Debating Complexity

Proceedings of the Twenty-Sixth Annual
Chacmool Conference

Edited by
Daniel A. Meyer, Peter C. Dawson, and Donald T. Hanna

The Archaeological Association of the University of Calgary
Calgary, Alberta, 1996
ISBN 0-88953-213-3
Socio-Political Complexity in Iron Age Temperate Europe: A Dialectical Landscape Approach

Matthew L. Murray
Department of Anthropology
Harvard University

The development of late iron age landscapes in temperate Europe, which were dominated by large fortified settlements, has recently been studied through a program of archaeological survey at Kelheim in southeastern Germany. This paper examines the landscape at Kelheim as part of a prehistoric frame of reference and as an important resource for social reproduction and the establishment of increasingly complex structures of social and political dominance from the eighth to the first centuries B.C. The focus is on evidence of dramatic population aggregation, concurrent changes in the structure of ritual behavior, and the appearance of new modes of political authority.

Introduction

The final millennium B.C. was a pivotal period in the development of socio-political complexity in later prehistoric Europe. Traditionally, the transition from the late bronze to the late iron age is summarized as an evolution from small-scale, segmentary or ranked communities to complex, stratified polities. This development also culminated in the first large-scale demographic and commercial centers of temperate Europe, the so-called "oppida" of the late iron age (Collis 1984; Wells 1984).

In this paper, I use the on-going study of archaeological landscapes at Kelheim in southeastern Germany (Murray 1993) to examine issues of socio-political complexity during the final millennium B.C. The theoretical approach explores late bronze and iron age landscapes in the context of critical social and spatial theory.

Landscape Archaeology and Socio-Spatial Dynamics

Recent critical social theory revolves around the concepts of "practice" and "discourse." Practice refers to a cognitive system through which human groups represent their social relations, in effect creating their own versions of social reality (Bourdieu 1977:21). When contradiction between these constructions exists, people engage in discourse, a form of mediation in which participants reflect on, interpret, and represent their particular social conditions (Leppert and Lincoln 1989:7). Discourse can be either reproductive, reaffirming existing dominant structures (Lincoln 1989:73-74), or revolutionary, challenging dominant structures and acknowledging rival versions of social reality (Kertzer 1988:40).

Discourse has a material and spatial dimension that makes social practice palpable and opens the process of social reproduction to critical analysis. The current reaffirmation of the spatial dimension of critical social theory was spearheaded by French scholars in the 1970s (e.g. Castells 1977; Lefebvre 1976) and has been further developed by Anglo-American sociologists and geographers (e.g. Urry 1985; Giddens 1984), including Edward Soja (1989). According to Soja, socially created spaces possess an ideological content that provides a material form and expression to society. Space, therefore, is the concrete manifestation of practice; places and their relationships are laden with meaning and cultural value and become the material structures of social realities. These spatial relations in turn structure society, producing what Soja (1980) terms the "socio-spatial dialectic."

Some prehistorians have developed arguments to link the spatially-informed notions of practice and discourse with the material residues of past societies (e.g. Barrett 1988; Hodder 1986). The material resources of discourse are situated in space and time and these temporal spaces are places rich in social meaning. Landscapes are mosaics of places and are the ideal venue to
explore long-term changes in places and their associated human dramas.

This argument has been developed in a provocative study of the Cranborne Chase landscape in southern England (Barrett et al. 1991). Cranborne Chase, we learn, is a mosaic of places in which people routinely engaged in social discourse, during which they transmitted knowledge, reinforced authority structures, or negotiated alternative social strategies through the manipulation of the ideological content of both present and past material culture. During the routines of daily life and rituals of liminality the landscape was "read" as a spatial text in which social relations, such as age, gender, and descent structures, were encoded. At Cranborne Chase, all forms of settlement, cemetery, cultivated plots, and non-habitation sites were stages for social discourse (Barrett et al. 1991:236), both reproductive and contentious. The prehistoric landscape and the monuments that are the focus of archaeological research today were active participants in the structuring of prehistoric social conditions (Barrett et al. 1991:6-8). Studies such as the Cranborne Chase monograph illustrate that spatial structures are an important social resource; the landscape operates as a reflexive frame of reference for social behavior and, therefore, as a force of and participant in historical event (Murray 1992).

By accepting the landscape as a socio-spatial dialectic, we can examine how social and spatial structures are continually negotiated and reproduced or transformed through time. This provides a new theoretical framework within which to investigate the changing landscape of the final millennium B.C. at Kelheim, Germany. Through the diachronic study of different socio-spatial contexts, we can examine the material dimension of social practice and the contradictions that feed discourse (Murray 1992).

