



RURAL SETTLEMENT

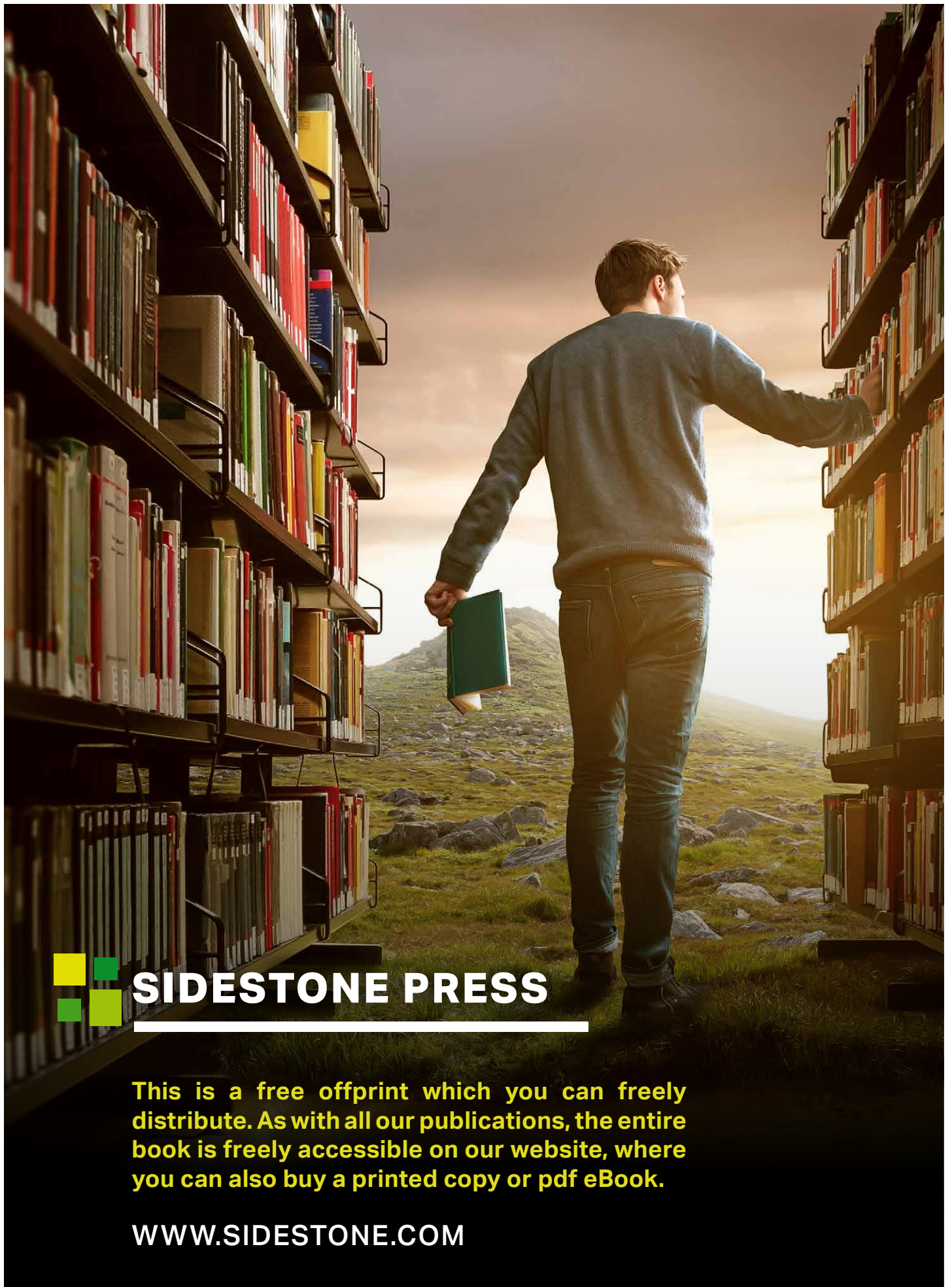
RELATING BUILDINGS, LANDSCAPE, AND
PEOPLE IN THE EUROPEAN IRON AGE

edited by

Dave C. Cowley, Manuel Fernández-Götz,
Tanja Romankiewicz & Holger Wendling

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Contents

1 Exploring rural settlement in Iron Age Europe. An introduction	9
<i>Dave C. Cowley, Manuel Fernández-Götz, Tanja Romankiewicz & Holger Wendling</i>	

PART 1 BEYOND THE SITE: SETTLEMENT SYSTEMS AND TERRITORIES

2 Regional settlement entities or <i>terroirs</i> in Late Iron Age northern France	21
<i>Alexandra Cony</i>	
3 Regional aspects of landscape exploitation and settlement structure in Denmark in the Late Bronze Age and Early Iron Age	31
<i>Mads Runge</i>	
4 Iron Age settlement in mid-west Ireland	45
<i>Katharina Becker</i>	
5 Recent research on the Arras Culture in its landscape setting	57
<i>Peter Halkon</i>	
6 Settlement and landscape in the Iron Age of eastern Iberia	69
<i>Ignasi Grau Mira</i>	
7 Approaching Late Iron Age rural landscapes. New ways of looking at the archaeological record in the southeast Iberian Peninsula	79
<i>Leticia López-Mondéjar</i>	

8 From hut to factory. Models of rural occupation in the Lower Guadalquivir valley during the 1st millennium BC	89
<i>Eduardo Ferrer-Albelda, Francisco José García-Fernández & José Luis Ramos-Soldado</i>	

