The Late Iron Age background to Roman Dacia

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Erratum.

Figure 2.3 are *bordei* from Slimnic (as shown in Fig. 2.2) not Arpaşu de Sus. *Contra* Gudea, the figure is from Glodariu 1981a as stated *not* Glodariu 1976, fig. 25. It is created by combining figures 6 and 8 from the 1981 publication.

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Introduction

The aim of this paper is to provide a synthesis of the archaeological evidence for the Late Iron Age in Dacia. This aim is both limited and ambitious in its scope: limited in the sense that I do not attempt to present any major reworking or re-interpretation of the data,¹ although I do not present interpretations without comment; ambitious in the sense that it is a huge topic to cover within the scope of a single paper. As a result, I shall concentrate largely on the evidence for the so-called 'Classic Dacian' period (1st c. B.C.–1st c. A.D.) from within part of present-day Transylvania,² but I will venture beyond these limits where appropriate.³

In addition to Romanian works on the subject,⁴ a few synthetic works in English discuss this period and region, the earliest being that by V. Pârvan, founding father of Romanian archaeology.⁵ T. Taylor provides a short discussion within a wider Thracian-Scythian context; I. Berciu has a chapter on this period, and I. H. Crişan's *Burebista şi epoca sa* exists in an English translation,⁶ although none of these works is unproblematic. Specific aspects such as Mediterranean imports and coins have also been discussed. M. H. Crawford has discussed a specific problem in the coinage, to which I will return below.⁷

Politics and the past

Few archaeologists would now dispute that the political, social and economic context within which archaeology as a discipline is practiced has a profound influence on the types of work undertaken, the subjects tackled, and the interpretations offered. The study of archaeology and history within Romania is no exception. The degree to which modern political concerns covertly or overtly influence archaeology, however, varies. Archaeology in Romania during the Communist period was very much a political concern, especially as regards two topics which have been a subject of debate from the 17th c.: the origins and the 'nature' (or 'essence') of the Romanian people.⁸ Debate centred on whether Romania and Romanians should look to the West and their Roman heritage, to the East and their religious roots, or should take an indigenous view, with Romanians either owing all to their Dacian forebears or to their mixed Dacian/Roman origins. These debates were an integral part of the 'struggle' for the creation of the Romanian state during the 19th and 20th c., culminating in the unification of Transylvania, Wallachia and Moldavia at the end of the First World War. The contribution of other cultures has largely been downplayed.⁹

In the Communist period, these debates resurfaced in the early 1960s once the heavy hand of Stalinism had been lifted. The Late Iron Age became a key period in these debates, as did Burebista, 'first and greatest' of the kings of the Dacians. Burebista was credited with the formation of an empire that stretched from the river Tisa to the Black Sea, from the Danube to

¹ But see Lockyear, forthcoming a and b.

Particularly the counties of Alba, Sibiu and Hunedoara, for which I have previously undertaken a review of the literature: Lockyear 1996b, Appendix D.

I do not pretend that the bibliography in this paper is complete; some omissions are deliberate, others due to the difficulty of obtaining certain publications.

⁴ Major works on the subject include Crişan 1993; Daicoviciu 1960 and 1972; Gostar and Lica 1984; Mihăilescu-Bîrliba 1990; Pârvan 1926; Sanie 1995.

⁵ Pârvan 1928

⁶ Taylor 1994; Berciu 1967, chapt. 8; Crişan 1978a.

⁷ Imports: Glodariu 1976a. Coins: Chiţescu 1981; Crawford 1977 and 1985.

⁸ Verdery 1988 and 1991; Banac and Verdery 1995, several papers.

Boia 2001, esp. chapts. 1-2.

¹⁰ Sherk 1984, no. 78.

the Lvov region of the Ukraine. By the late 1970s this empire was being described as 'the first free, independent and centralised state of the Dacians', ¹¹ and in 1980 Romania celebrated the 2050th anniversary of its formation with a flurry of popular celebrations, publications, and academic sessions at home and abroad. ¹² During the 1980s Ilie Ceauşescu, Nicolae's brother, took the arguments to their logical but ludicrous conclusion. ¹³

Why was the Late Iron Age so important in bolstering debates about Romanian national ideology, and what do we actually know about Burebista and his putative state? There are only three historical sources for Burebista: Strabo's Geography, Jordanes' Getica, and the Akornion inscription from Dionysopolis.¹⁴ Strabo records Burebista defeating tribes on the Tisa, which runs through modern-day Hungary; the Akornion inscription records the work of an emissary between Burebista and Dionysopolis (modern Balcic in Bulgaria), a Greek colony on the Black Sea, and describes Burebista as the 'first and ... [greatest?] of the kings in Thrace'; Jordanes' work, written in the 6th c. and derived from the work of Cassiodorus, is principally about the Goths, with whom he confuses the Getae, and is perhaps unlikely to contain accurate information about Burebista. It would seem that Burebista did have influence over a very large area, but the exact extent of that area, and the nature of the polity he controlled, are highly speculative. Conversely, of all the Balkan nations seeking statehood in the 19th c., Romania was the only one not to have had an historically attested mediaeval empire to look back upon (having only been 'unified' for a single year under Mihai Viteazul). One can see why the myth of the Dacian state came to be of such importance in later debates regarding Romanian national identity. For example, the 2050th anniversary celebrations in 1980 could be seen as a response to the imminent Bulgarian celebration of the 1300th anniversary of the First Bulgarian Empire in 1981.¹⁵

This fascinating aspect of Dacian archaeology will be explored in detail elsewhere. ¹⁶ For present purposes, its importance lies in the effect that politics has had in restricting interpretation, both in terms of broad-scale discussion of the development of Dacian society, and at a more detailed level in the dating, phasing, and interpretation of individual sites. Post-war interpretations of this period had to fit within this pseudo-historical framework that glorified the Dacian past, but also within a Marxist evolutionary framework derived from Stalin's *Dialectical materialism and historic materialism*, one of the first substantive Communist documents to be translated into Romanian. ¹⁷ Constantine Daicoviciu's contribution to the *Istoria Romîniei* followed this imposed scheme and couched the Dacian period in terms of an 'incipient slave-state'. By 1972 Romania's greater freedom from Soviet influence allowed Hadrian Daicoviciu, in *Dacia de la Burebista la cucerirea romană*, to move away from describing the Dacian state as slave-based, to emphasise its level of industrial production and international trade contacts. ¹⁹ However, Babeş made a number of insightful criticisms of H. Daicoviciu's book, concluding that:

The progress of our knowledge of Geto-Dacian history and culture depends, as we have seen, above all, on the continuing development and perfection of the methodology of archaeological research. To reach this aim, archaeologists must work independently, and if possible uninfluenced by historical data and theories.²⁰

¹¹ Crişan 1979.

¹² Home: Conovici 1980. Abroad: for example, a conference held at the Institute of Archaeology, London in 1980; Babeş 1980.

Deletant 1991. See also Haynes and Hanson, above p. 28.

Strabo: Jones 1954. Jordanes: Mierow 1915. Akornion inscription: SIG II no. 762; Sherk 1984, no. 78.

To be confirmed, this suggestion requires research in the Romanian state archives.

¹⁶ Lockyear, forthcoming a and b.

¹⁷ Stahl 1992, 126.

¹⁸ Daicoviciu 1960.

¹⁹ Daicoviciu 1972.

²⁰ Babeş 1974, 242 (my transl.).

