Reading Tells – Settlement Practice during the European Late Neolithic and Bronze Ages.

Roderick B. Salisbury
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We are proposing a full day regular session for the 13th Annual Meeting of the European Association of Archaeologists in Zadar. The title of this proposed session is Reading Tells – Settlement Practice during the European Late Neolithic and Bronze Ages. The primary issue addressed is the interplay between different approaches and interpretations in the analysis of tell and off-tell settlements across southeast Europe during the Neolithic and Bronze Ages. We have brought together scholars from both Europe and North America to participate in this session, providing a broad representation of different regions in terms of both participants and research focus. As can be seen from the individual abstracts, a range of different analytical techniques and conceptual frameworks will be discussed. We do not anticipate complete consensus, but do anticipate open dialogue regarding this very significant prehistoric phenomenon. All papers except the introduction will be about 20 minutes long; the introduction will be no more than 10 minutes. Individual abstracts follow the list of contributors.

Session Abstract:
Tells are a common macro-tradition in Neolithic and Bronze Age landscapes in Eastern and Central Europe. Within this macro-tradition there is variation in regional settlement patterns, in tells constructed during different periods, and in the layout of individual tells. The development and dissolution of tell-focused settlement patterns speaks to issues of integration and fragmentation, social memory, social identity, the creation and recreation of place, and changes in socio-political and socio-economic organisation. These changes are reflected not only in tells themselves, but in every observable social unit, including off-tell settlements, households, neighborhoods, settlements, and “culture-areas”. Examination of these phenomena before, during, and after the tell periods at different regional and temporal scales enables consideration of the complex social, political, and economic transformations that are associated with the rise and fall of tell communities.

In this session, we wish to emphasize variations during the creation and termination period of tells, and encourage discourse on a range of methods and interpretations of these variations. For instance, what did the settlement network look like before the appearance of tells, and how did it change after their termination? What are the factors relating to these changes that we identify in material remains? What explanations can we propose through examination of local trajectories? Regional and temporal variations in the cultural practices of tell construction and configuration within the larger settlement context is explored, and both social and environmental considerations for settlement integration and disintegration are addressed.
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Order of papers and abstracts:

Introduction: situating tell/non-tell dialogue
Roderick B. Salisbury, University at Buffalo NY, USA
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Tells: the Roots of Formation of Early Towns
Ferenc Horváth, University of Szeged, Hungary

Attempts to define the concept ‘tell’ are nearly as old as archaeology itself. These have led to the currently accepted archaeological model equating multi-stratified mound sites with tells. This presentation focuses on causes; the climatic, environmental, economic and social roots of the formation of multi-stratified sites from beginnings of the settled way of life until the appearance of early towns. At the same time it deals with those problematic trials which have attempted to categorise multi-stratified sites on the basis of physical and morphological criteria of the site itself, rather than on paleo-environmental and archaeological data. The author examines the question of the ‘tells’ in the periods of the Neolithic and of the Bronze Age Carpathian Basin in detail.

A tale of two sites: Tells and non tells in the Greek Neolithic
The emergence of Neolithic landscapes in Greece was largely dominated by the appearance of tells. However, recent research has proved that tells represent a distinct phenomenon, and that the population of large regions, especially in Northern Greece, inhabited extensive open settlements, surrounded by ditches and spotted with dispersed dwellings. The trajectories of two typical sites, Sesklo and Makriyalos, are presented. Each one of these sites, located in two distinct regions of Northern Greece, correspond to a different type of settlement, and seem to correspond to two diverging cultural traditions. The material culture and social practices, so far as they can be assessed by recent archaeological analysis, seem also to converge consistently on many different levels. The comparison between the two sites therefore clarifies their differences and offers an explanation for the eventual domination of tells during the subsequent Bronze Age.

The emergence and development of tells in Banat.
Florin Draşovean, The Museum of Banat, Timișoara, Romania
Abstract forthcoming...

Archaeological data for the use of space in a tell-like settlement of the Tisza culture: New results from Öcsöd-Kováshalom
Pál Raczky, Eötvös Loránd University, Budapest, Hungary

Öcsöd-Kováshalom lies on the former bank of the Körös River in the southern part of the Great Hungarian Plain. The site has long been known in the prehistoric research. Finds of the Tisza culture and settlement remains were found to be scattered over an area of 21 ha. Systematic investigations revealed that this settlement consists of 3 larger and two smaller discrete residential foci, and these originally covered only about 3-5 ha. Subsurface borings indicated that the central and the permanent settlement nuclei on three smaller elevation had been separated by seasonal watercourses. It also became clear that the layer thickness of the three residential foci forming the central part of the settlement ranged between 40-160 cm.