The Archaeological Landscape and Settlement at Kelheim

Kelheim is located at the confluence of the Altmühl and Danube rivers in the district of Lower Bavaria in southeastern Germany (Figure 1). During the Late Iron Age in the second and early first centuries B.C., extensive fortifications were constructed to enclose 650 hectares on the Michelsberg plateau and portions of the Altmühl River valley. This "oppidum" belongs to a series of similar defended sites and large open settlement complexes in Bavaria, that include the well-known oppidum of Manching, less than 35 kilometers to the southwest, and important undefended industrial and commercial complexes at Köferring-Egglingen and Berching-Pollanten, at distances of 22 and 38 kilometers. The Kelheim oppidum commands two important lines of communication and transport and lies at the interface between several landforms (Rutte 1990), including the rugged Jurassic Upland, rich in iron, stone, and timber, the broad Kelheim Basin, and the gently rolling farmland of the Tertiary Hills (Figure 2).

Since 1990 a program of archival research and field reconnaissance has sought to define the archaeological landscapes on over 450 square kilometers around the oppidum at Kelheim. Data collection included all post-Mesolithic remains, but here I will briefly discuss only the landscapes from the Late Bronze to the Late Iron Ages.

The archaeological landscape of the Umfeld Late Bronze Age (Bronze Age D and Hallstatt A-B horizons) from the fourteenth to the eighth century B.C. consists of a broad distribution of settlements, scatters of household refuse, and cemeteries. Cave deposits and hoards are also common residues of this period. Cemeteries are characteristically flat cremation burial grounds, sometimes containing hundreds of graves. Several locales at cliffs along the Altmühl River were places where ritual activity involved the intentional destruction of ceramic vessels. Late Bronze Age sites are found throughout the Altmühl River valley, Kelheim Basin, and the Tertiary Hills. Field survey confirmed this pattern, locating particularly extensive areas of settlement and some funerary remains on loess deposits in the hills (Murray 1993).

The landscape signature of the Early Iron Age (Hallstatt C-D and La Tène A horizons) during the eighth to the fourth centuries B.C. is an assemblage of burial remains, settlements, and scatters of habitation debris. Numerous funerary complexes comprising simple graves and more elaborate monuments are located throughout the region. Like the preceding period, Early Iron Age inhabitants intensively utilized the Altmühl River valley, Kelheim Basin, and Tertiary Hills. Activity within caves and rockshelters increased during this period, but acts of hoarding declined significantly.

Late Bronze and Early Iron Age settlement behavior at Kelheim is consistent with the pattern of small-scale, shifting habitation sites identified in other micro-regions of Central Europe (eg. Simons 1989; Waldhauser 1984). Settlements
were relatively short-lived and experienced local displacement, probably during agricultural cycles within the confines of group territories.

The subsequent Middle La Tène period (La Tène B–C1 horizons), from the fourth to the second centuries B.C., is poorly represented at Kelheim. There are only three typically small inhumation cemeteries and a few isolated finds along the Danube. Traditionally, the general absence of Middle La Tène remains is explained as the result of historic migrations of Celtic populations from Central Europe. This "depopulation" may be more apparent than real, since it is notoriously difficult to separate Middle La Tène habitation debris from earlier or later materials due to the lack of ceramics in association with diagnostic metal artifacts in graves. The few identifiable Middle La Tène deposits at Kelheim suggest that the population was already undergoing a process of aggregation within the Danube River valley and Basin. There is no evidence of activity in the Tertiary Hills or Altmühl River valley. A similar process of Middle La Tène aggregation has been identified at Manching (Krämer and Schubert 1970), where it is suggested that two communities coalesced into the Late La Tène oppidum.

By the second century B.C. (La Tène C2/D1 horizons), population aggregation in the western basin led to the establishment of the Late La Tène oppidum at the Michelsberg. Economic and habitation behavior in the surrounding countryside at this time was structured very differently than during previous periods. Evidence of iron mining and processing activities are located throughout the Jurassic Upland within several kilometers of the oppidum (Geisler and Burger 1983; Schwarz et al. 1967). There are few permanent habitation sites but numerous light scatters of domestic debris. Good farmland on the Tertiary Hills and loess islands above the Danube River valley which was exploited during the Late Bronze and Early Iron Age, is particularly devoid of substantial settlement during the Late Iron Age.

