Rejection of Urban Sedentism: Settlement Transitions in Southeast Hungarian Prehistory

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The Great Hungarian Plain provides a unique opportunity for exploring the many variables of social, economic and environmental change over time. My project focuses on one of these variables; the changes in settlement organisation circa 4800-4500 BC. During this period, people appear to have shifted from living in large, densely-packed villages to smaller dispersed farmsteads, and my research examines this phenomenon through geochemistry. My time in Hungary not only allowed me to pursue my research. Through collaboration with Hungarian prehistorians, I gained a new perspective on the difficulties facing my colleagues here. I also gained new friends and colleagues, and I look forward to continuing research projects here.

Introduction

During our time here in Hungary, the 2007-2008 Fulbright fellows have heard much about Hungarian history, and the role that Hungary has played in the political, social and economic development of Central Europe. Many of us may also recall that this history typically begins with the Hungarian Conquest, circa AD 900. The importance of this region, however, goes back to at least 6000 BC. During prehistory, the Carpathian Basin – that is Greater Hungary – formed a sort of funnel through which most of the cultural and economic developments of European prehistory first moved from Anatolia and the Aegean into Central and later Western Europe. This cultural package is what we call the Neolithic Revolution; the process that we can think of as the "domestication of Europe" (Hodder 1990), which included agriculture, pottery making and permanent houses. During this process, these cultural traits were filtered through the specific environmental and social contexts of people living in the Carpathian Basin, and different developmental trajectories arose on the eastern and western sides of Hungary. In this essay, I will first briefly introduce some very interesting and significant changes and cycles that occurred throughout this period in prehistory. These are important because they represent the reactions of society to environmental and social stresses, as well as providing the context of my research. That is, they represent the ways that people dealt with stress, in some cases by altering their environment and in all cases by restructuring their society. I also describe the role of my research in explaining some of these processes.

Before going any further, I need to mention other factors that brought me to Hungary as a Fulbright fellow; factors that also make this region especially useful for archaeological research. I have already alluded to the fact that the long-term processes of domestication occurred here. More specifically, all aspects of urbanisation, agriculture, and state formation took place here, and the archaeology is replete with examples from every major period in European prehistory. There is a long history of research in Hungary, starting from the late 19th century (Tompa 1929; Banner 1942; Bognár-Kutzián 1963, 1966, 1972; Kalicz and Makkay 1977; Raczky 1987; Bökönyi 1992, to list but a few examples). During the 1970s and 1980s, large-scale surveys of archaeological sites were conducted. The results of these were compiled and published as the Magyarország Régészeti Topográfiája (Archaeological Topography of Hungary), or MRTS (Ecsedy et al. 1982; Jankovich et al. 1998). In addition, every community of any size has a museum housing materials collected by professional archaeologists and antiquarians, although as I write this these museums are suffering from lack of resources, and some are being forced to close their doors. And finally, there is a long history of international collaboration. Greatly interested in working with scholars who can bring other ideas and new analytical methods, Hungarian prehistorians are quick to adopt and adapt new technologies and ideas. Three of the more recent of these collaborations include the Körös Regional Archaeological Project (Gyucha et al. 2006; Parkinson et al. 2004), the Upper Tisza Project (Chapman et al. 2003)

and the Százhalombatta Archaeological Expedition (Proszlai and Vicze 2005). These resources – the archaeological and the human – combine to provide a unique opportunity to explore social and environmental questions.

The Culture History of the Great Hungarian Plain

My Fulbright research proposal was to examine prehistoric social transitions on the Great Hungarian Plain in eastern Hungary (Figure 1), focusing on the period from about 4800 to 4500 BC; the end of the Late Neolithic period. The Neolithic was a time of especially profound transformations in human history. This period saw the rise of urbanization, or at least of relatively permanent settlements with solid houses at locales that were reoccupied for centuries or even millennia; construction of structures for ritual/religious purposes; an economy based on agriculture and animal husbandry; trade networks that spanned enormous areas; and the beginnings of metal working. These changes are particularly marked in south-eastern Europe during the 6th – 4th millennia BC. The initial diffusion of pottery and agriculture into the Carpathian Basin was from the Aegean and Anatolia through the Balkans (Childe 1939; Tringham 1971), a model supported by archaeozoological data (Bökönyi 1974). As a brief example of what is meant by the filtration of ideas and materials through the Carpathian Basin, by the Late Neolithic period the original agro-pastoral system of raising sheep and goats combined with growing Near Eastern grains had shifted to grains better suited to this climate and greater reliance on cattle and pigs (although sheep remained important throughout prehistory). The shift from reliance on sheep and goats to domestication of cattle and pigs is a widespread phenomenon, and faunal assemblages from northeast Romania, the northern Balkans and western Hungary both favour cattle over sheep, with some wild game included (Bailey 2000:182; Bökönyi 1988:431; Milisauskas 2002:210-211). Preliminary analysis of samples from the Early Copper Age site of Vésztő-Bikeri (Kasper 2003) suggests that the soils of the Hungarian Plain do not preserve botanical remains well. However, seeds of emmer wheat, einkorn, bread-wheat, barley, wild strawberry and cornelian cherry were recovered at the site, indicating a reliance on cultivated grains and wild fruit (*ibid.*). Based on the presence of high-purity samples of grains like einkorn, emmer wheat and barley at Balkan sites, Bailey (2000:178-180) hypothesizes a shift from small-scale mixed farming and foraging during the Early Neolithic to large-scale agriculture by the end of the Middle Neolithic. By the Late Neolithic, agriculture and herding was a well-entrenched subsistence system and people were beginning to experiment with working with metals, especially copper and gold.