9 Space and place in the Early Iron Age in eastern Burgundy	101
<i>Régis Labeaune</i>	

PART 2 SETTLEMENT UNITS AND BUILDINGS

10 The chronology of wetland settlement and its impact on Iron Age settlement dynamics in southwest Scotland	115
<i>Graeme Cavers & Anne Crone</i>	

11 Settlement nucleation and farmstead stabilisation in the Netherlands	125
<i>Karen M. de Vries</i>	

12 Turf worlds. Towards understanding an understudied building material in rural Iron Age architecture – some thoughts in a Scottish context	135
<i>Tanja Romankiewicz</i>	

13 The concept of 'house' and 'settlement' in the Iron Age of the middle Tisza region	143
<i>Péter F. Kovács</i>	

14 House or workshop? A case study of two pit-houses at the Iron Age settlement site of Michałowice, Kazimierza Wielka county (Poland)	153
<i>Jan Bulas, Michał Kasiński & Gabriela Juźwińska</i>	

15 Late Iron Age settlements in Hungary	157
<i>Károly Tankó & Lőrinc Timár</i>	

16 At the fringes of the La Tène world. The Late Iron Age rural occupation of the Banat region, Romania	167
<i>Andrei Georgescu</i>	

17 Late Iron Age rural settlements in southern Pannonia	173
<i>Ivan Drnić</i>	

- 18 Meillionydd. A Late Bronze and Iron Age double ringwork enclosure in northwest Wales** 179

Katharina Möller & Raimund Karl

- 19 The changing patterns of La Tène farmsteads in Central and Continental Western Europe** 191

Angelika Mecking

- 20 Rural settlement patterns in urbanised areas. The *oppidum* of Manching** 201

Thimo J. Brestel

PART 3 STATUS AND SETTLEMENT HIERARCHY

- 21 Rural residential places? Rethinking the *Fürstensitze*-elites correlation** 209

Manuel Fernández-Götz & Ian Ralston

- 22 Middle and Late La Tène rural aristocratic establishments in Gaul. Plans and organisation** 219

Stephan Fichtl

- 23 Scordiscan stronghold. A Late Iron Age multiple fortification at Bačka Palanka in northern Serbia** 233

Holger Wendling

- 24 The emergence of *oppida* in Celtiberia. The case study of Los Rodiles (Guadalajara, Spain)** 245

Marta Chordá, Álvaro Sánchez-Climent, Emilio Gamo & María Luisa Cerdeño

PART 4 NEW TOOLS AND PERSPECTIVES

- 25 Microtopographies of Dacian upland settlement strategies and community aggregation trends in the Orăștie Mountains, Romania** 251

Ioana A. Oltean & João Fonte

- 26 A structured Iron Age landscape in the hinterland of Knežak, Slovenia** 263

Boštjan Laharnar, Edisa Lozić & Benjamin Štular

27 Around the Münsterberg. How online tools help us to rethink our data	273
<i>Loup Bernard</i>	
28 Archaeology, landscapes, and heritage in the southeast Iberian Peninsula. The ALHIS project	277
<i>Leticia López-Mondéjar</i>	
29 Rural domestic patterns in northwest Iberia. An ethnoarchaeological approach to Iron Age household layout	281
<i>Lucía Ruano & Luis Berrocal-Rangel</i>	

Chapter 15

Late Iron Age settlements in Hungary

Károly Tankó & Lőrinc Timár

15.1 Introduction

In Central Europe the Late Iron Age period between the 5th century BC and the beginning of the Calendar Era is characterized mostly by La Tène material culture. This paper reviews the current state of knowledge for the unfortified settlements of this period in the area of what is today Hungary (see Szabó 2005; 2015 for an exhaustive bibliography on this topic).

Our knowledge of the Iron Age settlement structure and historical landscape of Hungary is largely based on a series of conventional excavations on the Great Hungarian Plain and in western Transdanubia undertaken since the 1990s. Until recently, our knowledge of the Late Iron Age in the Carpathian Basin, the La Tène period, was based on unevenly distributed assemblages. From the Early and Middle La Tène period, burial assemblages dominate, while Late La Tène finds originate mainly from small-scale excavations of fortified settlements. Any information on the settlements of the Early and Middle La Tène periods and the related finds was scarce until recently. This imbalance is illustrated in I. Hunyady's monograph on Celtic finds excavated in the Carpathian Basin, where her typology is based entirely on burial assemblages (Hunyady 1942-1944). The situation changed in the second half of the 1990s, when the Institute for Archaeological Sciences of the Eötvös Loránd University began to explore the Late Iron Age settlement structure on the Great Hungarian Plain in collaboration with French archaeologists, in a programme of work that has since developed independently (Szabó 1995, 36; Goguy *et al.* 2003; Czajlik 2010). This work has revealed that La Tène period villages excavated near Sajópetri and Polgár were established in the earliest stage of Celtic occupation on the Great Hungarian Plain, during the late 4th and early 3rd centuries BC (Guillaumet *et al.* 1999; Szabó 2007; Szabó *et al.* 2008). These assemblages show the traditions of the immigrant Celts as well as the local so-called Scythian communities. The recent rescue excavations in advance of the construction of motorways and a number of small scale investigations have provided new information regarding the extents of the La Tène Culture in Hungary in the 3rd and 2nd centuries BC (e.g. at the site of Mátraszőlős: Tankó & Vaday 2010).