Not only were these thoughts generally ignored, they were often derided.²¹ Even in 1992 it was stated that:

Our historians today are quasi-unanimous in the appreciation that in the classic period the Geto-Dacian world was divided into classes organised in a unified state, which was founded by the great king Burebista. 22

Recently, Suceveanu has discussed the meaning of the Akornion inscription in some detail, describing much of the debate around Burebista as 'patriotic parascientific literature'.²³ One side-effect of these cultural politics was the creation by many scholars of *corpora* of data, a politically safe form of academic research, to the extent that a corpus almost defines an academic work.

Another issue that affected archaeological research under the Communists was the restrictions placed on the use of maps, which stifled the development of landscape approaches to archaeology. Even for the important area around Grădiștea Muncelului, which has been extensively surveyed and where many sites are known, high-quality distribution and topographic maps have not been published, making assessment and understanding of the complex difficult.

It was also difficult for Romanian archaeologists to develop a more nuanced approach to problems of cultural identity and ethnicity. ²⁴ Culture-historical approaches have dominated. Identifying 'Celts' and 'Dacians' (or more broadly 'Thracians') through ties with the historical sources has been seen as largely unproblematic. For example, the presence of 'Dacian' pottery forms on sites in E Hungary and Czechoslovakia was seen as evidence of the expansion of the Dacians, usually under Burebista, as recorded by Strabo. ²⁵ The argument can become circular, however, when the dating of the pottery becomes dependent on its identification as Dacian.

Despite all the problems, Romanian archaeologists have generated large quantities of data and have produced many interesting and important observations. The challenge now lies in finding new ways to work with this information in order to generate fresh perspectives on this crucial period in Europe's prehistory.

Chronology

The chronological resolution we have available for the period under consideration is not as good as we might like. For many sites and finds, only a broad date of 'Classic Dacian' is given. This is partly due to the unique problems facing Romanian coin data (see below), but is also due to a lack of quantified pottery studies and an insistence on dating archaeological phases to historical or pseudo-historical events such as the Dacian Wars or the 'creation of Burebista's state'. In Iron Age studies in Britain, the expectation that Caesar's invasions of 55 and 54 B.C. would mark some type of archaeologically visible horizon has proved to be entirely false;²⁶ without independent verification, the use of such historical events to date archaeologically observed events is a dangerous and potentially misleading method.²⁷

One of the main tasks facing archaeologists interested in this period and region is therefore the creation of detailed ceramic and other typologies based on well-stratified groups and quantified assemblages. This period has a favourable radiocarbon calibration curve that could help the process. Until this is done, it will be impossible accurately to assess the pattern of

²¹ For example, by Gostar and Lica 1984.

²² Ursulescu 1992, 42 (my transl.).

²³ Suceveanu 2001, 319.

²⁴ Cf., for example, Jones 1997; Olsen and Kobyliński 1991; Shennan 1989 and 1991.

The paper by Crişan 1992 is but one example.

²⁶ T. Champion, pers. comm.

For a similar problem in Romano-British studies, see Reece 1994. Orton notes (pers. comm.) that in ceramic terms the Norman invasion of 1066 is invisible.

development and change. Glodariu made a useful start in the process²⁸ by comparing the assemblages from closed contexts (pits and sunken-featured buildings) at the sites of Slimnic and Arpaşu de Sus. His analysis is based entirely on vessel form but (although his relative sequence will be unaffected) the absolute dates of the phases are again fixed with reference to historical events.

Settlement evidence

Settlement types and hierarchy

The Late Iron Age settlement-pattern of the region is dominated, as elsewhere in Europe, by a few large nucleated settlements. These settlements in Dacia and some of the surrounding areas, however, differ from the 'oppida' in the West.²⁹ It would appear that, whereas in the West the defensive *enceinte* included dwellings, industrial and religious areas, eastern settlements (referred to as Zemplín type by J. R. Collis) usually had much smaller 'citadels', with any religious or industrial areas located outside the walls. The temptation to view this as evidence of 'Celts' and 'Dacians', however, should be avoided. The major sites will be considered below.³⁰

There are a few competing classifications of Dacian sites, of which those by Glodariu and Nandris are worth considering here. Glodariu's *Arhitectura Dacilor* (1983) provided a discussion of the principal types of structures and settlements in Late Iron Age Dacia. He made a distinction between undefended settlements, defended settlements, fortresses (*cetăți*) and fortificații "independente"). He proposed 5 categories of settlements:

- Type I Open settlements, farms and villages. These constitute the most common form of settlement, situated along river valleys or along the edge of upland zones, and are principally agricultural.
- Type II Defended settlements on promontories or on the edge of upland terraces. They have natural defences on three sides, with fortifications on the remaining side, often in the form of a bank and ditch. The core of the site is located within the defended area, but the settlement may have expanded beyond the defences. They are centres of economic and commercial life, having evidence for crafts and trade.
- Type III Settlements on islands.
- Type IV Dispersed settlements in mountainous regions, often sited along river valleys.
- Type V Nucleated settlements in mountainous regions with structures built on natural or artificial terraces. These settlements were labour-intensive to construct and were only possible due to their location in politically and socially important areas, or because of natural resources such as iron.³¹

Type III settlements are represented by only two examples and are of little importance to us here. It could be argued that there is in fact little distinction between Type IV, such as Cetăţeni-Muscel, and Type I settlements, such as Şura Mică (see below), since both represent dispersed agricultural settlements.

Both fortified settlements and fortresses are divided into two groups corresponding to promontory sites and hillforts in the anglophone literature.³² In addition, there are the linear fortifications at Ponorici and Porţile de Fier ale Transilvaniei, to be discussed below. These sites are further sub-divided on the basis of the types of fortifications used: ditches, banks, and walls. The clearest, and perhaps most significant, type are walls constructed in a technique known as *murus dacicus*, a feature of many sites in SW Transylvania. This construction technique usually consists of two faces of unmortared ashlar blocks laced with timber beams and having a core of earth and rubble (fig. 2.1). This technique is thought to be of Greek origin, a suggestion perhaps reinforced by the presence of Greek letters on some of the blocks. The method is used to construct free-standing defensive walls, walls to support terraces, and towers, and seems to demarcate 'high-status' settlements. Apart from the distinctive fortresses with

²⁸ Glodariu 1981b.

²⁹ Collis 1972.

³⁰ Collis 1972 also called for a more refined chronology based on seriated pottery assemblages.

³¹ Glodariu 1983, 46-47.

³² Glodariu 1983, 60-66 and 111-16.

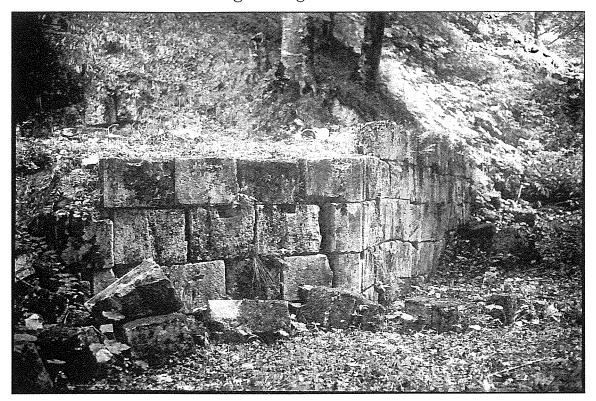


Fig. 2.1. Murus dacicus wall construction: the tower below the Great Circular Sanctuary at Grădiştea Muncelului (K. Lockyear).

the *murus dacicus* (to be considered as a group below), the distinction between fortified settlements and fortresses appears to be a fine one, and it may be easier to consider them together.