Settlement locations favoured by Neolithic groups were generally along waterways, and distribution maps of Neolithic settlements usually show clusters along the rivers and streams. These include the Sava, Morava, and Danube in Serbia, Lake Balaton in Transdanubia, and the Maros, Tisza, and the several branches of the Körös and Berettyó in eastern Hungary (Chapman 1990b; Sherratt 1982; Sümegi 2003). Especially favoured locations were natural levees formed during the Pleistocene. In Hungary, these places were the highest points on the Alföld, and were typically covered with aeolian loess (Sümegi 2003:56). Modern drainage and canalization across the Hungarian Plain has resulted in much straighter channels and far fewer marshy areas than would have existed in the past. Recently, the ancient waterways have been analysed by Gyucha and Duffy (2008). The results of their work are used here as base-maps for displaying the distribution of settlements in the region.

At around 4500 BC the specific set of social transformations that I am focusing on occurred. I first became aware of the significance of these transitions when I came to Hungary in the summer of 2005 to participate in a large, multi-national research project called the Körös Regional Archaeological Project, directed by Attila Gyucha of the Múnkacsy Mihály Museum in Békéscsaba Hungary, and William Parkinson, then of Florida State University and now at the Field Museum in Chicago, IL. At this time I also became aware of the unparalleled density of prehistoric archaeological sites in eastern Hungary. In Békés County alone there are over 400 sites from the Late Neolithic and Copper Age, a period spanning less than 1000 years. This is aside from sites from the Palaeolithic, Mesolithic, Early and Middle Neolithic, Bronze Age, etc. The number and kinds of questions that we can address with a data set of this magnitude and time depth makes it one of the best places in the world to practice social archaeology. All of this caused me to get deeply interested in the region, and I returned to the project in 2006. During that summer I began to develop a research proposal that forms the core of my dissertation research, as well as my Fulbright project.

My project aims to understand the reasons and results of people rejecting crowded, closely-packed nucleated settlements. To understand this phenomenon, we must begin by looking at the Carpathian Basin as a whole. The Late Neolithic was a period of population nucleation, as people began to live in larger villages. There were at least three distinct culture groups in eastern Hungary (Late Neolithic Tisza-Herpály-Csőszhalom complex), plus another stretching from Transdanubia (Lower Austria and western Hungry) across what is now the Czech Republic into Slovakia and southern Poland (Lengyel Culture), and yet another south of the Danube in what is now Serbia and western Croatia (Vinča Culture). In eastern Hungary, the Great Hungarian Plain saw the northernmost dispersal of tell settlements, most of which developed during the late Middle Neolithic Szakáhlát phase. Tells are large settlement mounds created through the successive rebuilding of houses made of mud. This rebuilding occurs over multiple generations, and such settlements typically are occupied for several centuries. Houses on these sites are generally large, rectangular, multi-roomed, and on occasion have two floors (Kalicz and Raczky 1987a). The largest Late Neolithic tell in Hungary, Vésztő-Magor, is located in Békés County. The settlement pattern, shown in Figure 2, is one of small to medium sized settlements clustered along small creeks and waterways. It is worth noting that each cluster contains a large "super site", usually a tell, and that there are empty areas between the clusters. The empty spaces have been interpreted as boundary areas.