This paper presents summaries of the excavation results at four sites (Figure 1 A), which represent three different geographical areas, dating to the Early and Middle La Tène. Sajópetri – Hosszú-dűlő and Polgár – Királyérpart are Late Iron Age settlements on the north-eastern perimeter of Great Hungarian Plain (Alföld). The site of Ménfőcsanak is situated in the western part of Hungary on the Small Hungarian Plain (Kisalföld),

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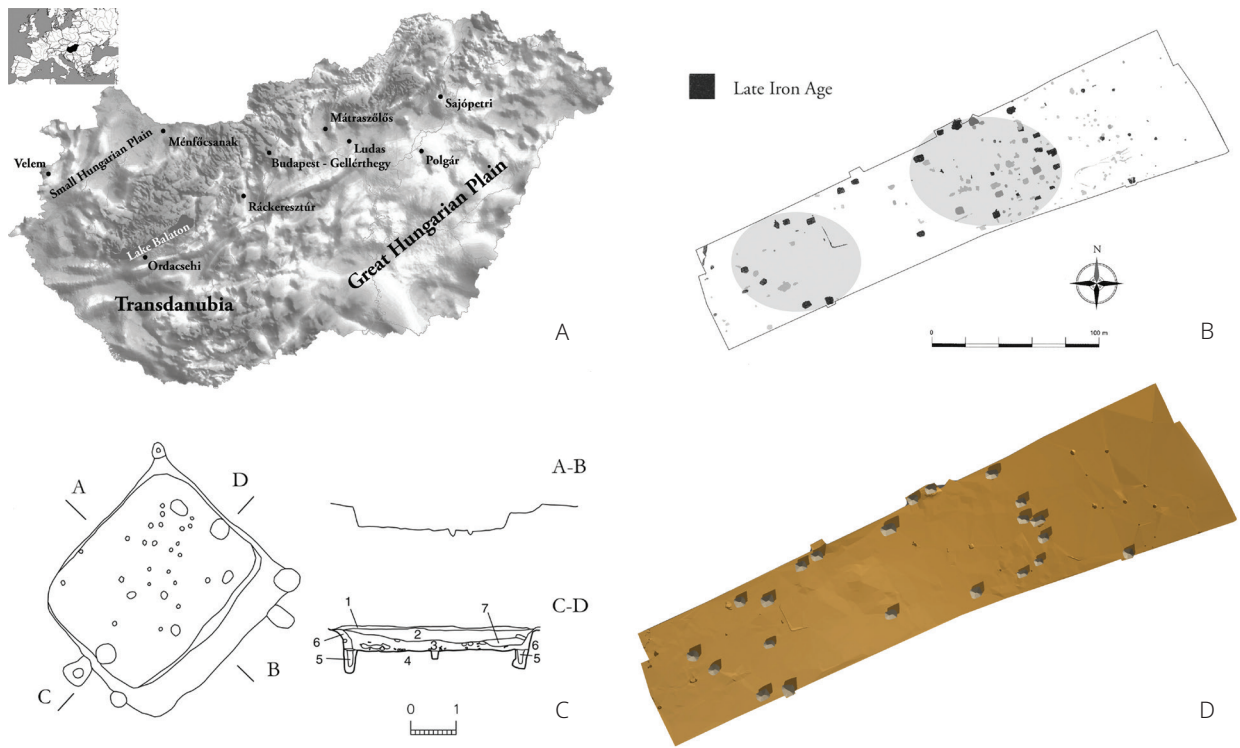


Figure 1: A) Map of Hungary with the sites mentioned in the text. B) Plan of the Late Iron Age site at Ordacsehi-Csereföld. Note the arrangement of the buildings. C) A typical Late Iron Age sunken-featured building (nr. 98.7) at Sajópetri. D) Reconstructed 3D view of the excavated site at Ordacsehi-Csereföld (D) near Lake Balaton (after Gallina et al. 2007). (Figure credits: L. Timár).

while Ráckeresztúr is located Transdanubia (Dunántúl). The common feature of these settlements is the almost exclusive presence of sunken-featured buildings (see Figure 1 C for a typical example) arranged in loose circular groups. The arrangement of the buildings suggests that they were grouped around a clearing or central area, but without any strict order in their disposition (Figure 1 B & D). Comparison of their plans to sites of the same period excavated in Austria is instructive. Although Ménfőcsanak in Hungary and Prellenkirchen in Austria lie only 70 kilometres apart, the settlement structures are rather different. In the Austrian example post built houses arranged in a different manner are the predominant form in the Middle La Tène period (Timár 2016, 192). Buildings from present-day Hungary are relatively small and have a simple floor-plan. Unfortunately there are not too many surviving structural elements which could decisively demonstrate their architectural form and finds related to their functions are also rare, though in some cases we can identify building types with specific uses (for workshop-type buildings see Timár 2016, 199-201). The nature of the evidence changes in the Late La Tène period, where we see the emergence of fortified oppida, suggesting significant changes in society at this time.

15.2 Four Early and Middle La Tène settlements in Hungary

15.2.1 Sajópetri – Hosszú-dűlő and Polgár – Királyérpart, north-eastern Hungary

The site at Sajópetri – Hosszú-dűlő is a Late Iron Age settlement in north-eastern Hungary, located on the alluvial plain in between the Sajó valley and the Bükkalja, at the boundary between the Great Hungarian Plain and the mountains. This large Celtic settlement (Figure 2 A), of which about 41000 m² has been excavated and published under the direction M. Szabó, is perhaps the most extensively researched and published Late Iron Age settlement in the Carpathian Basin to date (Szabó 2007). Furthermore, the wide repertoire of pottery from the site has supported the development of a technological and typological classification which provides a reference for interpretation at other archaeological sites (Szabó & Tankó 2007). The work at Sajópetri – Hosszú-dűlő was interdisciplinary in character, with special attention paid to architecture, archaeometallurgy, archaeozoology and petrography.