An alternative, but less detailed, typology was proposed by J. Nandris:

- 1. Strategically-placed fortified sites with murus dacicus walls.
- 2. "Domestic settlements largely of wooden houses, but not excluding stone building (e.g., Feţele Albe). These are well dispersed among gardens and orchards, through partially cleared forest, along ridges or in valleys, or even on small platforms dug on the slopes."
- 3. Upland sites associated with dairying and herding.
- 4. Sanctuaries and ritual sites.
- 5. Industrial sites for metalworking and pottery.³³

This typology is useful when considering the settlements within SW Transylvania as noted above, but it is less useful when looking at the wider pattern. This paper will therefore look first at undefended settlements, and then move to defended sites without *murus dacicus*. The fortress sites of the Munţii Orăştiei and nearby regions and the plethora of associated settlements and fortifications will then be considered together.

Undefended rural settlements

Despite being the most common type of settlement, Glodariu's Type I settlements have seen relatively little excavation or research.³⁴ The principal site within the study area is Slimnic Şarba-Stempen.³⁵ As so few sites of this type have been excavated, it is worth summarising the evidence in some detail. During the early 1970s Glodariu excavated 11 trenches through the site (fig. 2.2), covering a very small fraction of this dispersed settlement which is spread over an area some 2 km long. Nandris argues that this low-density, dispersed form of settlement is typical of Dacia at this period.³⁶

³³ Nandris 1976, 732-33.

This situation was not uncommon elsewhere before the advent of commercial 'rescue' archaeology.

³⁵ Glodariu 1981a.

³⁶ Nandris 1976.

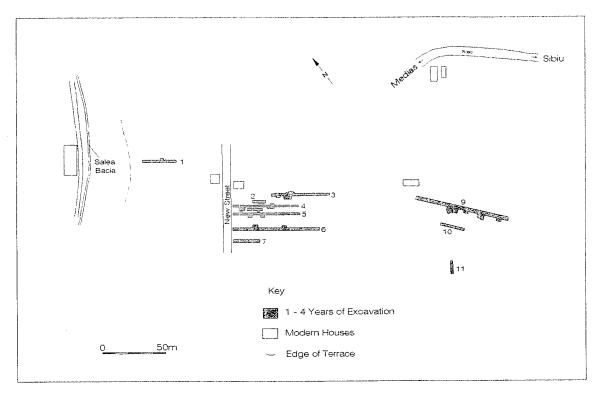
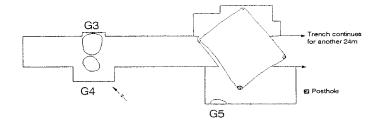


Fig. 2.2. Site plan of the excavations at Slimnic (compiled from figures in Glodariu 1981a).

Trench 3



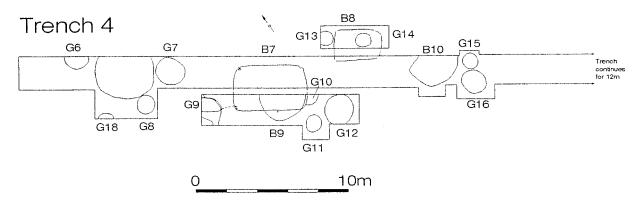


Fig. 2.3. Examples of bordei (sunken-featured buildings) from Arpaşu de Sus (after Glodariu 1981a).

The site lies in a region of rolling hills and good agricultural land 16 km north of Sibiu (fig. 2.4). Seventeen 'dwellings' were excavated, of which 6 were of Dacian date, one probably of the same period, and 10 Daco-Roman. The structures take the form of sunken-featured or 'semi-

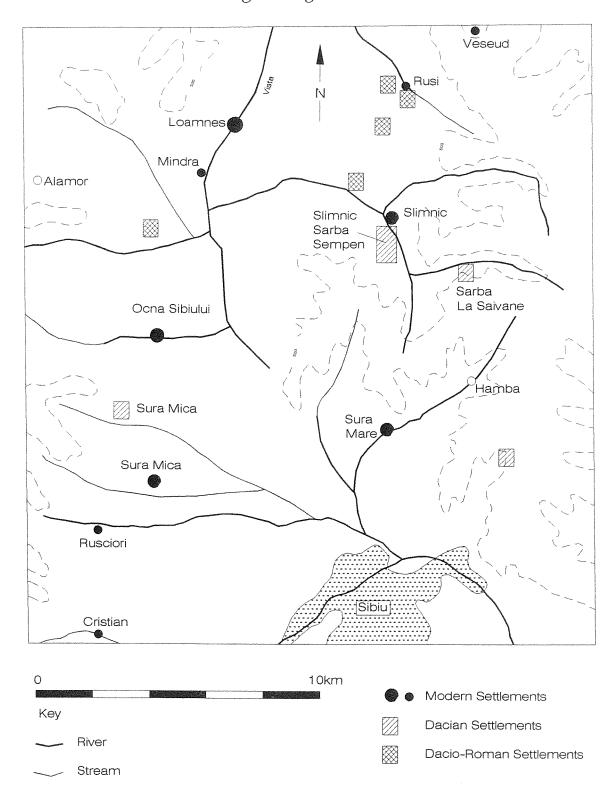


Fig. 2.4. Distribution of Iron Age and Roman settlements in the Sibiu basin (after Glodariu 1981a, fig. 85). sunken' buildings (bordei şi semibordei), usually 3-4 m across and 4-5 m long, with a depth of 70-80 cm for the bordei and 20-30 cm for the semibordei (fig. 2.3). In addition, 36 pits were excavated: 22 of Dacian and 14 of Roman date. These pits were of two forms: 'bucket'-shaped, and inverted-funnel shaped. The latter are probably grain storage pits and have also been found at Arpaşu de Sus and Şura Mică. Two kilns were found, one in building 5, which was associated only with Dacian pottery, and the second in trench VI (undated). A 5th-c. Gothic burial was also found in trench VI.

Glodariu dates the earliest excavated structure, building 12, to the 2nd c. B.C. on the basis of an imitation of a Delian bowl and an iron brooch. Dacian-period buildings and pits are largely dated by pottery. Three stray finds of Roman Republican coins were found on the site and a small hoard of silver objects was found nearby. Building 7 is dated to after the Roman invasion by pottery and a *fibula*, and by its stratigraphic relationship with building 9. A building accidentally sectioned by a local gardener recovered two *sestertii*, one each of Trajan and Antoninus Pius. The end of the settlement is difficult to date, although pottery evidence and another *fibula* indicate it continued into the mid-3rd c. By plotting the structures by phase, it would appear that the settlement 'drifted' over time — a not uncommon feature of unenclosed prehistoric rural settlements.

A similar site, still to be properly published, at Şura Mică, lies 10 km west of Sibiu, was excavated during the 1970s and 1980s.³⁷ It is a multi-period site with evidence from the Neolithic to the 12th c., but with extensive Dacian and Daco-Roman remains. It appears similar to Slimnic, having both *bordei* and surface structures, pits and a kiln, and also appears to 'drift' over time. In contrast to Slimnic, however, a series of pits had been backfilled with sterile soil, rather than with the usual organic fills, and in some were buried incomplete skeletons, both human and animal.³⁸ Three human skeletons were recovered, all incomplete. One pit held a single crouched burial with iron, bronze and silver artefacts; the second held two burials accompanied by 'ritually broken vessels'. The excavators dated these burials to *c*.50 B.C.–A.D. 50. Among the animal burials, one pit had a colt, a second had two dogs and the skull of a third, and a third pit had a goat.

The significance of the Slimnic and Şura Mică complexes lies in the evidence they provide for rural settlement in the Sibiu basin (and in Dacia more generally; see fig. 2.4), and for the issue of continuity of settlement (or otherwise) across the Roman invasion. The impression these sites give so far is of low-density agricultural settlements, slowly shifting through time, and largely unaffected by political events — in stark contrast to the situation that appears to pertain to the sites in the Munții Orăștiei discussed below. Slimnic and Şura Mică are only two of a series of rural sites identified in the Sibiu basin, mainly of Roman date, ³⁹ and they have been claimed (not without some justification) as evidence for continuity of settlement from the Late Iron Age into the Roman period. On the evidence presently available, however, it would appear that settlements of the Roman period are more numerous.