Results of field survey in the Tertiary Hills southeast of Kelheim illustrate this change in rural landuse patterns. The locations of several Late Bronze and Early Iron Age habitation sites were discovered on the basis of visible soil discolorations associated with dense concentrations of artifacts. In contrast, Late Iron Age remains on the fertile loess soils consisted of lightly scattered sherds with no evident clustering or correlation with subsurface features that are indicative of more intensive occupancy.

Investigations on the Mitterfeld within the Kelheim oppidum have demonstrated that the Late Iron Age community was a focus of diverse productive forces and participated in long-distance exchange (Wells 1991, 1988, 1987; Kluge 1987, 1986). To maintain a diverse concentration of people, intensive food production and raw material extraction beyond the settlement walls would be necessary. Plant remains recovered during excavation within the oppidum indicate that cereal crops were processed on site (Küster 1993). Faunal age patterns suggest that pigs were raised within the walls but that cattle were probably provisioned by external stock-raising communities (Crabtree 1993). These data suggest that an agrarian population resided at the oppidum; however, the fortification is not well sited for the exploitation of fertile farmland, which lies primarily 4–5 kilometers south and east of the oppidum. The sherd scatters in the surrounding countryside are possibly the residues of seasonal migrations by food producing groups into the hinterland, or may indicate the manuring of fields (Wilkinson 1988) using dung collected within or near the oppidum (Murray 1993). Alternatively, the light scatters of domestic refuse may be traces of Celtic pastoral groups that have defied recognition in the largely site-bound archaeological record of Central Europe (Murray 1993). Ethno-archaeological studies of pastoral communities in the Mediterranean have highlighted the ephemeral nature of their archaeological signatures (Chang and Tourelotte 1993; Chang and Koster 1986).

Burials and Hoards: Contradictory Acts of Representation

During this process of demographic and economic aggregation at Kelheim, there were significant transformations in certain forms of ritual behavior and their associated material and spatial resources. By comparing different contexts of ritual behavior, for example burial rites and hoards or votive offerings, we can examine contradictory patterns in the consumption of material resources in public and private arenas. The analysis of these contradictions can reveal the conflicts between multiple social and political strategies within social groups and help identify their power relations.

Typical flat cremation fields of the Urnfield Late Bronze Age are found throughout the Kelheim region. There are six classic Urnfield
burial grounds within the study area. Urnfield cemeteries tend to be very uniform and densely packed, and the typical grave comprises a simple pit with two or three ceramic vessels and occasional bronze objects (Pfauth 1989). Like the Urnfield cemetery located on the eastern outskirts of the Kelheim old city (Müller-Karpe 1952), these cemeteries may contain many hundreds of graves. Mounds, ditches, or posts delimited grave space in a few cemeteries (eg. Rochha 1965), but grave monuments demarcating burial space within the larger urnfields are usually absent or consist only of flat stones placed over each pit. While the burials of the Urnfield Late Bronze Age represent modest material wealth, objects were deposited in hoards and votive contexts in large quantities during this period (Stein 1976). Late Bronze Age metal hoards range from single objects to over 100 pieces. Three Late Bronze Age hoards were found along the shores of the Danube within the study region. The Kelheim hoards are small and consist of complete bronze axes and bronze sickle fragments. Following Rissman’s (1988) analysis of the patterns of Harappan wealth consumption, hoards and votive deposits may represent ritual consumption of private wealth, whereas the consumption of materials in funerary contexts represents socially constrained public display. I have argued elsewhere (Murray 1992) that the contradiction evident in the consumption of the materials of social discourse between private and public ritual arenas during the Late Bronze Age in southern Germany represents a mystification of social inequality by a dominant ideology.

Burial places of the Early Iron Age are especially numerous within the Kelheim region. There are at least 26 known locales, comprising groups of burial mounds and cremation or inhumation fields. In addition, many of the more than 50 unexplored tumulus cemeteries visible in the forests and in aerial photographs probably contain funerary remains from this period. The Early Iron Age is traditionally associated with the practice of inhumation under and within mounds, but there is actually a striking variety of burial formats in southeastern Germany, often within the same cemetery. For the Oberpfalz, Torbrügge (1979) charted at least 30 different kinds of burial from the Hallstatt Iron Age, with different funerary rites and structures. This change does not necessarily represent the introduction of new cultural norms (eg. Barrett et al. 1991:224), but a reworking of the existing material and spatial resources of social reproduction. Older traditions of cremation burial in nondescript pits with few offerings continued side-by-side with the new emphasis on monumentality in many cemeteries. Hoards and votive deposits are rare from the Early Iron Age (eg. Zimmermann 1970), and no such finds are known within the study area. Many of the same kinds of materials, such as metalwork, that had been deposited in very large quantities in hoards and votive deposits during the Late Bronze Age were now worked into the transformed burial practices and appeared in graves as complements of jewelry, weapons, metal vessels, and other appurtenances. The material and spatial resources of private ritual were thus transformed into the resources of public ritual. This transformation may be interpreted as contentious discourse between social groups with conflicting versions of their social conditions, in which the dominant structures of age, gender, and inheritance were open to public debate rather than euphemized through a uniform funerary ritual (Murray 1992).