Settlement location, distribution and type changed at the end of the Late Neolithic. General trends are observed, but not all areas within the region experienced the same phenomena. Since the research represented here focuses on eastern Hungary, the remainder of this discussion will be restricted to general changes seen on the Great Hungarian Plain, and more specifically changes within the area surrounding the Berettyó-Körös River system. During the Hungarian Early Copper Age, settlement patterns in eastern Hungary shifted from the three distinct areas of the Late Neolithic to smaller settlements of the Early Copper Age Tiszapolgár culture. The settlement pattern, as shown in Figure 3 is now more dispersed across the landscape, and there is a substantial increase in the number of sites, but the sites themselves cover approximately the same territory as the preceding Tisza-Herpály-Csőszalhom complex. This pattern largely continued through the succeeding Middle Copper Age Bodrogkeresztur phase (Parkinson et al. 2004; Sherratt 1983). During the Hungarian Early Copper Age (c. 4500-4000 BC), settlements are composed of small, single room dwellings without an interior hearth or oven, without obvious internal storage containers, and without any internal religious/ritual location (Horvath 1989). These settlements are smaller than Late Neolithic settlements and represent shorter occupation, possibly associated with increased settlement mobility as part of a pastoral lifestyle (Parkinson 2002:430). Another possibility is that the dispersal is part of a reaction against incipient social stratification, with households or factions within the communities asserting their independence, as suggested by Sahlins (1972) for tribal groups faced with developing social inequality.

It was thought that this change in settlement patterns represented a major and abrupt change in social organisation, with the total dissolution of tell occupation and the sudden flood of small settlements across the landscape (Bognár-Kutzián 1972). However, a variety of sites types existed during the Neolithic, with two or more types co-existing in several areas. Kalicz and Raczky (1987a:15-16) identify three basic site types during the Hungarian Neolithic; tells, tell-like mounds, and small to moderate sized flat sites enclosed by ditches. Larger sites predominate during the Late Neolithic and smaller sites are more common in the Early Copper Age, although all three types exist for both periods. In addition, many tells have Copper Age occupation levels following a period of hiatus. This time away is typically indicated by a sterile soil horizon, as seen at Vésztő-Mágor (Hegedűs and Makkay 1987) and Berettyóújfalu-Herpály (Kalicz and Raczky 1987b). Archaeologists do not have much information about the Late Neolithic small, flat sites. Few Late Neolithic flat sites have been investigated, and those few that have were only tested with narrow trenches (Kalicz and Raczky 1987a), so that the interior layout of these sites cannot be compared to larger Late Neolithic sites or to succeeding Early Copper Age settlements. In large part this is due to the research focus on tells and the large open settlements. In addition, many of the smaller, flat sites have been damaged by extensive ploughing, making them less attractive for large-scale research. Still, two important points can be draw from this discussion. The first is that the shift to small, dispersed settlements may have been a continuation of one part of the typical settlement pattern at the expense of large, nucleated villages. Secondly, we will not understand how these changes were acted out until we examine all levels of the settlement system.

Until very recently, the lack of excavation data was also a problem for understanding the Early Copper Age settlements. Only a very few had been intensively excavated and recorded, and knowledge of this period came primarily from cemetery data (Bognár-Kutzián 1963, 1972). Beginning in 1997, the Körös Regional Archaeological Project conducted survey, soil chemistry, magnetic resistivity analysis and excavation in Békés County. Excavations at two sites from the Early Copper Age, Vésztő-20 and Körösladány-14, provide some of the data needed to understand this transitional period. Now the small Late Neolithic settlements are being subjected to similar analyses through the Neolithic Archaeological Settlements of the Berettyó-Körös project.

The Neolithic Archaeological Settlements of the Berettyó-Körös (NASBeK) Project

My research examines the changes in the way settlements were constructed and how the space within them was organised, with special focus on the small Late Neolithic settlements. I see these changes as a reflection of the general decision to move away from crowded tell-settlements. I am also curious to see what the effects of human decisions about their settlement space had on the archaeological record that we see today. The conceptual approach follows from the idea that all of what we see is the result of human practices, and that these practices have both intentional and unintended consequences that are visible archaeologically (following the social theories of Bourdieu 1977 and Giddens 1984). The ways that house and settlement construction changed through this period, for example, will show up in differences in house styles, cooking areas, storage pits, workshops, etc. Further, some of these changes will be visible through non-intrusive techniques; that is, they can be identified without excavation. I am also hypothesising that some of these changes will be visible even on sites that have been severely damaged by ploughing.