The settlement, following the bend of the small river Sajó, consisted of three main zones. More than 30 buildings

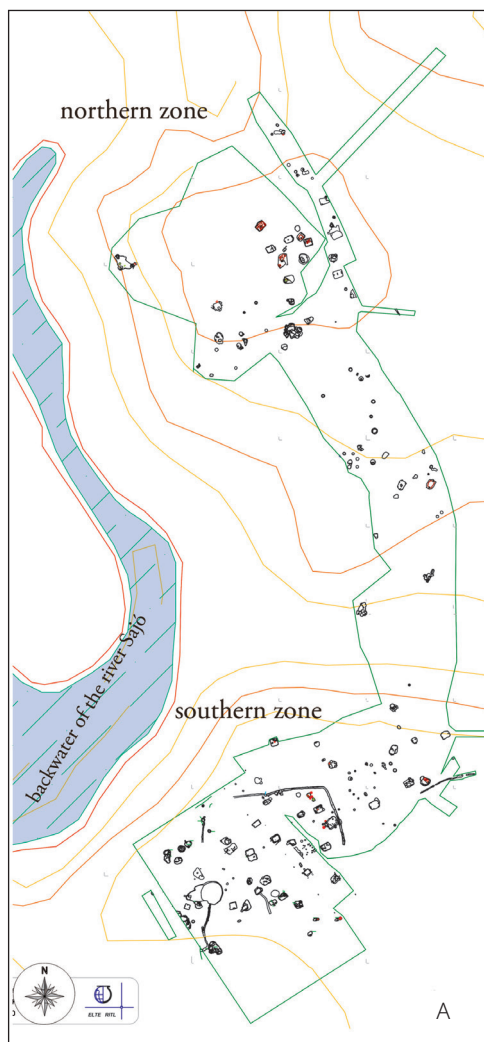


Figure 2: A) Map of the site at Sajópetri. B) A complex pottery kiln nr. 02.A.36-40. C) The large workshop nr. 02.A.93 with attached kilns in the central zone of the settlement. One of the special features of the large workshop is the step or bank on its longitudinal southern side, which seems to be a common attribute among the workshops (Timár 2016, 200, fig. 11). (Figure credits: L. Timár, C – Z. Czajlik, D – K. Tankó).

stood around an open central area in the southern zone, forming a rather densely built-up village (Figure 2 A). The northern zone was similar to the southern one but distinctly smaller. While the central area was almost devoid of structures which could be identified as houses, most of the wells were located there. Pits related to various activities (e.g. storage, clay extraction, but also votive offerings) seem more common in the west of the site, while pottery kilns were recovered in the south-eastern part of the investigated area (Figure 2 B & C; Timár 2007, 216-9). It seems likely that artisanal activities had their definite places within the settlement.

The multi-period site at Polgár – Királyérpart was the first Late Iron Age settlement excavated to modern standards in 1993-94 (Figure 3 A), and is located in the

Tisza valley on the northern periphery of the Great Hungarian Plain. It lies on the bank of a palaeochannel of the Tisza river, on the north side of the Sajó-Tisza confluence. The Late Iron Age is represented by sunken featured buildings (see house nr. 100 in Figure 5 B) and a series of pits. Polgár is an important site for research on Late Iron Age pottery, with the publication of its ceramic assemblages based on the technological and typological framework previously developed at the Sajópetri site. At Polgár, quern stones were found on the floor of one building, with an iron sickle in another building. Beside the agrarian character, demonstrated by finds like the quern stones and sickle, metalworking also played an important role attested by a burnt crucible and slag remains found in the buildings.