The subsurface probes suggested that one of these settlement nuclei, covering less than 1 ha, had been the central part of the Öcsöd settlement, and had also been occupied for the longest duration. The settlement of Öcsöd-Kováshalom is an example of two coexistent settlement types: a central tell-like mound flanked by horizontal, single-layer settlement. The excavations opened in this central part of the complex settlement structure allowed the division of six superimposed levels into two main phases. These phases represented two successive house levels in the life of the Öcsöd settlement, and at the same time two phases within the Tisza culture (Tisza I-II). Following the excavation on the main area we have a fairly clear picture of the spatial organisation of this tell-like settlement. In the center of the low mound a fence system was identified, which enclosed a 35 x 42 m rectangular area. Taking the number of houses in contemporary use as 4-6, and assuming that there were five occupants to a building, we arrive at a general population of 20-30
souls. If we taking into consideration of the five settlement loci of Öcsöd, in that case we can calculate 20-30 houses and a population number of 100-150 persons for the site. A three-fold organisation of space observed in the area enclosed by the fence (houses-working area-pits) could be noted. The construction of the Öcsöd houses undoubtedly required a large measure of cooperation between the inhabitants. In spite of heavy erosion, remains of open-air ovens, refuse deposits, and traces indicative of on-site stone and bone working were noted in the open area enclosing the house cluster. Material remains of sacred beliefs permeating various aspects of everyday life have also come to light in the context of the houses and pits. A total of 44 graves were uncovered in the main excavation area between houses and in the open area surrounding them, implying that settlement and burials were still strongly linked. On the basis of the archaeological information, the patterned arrangement of the archaeological features and directionality of loci associated with activities, as well as the spatial distribution of certain artefact types, define a regulated sub-division of physical space by the people of Öcsöd-Kováshalom.

Animal husbandry and hunting of a Late Neolithic tell-like settlement in the Great Hungarian Plain (case study of Öcsöd-Kováshalom)
Zsófia Eszter Kovács, University of Debrecen, Hungary

This paper presents the analysis of animal remains of a tell-like settlement called Öcsöd-Kováshalom in South-East of Hungary near the Kőröös river. The faunal remains identified give information concerning hunting and production practices as well as the mode of consumption of the inhabitants. A total of 20,344 bone fragments were identified from the central part of the settlement (1470 m2 area). The considerable fragmentation of the specimens suggests that this material mostly come from kitchen refuse. Domesticated animals were more frequent in this settlement (10,135 specimens, 77%) than wild animals (2997 specimens, 23%). This rate reflects well-developed animal husbandry and the important role of domesticated animals for nutrition, which is typical in late Neolithic settlements. Cattle (Bos taurus) was absolutely dominant in this sample (6320 specimens), pigs (Sus domesticus) stood in the second place (2466 specimens), preceding caprines (Ovis aries/Capra hircus) (1163 specimens). Over 50% of the killed cattle and caprines were adults, which might indicate the secondary use of these species. Among the wild animals large game was more frequent than the smaller (fur-bearing) animals suggesting that the main purpose of hunting was to obtain meat. Two time phases (earlier and late Tisza-culture) are compared from the viewpoint of species composition. In addition, samples from different parts of the site (houses - places between houses - pits) are compared.

Life after the tells: the Great Hungarian Plain in the Early Copper Age
Attila Gyucha, Munkácsy Mihály Museum, Békéscsaba, Hungary
William A. Parkinson, Florida State University, USA
Roderick B. Salisbury, University of Buffalo, USA
The Neolithic to Copper Age transition on the Great Hungarian Plain is marked by significant transformations in nearly all aspects of life. These changes fundamentally altered the characteristics of social networks and settlements as well as the mortuary customs and trade networks. These transformations have been generally suggested in the archaeological literature. However, prior to the 21st century, datasets allowing scholars to explain and interpret these changes were not available due to the lack of systematic research at Early Copper Age settlements.

