



**SETTLEMENT CHANGE
ACROSS MEDIEVAL EUROPE
OLD PARADIGMS AND NEW VISTAS**

edited by NIALL BRADY & CLAUDIA THEUNE

RURALIA XII



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Change in rural settlement in eastern Central Europe from the Early to the Later Middle Ages¹

*Elisabeth Nowotny**

Abstract

Micro-scale analyses are discussed with reference to the transformation of house types, addressing the shift to ground-level buildings and the uniting of different functions in one building. Settlement form (meso-scale) – the internal structure of the settlements (the emergence of farmsteads) and village morphology – is also analysed. Settlement desertion and relocation are discussed with reference to the distribution of settlements in the landscape (macro-scale). Possible underlying causes are also examined, among these being social and political changes.

Keywords: *Eastern Central Europe, rural settlement, house types, settlement form, village morphology.*

Résumé

Transformation des campagnes dans l'est de l'Europe centrale en haut Moyen Âge jusqu'au Moyen Âge tardif

Sont discutés des « micro-études » réalisés quant à l'évolution de la maison, menant vers une construction de plein pied et intégrant de plus en plus des fonctions différentes sous un même toit. Par la suite, les structures de l'habitat sont regardées de près au niveau d'une « méso-étude », comme par exemple l'émergence des fermes et la structure morphologique des villages. Au niveau « macro-étude » font l'objet la disparition ainsi que le déplacement des villages et leur répartition dans l'espace rural. Ensuite, des raisons sociales et politiques probables étant à la base de ce processus sont éclairées.

Mots-clés: *L'est de l'Europe centrale, milieu rurale, types de maison, formes d'habitat, morphologie de village.*

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1 To avoid misunderstandings regarding terminology, it should be pointed out that there are important differences in the chronological terms used in Austria, on the one hand, and in Moravia/Bohemia on the other. In Austria, the Early Middle Ages refers to the 6th-10th centuries, the High Middle Ages to the 11th-mid-13th centuries, and the Late Middle Ages to the 13th-15th centuries.

Zusammenfassung

Wandel im ländlichen Siedlungsbild in Ostmitteleuropa vom Früh- bis zum Spätmittelalter

Am Mikro-Level wird der Wandel der Hausformen im ländlichen Raum Ostmitteleuropas besprochen. Im Laufe der Zeit wird vermehrt ebenerdig gebaut und verschiedene Funktionen werden in einem einzigen Gebäude vereint. Weiterhin werden die Siedlungsformen (Meso-Level) – genauer die innere Struktur der Siedlungen (z. B. das

Aufkommen von Gehöften) und Dorfformen – verfolgt. Am Makro-Level werden das Wüstfallen und die Verlegung von Siedlungen und die Verteilung der Siedlungen in der Landschaft dargestellt. In Folge werden die möglichen zugrundeliegenden sozialen und politischen Ursachen diskutiert.

Schlagwörter: *Ostmitteleuropa, ländliches Milieu, Hausformen, Siedlungsformen, Dorfformen.*

Introduction

This paper investigates changes in the archaeological record of rural settlements, taking an explicitly multiscale approach that examines the micro-scale (house types), the meso-scale (internal structure of settlements and village form), and the macro-scale (distribution of settlements in the landscape). These transformations are often interlinked, partially depending on and being a precondition for each other. The possible underlying causes will be discussed. The aim of this paper is to outline a general development. Placed in the context of eastern Central Europe, the settlement of Mitterretzbach in northern Lower Austria will be used as a basis to discuss the various changes occurring in rural settlement in eastern Central Europe – more precisely in Austria, Moravia, Bohemia, and Slovakia – from the Early to the Later Middle Ages. Mitterretzbach was excavated between 1999 and 2005 (*Lauerermann – Drost 2005; Nowotny 2015*) by the Lower Austrian Museum of Prehistory. The site was settled in several phases, from the Late Neolithic period until the High Middle Ages.

Historical background²

After the relinquishment of the Roman Danube provinces, Germanic groups settled in this region. In the 6th and 7th centuries, Slavic groups immigrated to eastern Central Europe. In 568, the Longobards ceded their territories to the Avars. After the Avar wars of Charlemagne, the territories west of the River Enns were colonised by the church and the Bavarian-Frankish secular nobility. In the 9th century, the (Great) Moravian Empire was a powerful opponent to the Carolingian Empire. During this period, the Hungarian tribes appear on the historical map, settling in the Carpathian Basin. They were one of the factors linked to the demise of Great Moravia at the beginning of the 10th century. With the battle of Pressburg in 907, vast territories in today's Lower Austria were temporarily lost for the Frankish Empire until reintegration from

955 onwards. In the following period, the Holy Roman Empire was founded and the Hungarian kingdom was established in the east. The eastern march (Lower Austria) was systematically colonised. As a consequence of the investiture conflict in the late 11th century, the Babenberg counts were strengthened, and Austria became an independent duchy in 1156. Royal manors lost their political role, and the first territorial centres of power emerged. In Bohemia (and adjacent territories), the dynasty of the Přemyslides had increasingly gained power since the late 9th century, which led to the establishment of the kingdom of Bohemia inside the Holy Roman Empire in the early 13th century. The struggle for power between Přemisl Ottokar II, who had followed the Babenbergs in their rule, and Rudolf of Habsburg culminated in the battle on the Marchfeld 1278. Here the latter triumphed and gained the duchy of Austria and Styria. In the following centuries, more and more duchies and territories came under the rule of the Habsburgs. In the early 14th century, the Bohemian throne went to the Luxembourgs. In the following century, religious conflicts between Catholics and the Protestant movement of the Hussites caused a long civil war.

Micro-scale

At the Lower Austrian site of Mitterretzbach (*Nowotny 2015*), four Early Slavic pit houses and a large number of postholes, which will be addressed later, were unearthed. In the early Slavic period the typical dwellings in the research area are pit houses (*Nowotny 2016*), which are square (Fig. 1/1) or slightly rectangular (Fig. 1/2) in shape. Often there is an oven situated in one of the corners. The walls are constructed with the help of posts or in log construction, with their footings inside or outside the pit. In the north of eastern Central Europe irregular elongated-oval pits are the main residues of buildings, most probably ground-level houses (*Milo 2014*, 41). In more western, Germanic areas, most buildings were erected at ground level during this period, while sunken buildings were connected with handicraft activity (*Milo 2014*, 37–40, 322; for Bavarian areas: *Fries-Knoblach 2006*).

² Brunner 1994; Willoweit 2006; Wolfram 2003.

