lengyel, Polgár and related cultures in the Middle / Late Neolithic in central Europe (Kraków 2007) 329–344.

SOMOGYI / GALLINA 2013

K. SOMOGYI / Zs. GALLINA, Besonderes anthropomorphes Gefäß der Lengyel-Kultur mit doppelter Gesichts- und Menschendarstellung in Alsónyék (SW-Ungarn). In: A. Anders / G. Kulcsár (eds.), Moments in time. Papers presented to Pál Raczky on his 60th birthday (Budapest 2013) 437–456.

SONG 2004

R. SONG, Reconstructing infant diet and weaning behaviour of Ancient Maya from Lamanai, Belize using Laser Ablation-Inductively Coupled Plasma-Mass Spectrometry (LA-ICP-MS). PhD thesis, University of Toronto (Toronto 2004).

SOUVATZI 2008

S. SOUVATZI, A social archaeology of households in Neolithic Greece. An anthropological approach (Cambridge 2008).

SPANGENBERG et al. 2008

J. E. SPANGENBERG / S. JACOMET / J. SCHIBLER, Chemical analyses of organic residues in archaeological pottery from Arbon Bleiche 3, Switzerland: evidence for dairying in the late Neolithic. Journal Arch. Scien. 33, 2008, 1–13.

SRAKA 2012

M. SRAKA, ^{14}C calendar chronologies and cultural sequences in 5th millennium BC in Slovenia and neighbouring regions. Doc. Praehist. 39. Neolithic Stud. 19 (Ljubljana 2012) 349–376.

SRAKA 2014

M. SRAKA, Bayesian modelling the ^{14}C calendar chronologies of Neolithic-Eneolithic transition. Case studies from Slovenia and Croatia. In: W. Schier / F. Draşovean (eds), The Neolithic and

- Eneolithic in southeast Europe. New approaches to dating and cultural dynamics in the 6th to 4th millennium BC (Rahden 2014) 369–396.
- SREJOVIĆ / TASIĆ 1990
D. SREJOVIĆ / N. TASIĆ (eds), *Vinča and its world* (Beograd 1990).
- STADLER / KOTOVA 2010
P. STADLER / N. KOTOVA, Early Neolithic settlement from Brunn Wolfholz in Lower Austria and the problem of the origin of (Western) LBK. In: J. K. Kozłowski / P. Raczky (eds), *Neolithization of the Carpathian basin: northernmost distribution of the Starčevo/Körös culture* (Kraków / Budapest 2010) 325–348.
- STADLER / RUTTKAY 2007
P. STADLER / E. RUTTKAY, Absolute chronology of the Moravian-Eastern-Austrian Group (MOG) of the Painted Pottery (Lengyel-Culture) based on new radiocarbon dates from Austria. In: J. K. Kozłowski / P. Raczky (eds), *The Lengyel, Polgár and related cultures in the Middle/Late Neolithic in central Europe* (Kraków 2007) 117–146.
- STÄUBLE 1995
H. STÄUBLE, Radiocarbon dates of the Earliest Neolithic of central Europe. *Radiocarbon* 37, 1995, 227–237.
- STÄUBLE 2005
H. STÄUBLE, Häuser und absolute Datierung der Ältesten Bandkeramik. *Univforsch. Prähist. Arch.* 117 (Bonn 2005).
- STEHLI 1989a
P. STEHLI, Merzbachtal – Umwelt und Geschichte einer bandkeramischen Siedlungskammer. *Germania* 67, 1989, 51–76.
- STEHLI 1989b
P. STEHLI, Zur relativen und absoluten Chronologie der Bandkeramik in Mitteleuropa. In: J. Rulf (ed.), *Bylany Seminar 1987. Collected papers* (Praha 1989) 69–78.
- STEIER / ROM 2000
P. STEIER / W. ROM, The use of Bayesian statistics for ¹⁴C dates of chronologically ordered samples: a critical analysis. *Radiocarbon* 42, 2000, 183–198.
- STIEREN 1951
A. STIEREN, Bandkeramische Großbauten bei Bochum und ihre Parallelen in Mitteleuropa. *Ber. RGK* 33, 1951 (1943–50) 61–88.
- STUIVER / BRAZIUNAS 1993
M. STUIVER / T. F. BRAZIUNAS, Modeling atmospheric ¹⁴C influences and ¹⁴C ages of marine samples to 10,000 BC. *Radiocarbon* 35, 1993, 137–189.
- STUIVER / REIMER 1993
M. STUIVER / P. J. REIMER, Extended ¹⁴C data base and revised CALIB 3.0 ¹⁴C age calibration program. *Radiocarbon* 35, 1993, 215–230.
- SZÉCSÉNYI-NAGY 2015
A. SZÉCSÉNYI-NAGY, Molecular genetic investigation of the Neolithic population history in the western Carpathian Basin. *Molekulargenetische Untersuchungen zur Bevölkerungsgeschichte des Karpatenbeckens*. PhD thesis, University of Mainz (Mainz 2015). <<http://d-nb.info/1072530740/34>>.
- SZÉCSÉNYI-NAGY et al. 2014
A. SZÉCSÉNYI-NAGY / G. BRANDT / V. KEERL / J. JAKUCS / W. HAAK / S. MÖLLER-RIEKER / K. KÖHLER / B. G. MENDE / M. FECHER / K. OROSS / T. MARTON / A. OSZTÁS / V. KISS / GY. PÁLFI / E. MOLNÁR / K. SEBŐK / A. CZENE / T. PALUCH / M. ŠLAUS / M. NOVAK / N. PEČINA-ŠLAUS / B. ŐSZ / V. VOICSEK / K. SOMOGYI / G. TÓTH / B. KROMER / E. BÁNFFY / K. W. ALT, Tracing