My specific goal is to clarify the differences and similarities between the small, flat settlement sites during the Late Neolithic and Early Copper Age. As mentioned above, these sites, especially those dating to the Late Neolithic, have not been intensively examined. A working hypothesis is that the settlement pattern changed only slightly; that small flat sites with small houses were present during the Late Neolithic, although they only formed a small part of the total settlement system. During the Early Copper Age, this site type became more common, at the expense of the larger sites and tells. We do know that the tells were occasionally reoccupied during the Early Copper Age, although for very short periods, and that there is a lot of variability in settlement size, just as during the Late Neolithic. So I thought that perhaps the things that we learned about the small Early Copper Age settlements might have their origins in the Late Neolithic. Since we have excavation and geophysical data from Early Copper Age settlements, we should be able to correlate that with geochemical data, and then compare that directly to geochemical data from Late Neolithic settlements. Through these steps, we can form an image of how Late Neolithic settlements were structured, how space was used, without destroying them.

The ability to examine artefacts or archaeological sites without destroying them is an important development. Non-intrusive techniques provide archaeologists with good data without being destructive. Unlike excavation, which removes the excavated portion of a site forever, the techniques I am applying leave all, or nearly all, of the site undisturbed. These techniques can be broken down into three groups; geophysical, geochemical and aerial methods. Geophysical techniques are those that give an image of what is under the ground surface, and include ground-penetrating radar and magnetometry. Geochemical methods involve collecting sample of site sediments and testing them for various chemical elements that are associated with human activity, as will be discussed in more detail below. Aerial methods include aerial photos and satellite images, which show vegetation, waterways and sometimes the outlines of sites. Soil chemistry and magnetic resistivity have been used in the Körös Basin with good results, giving indications of site structure (Sarris et al. 2004; Yerkes et al. 2007). This early phase of the NASBeK project applies geochemical methods to several Late Neolithic and Early Copper Age settlements in the Berettyó-Körös region.

To accomplish the research goals, I selected representative settlements from each period and went out and cored these sites. During October and November of 2007 I carried out reconnaissance surveys at nine Late Neolithic sites and eight Early Copper Age sites. The final selection of sites was based upon access, integrity, size, comparability, and the presence of only one archaeological period. Access quite simply means the ability to get to the site, which is not as simple as one might think on the dirt farm tracks of rural eastern Hungary. Integrity refers to whether or not the whole site is available for examination. One thing that I discovered early on is that many of the sites recoded in the 1970s and 1980s have since been destroyed. For example, a site near the town of Gyoma is now occupied by a drainage pond that removed over half of the site – permanently. This bit of cultural heritage is gone forever. Sites of similar size and location are comparable within the conceptual framework for this project. All of the sites selected fall within agricultural fields, and are visible on the ground surface as concentrations of pottery, burnt daub and occasionally bone or stone fragments. These characterisations also apply to the sites excavated by the Körös Regional Archaeological Project (Parkinson et al. 2002, 2004). The sites selected were either Late Neolithic or Early Copper Age, without other occupations or cultures present within the site boundaries. From the Late Neolithic I selected Csárdaszallás-8 and -26 and Szeghalom-108. Early Copper Age sites selected include Békés-90, Mezőberény-68 and Okány-16. Mezőberény-68, Békés-90 and Csárdaszallás-26 all look topographically similar, forming small but obvious mounds of approximately 50 square meters on linear levees along relict channels, with core-areas of about 15 square meters. Csárdaszallás -8, Sarvas-131 and Okány-16 share a slightly different appearance. Again situated along relict channels, and averaging 100 square meters, these three sites do not look as mound-like and have larger or perhaps multiple core-areas. All of these sites lie in the Berettyó-Triple Körös river system in the Hungarian Great Plain geomorphological macro-region. This plain is flat and poorly drained, formed through gradual filling since the Pleistocene (Pécsi 1970). Prior to modern water controls, the rivers meandered and flooded regularly, forming oxbows and swamps and re-depositing sediments. The basic surface deposits here are wind-blown sand on hills; loess on flat surfaces above floodplains; and sands and silty clays on flat alluvial areas.

Once the sites were selected, I sampled the sites using a method called coring. What I mean by 'coring' is that I used a tool called an Oakfield soil auger to push down into the soil, 'trapping' the soil inside a hollow tube. The Oakfield has a hollow head on it that is 25cm long and 1.5cm in diameter. One side of this head is cut away, allowing access to the sediments that collect inside. You push it down, pull it out, collect

samples or discard the contents, push it back down another 25cm; push, sample, repeat. This component of my fieldwork was conducted during November 2007 and February-March 2008. Cores were taken at regular 10 meter intervals using a rectilinear grid system for continuous and systematic sampling across whole sites. A 5m interval in the site centers will provide greater resolution, and off-site samples will be taken to establish culturally sterile geochemical signatures. I have done 892 cores at 6 sites, and collected 2,750 samples. Fieldwork included documenting house locations and the distribution of material culture on the surface, and recording stratigraphic data and presence/absence of material culture from the cores.