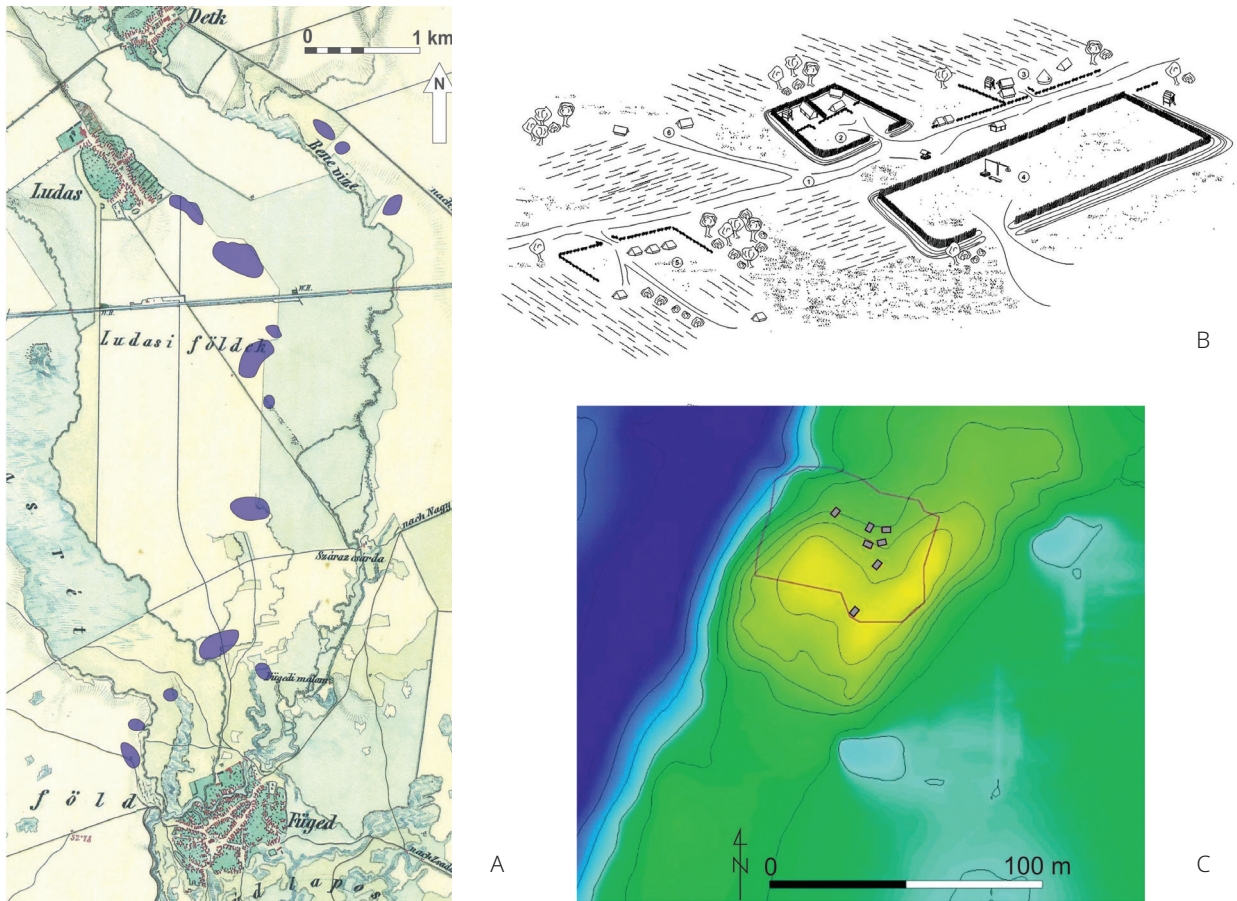


Figure 3: A) A chain of small settlements along a stream at Ludas. B) Graphic reconstruction of the site at Ménfőcsanak. Note the ditches and fences around the habitations. C) Map of the site Polgár 1, showing the arrangement of the sunken-featured houses. (Figure credits: A & B – K. Tankó, C – B. Holl).

The finds from Polgár reflect the dominance of the La Tène culture, but besides these Celtic finds, a number of artefacts refer to a different local tradition. The hand-built pottery types, as well as a range of metal and bone artefacts, illustrate the survival of local Scythian cultural traditions and also denote some continuity in the population. According to the chronologically “sensitive” finds, this settlement was established at the turn of the 4th-3rd centuries BC and did not survive beyond the first half of the 2nd century BC (Szabó *et al.* 1997, 81-90; Szabó *et al.* 2008).

In summary, the vessel types present at Sajópetri and at other sites in northeast Hungary in the 3rd-2nd centuries BC are uniform, with both Scythian (Vekerzug Culture) and Celtic (La Tène Culture) traditions represented in the pottery forms. This suggests that the Celtic occupation in the 3rd century BC saw the peaceful assimilation of the local indigenous population, indicating the cohabitation and ultimately the blending of the Celtic and Scythian communities. Some caution is needed at this point, as we must beware of drawing direct conclusions

regarding the ethnicity of these communities because the archaeological finds do not provide precise evidence on this aspect (Szabó & Tankó 2007; Szabó *et al.* 2007). Besides the dominance of finds of the La Tène and Scythian cultural traditions, relations pointing towards the Transylvanian and Transcarpathian regions can be also demonstrated, although only in the case of a few, unique objects. In other words, the pottery manufacturing techniques and the statistical distribution of vessel types suggest that the heterogeneous cultural traditions and their mixing led to the establishment of an independent pottery manufacturing custom on the fringes of the Great Hungarian Plain and the surrounding mountainous zone (Tankó 2010b; 2016).

The sites at Sajópetri – Hosszú-dűlő and that at Polgár – Királyérpart are typical, but rare, examples of the many unfortified settlements beside rivers that were typical in the Carpathian Basin in the Iron Age. These villages are generally interpreted as primarily agricultural in character, although there is also abundant evidence for local artisanship. The piles of slag and limestone (used as

flux) provide evidence for iron smelting and the number of tools among the finds is also remarkable (Szabó & Czajlik 2006, 513-20; Czajlik 2014, 141-2). These phenomena offer some explanation as to why the settlements were established at their respective places – an important motive behind the eastward expansion of the Celts was the need to access iron and copper resources which were processed locally. The quantity of metal artefacts, such as tools and semi-finished products (Guillaumet 2007, 253-62), confirms this observation.

Beyond the evidence provided by these two sites, micro-regional research has played a significant role in the mapping of Late Iron Age settlement patterns in northeast Hungary, including intensive field surveys along the Sajó and Zagyva rivers and in the valley of the Bene stream. Besides the field research, aerial reconnaissance has led to the discovery and recording of sites (Czajlik & Tankó 2007, 321-4; Czajlik *et al.* 2012, 171-80; Tankó & Vaday 2010, 151-3). The investigated areas are at the foot of Mátra and Bükk mountains and covered by soil, rock or dissolved material eroded from the mountains. The alluvial top soils in the valleys are rich in minerals and suitable for agricultural use. The aim of field surveys in these areas was to identify the Late Iron Age archaeological sites in this contact zone of the Great Hungarian Plain and the northern mountainous region of Hungary. The results, for example in the surroundings of the Ludas necropolis in the valley of the Bene stream, have shown that the valleys, running mainly north-south, were densely populated during the La Tène period (Figure 3 A). The general map of discoveries in the vicinity of Ludas indicates that the Celtic rural settlements follow the wide valley of Bene stream on its lower banks alongside the plain. This is particularly noticeable on the right bank where 12 La Tène culture villages were found in an approximately 7 km long section. This density is significant even though they may not all be contemporaneous (Czajlik & Tankó 2012, 174-80).