Sites with defenses not including murus dacicus

Glodariu's Type II settlements, which would usually be termed promontory forts, are also to be found within our study area. The site of Arpaşu de Sus in Sibiu county is perhaps the most extensively excavated and published (fig. 2.5).⁴⁰ It lies on a promontory, between two streams which converge to the north of the site, in the foothills of the Carpathians — an ideal location for the exploitation of both the fertile soils of the Carpathian basin to the north, and of the hills to the south through transhumance (still practiced by the inhabitants of the modern village). The exposed southern approach was initially defended by a single ditch and bank, which was later strengthened by an earth-filled timber wall. Internal buildings consist of surface or sunken-floored timber dwellings. Large numbers of pits were excavated, of a similar form (and presumably function) to those found at Slimnic and Şura Mică. Only a single sherd of pottery may be a Mediterranean import. Other finds included a badly corroded iron brooch, a silver arm ring, and a glass bead, as well as the usual ceramic assemblage, pot-tery burnishers, some iron tools, iron nails, and evidence for spinning and weaving (spindle whorls and weights).

Two interim reports have been published: Glodariu *et al.* 1983; Paul *et al.* 1981. See also Daicoviciu *et al.* 1989, 227.

³⁸ Glodariu et al. 1983, 242; see also Sîrbu 1993, 93 and 105.

³⁹ Glodariu 1981a, fig. 85.

Macrea and Berciu 1955, 615-26; Macrea 1957, 145-54; Glodariu 1975a; Macrea and Glodariu 1976; Preda 1994a.

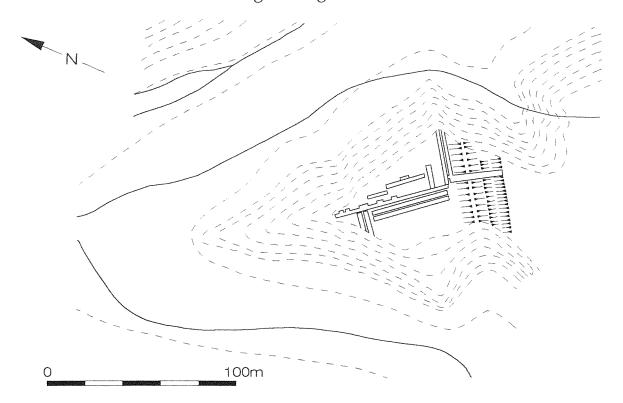


Fig. 2.5. The promontory fort at Arpaşu de Sus (after Macrea and Glodariu 1976, fig. 2).

Faunal evidence included cow, pig and ovicaprid bones. The impression gained from this site is of a small settlement, essentially domestic, with limited craft production and minor contacts with the wider world, but with sufficient communal organisation to be able to construct and refurbish the defences. The suggestion that it was an outpost defending the E flank of the settlement complex in the Munţii Orăştiei, manned by a garrison of Burebista's army, is not supported by the essentially rural and agricultural nature of the structures or by the finds.

There are other small promontory sites within the three counties under consideration but they are less well known. For example, at Şeica Mică, better known for a hoard of coins and jewellery,⁴¹ a promontory known as 'cetate' (fort) has a series of defences principally of Halstatt and mediaeval date, but one area did produce Dacian material that may originate from a site of this type.⁴²

Outside our study area, promontory forts of varying sizes and importance are known. For example, the site of Popeşti (25 km southwest of Bucharest) is one of the foremost sites of Late Iron Age date in Romania, comparable in richness to those in the Munții Orăștiei and the similarly large site of Poiana in Moldavia.⁴³ Of the promontory forts that have been published, Brad in Moldavia is of moderate size and has over 3 m of stratigraphy.⁴⁴ It is important both for its burial evidence and the presence of 'sanctuaries' (see below). Of a more comparable modest size to Arpaşu de Sus is the site of Sprîncenata.⁴⁵

The hilltop settlement at Cugir is, in some respects, more similar to the *murus dacicus* sites, for it is situated on a hilltop near the edge of the Transylvanian plain and dominates the valley, but it lacks the distinctive walls and may have gone out of use a little earlier. Excavations have yet to be published, although an interim article on the important high-

⁴¹ Floca 1956.

⁴² Horedt 1964.

Neither of these extremely important sites has seen full publication, but there are many interim notes and summary articles. Useful short synopses (in Romanian) are provided by Vulpe 2000a and b.

⁴⁴ Ursachi 1995.

⁴⁵ Preda 1986.

status burial has appeared, along with some summary reports.⁴⁶ The earliest phase of the settlement dates to the Bronze Age Sighişoara-Wietenberg culture, which is overlain by the Dacian settlement that seems to date principally from the 3rd c. B.C. to the 1st A.D. (divided by the excavator into two principal phases). It has been suggested that it was violently destroyed at the time of the Trajanic invasion, although an earlier date cannot be ruled out. In common with many other sites, the hill was extensively terraced in the Dacian period. The earthen defences did not need to encircle the entire hill as the SE slope is very steep. The defences of the first phase consisted of a high bank of earth and local stone (mica-schist), the second of another similar bank and a wall constructed of river boulders and local stone bonded with clay. Finds included some Hellenistic and Roman imports and several coin hoards, although these are poorly known. The latest coins appear to be two chance finds of Domitian found on the fortress site. The high-status burial was found on a terrace at the southwest of the site, outside the defences; it will be discussed below. Given the richness of the site and its location not that far east of the Munţii Orăştiei, the absence of any *murus dacicus* is an interesting point.

Fortresses and settlements of the Munții Orăștiei and associated sites

Excavations have taken place at defended sites of Costeşti-Cetăţuie, Blidariu, Piatra Roşie and Grădiştea Muncelului. The latter is the largest of these sites and often presumed to be Sarmizegetusa Regia, Decabalus' capital and the principal target of Trajan's invading legions. In addition, on the S flank of the Carpathians lies the defended site at Băniţa (14 km south-southeast of Grădiştea Muncelului as the crow flies), while in the northern foothills to the east lie the sites of Căpîlna and Tilişca (between which lies Cugir discussed above). Finally, to the north lies the more isolated site of Piatra Craivii. Other large defended sites may also have existed. For example, at Deva the castle may have destroyed a pre-existing Dacian site as is suggested by a number of finds, including possible *murus dacicus* blocks built into the castle's fabric; elsewhere in the city, a kiln of Dacian date has been excavated.⁴⁷ Other unexcavated sites in the mountains, such as Vîrful lui Hulpe, may also form part of this network.⁴⁸

The important site at Feţele Albe also has *murus dacicus* walls, but in this case they are supporting terraces (as also occurs at Grădiştea Muncelului just up the valley). Finally, Daicoviciu *et al.* (1989) list large numbers of isolated 'dwelling' or 'watch' towers that also use this type of walling.

Antiquarian interest in the sites within the Munţii Orăştiei (Orăştia mountains) goes back to 1540 when a large hoard of *c*.40,000 gold coins was uncovered (10,000 were sent to Vienna). This find and later discoveries resulted in sustained treasure-hunting in the region, not only by locals but also by state officials hoping to augment the coffers after the wars with Napoleon had depleted them.⁴⁹ Antiquarian work continued through the 19th *c.*, with M. J. Ackner concluding that the remains could not be Roman. In 1848 A. Fodor excavated the Roman bath suite just below the main *enceinte* at Grădiştea Muncelului.⁵⁰ In the 20th *c.* work has been systematically carried out by a series of researchers based in Cluj, beginning with a project directed by D. M. Teodorescu and C. Daicoviciu (1921-1928). Teodorescu concluded that the complex was constructed according to a single plan, and this idea has endured in the literature. During the Second World War, Daicoviciu campaigned for funds to continue the work. Although excavations at Grădiştea Muncelului restarted in 1943 and continue to the present, the main work was undertaken from 1949, with large-scale work taking place in the 1950s.⁵¹ A second burst of activity occurred in about 1980 when the Romanian state celebrated the fictitious 2050th anni-

For example, Crişan 1994; Crişan and Medeleţ 1979.