The analytical framework for this project is based on two parts. One is the examination of the vertical layering of sediments and soils at these sites, along with identification of ditches, pits and houses (ditches, pits, wells, walls, and houses are categorised as 'features' in archaeology). Layers observed in the cores indicate both the depth of habitation layers and the distribution of features within the sites. I also have conducted limited excavation at two of the Late Neolithic sites so that I can directly observe the different natural and cultural layers within the soil profiles. To do this I have excavated 1m x 1m test pits, two within Late Neolithic settlements and two in off-site areas. The other major aspect of the project has been to collect small samples of soil from natural and cultural layers within each site for geochemical analysis. For the immediate project, I am testing small sub-samples of sediments for pH and relative levels of phosphate. Phosphate is an element that remains fixed in the soil and is not removed through day-today processes of ploughing or erosion (Eidt 1977; Lorch 1940; Sjoberg 1976). This chemical is deposited in the soil though human and animal remains and/or waste, and high levels are a strong indicator of human activity. Presence and absence of phosphate is a good indicator of relative horizontal limits of the settlement. Patterns of high and low of phosphate readings may vary between LNA and ECA settlements, or give indications of activity areas within the sites. The results of the chemical analysis are slowly coming together, but are unfortunately not available for this publication.

Results of the research- Rejection of urban sedentism?

Results of the stratigraphic analysis indicate no significant differences between Late Neolithic and Early Copper Age settlements. Natural soil profiles in the region vary depending on whether one is on a loess ridge or not. Natural layers on the loess ridges include a ploughzone (Ap-horizon) of dark greyish-brown dense silty clay with a subangular blocky structure and a subsoil of light olive brown loess with sodium or calcium carbonate concretions. On the lower surrounding areas one typically encounters meadow clay deposits, formed in standing water, like marshlands. These soils are denser, and the ploughzone is underlain by dark grey clay or silty-clay. Deposits observed on sites also contain a ploughzone. Cultural layers under the ploughzone were typically composed of dark brown to dark yellowish brown silty clay or loam, and contained ceramics, daub, charcoal, bone and shell. Fill deposits in pits and ditches included brown and dark grey brown silts and silty clay, often mottled with dark yellowish-brown silt, and containing lenses of friable burned daub and ashy sediment. Sterile layers found under cultural deposits typically consist of dark grey silty clay containing fragments of calcium carbonate concretions, occasionally mottled with light olive brown silt, overlying light olive brown loess subsoil which also may include carbonate concretions. Figure 4 depicts the distribution of the cultural layer across the site of Mezőberény-68. Stratigraphic data in this case is mapped using presence or absence of cultural material and sediments associated with the cultural layer. The darkest areas of the map depict a definite cultural layer based on soil colour/texture and the presence of artefacts. Mid-range colours indicate the soil associated with the cultural layer but without any artefacts, while the lightest shade of grey indicates natural soils. White areas surrounding the site were not tested.

Houses construction and location also play a role in our understanding. A hallmark of Neolithic settlements in south-eastern Europe is the use of mud, usually for wattle and daub construction (Sherratt 1982; Stevanovič 1997; Tringham 1971). Deliberate house destruction by fire is also recognized as a common feature of Neolithic life here (Stevanovič 1997; Tringham 1971), and the remains of this practice are evident on the surface of Neolithic and Copper Age settlements as very visible concentrations of burned daub. Burned daub concentrations were found to correlate with house structures at Vésztő-20 (Parkinson et al. 2004), and are routinely interpreted as indicative of houses during surveys. I have been able to demarcate houses at Szeghalom-108, Okány-16 and Csárdaszallás-8 and -26 based on roughly rectangular concentrations of burnt daub on the ground surface. The use of mud for construction of houses and the subsequent deliberate burning of these houses indicates the continuation of long-standing traditions. While the extent of the daub concentrations at Szeghalom-108 implies rather large houses, the structures at the other sites appear to be somewhat smaller. However, the size of the houses cannot be determined simply from surface analysis; the results mentioned here only hint at possibilities.

Although the geochemical analysis are not complete, preliminary results suggest that the spatial patterning and occupational intensity among small Late Neolithic and Early Copper Age sites are quite similar. There are also indications that house size and spacing within the settlements is variable, suggesting a flexible approach to

demographic and spatial needs. Complete multi-element geochemical workup of samples will be completed over the next year, and should give an indication of specific activity areas within the sites. Work in other regions has indicated that food preparation results in high levels of phosphorus (P), magnesium (Mg), and potassium (K) as well as elevated pH. A stabling area for livestock would be high in P and manganese (Mn), while an area high in P but low in Mn could indicate a human latrine. Areas high in all elements and containing cultural material were likely used as trash repositories ('middens'), while areas low in all elements and materials were probably pathways. My analysis of the results will refine interpretations of such patterning, and apply these techniques to the loess soils of Central Europe.