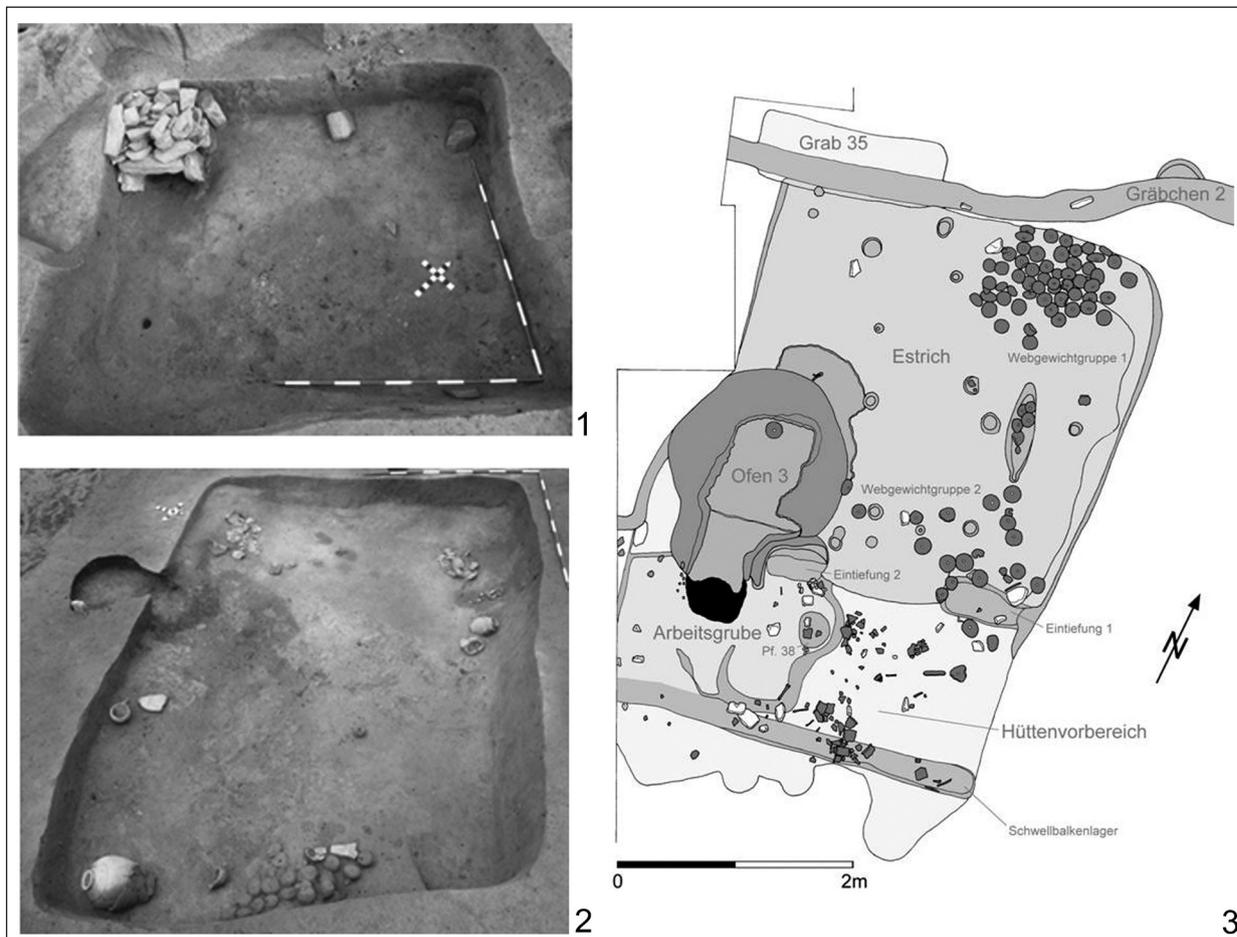


Fig. 1: Short-term development of house types in Thunau, Lower Austria: 1. quadratic pit house with a stone oven in a corner; 2. rectangular pit house with a cupola oven dug into the surrounding soil; 3. pit house, heatable from the outside (© Martin Obenaus, Silva Nortica).

As the Early Middle Ages progressed in eastern Central Europe, pit houses continued to serve as the main dwellings. An example is the 9th/10th-century settlement at Thunau in the valley of the River Kamp. In addition, a short-term change is apparent at this site (Obenaus 2015, 11-13, fig. 8 f.). While pit houses of the earlier phase were square (Obenaus 2011, 11f.), mostly with ovens made of stone in the corners, houses of the later phase were rectangular with one or two covered ovens dug into the surrounding loam at the sides of the pit. A pit house heated from the outside, and thus smoke-free, represents a singular finding that might indicate an additional development (Fig. 1/3).

While ground-level buildings began to play an important role at central sites in the research area from the 9th century onwards (Milo 2014, 46), the decrease in pit houses at rural settlements (for southern Moravia: Ruttkay 2002, 269; see also Klápště 2012, 190) generally took place in the 11th century, although these developments vary greatly from one region to another (Klápště 2007, 230). Reliable statements are difficult, as

settlements often did not leave comprehensive traces and are thus difficult to date.

At Mitterretzbach (Nowotny 2015), the examination of the large number of postholes brought building layouts to light. Their typological classification, orientation, and positional and stratigraphic relations, as well as the finds, led to their assignment to different settlement phases. Within the medieval period, a group of ground-level buildings is dated to the High Middle Ages (11th century) (Fig. 2). These are four- or six-post structures, long buildings with a row of ridge posts and buildings with wall slots. Some of them are likely to have been residential and some were outbuildings. A single pit house with unclear function was also placed in this phase.

This phase of Mitterretzbach demonstrates a stage of development at which ground-level buildings were in the majority, but the detached buildings had yet to develop into the wings of larger complexes. This is the case in the 13th/14th-century village of Hard (Felgenhauer-Schmiedt 2008) (Fig. 4/1; 5/2), where the farmhouses consisted of several rooms. The foundations were built