- the genetic origin of Europe's first farmers reveals insights into their social organization. <<http://dx.doi.org/10.1101/008664>> <<http://biorxiv.org/content/early/2014/09/03/008664>>.
- SZÉCSÉNYI-NAGY et al. 2015
A. SZÉCSÉNYI-NAGY / G. BRANDT / W. HAAK / V. KEERL / J. JAKUCS / S. MÖLLER-RIEKER / K. KÖHLER / B. G. MENDE / K. OROSS / T. MARTON / A. OSZTÁS / V. KISS / M. FECHER / GY. PÁLFI / E. MOLNÁR / K. SEBŐK / A. CZENE / T. PALUCH / M. ŠLAUS / M. NOVAK / N. PEČINA-ŠLAUS / B. ŐSZ / V. VOICSEK / K. SOMOGYI / G. TÓTH / B. KROMER / E. BÁNFFY / K. W. ALT, Tracing the genetic origin of Europe's first farmers reveals insights into their social organization. *Proc. Royal Soc. B* 282/1085, 2015, 20150339; DOI: 10.1098/rspb.2015.0339.
- TAINTER 1988
J. TAINTER, *The collapse of complex societies* (Cambridge 1988).
- TAINTER 2006
J. TAINTER, The archaeology of overshoot and collapse. *Annu. Rev. Anthr.* 35, 2006, 59–76.
- TÁLAS 1987
L. TÁLAS (ed.), *The Late Neolithic of the Tisza region* (Budapest, Szolnok 1987).
- TASIĆ et al. 2015
N. TASIĆ / M. MARIĆ / K. PENEZIĆ / D. FILIPOVIĆ / K. BOROJEVIĆ / D. BORIĆ / P. REIMER / N. RUSSELL / A. BARCLAY / A. BAYLISS / B. GAYDARSKA / A. WHITTLE, The end of the affair: formal chronological modelling for the top of the Neolithic tell of Vinča-Belo Brdo. *Antiquity* 89, 2015, 1064–1082.
- TASIĆ et al. in press [a]
N. TASIĆ / M. MARIĆ / C. BRONK RAMSEY / B. KROMER / A. BARCLAY / A. BAYLISS / N. BEAVAN / B. GAYDARSKA / A. WHITTLE, Vinča-Belo Brdo, Serbia: the times of a tell. *Germania* 93.
- TASIĆ et al. in press [b]
N. TASIĆ / M. MARIĆ / D. FILIPOVIĆ / K. PENEZIĆ / E. DUNBAR / P. REIMER / A. BARCLAY / A. BAYLISS / B. GAYDARSKA / A. WHITTLE, Interwoven strategies for refining the chronology of the Neolithic tell of Vinča-Belo Brdo, Serbia *Radiocarbon* 58(4), 2016.
- TAYLOR / BAR-YOSEF 2014
R. E. TAYLOR / O. BAR-YOSEF, *Radiocarbon dating: an archaeological perspective* (2nd ed.) (Walnut Creek 2014).
- TESCHLER-NICOLA 2012
M. TESCHLER-NICOLA, The Early Neolithic site Asparn/Schletz (Lower Austria): anthropological evidence of interpersonal violence. In: R. Schulting / L. Fibiger (eds), *Sticks, stones, and broken bones. Neolithic violence in a European perspective* (Oxford 2012) 101–120.
- TEŽAK-GREGL 1991
T. TEŽAK-GREGL, Naselje korenovske kulture u Kaničkoj Ivi (Die Siedlung der Korenovo-Kultur in Kanička Iva). *Opuscula Arch.* (Zagreb) 15, 1991, 1–23.
- THORPE 2003
I. J. N. THORPE, Anthropology, archaeology, and the origin of warfare. *World Arch.* 35, 2003, 145–165.
- THRIFT 1999
N. THRIFT, Steps to an ecology of place. In: D. Massey / J. Allen / P. Sarre (eds), *Human geography today* (Cambridge 1999) 295–321.
- THRIFT 2008
N. THRIFT, *Non-representational theory. Space, politics, affect* (London 2008).
- TOČIK 1969
A. TOČIK, Erforschungstand der Lengyel-Kultur in der Slowakei. *Štud. Zvesti Arch. Ústavu* 17, 1969, 437–454.