It appears that the changes in the patterns of settlement distribution were the result of populations from nucleated villages splitting apart and moving away to form small, independent farmsteads. Moreover, this process appears to have begun during the Late Neolithic, although the Early Copper Age sees the culmination of this dispersal. Preliminary results of this project tentatively suggest that this is not a reorganisation of the settlements so much as a reorganisation of the society in response to some stress. If settlement dispersal was part of a reaction against something particular to closely packed tell-communities, for example a rejection of attempts at control over lithic and ore resources by some community members, then the pattern would be expected, and would offer insight into efforts to maintain an egalitarian lifestyle. For example, we could postulate that outdoor cooking or communal storage of food were ways of preventing hoarding of food by community members. Additional and perhaps alternative models will be developed as the analysis of data continues.

Experiences, archaeological and otherwise

Some of the more amusing interactions I have had here in Hungary are with farmers. All of my field research involves walking about on someone's field. Very few of the farmers I met understood any English, yet we were able to communicate through a combination of my poor Hungarian and sign language. In a striking difference from their American counterparts, the farmers I met were not overly concerned that I was on their land. They were obviously aware of the archaeological remains in their fields, accepted my scientific interest in these remains, and were content to know that I did not intend to dig up the entire field. There was one gentleman who made it clear to me that he thought my making small holes every ten metres was indicative of insanity, but he said it with a smile.

I am not the only insane archaeologist running about in Hungary. What I have presented here is but a small portion of the work that is being done, by me and by others. I fully expect other dissertation researchers affiliated with the Körös Regional Archaeological Project to apply for Fulbright fellowships in the coming years. In my case, sub-samples of the sediments I collected will be sent to the Laboratory for Archaeological Science at the University of Wisconsin-Madison for multi-element analysis. Results of the multi-element analysis should give specifics about kitchen areas, workshops, latrines, butchering areas and other task areas. These combined data will suggest whether the organisation and structure of small settlements changed dramatically during the transition. In addition, a new collaborative project is in the very early planning stages, as Gabor Bacsmegi and I are just beginning to develop a proposal to excavate one of the small Late Neolithic sites that I tested, so that the physical layout of one of these settlements will finally be available.

The Fulbright has enabled me to work personally with Hungarian researchers, live in my research area for an extended period of time, and access museum collection. Living in the research area for several months rather than the four to six weeks of a typical field season provided me with the opportunity to become thoroughly familiar with the physical and human geography. Affiliation with the Békés County Museum and contacts with the Morá Ferenc Museum and the archaeology department at the University at Szeged have given me access to collections and archives that I do not have in the United States.

In addition to conducting my research, I have benefited from this experience through the breadth of Hungarian culture and archaeology I have been exposed to. Although I came grounded in Hungarian prehistory, personal one-on-one interactions broadened my knowledge. Exposure to new ideas, development of new professional contacts, and experience with techniques used by Hungarian archaeologists expanded my dissertation project in new directions. I also have gained a new appreciation of the particular problems facing my Hungarian colleagues in their own research. I have benefited. I hope that Hungarian archaeology will also benefit from my work, which has not only generated new data and additional interpretations of Hungarian prehistory, but also has involved Hungarian archaeologists in collaboration, thus fostering increased awareness of the objectives, methods, difficulties, and possibilities between scholars in our two countries.

Acknowledgements

I would like to formally thank the many people who made this project possible. First thanks must go to Huba Brückner and the Hungarian Fulbright Commission. Huba's ability to remember the most minute details about my work and life, along with efforts by his staff to create a real Fulbright family, made living abroad for nine months a joy. Thanks must also be extended to Imre Szatmári and the staff at the Múnkacsy Mihály Museum in Békéscsaba, who extended an invitation of affiliation and gave me office space.

Special thanks go to Gergely Bóka and Pál Medgyesi from the archaeology division for putting up with the American in their office. My PhD supervisor Ezra Zubrow, along with Bill Parkinson of the Field Museum in Chicago and Rick Yerkes of the Ohio State University deserve credit for mentoring and for encouraging me to pursue my own ideas. Paul Duffy of the University of Michigan helped me get set up when I first arrived in Békéscsaba, and invited me to participate in his Bronze Age Körös Off-Tell Archaeology (BAKOTA) project. Gabor "Baxi" Bacsmegi has reminded me to look in more than one geographical direction for prehistoric influences and interactions, and is collaborating with me in the development of future research in the Berettyó-Körös. Katharina Rebay, Darren Poltarek and Chris Pultz helped in the field. Finally, my most heartfelt thanks must go to my Fulbright advisor in Hungary, Attila Gyucha, without whom this work may not have been a success, or even possible. Hungarian hospitality is personified in Attila. More than a colleague, he is a friend who translated for me, gave me a place to sleep, trained me in Hungarian excavation methods and Hungarian perspectives on prehistory, tramped through ankle-high mud to check sites with me, and taught me how to make Hungarian stew. My debt to him is immense.