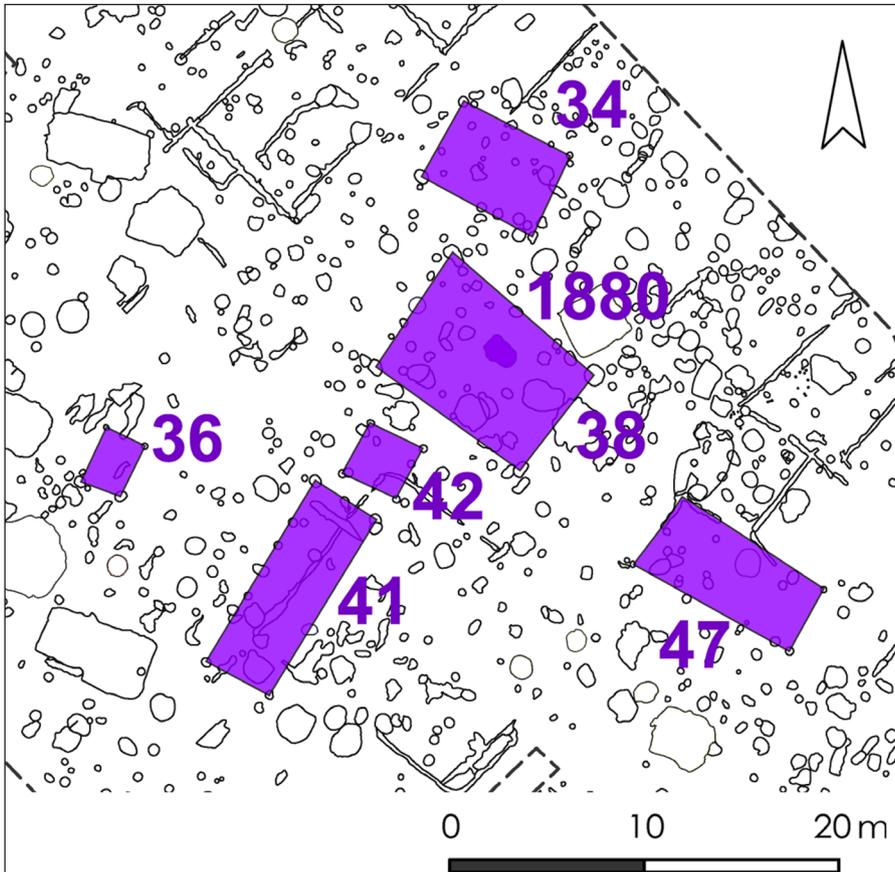


Fig. 2: A high medieval farm-type structure consisting of several ground-level buildings in post construction, Mitterretzbach, Lower Austria (© Elisabeth Nowotny after Franz Drost).

of stone without the use of mortar and, in two cases, the walls were entirely made of stone. The two-room houses are seen as houses with one room for living and one for storage; while houses with three rooms might have consisted of an entrance, storage area, and living room; and four-room layouts are seen as houses that also incorporated a stable.

A divergent development took place in the Weinviertel, in the north-eastern part of Lower Austria. Here, the dominance of buildings in post construction continued until the Late Middle Ages, for both residential buildings and for outbuildings (Krenn 2012, 164-166).

In Bohemia and Moravia, multipartite (often three-room) residential houses became more popular than one-room houses. Examples are found at the archaeological sites at Mstěnice, south Moravia (Nekuda 2000, 361; Klápště 2012, 299) and Svídna, central Bohemia (Klápště 2012, 275 f.). They developed in different ways, beginning with what were originally independent residential buildings and storage rooms or granaries, as can be observed in Mstěnice (Klápště 2012, 299 f.) and in Pfaffenschlag (Nekuda 1975, 249).

To sum up: Over the course of time, domestic accommodation shifted from pit houses to ground-level buildings. Subsequently, different activities increasingly

took place in the same building instead of being divided among separate structures.

Building techniques had a major impact on the conservation of the structures. In Svídna, the base portions of the walls were built of hard chalk bound by clay, while the outbuildings were presumably built in a way that left no archaeological traces, perhaps of timber and mud (Klápště 2011, 108 with literature).

Bystřec in northern Moravia shows the development of building techniques through time. It existed from the middle of the 13th century until the early 15th century. Here buildings were at first constructed with posts, which were gradually replaced by walls of timber and earth set on stone foundations (Klápště 2011, 106-108 with literature).

The causes of the often-slow implementation of innovations, for example in building techniques, may have been 'a strong local building tradition, a good supply of certain building materials, the landowners' involvement, social differentiation or farming practice' (Klápště 2012, 105). It is highly likely that local conditions had a strong impact on building techniques, rather than being determined mainly by a time-specific general development (which is also a construct of today's research). This was also apparent in the case of the Lower

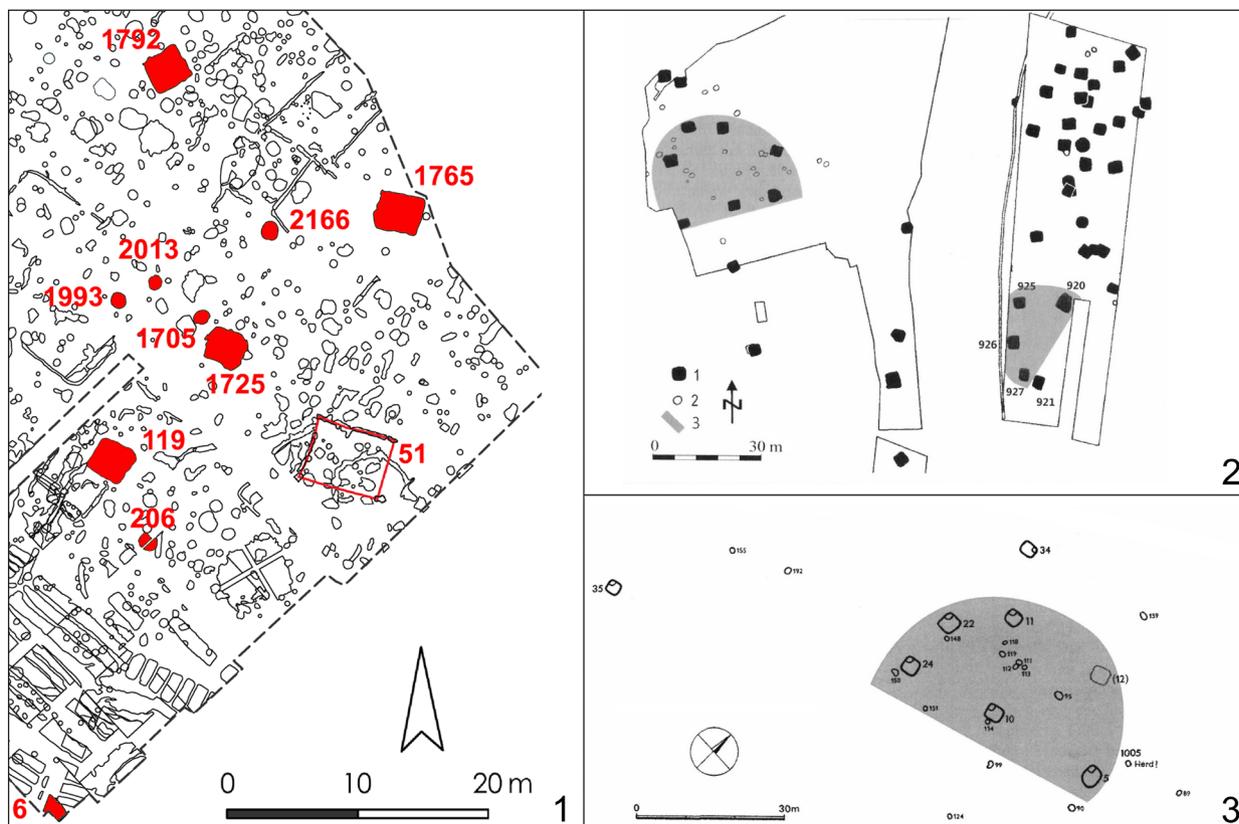


Fig. 3: Early Slavic semicircular arrangements of houses: 1. Mitterretzbach, Lower Austria; 2. Roztoky, Bohemia; 3. Březno, Bohemia (1. © Elisabeth Nowotny after Franz Drost; 2 and 3. Milo 2014 after Kuna – Profantová 2005 and Pleinerová 2000).