⁴⁷ Albu 1971a and 1971b; Andriţoiu 1973, 11-21; Floca 1969, 18-25; id. 1971; id. 1977, 174-81; Mărghitan 1970, 13-14.

⁴⁸ Daicoviciu et al. 1989, 208.

⁴⁹ Daicoviciu et al. 1989, 121-25, 148.

⁵⁰ Daicoviciu et al. 1989, 132-34.

⁵¹ Daicoviciu et al. 1989, 149-70.

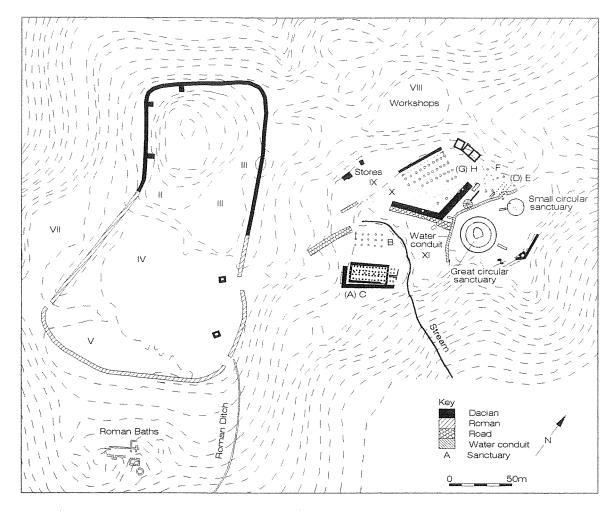


Fig. 2.6. The *enceinte*, religious precinct and nearby civil structures at Grădiștea Muncelului (after Daicoviciu 1972, plan 3, with additions).

versary mentioned above. Daicoviciu and Ferenczi published a corpus of sites in the region, which has been subsequently updated.⁵² As it is not possible to discuss each of these sites in detail, a summary of some of their principal aspects will be presented. In the following I will first discuss the principal site of Grădiştea Muncelului and then discuss the others in a more summary fashion.

Grădiştea Muncelului lies in the mountains to the south of the modern town of Orăștie.⁵³ The site is divided into three zones: the defended *enceinte* (the *cetate*), the religious precinct, and the 'civil settlement'. The *cetate* is a roughly kidney-shaped area (see fig. 2.6) with a massive wall of *murus dacicus* encircling terraces I-V at the top of the hill. The site is now heavily wooded and no clear plan of the interior of the fortress is available, although it does not appear that any substantial structures existed. The wall of the *cetate* has several phases, the last re-using some of the circular stone bases from the religious precinct. It has been suggested that the wall was destroyed during the conquest, then rebuilt and extended by the Roman army.⁵⁴ A Roman military presence is demonstrated by a number of inscriptions and carvings on the walls, and it seems likely that the bathhouse excavated by A. Fodor is associated with it, although the form of the *enceinte* wall is very unlike normal Roman military constructions of

⁵² Daicoviciu and Ferenczi 1951; Daicoviciu 1964; Daicoviciu et al. 1989.

As far as I know, no monograph has been produced on the excavations at Grădiștea Muncelului; the results are scattered in a series of interim reports. Useful summaries are given by Daicoviciu 1972, Daicoviciu *et al.* 1989, and Glodariu *et al.* 1996; see also Glodariu 1995, 124-30.

⁵⁴ Daicoviciu et al. 1983, 232-33; Glodariu 1995, 124.

the period (a more typical Roman fortress lies at Piatra Grădiștii in the valley to the north).⁵⁵ A small cache of coin dies has been found towards the south of the defended area.⁵⁶

The religious precinct consists of terraces X and XI to the east of the *cetate* (fig. 2.6). Here were found the remains of 10 or 11 'sanctuaries' (not all contemporary), as well as supporting walls, staircases, a paved road leading to the *cetate*, the solar disc or altar, and a number of drainage conduits.⁵⁷ The sanctuary buildings will be discussed below (pp. 57-61).⁵⁸ The depth of the deposits here can be great, often as a result of the creation of the terraces, and earlier phases are difficult to examine. Much of the area shows clear indications of burning and deliberate destruction in the final phase.

The 'civil settlement' consists of a number of terraces around the fortress, but also stretches west along the gently falling ridge for at least 3 km and further up the crest to the northeast for another 1 km. The terraces often appear in clusters scattered through the woods rather than as a continuous spread. Where excavated, these terraces are usually constructed by digging into the slope and then tipping the resultant spoil down-slope. In reality, the 'civil settlement' consists of all the structures not in the *cetate* or in the sanctuary complex.⁵⁹

A wide variety of structures has been found on these terraces. All are timber-built, resting on stone foundations, or using post-holes, often with evidence for wattle-and-daub walls. For example, 'the house with a medical kit' that was found on the fifth terrace of the 'Plateau with Six Terraces' was a circular (diam. 6 m) building destroyed by fire. 60 The fire had preserved the wall to a height of 25-30 cm for about half of its circumference. It consisted of posts about 1 m apart set 0.9-1.0 m into the ground, connected by thick (25-30 cm) wattle-and-daub panels. Inside was found a 'medical kit' consisting of 5 small vessels, bronze tweezers, an iron knife, and a plaque of 'volcanic ash' in a wooden box with iron handle and bronze straps. 61

On the second terrace of the same complex excavators found a polygonal building which had 20 sides (2 m long) resting on a mixture of limestone, andesite, and local stone blocks, resulting in a building with a diameter of 12.5 m.⁶² Amongst the rich finds assemblage from this building was a remarkable vessel, conical in form, with a diameter of 1.25 m, and a height of 0.7 m. Around its lip was stamped the words DECEBALVS PER SCORILO in 4 places.⁶³ From a structure that the excavators had expected to be an unremarkable domestic building comes one of the strongest links between Grădiștea Muncelului and Decebalus.

Metal-working is also widely attested, with workshops being found, for example, on terrace VIII above the religious precinct, on the 'terrace with workshop', and at Căprăreața c.1 km north-northeast of the cetate.⁶⁴ At the latter site (altitude c.1,250 m, on 7 terraces cut into the steep slopes of the valea Godeanului) was found about a tonne of iron blooms along with a wide variety of tools, including tongs, chisels, sledgehammers, hoes, a ploughshare, hinges, and 4 circular fittings which are probably the centrepieces of cartwheels. Although there is a bias due to the intense archaeological activity, the overwhelming proportion of evidence for iron-working in Dacia does come from Grădiștea Muncelului and sites nearby.⁶⁵

⁵⁵ Daicoviciu *et al.* 1989, 175-76.

⁵⁶ Glodariu et al. 1992.

Excavations in this area have been extensive and are extremely complicated. Useful summaries are given by Daicoviciu 1972, Glodariu *et al.* 1988, and Daicoviciu *et al.* 1989.

⁵⁸ See Tables 2.3-4 with refs.

⁵⁹ For example, Daicoviciu *et al.* 1952, 303-6.

⁶⁰ Daicoviciu et al. 1957, 259-63; Daicoviciu et al. 1959a, 393-95; Glodariu et al. 1988, 93-94.