Figures

FIGURE 1.
LOCATION OF THE NEOLITHIC ARCHAEOLOGICAL SETTLEMENTS OF THE BERETTYÓ-KÖRÖS PROJECT AREA IN EASTERN HUNGARY.

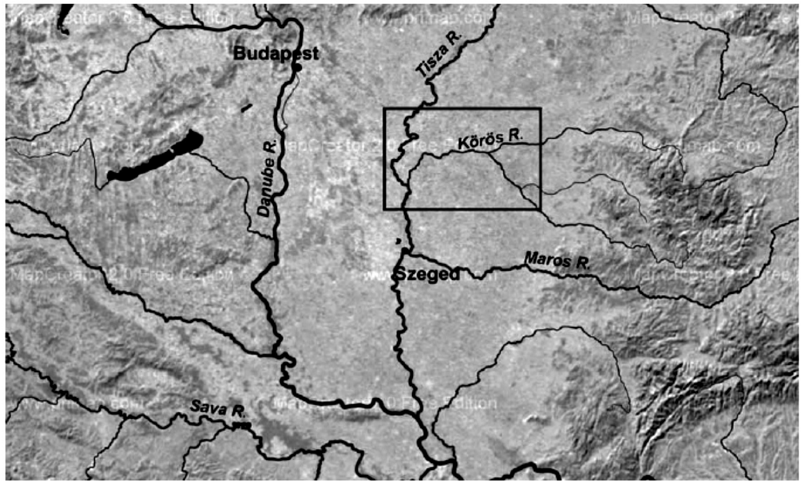


FIGURE 2.
DISTRIBUTION OF LATE NEOLITHIC SITES IN BÉKÉS COUNTY, HUNGARY. PALAEOHYDROLOGY USED BY PERMISSION OF GYUCHA AND DUFFY.

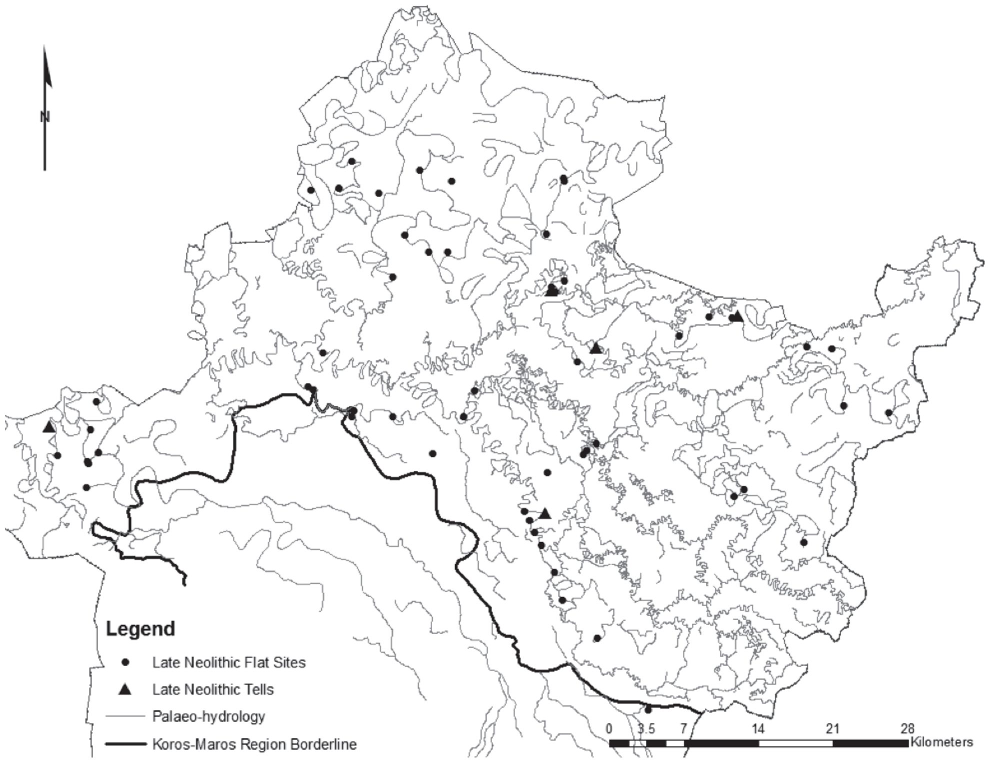


FIGURE 4. – DISTRIBUTION MAP OF THE CULTURAL LAYER AT MEZŐBERÉNY-68.