Austrian Waldviertel and Weinviertel, as stated above (see also Krause – Kühnreiter 2014, 232 f.).

Meso-scale

At the meso-scale, settlement form is of primary interest. This comprises the internal structure of the settlements (for example, the emergence of farmsteads) as well as the shape of the village.

Internal structure of the settlements and the emergence of farmsteads

In the Early Slavic phase of Mitterretzbach (Fig. 3/1) the sunken dwellings were organized in a row and oriented more or less identically, but with one set at an angle. While in Lower Austria only erratic settlement patterns (Felgenhauer-Schmiedt 2009, 76) had hitherto been known from this period, this semicircular arrangement of houses has sometimes been identified for settlements of the Prague-type culture, *i.e.* of the Early Slavic period (Fig. 3/2, 2) (compilation: Kuna – Profantová 2005, 335 f., 133 f. fig. 42 f.).

These arrangements may have existed as a settlement oriented around an open space (*Platzdorf*) (Pleinerová

1975, 26) or as singular homesteads within a clustered village (Dostál 1985, 85, fig. 19, 124). Because of the question of the contemporaneity of these buildings, and the small size of the excavated area of the settlements, it is difficult to make assertions about the form of settlement. In a recent critical revision, Peter Milo only regards one representative of each kind as plausible (Milo 2014, 275-282, 307).

The absence of independent farm-type complexes in rural settlements is seen as one of the main differences in the archaeological record of rural areas between western and eastern Central Europe in the early medieval period (Milo 2014, 302, 315-321, 636). In our research area, we find only hints of autonomous economic units as well as of economically specialised areas within settlements on some sites of the middle/latter part of the Early Middle Ages (Milo 2014, 321).

The development towards clearly enclosed yards was anticipated at early medieval central places (among others the Burgwälle), but on rural sites farmsteads enclosed by fences are only visible in the High Middle Ages (Milo 2014, 315-321, spec. 321; Klápště 2007). There is only one early example from the Czech lands, at Mštenice, which – in Phase III in the 11th century –

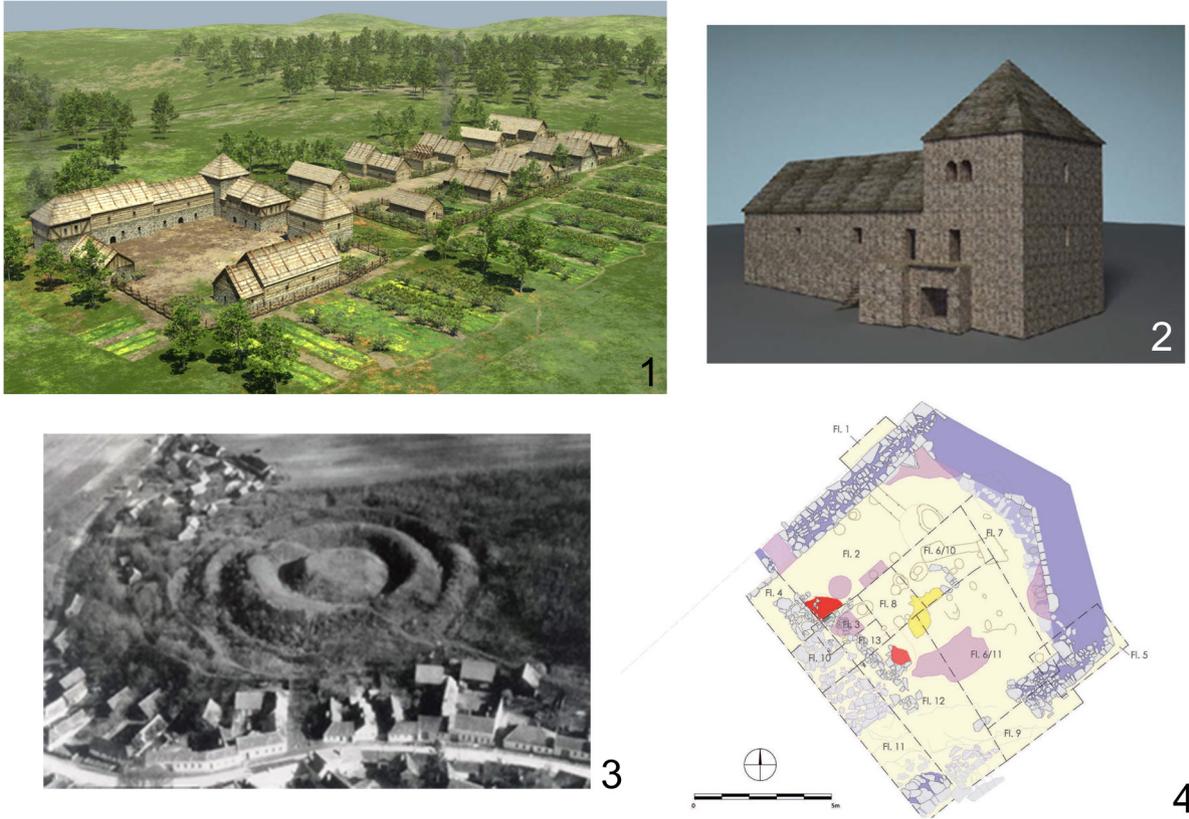


Fig. 4: Presence of leadership in respectively close to villages in Lower Austria: 1. The manor farm in the unit of the village of Hard; 2. The stone building of Kleinhard; 3. The Hausberg (motte) of Gaiselberg; 4. The lowland castle of Ödengroßau (graphic: 1. © Seven Reasons after Sabine Felgenhauer-Schmiedt; 2. Felgenhauer-Schmiedt 2008; 3. Felgenhauer-Schmiedt 2013; 4. Felgenhauer-Schmiedt 2008).

features several small enclosed farmsteads (*Klápště 2007*, 230), of approximately 20 m², a rather irregular layout, and several outbuildings. Some scholars have rejected this interpretation because of a lack of evidence (*Klápště 2012*, 191). Generally, the preservation conditions of ground-level buildings, which had emerged by the High Middle Ages, impede archaeological assessments (*Klápště 2012*, 191).