15.2.2 Ménfőcsanak, Transdanubia, western Hungary

The Late Iron Age settlement at Ménfőcsanak is located on the gentle slope of a hill rising above a bend on the Marcal River, surrounded by marshy meadows beside a stream. The orientation and structure of the settlement was defined by hydro-geological, topographic, environmental and agricultural factors. Easy access to water and the topography could have been the key factors in location, considering that the main concentrations of Late Iron Age features are generally located on the higher ground separated by 50-200 m empty spaces with no archaeological features (Tankó 2010a, 249-52).

The north-eastern part of the site is the most complex, containing evidence for sunken-featured houses, post in ground structures and wells. Ditches, which can be

interpreted as the remains of fences, subdivide the site. At the south-eastern edge of the site a 70 m by 150 m rectangular area surrounded by a ditch broken by an entrance on the south can be interpreted as a paddock or an enclosure for animals, since it contains only two wells. Another rectangular area, similarly bounded by a ditch enclosing an area of about 40 by 50 m, lies to the northwest and is set parallel to the first enclosure, in this case with an entrance to the southeast. This enclosure is subdivided, with two buildings and a storage pit to the northeast and numerous postholes to the southwest (Figure 3 B). As one of the buildings has the same orientation as the enclosure ditch one may assume they were contemporary.

While it is difficult to reconstruct the main prehistoric transport routes because of scarce archaeological evidence, it is clear that the existence of roads both within and between settlements can be inferred. At Ménfőcsanak the two rectangular boundary ditches and the similar alignment of the buildings suggest the presence of an Iron Age road aligned northeast-southwest which was reused in the Roman period. The evidence from the Celtic cemetery of Ménfőcsanak suggests this settlement was established in LT B1 during the second half of the 4th century BC, and abandoned during the LT B2/C1 transition period at the latest, in the second half of the 3rd century BC (Tankó 2010a).

15.2.3 Ráckeresztúr, Transdanubia, Dunántúl

The development of aerial reconnaissance for archaeology in Hungary has proved indispensable for exploring settlement patterns. Combined with field and magnetometer surveys this approach has provided data about the Late Iron Age settlement network in Transdanubia, with some sites further investigated by small-scale excavations with the aim of obtaining dating evidence. In a research project led by Z. Czajlik, three Celtic settlements were investigated at Harc (Czajlik *et al.* 2010), Bata (Czajlik 2010) and Ráckeresztúr (Czajlik *et al.* 2015) – the latter of which will be described in some detail here.

The outlines of the buildings and pits at Ráckeresztúr are easily observed on aerial photographs taken while the site was covered by growing winter wheat (Figure 4 A). Magnetometry surveys showed not only the archaeological structures but also a great number of geomorphological features and stray metal objects in the plough soil, creating a more confusing picture than the aerial photographs. The aerial photographs show a number of pits, and nine large and five small buildings, three of which were subsequently excavated. One of these buildings produced a relatively large number of Late Iron Age finds, mostly pottery fragments. In general, the pottery from Ráckeresztúr corresponds to the ceramic assemblages from other contemporaneous sites of the La Tène Culture. In view of the currently known relative chronology, the excavated

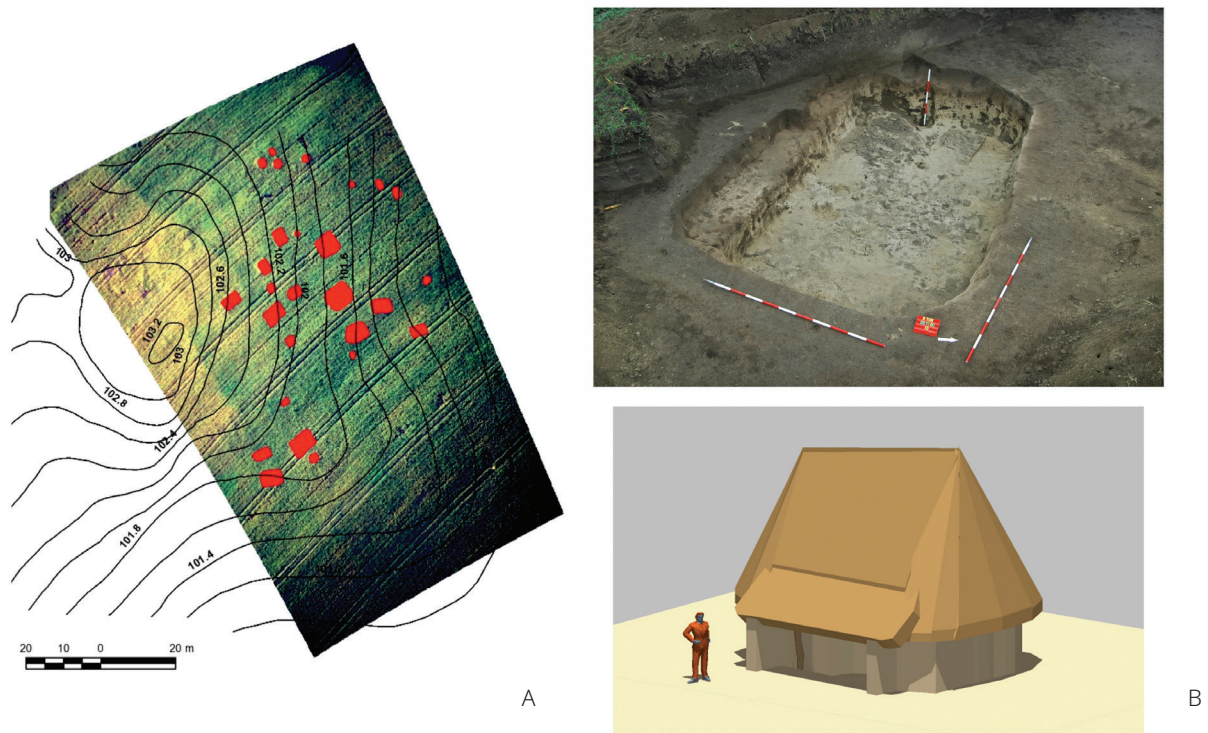


Figure 4: A) Aerial photographic based mapping of the site at Ráckeresztúr, after Czajlik et al. 2015. B) Excavation view (top) and reconstruction (below) of the sunken-featured building nr. 10 at Ráckeresztúr (Photo: Z. Czajlik; Reconstruction: L. Timár).

building was used between the LT B2 and C1 phases (Czajlik et al. 2015).