TOMPA 1937

F. VON TOMPA, 25 Jahre Urgeschichtsforschung in Ungarn 1912–1936. Ber. RGK 24–25, 1937, 27–127.

TOMPA 1942

F. VON TOMPA, Őskor. In: K. Szendy (ed.), Budapest története I (Budapest 1942) 1–134.

TORMA 1969

I. TORMA, Neolithische Siedlung und Gräberfeld, kupferzeitliche Siedlung, bronzzeitliche Siedlung in Pári-Altacker (Vorbericht). Mitt. Arch. Inst. Ungar. Akad. 2, 1969 (1971) 27–34.

TÓTH 2013

Zs. TÓTH, Csont- és agancseszközök komplex vizsgálata a késő neolitikus Aszód-Papi földek lelőhelyén (Complex analysis of bone and antler tools at the late Neolithic site of Aszód-Papi földek.). PhD thesis, Eötvös Loránd University (Budapest 2013).

TRIGGER 1976

B. G. TRIGGER, The children of Aataentsic. A history of the Huron people to 1660 (Montreal, Kingston 1976).

TRINGHAM / KRSTIĆ 1990

R. TRINGHAM / D. KRSTIĆ, Selevac and the transformation of southeast European prehistory. In: R. Tringham / D. Krstić (eds), Selevac. A Neolithic village in Yugoslavia (Los Angeles 1990) 567–616.

TSUTAYA / YONEDA 2013

T. TSUTAYA / M. YONEDA, Quantitative reconstruction of weaning ages in archaeological human populations using bone collagen nitrogen ratios and approximate Bayesian computation. PLOS ONE 8,8, 2013, e72327. <<http://dx.doi.org/10.1371/journal.pone.0072327>>.

TUAN 1977

Y.-F. TUAN, Space and place. The perspective of experience (Minneapolis 1977).

TUZIN 2001

D. TUZIN, Social complexity in the making. A case study among the Arapesh of New Guinea (London 2001).

UBELAKER 1999

D. H. UBELAKER, Human skeletal remains. Excavation, analysis, interpretation³ (Washington 1999).

URBAN 1979

O. H. URBAN, Lengyelzeitliche Gräberfunde in Niederösterreich und Burgenland. Mitt. Österr. Arbeitsgemeinschaft Ur- u. Frühgesch. 29, 1979, 9–23.

URTON / HOBSON 2005

E. J. URTON / K. A. HOBSON, Intrapopulation variation in gray wolf isotope ($\delta^{15}\text{N}$ and $\delta^{13}\text{C}$) profiles: implications for the ecology of individuals. Oecologia 145, 2005, 317–326.

VADÁSZ 1971

É. V. VADÁSZ, Almásfüzitő–Foktorok (Komárom m., komáromi j.). Rég. Füzetek 25, 1971, 3.

VANDEPUTTE et al. 1996

K. VANDEPUTTE / L. MOENS / R. DAMS, Improved sealed-tube combustion of organic samples to CO_2 for stable isotope analysis, radiocarbon dating and percent carbon determinations. Analytical Letters 29, 1996, 2761–2773.