The 11th-century group of buildings at Mitterretzbach (Fig. 2) is the first systematically excavated farm-type structure of this period in Lower Austria. The posthole buildings are largely similarly orientated and some of them are aligned with each other. Because of this spatial relationship to each other, they are interpreted as belonging to the same steading or farm-type complex (of at least 32 x 37 m in size), despite the absence of a surrounding fence. Another building c. 52 m away may be part of another settlement unit. Farmsteads of comparable structure are more common further westwards than in the surrounding areas.

Development in the following period can be sketched by looking at the village of Hard (Fig. 4/1; 5/2) with its plots, some of which were shut off by stone

walls (*Felgenhauer-Schmiedt 2008*, 74). Information about outbuildings is lacking, as the plots themselves were not investigated.

Farmsteads in the more eastern part of the Weinviertel – from 1600 m² up to 2500 m² (including the adjacent garden plot)–seem to have been distinctively larger than in the adjacent regions of Moravia and north-western Lower Austria (Waldviertel). However, no regular building structure has been found (*Krenn 2012*, 179), apart from marginal buildings with gable or eave facing the street or square. This is probably due to the incomplete excavation of the villages.

In Bohemia and Moravia, the treatment of space changed in the 13th and 14th centuries as the layouts of homesteads became more stable and comprised a relatively firmly marked-out piece of land, which favoured the use of more-durable building material/techniques, particularly stone (see above) (*Klápště – Smetanka 1996*, 335). Farmsteads consisting of a multipartite residential house, a courtyard, and various outbuildings became characteristic during the Later Middle Ages; some of the farmsteads in Svídna provide examples (*Klápště 2012*, 279 f.) (Fig. 5a).

Village shape and field forms

In terms of archaeology, the greatest challenges when talking about settlement form are the partial excavation of sites and the often poor or insufficient dating of finds. This applies to the example of Mitterretzbach.

In the early medieval period (*Milo 2014*, 260-314, esp. 304 f., 329) the dominant settlement type in eastern Central Europe is the clustered village, which comprises about two-thirds of the sites. These typically seem to have been rather small settlements, sometimes referred to as hamlets (*Gringmuth-Dallmer 1996*, 26; *Brather 2016*, 206). Linear settlements (for example parts of Roztoky, Bohemia) and dispersed settlements (also sparse ones; for example Kraków-Nowa Huta Site No. 1, Poland) are also known and occur about equally often. Milo states that all the named types seem to have been present throughout the whole of the Early Middle Ages, and that no changes occurred over the centuries (*Milo 2014*, 303-305 Tab. 11, 12; Diagr. 10, 11). An inner social structure of these settlements is difficult to characterise (*Brather 2016*, 205). In western, Germanic areas the assessment of the village form is much easier; here closed clustered villages are more clearly dominant (*Milo 2014*, 329).

Examples of a (probable) linear village at high medieval sites are Gang, Lower Austria (*Felgenhauer – Felgenhauer 1969*) and the first phase of Pfaffenschlag, in southwest Moravia (*Nekuda 1975*, 243; 262), the latter being recently critically reviewed (*Klír 2008*, Anm. 93; *Klápště 2012*, 302 Anm. 212). For Mstěnice, southern Moravia, Nekuda postulates a clustered village consisting of several homesteads (*Nekuda 2000*, 350 f., 36) at this time, while critics talk of an ‘unclear mosaic of remains of wood-and-clay buildings’ (*Klápště 2012*, 299; for a review, see also *Procházka 2002*).

The farmsteads of late medieval Hard (Fig. 4a; 5b) were situated in two rows beside a road, with a village green between them and the manor farm. It is thus labelled a type of dead-end road village (*Sackgassendorf*) by the excavator Sabine Felgenhauer. It was thus proven that the presence of a second row of houses was not a development dating only from the end of the medieval period onwards, as had been suggested before by researchers of deserted villages (*Felgenhauer-Schmiedt 2008*, 39, 148 with literature).

The village of Hard was newly laid out around the middle of the 13th century, and thus we can see the implementation of a regular layout during an expansion stage, rather than at the time of settlement foundation (*Felgenhauer-Schmiedt 2009*, 80). This calls into question the generalization that villages with a regular layout, especially Anger-villages (two rows of houses separated by a linear village green), were generally founded systematically from the beginning of colonization in the 11th century onwards. This idea is based on the mapping of different settlement and *field forms* in the 19th-

century Franciscan cadastre and the presumption of their originality. The cadastre shows regular villages dominating in the areas of colonization, whereas on the ‘old settlement land’, we find mainly hamlets and clustered villages. Generally, the division in Hufen and the implementation of Gemarkungen was a precondition for the augmentation of the yield (*Gringmuth-Dallmer 2006*, 111 f.).

The high and late medieval deserted medieval villages of the Weinviertel provide examples of the reconstruction of the village form (Anger- or linear village) from LiDAR scans and the Franciscan cadastre, and only minimally by on-site archaeology. Due to the lack of structures in the early phases and hints for displacement (*Krenn 2012*, 183-185), these sites cannot help to solve the question of the emergence of regular villages. Krenn (2012, 185) relates the distances between them to their methodical installation in the course of a structured colonization.

For the northern Waldviertel, systematic field survey led to the model of a different development of the two rows of a village, which is still to be verified by archaeology (*Krause – Kühnreiter 2014*, 235).

In Moravia and Bohemia, the layouts with village greens in different shapes became dominant in the 13th century (*Klápště 2012*, 285). An example is the completely investigated village of Pfaffenschlag. In Mstěnice, 17 farmsteads were arranged along 2 sides of the elongated village green from the 2nd half or end of the 13th century onwards (*Klápště 2012*, 299).

In the Drahaný highlands in central Moravia, which were first settled in the 13th and 14th centuries, the short double-row forest field village (*Waldhufendorf*, comprising 6 to 8 homesteads) was the main village form (*Klápště 2001*, 31 f.). Half of the villages were abandoned in the 15th century.

For Slovakia it has been stated that ‘up to the 14th century scattered forms of settlement are especially known, consisting of groups of houses situated in larger areas within the settlement’s arable land’ (*Čapolvič – Habovštiak 1996*, 270).