The research conducted by the Hungarian-American Kőröös Regional Archaeological Project at several Early Copper Age sites in the Kőröös Valley of southeastern Hungary during the past few years yielded a great quantity and variety of data regarding this transitional period. Evaluating these data, along with some additional relevant data from the region, provides a better understanding of the how and why these transformations took place. This paper discusses the constraints and opportunities arising from interpretation of paleoenvironmental, material culture, economic and social organisation data from the region in the transitional period. We also provide a model to explain the changes occurring on the Great Hungarian Plain around 4500 BC.

**Interpretation possibilities of the Bronze Age tells sites in the Carpathian Basin**

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László Reményi, Budapest History Museum, Hungary

A *tell* as a kind of settlement cannot be studied in itself, but only as a part of a broader economic, social and settlement organization system, which also involves climatic conditions and microenvironment as other significant factors. According to the Hungarian chronology, the Bronze Age *tell* sites in the Carpathian Basin were occupied from the second part of the Early Bronze Age to the end of the Middle Bronze Age, which can be dated back to approximately 2100-1500 BC. As only vertical test excavations have been carried out in many of the *tell* sites located in Hungary, we do not have enough information on the inner structure of the settlements. However, the central settlement can be studied from different perspectives, considered together with flat, dispersed sites and burial grounds. The aim of this study is to show examples of the different possible interpretations from sites of the Nagyrév, Vatya, Hatvan, Füzesabony, Gyulavarsány and Szőreg-Perjámos cultures. During the presentation of social and economic relations connected to *tell* sites, we demonstrate that the subsystems linked to this settlement form constitute a complex but unstable structure in which – because of the close interactions between the parts – changes occurring in the stated subsystems had deep influence on the sustainability of the structure. In fact, the structure carried within it the potential of its own eventual destruction.

**Complexity in abundance: understanding the Bronze Age tell settlements of the Lower Maros/Mureș**

John O’Shea, University of Michigan, USA
The tell settlements of the eastern Carpathian Basin have long been a focus of archaeological interest. Much of this interest has derived from their potential for yielding a diachronic understanding of the past, both by providing an ordered sequence of change in artifact styles and settlement organization, and as a basis for establishing regional chronologies. Yet, the Maros/Mureş tells present extremely complex patterns of construction, deposition, renovation, and modification that are anything but straightforward to ‘read’. This paper draws on examples from the contemporary Bronze Age tell settlements at Pecica Şanţul Mare and Klárafalva Hajdova to consider both the difficulties and potentials that such tell sites present.

**Houses – Households and what they reveal**  
Magdolna Vicze, Matrica Museum, Százhalombatta, Hungary

The paper demonstrates how much has been done in the Hungarian Bronze Age in respect of house-forms, house- and settlement structures, and also how little in the interpretation of households. One of the several reasons for lack of complex interpretation is the lack of established theoretical background. The data is exceptionally rich, and therefore good-practice examples are needed to complement the data. One such example is the Százhalombatta Project where the proto-urban social organisation of a Bronze Age tell forming society is studied. Tells are extremely important for understanding the socio-political developments and emergence of European prehistoric communities. Studying Bronze Age households is one of the primary necessities in understanding Bronze Age society.

**GIS aided interpretation of post and stake holes on a Bronze Age tell settlement: Százhalombatta Földvár**  
Dániel Füköh, Matrica Muzeum, Százhalombatta, Hungary

Postholes and stake holes on prehistoric sites clearly indicate a sort of superstructure. The definition of stratigraphic and contextual position of post and stake holes on multiple layered sites is a complex problem, not just because of the volume, but also from the fact that these objects cut through several layers. The posts, which have clear spatial relations (belong to a wall, or form a persistent pattern) can be easily be seen as part of structures. However, most of these features have no clear context, or have no context at all. With the support of a digital database and the data manipulation engagement of GIS, structured and classified spatial data can be provided by querying statistical attribute data (diameter depth, elevation, shape) concerning the post and stake holes in question. The structured spatial data can then be used to set up groups of features, using different analytical aspects.

The basis of this analysis is the supposition that buildings on the Százhalombatta Földvár Bronze Age tell settlement had traditional frames for different functions in a structured architectural environment. With the analysis of the patterns that emerge on the basis of
the spatial parameters of structured statistical data, it is possible to set up models of buildings or even to trace out the settlement structure.