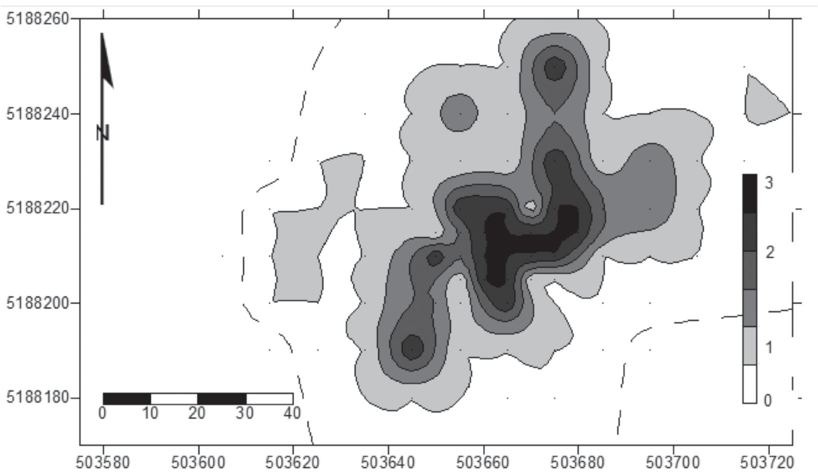
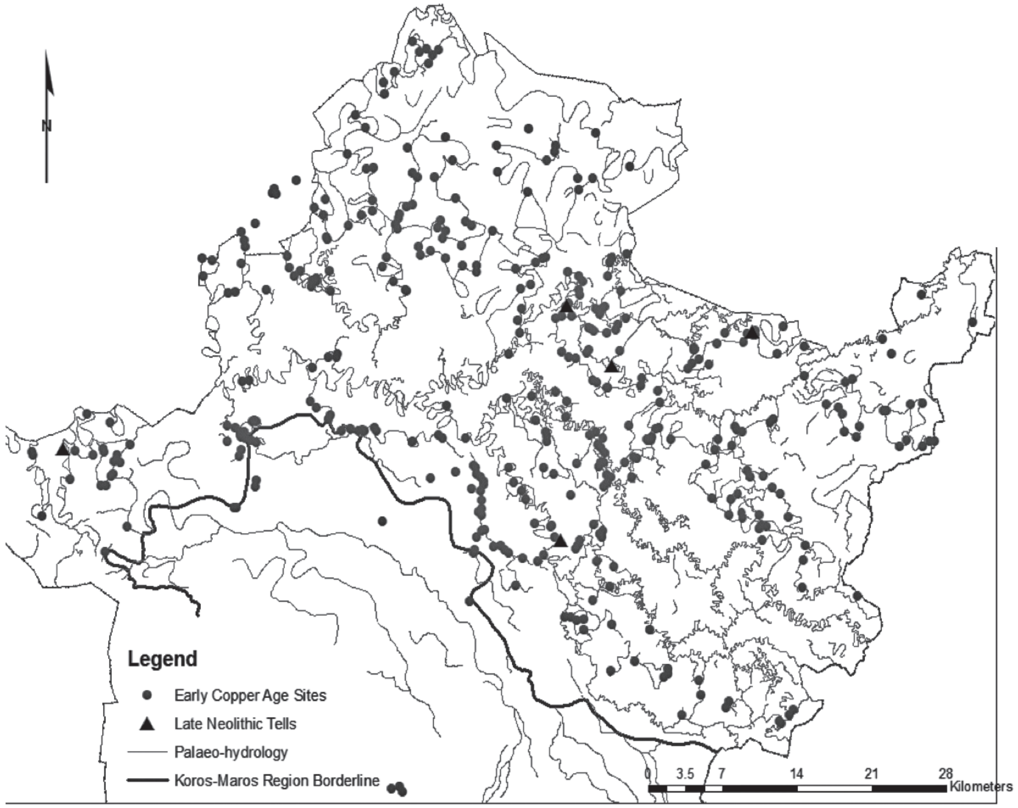


FIGURE 3.
DISTRIBUTION OF EARLY COPPER AGE SITES IN BÉKÉS COUNTY, HUNGARY. PALAEOHYDROLOGY USED BY PERMISSION OF GYUCHA AND DUFFY.



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