Macro-Scale

Abandonment

The structure of the landscape changed in the advancing Middle Ages, due to the abandonment of villages and the formation of towns (*Felgenhauer-Schmiedt 2008*, 148; *Krause – Kühnreiter 2014*, 236 f., 244 f.). The abandonment of rural settlements was induced by the interaction of different natural causes and human actions, such as economic reorientation, war, and the collapse of prices (*Felgenhauer-Schmiedt 2008*, 146 f.), and proceeded in parallel with population aggregation at central sites (*Krause – Kühnreiter 2014*, 237).

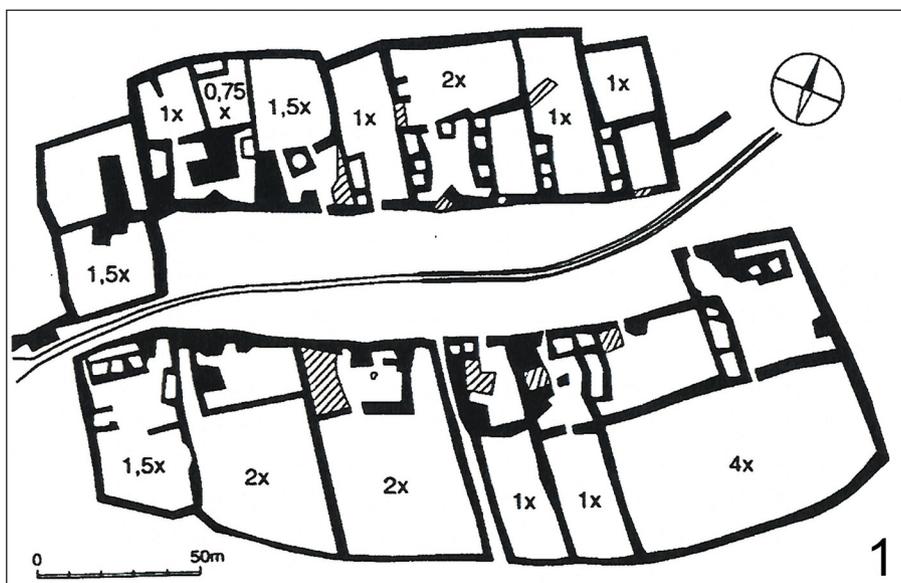


Fig. 5: Different sizes of houses and parcels connected to a differentiated social structure in the village itself: 1. Svidna, Bohemia; 2. Hard, Lower Austria (1. Klápště 2012 after Smetánka; 2. © Seven Reasons after Sabine Felgenhauer).

Relocation

In early and high medieval ages, several settlements in Moravia and Bohemia (Nekuda 2000, 349 f.), Slovakia (Čaplovič – Habovštiak 1996, 270) and Lower Austria (Felgenhauer-Schmiedt 2009, 80; Krenn 2012) were relocated in their immediate surroundings. These have been labelled ‘dynamic settlements with continuity of space’ (Klápště 2007, 231). This relocation is – unsurprisingly – typical for rural settlements, whereas the (partly fortified) central sites of the 9th and 10th centuries were (together with the reused Roman sites) the first settlements to remain in the same position for their entire period of existence (Herold 2012, 78).

Changes

In a long-term perspective, the shift from the exercise of authority over an association of people in unstable small dominions in the Early and High Middle Ages to control over larger territories in the Late Middle Ages (Weltin

1990 with literature) was decisive. The latter may be connected to colonization reaching its limits, provoking a reorganization of space and power (Felgenhauer-Schmiedt 2013, 228). It may be reflected in the archaeological record by stable villages with regulated open fields and through the replacement of the high number of small castles that had spread as a result of the intensive medieval colonization by a few big castles. The majority of small castles were supplanted by lightly fortified or unfortified manors (of the lower nobility or officials). An example is Hard (Figs. 4/1, 5/2), which reflects the change from a fortified house to a late medieval manor (farm) (Felgenhauer-Schmiedt 2013, 227).

Social change is one impact factor in the settlement landscape, and may be reflected in differentiation among settlements. At the start of the Early Middle Ages, we know only simple villages. This corresponds to the situation in other areas connected to the Early Slavs. Together with

the rather poor material culture, this has led researchers to postulate a reasonably egalitarian society (*Klápště* 2012, 188). On the other hand, the example of the Bavarian area shows that rural settlement need not reflect social differentiation, even if it obviously existed (*Felgenhauer-Schmiedt* 2013, 5 Anm. 2 with Literature).

As the Early Middle Ages progressed, an archaeologically identifiable differentiation among settlements developed in the eastern border regions of the Frankish Empire, in terms of central places (*Herold* 2012), which is connected to the (re-)organization of the elites.

It is not before the High Middle Ages that the presence of leadership becomes archaeologically apparent in the villages. This is linked with the formation of the (lower) nobility (*Felgenhauer-Schmiedt* 2012, 78; *Nekuda* 2000, 355, 361). The various pieces of archaeological evidence for the presence of leadership (*Nekuda* 1985; *Felgenhauer-Schmiedt* 2013) are stone buildings without any fortification, fortifications (lowland castles or mottes), and a manor as part of the village (Figs. 4/1, 5/2).

In the village itself, different sizes of farmsteads (parcels as well as houses) were connected to social structure (*Klápště* 2012, esp. 276 fig. 66; *Felgenhauer-Schmiedt* 2008, 138). This is the case, for example, in late medieval Svídna (Fig. 4/2) and Hard (Figs. 4/1, 5/2).

An example of the mutual relationship between political/social development and settlement transformation comes from Bohemia, where the 12th century saw the rise of the phenomenon of private colonization by temporal and spiritual overlords, which may have led to more-dispersed forms of settlement. The overloading of the social capacity of the settlements ended in the minor landed gentry splitting off (*Klápště* 2001, 29 f.).

The majority of phenomena resulting from the high medieval colonization (including the transformation of vast areas into agriculturally intensively cultivated landscapes) are similar in some regions of Central Europe, yet occur at different times (*Krause – Kühtreiber* 2014, 257 ff.; see also *Gringmuth-Dallmer* 2006). As a specific of the eastern Austrian colonisation, the importance of a broad aristocracy and the almost complete lack of centrally directed measures regarding space has been emphasised (*Krause – Kühtreiber* 2014, 260).

With regard to the organizing principles of rural economy, the manorial system had become a main factor for the structuring of space, socially, economically, and juridically (*Felgenhauer-Schmiedt* 2013, 6). The question of whether and to what extent it existed in the area of investigation in early medieval times cannot be answered at the current state of research (*Herold* 2016, 117). The relatively firmly marked-out piece of land belonging to a homestead is seen as the basis for this development (*Klápště* 2001, 32 f.). The so-called demesne system (*Fronhofsystem*) based on levy is replaced by the rent assessment system

(with autonomous farmers) in the course of the High and Late Middle Ages (*Felgenhauer-Schmiedt* 2013, 225 with fn. 32). The implementation of the *emphyteuse* brought restructuring mainly in the Slavic territory (*Felgenhauer-Schmiedt* 2008, 155 fn. 528). The transformation of the economic system had become necessary to increase the carrying capacity of the settlement area and thus meet the rising socio-economic demands (*Klápště* 2001, 30). These transformations took place later than in the rest of Europe (*Klápště* 2001, 33).