VEIT 1996

U. VEIT, Studien zum Problem der Siedlungsbestattungen im europäischen Neolithikum (Münster 1996).

- VENCL 1999
S. VENCL, Stone Age warfare. In: J. Carman / A. Harding (eds), *Ancient warfare. Archaeological perspectives* (Stroud 1999) 57–72.
- VIRÁG / FIGLER 2007
Zs. VIRÁG / A. FIGLER, Data on the settlement history of the Late Lengyel period of Transdanubia on the basis of two sites from the Kisalföld (Small Hungarian Plain). A preliminary evaluation of the sites Győr-Szabadrétdomb and Mosonszentmiklós-Pálmajor. In: J. K. Kozłowski / P. Raczky (eds), *The Lengyel, Polgár and related cultures in the Middle/Late Neolithic in central Europe* (Kraków 2007) 345–364.
- VISY 2003
Zs. VISY (ed.), *Hungarian archaeology at the turn of the millennium* (Budapest 2003).
- WAHL / KÖNIG 1987
J. WAHL / H. G. KÖNIG, Anthropologisch-traumatologische Untersuchung der menschlichen Skelettreste aus dem bandkeramischen Massengrab bei Talheim, Kreis Heilbronn. *Fundber. Baden-Württemberg* 12, 1987, 65–193.
- WALLACE / LINDEMAN 2013
H. D. WALLACE / M. W. LINDEMAN, Competition and cooperation: Late Classic period aggregation in the southern Tucson basin. In: J. Birch (ed.), *From prehistoric villages to cities. Settlement aggregation and community transformation* (New York 2013) 134–152.
- WANKEL 1873
J. WANKEL, Eine Opferstätte bei Raigern in Mähren. *Mitt. Anthr. Ges. Wien* 3, 1873, 75–94.
- WARD / WILSON 1978
G. K. WARD / S. R. WILSON, Procedures for comparing and combining radiocarbon age determinations: a critique. *Archaeometry* 20, 1978, 19–31.
- WATERBOLK 1971
H. T. WATERBOLK, Working with radiocarbon dates. *Proc. Prehist. Soc.* 37, 1971, 15–33.
- WATERS-RIST / KATZENBERG 2010
A. L. WATERS-RIST / M. A. KATZENBERG, The effect of growth on stable nitrogen isotope ratios in subadult bone collagen. *Internat. Journal Osteoarch.* 20, 2010, 172–191. <<http://doi:10.1002/oa.1017>>.
- WHITE / SCHWARCZ 1994
C. D. WHITE / H. P. SCHWARCZ, Temporal trends in stable isotopes for Nubian mummy tissues. *Am. Journal Physical Anthr.* 93, 1994, 165–187.
- WHITTLE 1990
A. WHITTLE, Radiocarbon dating of the Linear Pottery culture: the contribution of cereal and bone samples. *Antiquity* 64, 1990, 297–302.
- WHITTLE 2007
A. WHITTLE (ed.), *The Early Neolithic on the Great Hungarian Plain: investigations of the Körös culture site of Ecsegfalva 23, Co. Békés*. *Varia Arch. Hungarica* 21 (Budapest 2007).
- WHITTLE 2015
A. WHITTLE, Unexpected histories? South-east and central Europe. In: C. Fowler / J. Harding / D. Hofmann (eds), *The Oxford handbook of Neolithic Europe* (Oxford 2015) 1051–1071.
- WHITTLE et al. 2002
A. WHITTLE / L. BARTOSIEWICZ / D. BORIĆ / P. PETTITT / M. RICHARDS, In the beginning: new radiocarbon dates for the Early Neolithic in northern Serbia and south-east Hungary. *Antaeus* 25, 2002, 63–117.

WHITTLE et al. 2011

A. WHITTLE / F. HEALY / A. BAYLISS, *Gathering time. Dating the early Neolithic enclosures of southern Britain and Ireland* (Oxford 2011).

WHITTLE et al. 2013

A. WHITTLE / A. ANDERS / A. R. BENTLEY / P. BICKLE / L. CRAMP / L. DOMBORÓCZKI / L. FIBIGER / J. HAMILTON / R. HEDGES / N. KALICZ / Zs. E. KOVÁCS / T. MARTON / K. OROSS / I. PAP / P. RACZKY, 3. Hungary. In: P. Bickle / A. Whittle (eds), *The first farmers of central Europe. Diversity in LBK lifeways* (Oxford 2013) 49–97.