In contrast to the Early Iron Age, there are few funerary remains from the second and early first centuries B.C. in most of Central Europe (Krämer 1985, 1952). The discovery of 19 Middle and Late La Tène burials just east of the oppidum in Kelheim-Gmünd (Kluge 1985) represents one of the largest known Late Iron Age funerary assemblages in southern Germany. The burial place contains a small number of simple cremation and inhumation graves with few offerings and no monumental architecture. While there is a relative absence of formal burial during the Late Iron Age, there are many finds of human remains within contemporary settlements, both from structural features and as scattered finds (Huoff 1964; Wiedemer 1963). Although such widespread remains have not yet been identified at Kelheim, they have been recovered from the oppidum at Maching and cannot be associated with warfare (van Endert 1987: 56-58; Lange 1983). These finds, and the general absence of formal burial places in southern Germany, represent dramatic transformations in the treatment of mortuary remains and the reproduction of social relations during the Late Iron Age. It appears that the discourses relating to classification of the dead and the structuring of inheritance, kinship, and social obligations previously undertaken within separate burial places may have shifted to the settlements themselves.

During the later Iron Age in temperate Europe there is a marked increase in the consumption of material through deposition in
hoards and votive offerings containing iron, bronze, and precious metals (e.g. Zimmermann 1970). At Kelheim, there are two known votive offerings. A Late La Tène iron sword was dredged from river sediments at the base of the Michelsberg, and a bronze bull figurine was found on high ground overlooking the oppidum. Like other large Late Iron Age settlements, bronze, silver, and gold coins were produced at the Kelheim oppidum (Overbeck 1987). Coin hoards and isolated finds in the countryside around many oppida suggest that coins were circulated within their hinterlands (e.g. Kellner 1990). This local circulation is not evident at Kelheim. Only five coins are known from four locales in the hinterland, primarily within caves or at the base of impressive cliffs. These places were of significant ritual importance during the Bronze and Early Iron Ages and are located very close to the oppidum. When coinage was circulated outside the Kelheim oppidum there may have been a ritual context to the deposition. The proximity of all votive offerings and coin deposits to the Michelsberg suggest that control of the economy of these forms of ritual discourse was centered on the oppidum.

Natural and Built Spaces: Caves, Cliffs, and Viereckschanzen

During the final millennium B.C., there was a shift in attitude toward certain natural spaces and the introduction of new built places. Deposition of extra-domestic cultural remains in caves or at cliffs was common from the Neolithic to the Early Iron Age at Kelheim (Nadler 1985, 1984). Cliff sites were the focus of conspicuous destruction of pottery (Maier 1984, 1965); fine ceramics, metalwork, and select human remains were deposited in caves, rockshelters, and fissures (Schröter 1985; Schauer 1981). In the later Iron Age, cave deposition declined markedly. The only securely dated Middle and Late La Tène deposits at Kelheim are located within two adjacent caves in the Danube gorge below the oppidum. The deposits are associated with human remains (Nadler 1986). This pattern of shifting deposition in caves through time is found throughout Central Europe (e.g. Leja 1987; Weismüller 1986; Züchner 1977; Behm-Blancke 1976; Dämmer et al. 1974; Angeli 1970; Kunkel 1955).

During the third and second centuries B.C., when burial places and certain natural sanctuaries faded in importance, a new formal structure, the Viereckschanze, appeared on the Celtic landscape of Central Europe. The Viereckschanzen are large, remarkably uniform rectilinear ditched enclosures (Bitte et al. 1990), of which over 1000 have been identified in southern Germany. At least 11 such structures are present in the Kelheim study region. The appearance of the Viereckschanzen and concomitant decline in use of some natural sanctuaries may herald a restructuring of Iron Age ritual life, from practice in natural places to the formal incorporation of nature into built places (Murray 1992). This incorporation of nature was possibly a form of natural legitimation for emergent socio-political structures.