⁶¹ Daicoviciu et al. 1957, 260-63, fig. 2.

⁶² Daicoviciu et al. 1955, 195-202; Glodariu et al. 1988, 94-95.

⁶³ Crişan 1969a, 189-90, pl. 86.1. The significance of these two personal names has been much debated.

Terrace VIII: Daicoviciu *et al.* 1952, 297-302; Daicoviciu *et al.* 1953, 164-73. Workshop: Daicoviciu *et al.* 1955, 207-11. Căprăreața: Glodariu 1975c.

⁶⁵ See, for example, Glodariu and Iaroslavschi 1979; Iaroslavschi 1997.

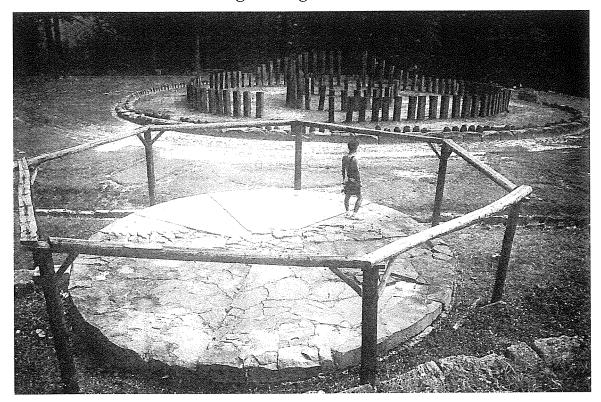


Fig. 2.7. The andesite 'altar' at Grădiștea Muncelului (K. Lockyear).

Considerable efforts also went into water-management. For example, a wooden cistern was found to the west of the *cetate* with a capacity of at least 3,000 litres.⁶⁶ Water from two springs was channelled into this barrel via two ceramic pipes, and a third led water out. As well as the numerous water pipes, drainage channels constructed from limestone blocks were used, particularly in the religious precinct.⁶⁷ One of these channels ran under the edge of the large andesite 'solar disk' or altar (fig. 2.7).

By definition, the similarity between Grădiștea Muncelului and the other sites listed above (p. 42) is the presence of *murus dacicus* walls and their date. Some other sites such as Cugir should perhaps be considered alongside. In what other ways are they similar? Except for the undefended settlement at Feţele Albe, they all lie on a hilltop or ridge. Some have evidence for sanctuaries (see Table 2.1 and below), all but one of which seem to lie outside the defended area. Many have painted pottery, either the more common type with geometric designs, or the rarer figural types that are only found in SW Transylvania. Many have evidence for a variety of 'industrial' or craft activities, as well as imported goods and coins.

Nevertheless, it is easy to over-emphasise the similarities between these settlements. The *murus dacicus*, for example, is not identical throughout. At Piatra Craivii the courses of blocks are interrupted by vertical stone posts.⁶⁸ At Costeşti, the walls linking towers I-III have some transverse blocks which protrude further into the core, in the Hellenistic manner.⁶⁹ At Căpîlna the lower part of the circuit wall has only a single face, with the transverse beams dug into the slope of the hillside.⁷⁰ All these may seem superficial variations given the distinctiveness of the wall form, but they may hint at meaningful differences.

Perhaps more telling are the differences in plan and layout. Six of the 9 sites under consideration have towers of some kind (Table 2.1). The exceptions are the 'civil' site at Feţele,

⁶⁶ Daicoviciu et al. 1951, 121-23; Iaroslavschi 1995, 138.

⁶⁷ Glodariu 1983, 40-41.

⁶⁸ Berciu et al. 1965; Moga 1995.

⁶⁹ Glodariu 1983, 54.

⁷⁰ Glodariu and Moga 1989, 38-43.

Kris Lockyear

TABLE 2.1. CHARACTERISTICS OF THE MAIN EXCAVATED SITES WITH MURUS DACICUS. N.B. Site 'type' is merely an impressionistic categorisation based on the published evidence and site visits; absence of a checkmark does not mean a categorical absence.

name	county	type	M.D. circuit	other def.	M.D. towers		sanctuaries	aries	paint	painted pot	fate
			continuous discon.		on on enceinte	other ci	circular	rect.	geo'tric	figural	
Grādiştea Muncelului	Hunedoara	major settlement and religious centre and defended area	,	>	>	2		& ^I	`	>	widespread burning esp. in the religious precinct and some of the civil settlement
Piatra Roșie	Hunedoara	small fortified settlement/élite residence	`	>	```\	,		_			burning only present in tower B (SE corner of
Costești	Hunedoara	medium sized defended settlement	>	>	`			4	>	`	two episodes of burning before and after the construction of the free heart.
Blidariu	Hunedoara	compact fortress	`		>						No evidence of
Bănița	Hunedoara	poorly published, ?small defended élite	>	¢-				1?			Silling Silling
Fetele Albe	Hunedoara	undefended religious/élite site				******				`	two levels of burning
Piatra Craivii	Alba	small fortified settlement	>					2	>		***************************************
Căpîlna	Alba	small fortified settlement/élite residence	>	>	`			2?	>		destroyed by fire
Tilişca	Sibiu	large sprawling settlement		>	<u> </u>		s south and the second		`	тен	Anna da sa

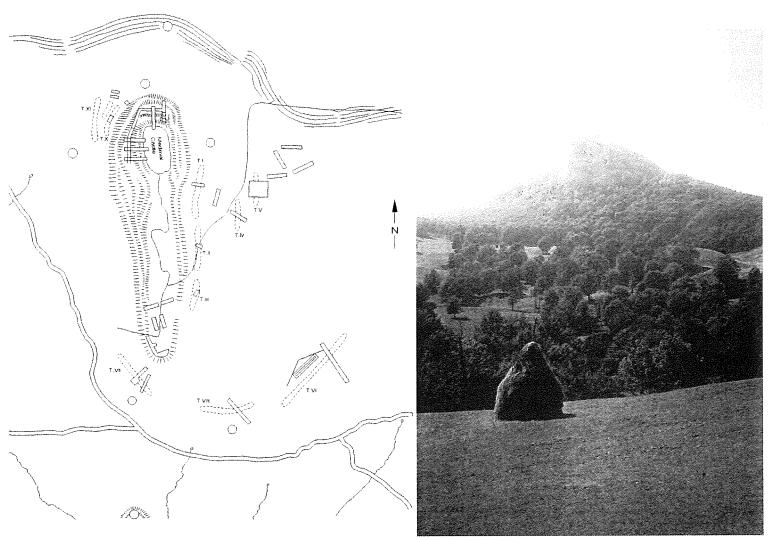


Fig. 2.8. Piatra Craivii (after Berciu et al. 1965, fig. 2).

Fig. 2.9. Piatra Craivii. The settlement is built on a series of terraces cut around the base of the limestone outcrop (K. Lockyear).

Albe, where *murus dacicus* is used to support a number of terraces upon which the site is built;⁷¹ Piatra Craivii, where the nature of the site — a series of terraces carved out along the edges of a limestone outcrop — does not provide much scope for the construction of towers (figs. 2.8-9),⁷² and Băniţa, which did, however, have a 'wooden watch-tower'.⁷³ Among the remaining 6 sites, Tilişca is large and occupies a long, relatively thin hilltop. It has two free-standing towers with lower sections of *murus dacicus*, but the upper parts are constructed of large, poorly fired tiles (almost mudbrick) (fig. 2.10).⁷⁴ A similar construction technique is employed on the two main 'dwelling towers' at Costeşti.⁷⁵ In contrast to Tilişca, Piatra Roşie is a compact site that, from the plan and finds, has the feel of a fortified élite residence, with 5 towers incorporated into a stronghold, and another 4 free-standing towers, two of which were later incorporated into the corners of a further enclosure (fig. 2.11).⁷⁶ The nearest to Piatra Roşie in plan is Blidariu, which looks more like a fortress than any of the other sites, with its possible

Daicoviciu 1971; Daicoviciu and Glodariu 1969; Daicoviciu et al. 1973b; Preda 1996.