WILSHUSEN / POTTER 2010

R. H. WILSHUSEN / J. M. POTTER, *The emergence of villages in the American Southwest: cultural issues and historical perspectives*. In: M. S. Bandy / J. R. Fox (eds), *Becoming villagers. Comparing early village societies* (Tucson 2010) 165–183.

WINTERHALDER / LESLIE 2002

B. WINTERHALDER / P. LESLIE, *Risk-sensitive fertility and the variance compensation hypothesis. Evolution and Human Behavior* 23, 2002, 59–82.

WOSINSKY 1889

M. WOSINSKY, *Lengyeli ásatások 1888-ban* (Die Ausgrabungen in Lengyel im Jahre 1888). *Arch. Ért.* 9, 1889, 331–335.

WOSINSKY 1891

M. WOSINSKY, *Das prähistorische Schanzwerk von Lengyel. Seine Erbauer und Bewohner I–III* (Budapest 1891).

WYLIE 2002

A. WYLIE, *Thinking from things. Essays in the philosophy of archaeology* (Berkeley, Los Angeles 2002).

ZALAI-GAÁL 1982

I. ZALAI-GAÁL, *A lengyeli kultúra a Dél-Dunántúlon* (Die Lengyel-Kultur in Südtransdanubien). *Szekszárdi Béri Balogh Ádám Múz. Évk.* 10–11, 1982, 3–58.

ZALAI-GAÁL 1988

I. ZALAI-GAÁL, *Közép-európai neolitikus temetők szociálarchaeológiai elemzése* (Sozialarchäologische Untersuchungen des mitteleuropäischen Neolithikums aufgrund der Gräberfeldanalyse). *Szekszárdi Béri Balogh Ádám Múz. Évk.* 14, 1988, 3–178.

ZALAI-GAÁL 1990a

I. ZALAI-GAÁL, *A neolitikus körárokrendszerek kutatása a Dél-Dunántúlon* (Die Erforschung der neolithischen Kreisgrabensysteme in SO-Transdanubien). *Arch. Ért.* 117, 1990, 3–24.

ZALAI-GAÁL 1990b

I. ZALAI-GAÁL, *Neue Daten der Erforschung der spätneolithischen Schanzwerke im südlichen Transdanubien*. *Zalai Múz.* 2, 1990, 31–38.

ZALAI-GAÁL 1999

I. ZALAI-GAÁL, *A lengyeli kultúra sírjai Pári-Altackerben* (Torma István ásatása 1968-ban) (Gräber der Lengyel-Kultur in Pári-Altacker. Grabung von István Torma im Jahre 1968). *Wosinszky Mór Múz. Évk.* 21, 1999, 1–31.

ZALAI-GAÁL 2000

I. ZALAI-GAÁL, *A győrei neolitikus antropomorf edény*. *Wosinszky Mór Múz. Évk.* 22, 2000, 7–38.

ZALAI-GAÁL 2001a

I. ZALAI-GAÁL, *Die Gräbergruppe B2 von Mórág-Tűzkődomb und der ältere Abschnitt der Lengyel-Kultur*. *Acta Arch. Acad. Scien. Hungaricae* 52, 2001, 1–48.

ZALAI-GAÁL 2001b

I. ZALAI-GAÁL, A késői neolitikum története a Dél-Dunántúlon a temetőelemzések tükrében (tipológia – kronológia – társadalomrégészet). Akad. Doktori Értekezés (Budapest 2001).

ZALAI-GAÁL 2002

I. ZALAI-GAÁL, Die neolithische Gräbergruppe B1 von Mórág-Tűzkődomb. I. Die archäologischen Funde und Befunde (Szekeşárd / Saarbrücken 2002).

ZALAI-GAÁL 2007

I. ZALAI-GAÁL, Von Lengyel bis Mórág. Die spätneolithische Grabkeramik in Südtransdanubien aus den alten Ausgrabungen. I. Analyse. Wosinsky Mór Múzeum. Évk. 29, 2007, 7–177.

ZALAI-GAÁL 2008

I. ZALAI-GAÁL, An der Wende vom Neolithikum zur Kupferzeit in Transdanubien (Ungarn): Die „Häuptlingsgräber“ der Lengyel-Kultur in Alsónyék-Kanizsa. *Altertum* 53, 2008, 241–240.