**Tells of the Bronze Age Kőrös: a test of the staple finance model**  
Paul R. Duffy, University of Michigan, USA

This paper explores land use constraints and social relationships between tell and off-tell sites in the Kőrös area of southeastern Hungary during the Early and Middle Bronze Age. Micro-environmental information is combined with food productive estimates of pre-industrialized farming techniques to reconstruct land use potential. Specific hypotheses derived from the archaeological literature on chiefdoms are tested, evaluating whether populations at the tells were larger than the food productive capacity in the immediate environment could provide for. Recent data from the excavations of Gyepesi Átkelő, an off-tell site downriver of Békés-Várdomb, are briefly discussed in light of the results.

**Tell Židovar and the Vatin Culture**  
Miloš Jevtić, Faculty of Philosophy, Belgrade, Serbia

The most important segment in the study of stratigraphy at the multilayered prehistoric settlement Židovar near Vršac concerns the investigation of the Vatin culture with over 3 meters thick cultural layer. Particularly interesting are the results obtained in the course of recent excavations of the stratigraphic trench at the Židovar tell that make possible somewhat different understanding of the evolution of the Vatin culture. It seems that many successively built settlements of the Vatin culture at this tell, with interesting new architectural forms, make possible the drawing of more reliable conclusions about its origin, evolution and disappearance in the region of the south Banat. These results differ considerably from earlier interpretations taking into account Feudvar near Mošorin, one of the most thoroughly investigated settlements of the Bronze Age, and the Vatin culture in our territory. Small-scale off-tell investigations in a suburban area of some kind, along with the beginning of systematic site survey of the immediate surroundings of Židovar, also yielded interesting results concerning the relations between the Late Vatin culture and other Late Bronze Age cultures in the area of the south Carpathian basin and the Serbian Danube valley.

**Geoarcheological investigations of a Middle Bronze Age tell in North-Hungary**  
Gábor Bácsmegi, Kubinyi Ferenc Museum, Szécsény, Hungary  
Pál Sümegi, University of Szeged, Hungary

In the year 2003, with the support of the Ministry of National Cultural Heritage and the National Office of Cultural Heritage, we had the possibility to perform geoarchaeological investigations on the tell site belonging to the Hatvan culture near Héhalom. The tell is relatively unexcavated. A part of the tell is still in use as a modern cemetery, thus our research was confined to limited area.
Geoarchaeological studies unambiguously prove that the tell, formerly considered to be of half hectare extension, was in fact a much larger fortified settlement dissected by two circular ditches, having an extent of 6-7 hectares by the beginning of the Middle Bronze Age. Around the tell, we can suppose the existence of several smaller satellite settlements. The life of the people living on the tell concentrated into the 5-6 hectare large strip of land between the external and the internal ditch, while on the black soil ring between the core of the tell and the internal ring-form ditch the livestock was probably placed. The internal core of the tell was inhabited only periodically or only populated by a limited number of people (leaders or military aristocracy?). Apart from the inner ring-form ditch there was an external, deeper ditch reaching down occasionally to 4 metres, formed of dry valleys in a sickle-shape form that had an unambiguous protective function. Together with the satellite settlements, the fortified Bronze Age settlement concentrated a significant human community. At the feet of the North-Hungarian Mid-Mountain range, on the North-Hungarian Plain detrital cone it was part of the chain of tell settlements formed by the Hatvan culture along the border between the Hungarian Plain and the Carpathians. The immediate surroundings of the tell comprised pastures and tillage, while remains of the original forest cover remained only in the valley and the distant hills.

Data to the research of the Otomani Culture habitat in the Carei Plain and the Eriu Valley
Zsolt Molnár-Kovács, Babes-Bolyai University, Cluj-Napoca, Romania

From a cultural point of view, the Carpathian Basin during the Middle Bronze Age resembles a mosaic. Despite the fact that every community had developed a specific material culture in this chronological sequence, we may still talk about so-called ‘tell society’ based on the social and economic macro features. The aim of this study is to present a hypothetical image of the Middle Bronze Age landscape of the Carei Plain and the valley of the Eriu River. The starting point was the exhaustive recording of the Otomani settlements (mapping, visiting and photographing each site, analyzing archeological evidence). 80 settlements have been identified in this area. The list of sites is far from complete, but it does reflect the actual state of research.