It is possible that a tower could have stood on the top of the limestone outcrop, but a mediaeval fortification was also built there: Berciu and Popa 1971; Berciu et al. 1965; Moga 1981.

⁷³ Floca 1966.

⁷⁴ Lupu 1989, 22-27.

⁷⁵ Glodariu 1983, 55-57.

⁷⁶ Daicoviciu 1954.

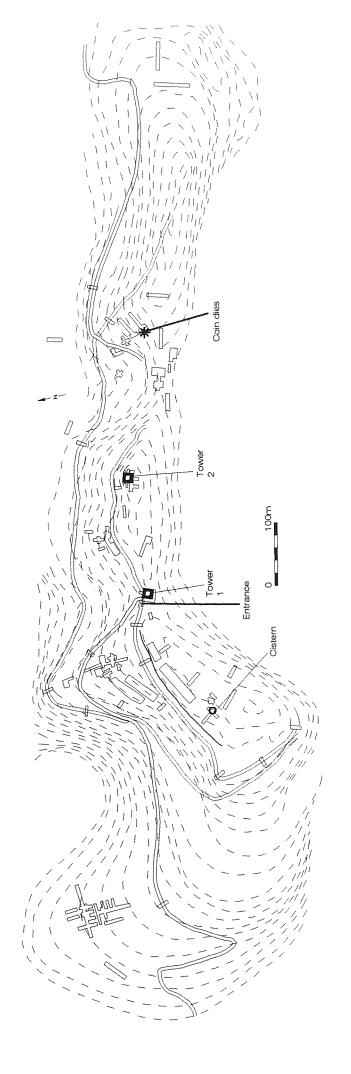


Fig. 2.10. Tilişca (after Lupu 1989, fig. 2 and additions).

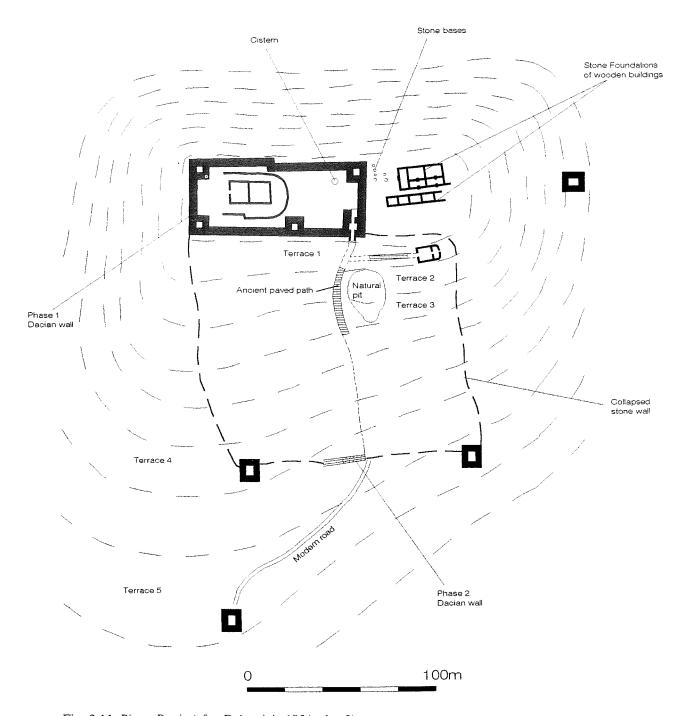


Fig. 2.11. Piatra Roșie (after Daicoviciu 1954, plan 2).

barracks and storerooms, although the location of the water cistern just outside the fortress walls is puzzling.⁷⁷ Although the similarities are undeniable, one can see that there are also variations in plan. These variations could in part be the result of topography, but the choice of location must also be a result of function. It is extremely difficult to assign functions to sites on the basis of archaeological remains, but I have attempted an impressionistic characterisation in Table 2.1.

⁷⁷ Blidariu has been published in a series of interim reports (Daicoviciu *et al.* 1955, 219-27; 1957, 263-70; 1962, 463-66; 1973a, 70-73). Useful summaries are provided by Daicoviciu *et al.* 1989, 181-84 and Preda 1994b.

Another axis of variation, however, is time. The chronology of these sites is also of great importance. Unfortunately, adherence to a chronological model derived from the scanty historical sources makes any detailed assessment of this factor difficult. For example, the survey by Daicoviciu and Glodariu of the dating evidence for a number of the sites in the region concluded:

With respect to the complex of stone fortifications in the Munţii Orăştiei, the construction of their main elements must be on behalf of Burebista, although, evidently, the work started by him was continued by his successors. The Hellenistic origin of the Dacian walls in *opus quadratum* presupposes that their construction took place in a period when the great king fostered close connections with the Pontic fortresses ... The end of the fortresses and settlements from the Munţii Orăştiei was the result of the Roman conquest.⁷⁸

Glodariu reached similar conclusions some 20 years later.⁷⁹

Can the archaeological evidence support this framework? The coinage evidence for these sites is conveniently summarised by V. Mihilescu-Bîrliba. The coin sequences at Blidariu, Costești and Grădiștea Muncelului all end with Trajan. The coin series from Căpîlna ends with Augustan issues but the possibility that these coins are all from a single, dispersed hoard raises questions as to their interpretation. At Piatra Roşie the latest coins are of Republican date, as is the hoard, which closes in 43 B.C. The only coins at Tilişca are also of Republican type. Due to the pattern of supply and copying (discussed below), at best these dates form only rough termini post quem. Very few post-Republican coins have been found anywhere, and to argue from their absence is untenable.

Florea has reviewed the evidence for the end of these sites⁸¹ (see the summary in Table 2.1). A number showed evidence of burning, which is attributed to the Roman invasion. The intensity of the conflagration that engulfed the sanctuaries at Grădiştea Muncelului and some of the terraces cannot be denied, and the Roman invasion certainly provides a possible context. Costești apparently had two phases of burning, as did Feţele Albe. In contrast, only one tower at Piatra Roşie appears to have been burnt, and there is no burning in evidence at Blidariu. We must be aware that there are many possible causes for fire, especially when the architecture is essentially of timber; they include unrecorded internecine strife and simple accidents. Each episode has to be dated on its own merits.

The distribution of painted pottery is of interest here. ⁸² Pottery with animal or figurative designs has been found at only 5 sites: at various points around Grădiştea Muncelului, ⁸³ at Costești, Fețele Albe, Fața Cetei, and at Meleia, ⁸⁴ all in the mountain zone close to Grădiştea Muncelului. Is this restricted distribution a function of date and/or status? Unfortunately, the finds from Costești consist of two sherds of uncertain provenance; at Fața Cetei only a single sherd has been recovered from surface collection. The discovery of painted pottery at Meleia contrasts with that site's initial interpretation as an upland sheep-rearing settlement (see below), and a simple chronological explanation for the distribution is not supported by Blidariu where none of this pottery has been found, but the only coin is a *sestertius* of Trajan. ⁸⁵

The presence of a bathhouse at Grădiștea Muncelului shows that the site remained occupied after the conquest, possibly for some time. The process by which this region lost its pre-

⁷⁸ Daicoviciu and Glodariu 1976, 79 (author's translation).

⁷⁹ Glodariu 1995, esp. 129.