15.3 Late Iron Age Buildings

The excavations described above provide opportunities to understand and reconstruct the form of Late Iron Age buildings. There are challenges since structural evidence is scarce, comprising only postholes, hollows and any other negative features, and it is often impossible to ascertain the functions of buildings. These issues, the building types and their theoretical reconstructions are comprehensively discussed in previous papers (see Timár 2016), and are presented here in summary form only.

Those in the central part of the Carpathian Basin in present-day Hungary exhibit a fairly uniform construction comprising a rectangular pit measuring between 2m or 3m across by between 3m and 5m in length with postholes on the shorter sides (building 10 at Ráckeresztúr is a good example of this type, Figure 4 B).

The traditional reconstruction of the sunken-featured buildings is based on a modern shepherd's hut with the roof resting upon the ground (see Tankó 2004, 105, Abb. 3/1-2; Timár 2007, 204-7). This model carries undesirable implications, since it implies the subordinate function of such buildings, and that the population was living in

other types of houses. However, we have already seen regional differences in the settlement patterns and there are only a few traces of buildings built on the surface in the settlements in Hungary, contrary to those excavated in Austria where such features are common. An assumption that the sunken-featured buildings were destined to fulfil subordinate functions only creates a problem imagining what kind of structure these settlements had. Therefore, the understanding of the remains is very important, and for a variety of reasons the old theoretical reconstruction cannot be accepted anymore (for a critical review see Timár 2007, 205; 2016). Among others, a section across a La Tène period building at Ménfőcsanak demonstrated clear evidence of a sunken-featured building with low standing walls.

Available raw materials should have played a decisive role in the structure of these buildings. It can be suggested that the Celts of Liptovska Mara in present-day Slovakia (Pieta 2008, 91) would have faced the greatest difficulties if they had tried to build sunken-featured house types of the plains due to the rock under the thin soil layer, while the soils at Sajópetri are conducive to constructing an alpine-type sunken-featured house. Sunken-featured houses proved to be very cheap, slightly impractical and highly unhealthy in modern times (they

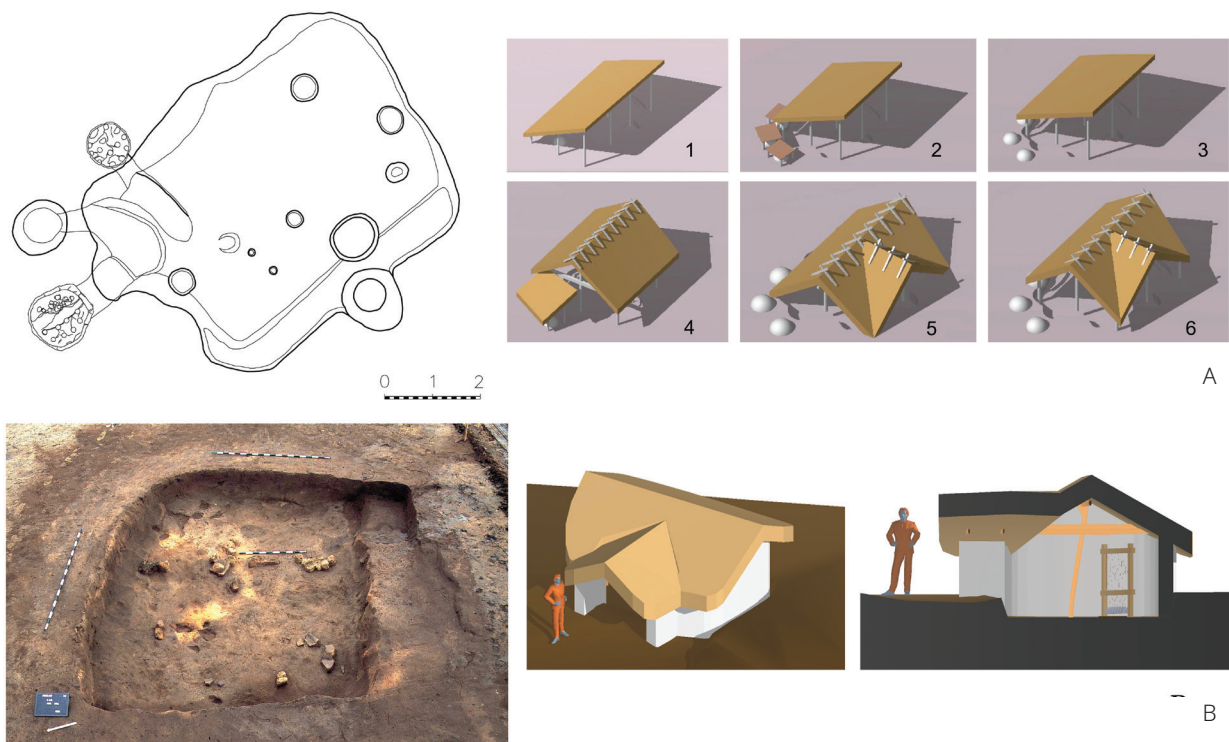


Figure 5: A) Building 02.A.93 from Sajópetri with attached pottery kilns. The small 3D sketches show all the possible roof shapes. B) Building nr. 100 from Polgár with loom weights on its floor. The reconstructed cross-section shows the minimal ceiling height that would allow the use of the loom inside the house, while the axonometric reconstruction shows the minimal exterior volume of the house. (Figure credits: L. Timár).

existed in Hungary until the 1960s, Timár 2013, 299) and there must be no doubt that they were always built when timber was scarce.