The study of the settlement systems and networks of interacting polities is a window on the historical development of social complexity and hierarchy. The evolution of Middle Bronze Age complex and hierarchical societies from north-west Romania and the analysis of their social-political system are presented from a comparative core-periphery-systems perspective. The idea of core/periphery hierarchy was originally developed to describe the stratified relations of power and dependency among societies in the modern world-system. The new comparative perspective of the world-systems approach developed by scholars like A. Harding can be used properly for the political-social system of the Otomani communities from the Romanian lowlands, where the Middle Bronze Age chiefdoms are strongly linked by local and interregional (cross-cultural) social systems and luxury and barter-goods trade networks.
Estimating the territorial sizes and boundaries of the Otomani chiefdoms from north-western Romania is very difficult. Therefore, the present study had applied the methods of the XTENT-models, Thiessen-poligons and Central Place theory, archaeological data, mathematic calculations and geo-informatics programs. Knowing the environmental background of the Carei Plain and Eriu Valley, the sizes of settlements and the approximate territorial area controlled by them, an interesting (but hypothetical) picture of the political and social development of the Otomani communities can be drawn.

The social and economical functions of the Bronze Age tells in the Carpathian Basin
Florin Gogâltan, Babes-Bolyai University, Cluj-Napoca, Romania

On this occasion I would like to discuss some aspects related to the level of the social organization and the economic function of the Bronze Age tells in the Carpathian Basin. As a starting point I consider it necessary to present some theoretical models applied to the so-called ‘classical’ tells from Orient and southern and eastern Europe in order to be able to expand the discussion to our area of interest – the south-eastern regions of Central Europe.

This subject was highly debated in the literature especially after V.G. Childe published his article about the ‘urban revolution’ in the beginning of the 20th century. The problem of the appearance of the towns in the south-eastern part of Europe is equally complex. The hypothesis that at the beginning of the Bronze Age there existed in Greece towns, quasi-towns or proto-towns remains, like in the case of Orient, uncertain. Moreover, some specialists argued that the proto-urban organization existed already in Neo-Enolithic times. H. Parzinger believes that in the Balkan region one may talk about a ‘Vor-Urban’ and a ‘Früh-Urban’ period. The pre-urban situation is supposed in the case of the tells of Muntenia and Bulgaria in the period of the 8th horizon proposed by Parzinger (Gumelniţa-Karanovo VI-Kodžaderman) but without characterizing the realities of the Carpathian Basin. According to N. Kalicz, the Late Neolithic tells of Hungary, representing the highest level of development of the Neolithic settlement in the south-eastern regions of Central Europe, cannot be interpreted as being a stage in the proto-urban development. These functioned only as autarchic economic units but without having a major political role and I agree with his opinion. B. Hänsel’s conclusions presented with the occasion of the XIIIth Congress of pre- and proto-history at Forlì are extremely important for the theme of the present paper.

However, the appearance of the urban conception in the Bronze Age settlements of the Carpathian Basin has to be more largely approached. The analysis of the fortification system, the way the constructions were structured inside the settlement, the economic activities that took place in the settlement etc, point out that these settlements were on the way of becoming proto-urban entities. In his last synthesis concerning the Bronze Age society in Europe, A. Harding was against this theory. He believed that only at the end of the Bronze Age period one may talk about a type of organization that could be termed as ‘proto-urban’. The complex way in which the habitat has been organised within the settlements – the future tells – clearly demonstrates that they are different from those with
only one cultural layer and modest constructions, such as the pit houses. The central position of these settlements is proved, first of all, by the elements of fortification. A political authority controls a well delimited territory. This presumes the presence of agricultural areas, pastures, lumber works and clay sources, but also the control of the main routes, etc. The limited space on which the large majority of tells are based make us presume that the main economical activities (agriculture, animal breeding) did not occur here but within the so-called ‘satellite’ settlements. The latter were protected by the fortified centres, the tells, which at the same time held a major place regarding the production of items made of metal and bone. In the same time, it can be added that these tells also performed a religious function for these communities.

The question addressed is whether the Bronze Age tells of the Carpathian Basin should be considered only proto-urban or already urban settlements? It is obvious that the tells held the highest position in the development of the prehistoric habitat in this area. Therefore, as K. Kristiansen underlined, the tells must be regarded through their main function as centres of production, distribution and trade, as well as residences for the society elites. They should not be automatically compared with similar types of settlements from other periods or geographical areas.