An example for the reflection in the archaeological record is the 13th/14th-century manor at Hard (*Felgenhauer-Schmiedt* 2008; *Felgenhauer-Schmiedt* 2013, 15f., 19) (Fig. 4/1) which, when no longer part of the demesne system, met the new demands and developed its new role by conversions and additions to the building (*Felgenhauer-Schmiedt* 2013, 18 f.).

Topographic transformations

Early Slavic communities preferred mainly low-lying land for settlement (Bohemia: *Kuna – Profantová* 2005, 319 f.; Moravia: *Měřínský* 2002, 63 f., Slovakia: *Fusek* 1994, 309, Lower Austria: *Nowotny* 2016, 171 fig. 1).

Gradual long-term settlement growth in the Early and High Middle Ages led over time to settlement of those areas most suitable for agriculture; less-favourable areas were settled in later medieval times (for the Czech areas, see *Klápště* 2001, 31; Slovakia, see *Čaplovič – Habovštiak* 1996, 270; Lower Austria publications dealing with settlement or landscape archaeology of regions as a whole are still missing; see *Krause – Kühtreiber* 2014, 235 f.).

Concluding summary

The settlement of Mitterretzbach in north-eastern Austria is a rather typical Early Slavic settlement of Eastern Central Europe with sunken dwellings in a semicircular arrangement, representing a settlement laid out around an open space. Clustered villages are generally predominant in this period. Over the course of Early Middle Ages, central sites emerged and the shift to ground-level buildings began, becoming prevalent on rural sites in the High Middle Ages. Enclosed farmsteads, a phenomenon that appeared much earlier in western Central Europe, also become archaeologically evident during this period. In Mitterretzbach, a high medieval farm-type structure consisting of ground-level buildings in post-construction was identified, representing the latest settlement phase on this site. This demonstrates a stage of development – generally observable in the research area – at which ground-level buildings had become the main building type. Village layouts also become more regular, which is often linked to colonization.

In the Late Middle Ages, detached buildings developed into multipartite houses, and stone became more common as a more durable building material, which is connected to the increasing stability of layouts of homesteads and plots of land. Layouts with village greens in different shapes are now dominant. Moreover, the abandonment of rural settlements and the increasing concentration on central sites was a late medieval phenomenon.

Of the different changes affecting the settlement landscape, the shift in the Late Middle Ages from the exercise of authority over an association of people to authority over territories was of major importance. In the rural milieu, this is reflected by the existence of stable villages with regulated open fields. An important economic transformation is the replacement of the demesne system (*Fronhofsystem*) by the rent assessment system in the course of the High and Late Middle Ages, taking place comparatively late in the European context.

References

- Brather, S. 2016:*
Grubenhäuser und Haushalte: Zur Sozialstruktur frühmittelalterlicher Siedlungen in Ostmitteleuropa, in: Bollók, A. – Csiky, G. – Vida, T. (eds), *Zwischen Byzanz und der Steppe: archäologische und historische Studien. Festschrift für Csanás Bálint zum 70. Geburtstag*. Budapest, 195-208.
- Brunner, K. 1994:*
Herzogtümer und Marken: Vom Ungarnsturm bis ins 12. Jahrhundert. *Österreichische Geschichte 907-1156*. Wien.
- Čapolovič, D. – Habovštiak, A. 1996:*
The situation of archaeological research of Middle Ages: agricultural settlements in the territory of Slovakia, *Ruralia I. Pam. Arch. Suppl 5*, 269-276.
- Dostál, B. 1985:*
Břeclav-Pohansko III: Časně slovanské osídlení. *Opera Universitatis Masarykianae, Facultas Philosophica 261*. Brno.
- Felgenhauer-Schmiedt, S. 2008:*
Hard: Ein Wüstungskomplex bei Thaya im niederösterreichischen Waldviertel. *Archäologische Forschungen in Niederösterreich 6*. St. Pölten.
- Felgenhauer-Schmiedt, S. 2009:*
Archäologie ländlicher Siedlungen des Mittelalters in Niederösterreich, in: Felgenhauer-Schmiedt, S. – Csendes, P. – Eibner, A. (eds), *Lebenswelten im ländlichen Raum: Siedlung, Infrastruktur, Wirtschaft, Beiträge zur Mittelalterarchäologie in Österreich 25*, 69-88.
- Felgenhauer-Schmiedt, S. 2012:*
Herrschaftszentren und Adelssitze des 10. bis 13. Jahrhunderts im nördlichen Waldviertel: der Beitrag der Archäologie, in: Birngruber, K. – Schmied, Ch. (eds), *Adel, Burg und Herrschaft an der „Grenze“: Österreich und Böhmen. Studien zur Kulturgeschichte von Oberösterreich 34*. Linz, 57-82.
- Felgenhauer-Schmiedt, S. 2013:*
Zur Präsenz von Herrschaft im Dorf, *Ruralia IX*, 5-22.
- Felgenhauer, F. – Felgenhauer, S. 1969:*
Die Wüstung Gang, Gemeinde Eckartsau, p.B. Gänserndorf, Niederösterreich: Probegrabung und Versuch einer Wüstungsanalyse, *Archaeologia Austriaca, Beiheft 10*, 25-67.
- Fries-Knoblach, J. 2006:*
Hausbau und Siedlungen der Bajuwaren bis zur Urbanisierung, *Bayerische Vorgeschichtsblätter 71*, 339-430.
- Fusek, G. 1994:*
Slovensko vo včasnოსlovanskom období [Die Slowakei in der frühslawischen Zeit]. *Archeologica Slovaca Monographiae 3*. Nitra.
- Gringmuth-Dallmer, E. 1996:*
Landwirtschaftliche Siedlungen im östlichen Deutschland zwischen frühem und hohem Mittelalter, *Ruralia I, Pam. Arch. Suppl. 5*, 17-28.
- Gringmuth-Dallmer, E. 2006:*
Die hochmittelalterliche Ostsiedlung in vergleichender Sicht: Siedlungsforschung, Archäologie – Geschichte – Geografie 24, 99-121.
- Herold, H. 2012:*
Fortified settlements of the 9th and 10th centuries AD in Central Europe: structure, function and symbolism, *Medieval Archaeology 56*, 60-84.
- Herold, H. 2016:*
The natural environment, anthropogenic influences and supra-regional contacts at 9th- to 10th-century fortified elite settlements in Central Europe, in: Christie, N. – Herold, H. (eds), *Fortified settlements in Early Medieval Europe: defended communities of the 8th to 10th centuries*. Oxford, 107-120.
- Klír, Th. 2008:*
Osídlení zemědělsky marginálních půd v mladším středověku a raném novověku [Besiedlung und landwirtschaftliche Nutzung marginaler Böden im späten Mittelalter und der frühen Neuzeit]. *Dissertationes archaeologicae Brunenses/Pragensesque 5*. Praha.
- Klápště, J. 2001:*
Bohemia and Moravia: High Medieval Settlement, in: Crabtree, P. J. (ed.), *Medieval archaeology: an encyclopedia*. Routledge encyclopedias of the Middle Ages 4. New York/London, 31-35.
- Klápště, J. 2007:*
Das frühmittelalterliche Dorf in Böhmen und Mähren: Glanz und Elend des aktuellen Forschungsstandes, in: Jeute, G. H. – Schneeweiß, J. – Theune, C.