We know little about the general structural evolution of Late Iron Age houses, and it is also possible that the various Celtic tribes had their own architecture which makes the classification of the buildings more difficult. The presence or absence of the postholes was often used as a criterion for the respective typological categories, but according to our opinion, all the sunken-featured buildings belonged to the same structural type (see Timár 2016, 197-8; Buchsenschutz 2005, 56, fig. 4) and other features like size or proportions are more important.

In some houses at Sajópetri the finds indicate blacksmithing activity, which is almost impossible without raising of hands above the head, thus an adequate ceiling height would have been vital in their case. As the number of the possible reconstruction variants is relatively low, with such a single consideration one could reduce the six variants to one in the case of building 02.A.93 (Figure 5 B, see also Timár 2007, 219). Building number 100 at Polgár housed a warp-weighted loom which must have had a frame as tall as its user (Figure 5 B). Therefore, it could be assumed that buildings of the workshop-type had upright,

vertical walls above the ground surface instead of roofs placed on the surface. It is also important to mention that computer technology allows the precise 3D modelling of even difficult structures which is very useful for reconstructing a particular building (Timár 2007, 216-9; 2011, 400-4; 2013, 291-300; Czajlik *et al.* 2015, 88-90).

15.4 The Late La Tène period: emergence of fortified *oppida*

The study area suffers from an assumption that there is a clear connection between archaeological finds and historical events in the Late Iron Age of Central Europe. Thus, the term 'La Tène culture' refers to the finds only, while designations like La Tène B period and Middle La Tène period refer to different archaeological contexts. Furthermore, chronologically sensitive information is restricted to cemeteries. It is not easy to reconstruct a timeline from the overlap of the burials of three or four generations, using refined chronologies of brooches, weapons and similar objects which had changed over time, and it is more difficult to transpose such a relative chronology to the settlements, where such finds are extremely rare. There is therefore a heavy reliance on proportions of pottery assemblages which provide only

an approximate date in a relative chronology, which is restricted to a certain region of Central Europe. The abandonment of the Sajópetri site was presumably at the end of the La Tène C1 period, but the cause of this is unknown. While the settlement may have been relocated to the nearby hill of Bükkszentlászló – Nagysánc, where there is a fortified hilltop *oppidum* (Szabó 2007, 310-9), and this appears to be a general tendency in Central Europe, the processes whereby unfortified settlements were replaced by *oppida* from the La Tène C2 period onwards remain unclear.

Besides the investigations of unenclosed Early and Middle La Tène settlements described above, there have also been significant excavations at fortified settlements of the Late La Tène period. Hungarian-French work focused first on the *oppida* of Transdanubia (Guillaumet 2000), and test excavations have been carried out on Szent Vid at Velem and Gellérthegey in Budapest (Barral *et al.* 1996; Guillaumet *et al.* 1999). These excavations have furnished important information on the later phases of the La Tène period, providing a Hungarian perspective on the general European research trends of the culture of the *oppida*. Nevertheless, since these excavations have concentrated on the fortified settlements there is little known about potential satellite settlements. Thus, there is a notable distinction between the evidence for dispersed open settlement in the Early and Middle La Tène periods, while in the Late La Tène period our knowledge is rather restricted to fortified settlements of proto-urban character.

It is a fact that towards the end of the Middle La Tène period, considerable changes took place in Transdanubia and in the Carpathian Basin as a whole. The use of cemeteries established in the early phases ceased by the La Tène C1, a phenomenon which can also be observed in east and northwest Hungary (Szabó & Tankó 2006, 331). Recently excavated Iron Age settlements show a similar pattern and it appears that the Early La Tène unfortified settlements were abandoned by the end of the Middle La Tène phase. Thus, the 3rd century BC can be considered as a transitional period, when early urbanization in this region had begun (Szabó 2007, 331).

The first constructions of the later *oppida* were laid down during this transitional phase, along with the establishment of a network of secondary settlements linked to these centres. The close relationship between unfortified and fortified settlements is evident from the similarities in their ceramic assemblages. However, it is still an open question why the La Tène cemeteries and settlements in the Carpathian Basin ceased being used by the first half of the La Tène C period. Since no destruction layers were discovered at Polgár, Sajópetri and Ménfőcsanak, one has to assume that the Celtic inhabitants must have abandoned these sites peacefully. It is tempting to link this phenomenon to the establishment of the *oppida*, but

unfortunately there is, at present, no supporting evidence of this from the Carpathian Basin. This aspect of the Late La Tène period of the Great Hungarian Plain is still difficult to interpret from an archaeological perspective, while the further fate of this Celtic population in eastern Hungary is also obscure. Remnants of the La Tène traditions refer to surviving Celtic populations at least until the arrival of the Germanic groups to northeast Hungary.

In western Hungary the situation was more straightforward, since under Roman rule the Celtic population was Romanised. The conversion was rapid in the frontier zone and along major roads, but was significantly slower and partial in the hinterland (Bíró 2017, 249-71). Here many of the *vici* maintained their indigenous character with sunken-featured houses and irregular plans (Bíró 2017, 142-50), often similar to the unfortified settlements of the Middle La Tène period instead of following the densely urbanized patterns of the Late La Tène *oppida*.

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15.6 Bibliography

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