ZALAI-GAÁL 2010

I. ZALAI-GAÁL, Die soziale Differenzierung im Spätneolithikum Südtransdanubiens: die Funde und Befunde aus den Altgrabungen der Lengyel-Kultur. *Varia Arch. Hungarica* 24 (Budapest 2010).

ZALAI-GAÁL 2013

I. ZALAI-GAÁL, Totenhaltung als Indikator relativer Chronologie im transdanubischen Spätneolithikum? In: A. Anders / G. Kulcsár (eds), *Moments in time. Papers presented to Pál Raczky on his 60th birthday* (Budapest 2013), 467–485.

ZALAI-GAÁL / ÓDOR 2008

I. ZALAI-GAÁL / J. G. ÓDOR, Early Lengyel burials at Györe in southern Transdanubia. *Antaeus* 29–30, 2008, 535–576.

ZALAI-GAÁL / OSZTÁS 2009a

I. ZALAI-GAÁL / A. OSZTÁS, A lengyeli kultúra települése és temetője Alsónyék–Kanizsa-dűlőben. In: L. Bende / G. Lőrinczy (eds), *Medinától Etéig. Régészeti Tanulmányok Csalog József születésének 100. Évfordulójára* (Szenté 2009) 245–254.

ZALAI-GAÁL / OSZTÁS 2009b

I. ZALAI-GAÁL, Neue Aspekte zur Erforschung des Neolithikums in Ungarn. Ein Fragenkatalog zu Siedlung und Gräberfeld der Lengyel-Kultur von Alsónyék, Südtransdanubien. In V. Becker / M. Thomas / A. Wolf-Schuler (eds), *Zeiten – Kulturen – Systeme. Gedenkschrift für Jan Lichardus* (Langenweißbach 2009) 111–139.

ZALAI-GAÁL et al. 2009

I. ZALAI-GAÁL / E. GÁL / K. KÖHLER / A. OSZTÁS, Eberhauerschmuck und Schweinekiefer-Beigaben in den neolithischen und kupferzeitlichen Bestattungssitten des Karpatenbeckens. *Acta Arch. Acad. Scien. Hungaricae* 60, 2009, 303–355.

ZALAI-GAÁL et al. 2010

I. ZALAI-GAÁL / K. KÖHLER / A. OSZTÁS, Zur Typologie und Stellung von Kulttischchen der Lengyel-Kultur im mittel- und südosteuropäischen Neolithikum. *Acta Arch. Acad. Scien. Hungaricae* 61, 2010, 305–380.

ZALAI-GAÁL et al. 2011a

I. ZALAI-GAÁL / E. GÁL / K. KÖHLER / A. OSZTÁS, „Ins Jenseits begleitend“: Hundemitbestattungen der Lengyel-Kultur von Alsónyék-Bátaszék. *Acta Arch. Acad. Scien. Hungaricae* 62, 2011, 29–74.

ZALAI-GAÁL et al. 2011b

I. ZALAI-GAÁL / E. GÁL / K. KÖHLER / A. OSZTÁS, Das Steingerätedepot aus dem Häuptlingsgrab 3060 der Lengyel-Kultur von Alsónyék, Südtransdanubien. In: H.-J. Beier / R. Einicke / E. Biermann (eds), *Dechsel, Axt, Beil & Co – Werkzeug, Waffe, Kultgegenstand? Aktuelles aus der Neolithforschung* (Langenweißbach 2011) 65–83.

ZALAI-GAÁL et al. 2012a

I. ZALAI-GAÁL / E. GÁL / K. KÖHLER / A. OSZTÁS / K. SZILÁGYI, Präliminarien zur Sozialarchäologie des lengyelzeitlichen Gräberfeldes von Alsónyék-Bátaszék, Südtransdanubien. *Præhist. Zeitschr.* 87, 2012, 58–82.

ZALAI-GAÁL et al. 2012b

I. ZALAI-GAÁL / K. KÖHLER / A. OSZTÁS, Totenbrett oder Totenhütte? Zur Struktur der Gräber der Lengyel-Kultur mit Pfostenstellung in Südtransdanubien. *Acta Arch. Acad. Scien. Hungaricae* 63, 2012, 69–116.

ZALAI-GAÁL et al. 2014a

I. ZALAI-GAÁL / A. GRISSE / A. OSZTÁS / K. KÖHLER, Die durchbohrten Steingeräte des südtransdanubischen Neolithikums (5. Jahrtausend v. Chr.) (Budapest 2014).