Since the first large-scale excavation of a Viereckschanze at Holzhausen near Munich (Schwarz 1975), the enclosures have been interpreted as Celtic cult structures. In spite of subsequent excavations, the cultic nature of the enclosures is by no means consistently established. There are no sizeable deposits of human remains or material offerings such as those at Belgic sanctuaries like Gournay-sur-Aronde (Brunaux 1988:11-24) or from bodies of water such as the site of La Tène (Vouga 1923). Instead, the Viereckschanzen produce rather modest material, primarily of a domestic character.

There is now a movement within German Iron Age studies to reconsider the complacent relegation of these structures to the black hole of Celtic religious ritual. Large-scale excavation of a Viereckschanze and its surroundings at Bopfingen in southwestern Germany (Krause and Wieland 1993) may indicate that the structure was a central element within an extensive coeval settlement complex, and the excavators suggest multiple social and political functions for the enclosure. Recent publications of ceramic assemblages from a few structures also provide a basis for reappraisal. Ceramic assemblages from excavated Viereckschanzen vary significantly from habitation sites. While graphitic pottery usually makes up about 20-30% of assemblages from settlements (Stöckli 1979a, 1979b), there are almost no graphitic pots from the enclosures at Tomerdingen (Zürn and Fischer 1991), Fellbach-Schmiden (Plank 1982), and Ehningen (Schiek 1984). Instead, the assemblages are dominated by a high percentage of coarse ware, especially bowls.

If graphite pots were specialized cooking vessels (Kappel 1969), then pottery assemblages from the enclosures suggest that, while food was not necessarily prepared on site, considerable quantities may have been served and consumed.
The presence of wells within most excavated enclosures (e.g. Zürn and Fischer 1991; Planck 1982; Schwarz 1975) indicates that the provisioning of drinking water was important, as was the formal and uniform delineation of a space. These observations support the interpretation of the enclosures as structured places for competitive feasting rituals, an interpretation for which there is indirect historical documentation (Müller 1993:180; Pauli 1991:129; Berger 1963). Such places would have interfaced with redistribution strategies of agricultural produce centralized at the oppidum.

I suggest that the Viereckschanzen represent an extension of control over the hinterland during the agricultural season when transhumant food producers were working the land, in effect maintaining control over agricultural labor during its periodic absence from the central settlement. There is a strong association between enclosure and good agricultural land at Kelheim. Discontinuous seasonal use of the enclosures would help explain the frequent clustering of several structures in one locality (e.g. Böhme and Reichenberger 1992), since cyclical rebuilding may have necessitated occasional minor shifts in location. The patterning of Viereckschanzen in the landscape may also represent rival strategies of feasting and wealth redistribution, during which different social groups competed for power and influence by constructing enclosures and providing feasts for present and potential adherents. A linear inheritance of power may also have been enacted at these neighboring enclosures as consecutive authority structures naturalized their inheritance by reference to previous structures (I am indebted to Bettina Arnold, University of Minnesota, for inspiring discussions about traditional Celtic sociopolitical competition and the interpretation of the Iron Age landscape). The layout of some groups of Viereckschanzen suggest that they were probably constructed consecutively (e.g. Teufstetten: Christlein and Braasch 1982:226); however, it is not yet possible to determine the precise duration and extent of use.

Enclosures were often constructed near or within sight of Early Iron Age funerary monuments (Bittel 1978), such as at Holzharlanden near Kelheim where a Viereckschanze was erected adjacent to the largest tumulus cemetery in the region (encompassing over 100 mounds). This suggests that the Viereckschanzen served to incorporate disparate ancestral and hereditary territories into new polities through an appeal for natural legitimacy to traditional descent and power relations represented by the burial places (Murray 1992).

**Concluding Remarks**

In this study of the Kelheim oppidum and its landscape, I have attempted to illuminate certain transformations in the socio-spatial structures of discourse that occurred during the emergence of a complex Late Iron Age polity. These transformations include economic and demographic centralization, dominant or contentious representations of social and political structures through mortuary rites and acts of hoarding, and the appearance of new sociopolitical arenas and symbols of dominance, such as the Viereckschanzen.

The dynamic of landscape and society is a recurring process in which contemporary generations are fully involved. Blurred by superstition and romance, and somewhat distorted by the passage of time and tradition, archaeological places continue to be part of current folk culture. Bearing names such as "Heidenstein" ("Heidenstein"), "Urnfield Lane" ("Am Urnental"), and "Celts' Court" ("Keltenschänze"), the greatly subdivided properties of the modern Kelheim landscape evoke poignant representations of the past. In the face of expanding industry and agribusiness, this folk knowledge shows that past meanings continue to pervade the construction of the present day landscape.

**References Cited**