- (eds), *Aedificatio terrae: Beiträge zur Umwelt und Siedlungsarchäologie Mitteleuropas. Festschrift Eike Gringmuth-Dallmer zum 65. Geburtstag. Internationale Archäologie – Studia honoraria* 26. Rahden, 229-238.
- Klápště, J. 2011:*
Investigating rural settlement, in: Carver, M. – Klápště, J. (eds), *The archaeology of Medieval Europe 2: Twelfth to sixteenth centuries. Acta Jutlandica Humanities Series 9/1002.* Aarhus, 97-109.
- Klápště, J. 2012:*
The Czech lands in medieval transformation: east Central and Eastern Europe in the Middle Ages 17. Leiden/Boston.
- Klápště, J. – Smetanka, Z. 1996:*
The archaeology of medieval villages in Bohemia and Moravia (Czech Republic), *Ruralia I. Pam. Arch. Suppl* 5, 331-338.
- Krenn, M. 2012:*
Wüstungsforschung und Denkmalpflege in Niederösterreich: Anforderungen und Aufgaben der archäologischen Denkmalpflege am Beispiel mittelalterlicher Siedlungsstrukturen. *Fundberichte aus Österreich Materialhefte A* 20. Horn.
- Krause, H. – Kühnreiter, Th. 2014:*
Hochmittelalterliche Transformationsprozesse und ihre Wirkung auf das Siedlungsbild Ostösterreichs, in: Gringmuth-Dallmer, E. – Klápště, J. (eds), *Tradition – Umgestaltung – Innovation: Transformationsprozesse im hohen Mittelalter. Praehistorica* 31/2. Prag, 221-268.
- Kuna, M. – Profantová, N. 2005:*
Počátky raného středověku v Čechách. *Archeologický Ústav AVČR. Praha.*
- Lauerermann, E. – Drost, F. 2005:*
KG Mitterretzbach, *Fundberichte aus Österreich* 44, 468.
- Měřínský, Z. 2002:*
České země od příchodu Slovanů po Velkou Moravu I. Naklad Libri. Praha.
- Milo, P. 2014:*
Frühmittelalterliche Siedlungen in Mitteleuropa: Eine vergleichende Strukturanalyse durch Archäologie und Geophysik. *Studien zur Archäologie Europas* 21. Bonn.
- Nekuda, V. 1975:*
Přáfensschlag: Zaniklá středověká ves u Slavonice. *Mittelalterliche Ortswüstung bei Slavonice.* Blok. Brno.
- Nekuda, V. 1985:*
Hrádek – tvrz – dvůr – předsunutá opevnění. *Prameny k dějinám a kultuře Moravy* 1. Brno.
- Nekuda, R. 2000:*
Mstěnice 3. Raně středověké sídliště. *Zanikla středověká ves u Hrotovic. Prameny k dějinám a kultuře Moravy* 7. Brno.
- Nowotny, E. 2015:*
Die früh- bis hochmittelalterliche Siedlung von Mitterretzbach, Niederösterreich. *Archäologische Forschungen in Niederösterreich N.F.* 1. Krems.
- Nowotny, E. 2016:*
The archaeology of early Slavic settlements in Lower Austria, in: Biermann, F. – Kersting, Th. – Klammt, A. (eds), *Die frühen Slawen – von der Expansion zu gentes und nationes. Beiträge zur Ur- und Frühgeschichte Europas* 81/1. Beiträge der Sektion zur slawischen Frühgeschichte des 8. Deutschen Archäologiekongresses in Berlin, 06.-10. Oktober 2014. Langenweissbach, 171-180.
- Obenaus, M. 2011:*
Die neuen Forschungen in der Talsiedlung von Thunau am Kamp (Ein Zwischenbericht), in: Macháček, J. – Ungerman, Š. (eds), *Frühgeschichtliche Zentralorte in Mitteleuropa. Studien zur Archäologie Europas* 14. Bonn, 529-549.
- Obenaus, M. 2015:*
Die frühmittelalterliche Talsiedlung von Thunau am Kamp: Grabungen 2004 bis 2014, *Archäologie Österreichs* 26/1, 9-21.
- Pleinerová, I. 1975:*
Březno. Vesnice prvních Slovanů v severozápadních Čechách [Březno, ein Dorf der fruehesten Slawen in Nordwestböhmen]. Prag.
- Pleinerová, I. 2000:*
Die altslawischen Dörfer von Březno bei Louny. *Prag/Louny.*
- Procházka, R. 2002*
Besprechung von: Vladimír Nekuda: Mstěnice. *Zaniklá středověká ves u Hrotovic* 3. Raně středověké sídliště, *Archeologické rozhledy* 54/4, 947-950.
- Ruttka, M. 2002:*
Ländliche Siedlungen des 9. bis 11. Jahrhunderts im Mitteldonauegebiet, in: Henning, J. (ed.), *Europa im 10. Jahrhundert: Archäologie einer Aufbruchzeit. Mainz am Rhein,* 267-282.
- Weltin, M. 1990:*
Der Begriff des Landes bei Otto Brunner und seine Rezeption durch die landesgeschichtliche Forschung, *Zeitschrift der Savigny-Stiftung für Rechtsgeschichte, Germanistische Abteilung* 107, 339-376.
- Willoweit, D. 2006 (ed.):*
Reiche und Territorien in Ostmitteleuropa: Historische Beziehungen und politische Herrschaftslegitimation. München.
- Wolfram, H. 2003:*
Grenzen und Räume: Geschichte Österreichs vor seiner Entstehung. *Österreichische Geschichte* 308-907. Wien.