ZALAI-GAÁL et al. 2014b

I. ZALAI-GAÁL / A. OSZTÁS / K. SOMOGYI, Zur relativen Chronologie der Lengyel-Kultur im westlichen Karpatenbecken: Präliminarien zur Bayesischen Analyse. *Acta Arch. Acad. Scien. Hungaricae* 65, 2014, 285–334.

ZALAI-GAÁL et al. in press

I. ZALAI-GAÁL / K. KÖHLER / A. OSZTÁS, Ein neuer Gefässtyp der Spätlengyel-Kultur von Alsónyék-Bátaszék, Südtransdanubien. *Studia Praehistorica* (Sofia).

ZÁPOTOCZKÁ 1998

M. ZÁPOTOCZKÁ, Bestattungsritus des böhmischen Neolithikums (5500–4200 B. C.). Gräber und Bestattungen der Kultur mit Linear-, Stichband- und Lengyelkeramik (Praha 1998).

ZEEB-LANZ 2009

A. ZEEB-LANZ (ed.), Krisen – Kulturwandel – Kontinuitäten. Zum Ende der Bandkeramik in Mitteleuropa. Beiträge der Internationalen Tagung in Herxheim bei Landau (Pfalz) vom 14.–17. Juni 2007. *Internat. Arch. – Arbeitsgemeinschaft, Symposium, Tagung, Kongress* 10 (Rahden 2009).

ZIMMERMANN 1988

A. ZIMMERMANN, Steine. In: U. Boelicke / D. von Brandt / J. Lüning / P. Stehli / A. Zimmermann (eds), *Der bandkeramische Siedlungsplatz Langweiler 8, Gemeinde Aldenhoven, Kreis Düren. Rhein. Ausgr.* 28, 1988, 569–787.

ZIMMERMANN 2012

A. ZIMMERMANN, Das Hofplatzmodell – Entwicklung, Probleme, Perspektiven. In: F. Kreienbrink / M. Cladders / H. Stäuble / T. Tischendorf / S. Wolfram (eds), *Siedlungsstruktur und Kulturwandel in der Bandkeramik* (Dresden 2012) 11–19.

ZIMMERMANN et al. 2009

A. ZIMMERMANN / K. P. WENDT / T. FRANK / J. HILPERT, Landscape archaeology in central Europe. *Proc. Prehist. Soc.* 75, 2009, 1–53.

ZOFFMANN 1968

Zs. K. ZOFFMANN, An anthropological study of the Neolithic cemetery at Villánykövesd (Lengyel culture). *Jannus Pannonius Múz. Évk.* 13, 1968, 25–37.

ZOFFMANN 1969–1970

Zs. K. ZOFFMANN, Anthropological analysis of the cemetery at Zengővárkony and the Neolithic Lengyel culture in SW Hungary. *Janus Pannonius Múz. Évk.* 14–15, 1969–70, 53–72.

ZOFFMANN 1978

Zs. K. ZOFFMANN, Excavations at Bicske II. Anthropological finds from the Neolithic cemetery. *Alba Regia* 16, 1978, 61–69.

ZOFFMANN 1996

Zs. K. ZOFFMANN, A neolitikus Sopot-kultúra embertani leletei Nemesvámos-Balácsa lelőhelyről. *Commun. Arch. Hungariae*, 1996, 42–45.

ZOFFMANN 2004

Zs. K. ZOFFMANN, A Lengyeli kultúra Mórág B.1. temetkezési csoportjának embertani ismertetése (Anthropologische Funde des neolithischen Gräberfeldes Mórág B.1 aus der Lengyel-Kultur.). *Wosinszky Mór Megyei Múz. Évk.* 26, 2004, 137–179.

ZOFFMANN 2007

Zs. K. ZOFFMANN, Anthropological material from a Neolithic common grave found at Esztergályhorváti (Lengyel culture, Hungary). *Folia Anthr.* 6, 2007, 53–60.

ZOFFMANN 2014

Zs. K. ZOFFMANN, Embertani leletek a Lengyeli kultúra Mórág-Tűzkődomb B.2 lelőhelyen részlegesen feltárt sírcsoportjából (Anthropological finds from the partially unearthed burial group at Mórág-Tűzkődomb B.2 dated to the Late Neolithic Lengyel culture). *Folia Anthr.* 13, 2014, 61–66.