Mihăilescu-Bîrliba 1990, Table 6, reproduced in Lockyear 1996b, Table 14.5. To this should be added the recent hoard from Piatra Roşie (Pavel and Andriţoiu 1994) and the coin finds from Tilişca (Lupu 1989, 75-76).

⁸¹ Florea 1993.

⁸² Florea 1998.

⁸³ For example, Florea and Palkó 1991.

⁸⁴ Florea 1998, 146-50.

⁸⁵ Daicoviciu *et al.* 1955, 202.

eminence and the focus of settlement shifted to the Roman cities in the lowlands requires further research. At present, it is not possible to chart the growth and decline of settlement here, either in support or contradiction of the historical model. The surest way forward would be the detailed quantitative analysis of securely-stratified pottery assemblages. Pending such an analysis, I would suggest that these sites may represent a range of foundation dates and varying patterns of growth and decline. They are obviously inter-related, and may, like the forts on the Saxon Shore in Britain, have become part of a system of sorts without ever having been part of any grand master-plan. Similarly, their abandonment should not be assumed to be entirely coincident with the Roman conquest but should be seen as part of the broader pattern of changes brought about by that conquest.

In contrast to these fortified settlements, the excavated sites at Meleia and Rudele high in the mountains south of Grădiștea Muncelului typify Nandris's Type 3 settlements. Rudele consists of 5 mounds in a forest-clearing at an elevation of 1366 m; they are 10-26 m in diameter and 0.5-1.2 m high, and four have been excavated. Meleia is the more complicated site, at 1419 m above sea level, with 7 or 8 small terraces with mounds, and a plateau with 8 more mounds upon it. Eight mounds have been completely excavated (the dwelling on terrace II, terraces VI-VIII, and mounds [stîne] 1-3 and 5 on the plateau) and at least 4 more were sectioned up to 1959 (the second mound on terrace II, terrace III, mounds 4 and 6 on the plateau). Table 2.2 summarises what is known about these buildings.

Further excavations took place on the plateau at Meleia in 1970 and 1972, though these remain unpublished. In 1970 an unspecified mound was re-examined and found to have an earlier phase with the remains of a similar construction which had been destroyed by fire.⁸⁸ A deposit of iron metal-working tools (including at least one sledge hammer, 5 pairs of tongs and 2 punches) was discovered.⁸⁹ Two further mounds were sectioned in 1970 and 1972, revealing three and two levels of construction, respectively. In 1972, another two groups of mounds were located.⁹⁰ According to Daicoviciu *et al.*,⁹¹ one mound remains unexcavated.

These structures all use stone blocks, often unworked, as foundations for timber buildings. They have one, two or three concentric foundations, with a variety of forms for the innermost building. The foundations vary from very clear and substantial remains, such as building 3 at Rudele (fig. 2.12) and $stinele\ 2$ and 3 at Meleia (figs. 2.13-14), to very ephemeral unclear patterns, for example terraces VI-VIII at Meleia (fig. 2.15). At least 5 were destroyed by fire, 92 but none provided evidence for wattle-and-daub walls, unlike the structures in the civil settlement at Grădiștea Muncelului and elsewhere, 93 which suggest timber walls. Only two of the structures at Meleia show clear evidence of iron building materials such as nails and hinges. No tiles were recovered, indicating they were roofed with shingles or perhaps thatch. This all suggested to the original excavators that these buildings were $stine\ (singular: stini)$, seasonal structures associated with the use of the high mountain pastures in the summer, 94 an aspect of the Romanian rural economy to this day.

⁸⁶ Daicoviciu et al. 1959a, 386-91; Daicoviciu et al. 1959b, 341-46.

⁸⁷ Daicoviciu *et al.* 1959b, 346-49; Daicoviciu *et al.* 1961, 308-15; Daicoviciu *et al.* 1962, 467-73.

⁸⁸ Daicoviciu et al. 1989, 164.

⁸⁹ Glodariu and Iaroslavschi 1979, 17-19, 40-41, 46-47, 49-50, 52 and figs. 12.9, 14.7-9, 15.1, 15.3, 19.7 and 19.16.

⁹⁰ Daicoviciu et al. 1989, 164-65.

⁹¹ Daicoviciu et al. 1989, 215.

Four are known from the original excavations (Table 2.2) plus the earlier phase of the unspecified mound excavated in 1970 noted above.

Cf. the round building on the 'plateau with six terraces' (Daicoviciu *et al.* 1955, 195-204) or the structures at Feţele Albe (Glodariu 1976b, figs. 11-12).

⁹⁴ Nandris 1981.

TABLE 2.2. DETAILS OF STÎNE AT MELEIA AND RUDELE FROM EXCAVATIONS UP TO 1959.

Name		exc'd?	plan avail.	no. of conc. fndtns	form of inner bldg	hearth?	burnt?	ınventory	references
Meleia terraces dwell	erraces dwelling on terrace II	exc'd 1957	yes	3	D-shaped	yes	110	Rich pottery assemblage including large jars, lids and a lamp; some iron rings	Daicoviciu <i>et al.</i> 1959b, 346–8, Fig. 12
	mound covered in tree stumps,	sect'd 1957	no	***************************************	and the same of th	yes	n/a	No structure, open air hearth? Some sherds of pottery, an iron crampon	Daicovîciu <i>et al.</i> 1959b; 348
	terrace II terrace III	sect'd 1958	no	ı	l	yes	no	Found traces of dwellings	Daicoviciu et al.
	terrace VI	exc'd 1958	yes	2?	oval?	no?	no	10-15 small pottery fragments	Daicoviciu <i>et al.</i> 1961: 308–9, Fig.
	terrace VII	exc'd 1958	yes	2?	D-shaped?	yes	no	Only pottery, not so abundant as terrace VIII but in better condition	Daicoviciu et al. 1961: 310–11,
	tептасе VIII	exc'd 1958	yes	1?	oval?	ou	ou	Abundant pottery but in poor condition and fragmented; an iron blade	rig., o Daicoviciu <i>et al.</i> 1961: 309–10, Fig. 7
Meleia p	Meleia plateau † stîna 1	6561 b,exe	yes	prod	circ./spiral	no?	yes	Two small iron nails; iron spear head; whetstone; about 300 pottery vessels "of all categories usually found on Dacian stine"	Daicoviciu <i>et al.</i> 1962: 469–70, Fig. 4; see also Daicoviciu 1972:
	stîna 2	exc.d 1958	yes	m	sub-rect.	yes	yes	Carbonised maize; iron building materials such as nails and two hinges etc.; knife blade, some iron points and an iron ring; upper half of a quern; possible strike-a-light; abundant and varied pottery assemblage including two painted lids and part of a large painted iar	Daicoviciu <i>et al.</i> 1961: 311–14, Fig. 9
	stina 3	exc.d 1959	yes		circular	yes	yes	Foundations of limestone; carbonised wheat and maize, numerous nails and spikes; two iron rings, an iron ferrule, and a spur, pieces of iron slag; abundant pottery of all sizes and two sherds of painted pottery	Daicovicíu <i>et al.</i> 1962: 468–69, Fig. 3
	stîna 4	sect'd 1957	no	and the same of th	***************************************	6	yes	"numerous pottery fragments and some iron objects"	Daicoviciu <i>et al.</i> 1959b: 349, Fig. 13
	stîna S	exc'd 1959	yes	6	rectangular	yes	no	large iron nail; iron slag; less pottery than stine 1-4 and fewer forms	Daicoviciu <i>et al.</i> 1962: 471–3, Fig.
	stîna 6	sect'd 1959	ou	mysekke	1	yes	ou	pottery comparable to stina 5	Daicoviciu <i>et al.</i> 1962: 473
	stîna 7	not exc'd	dilinaves	-	tamen	1		-	Daicoviciu <i>et al.</i> 1962; 468
	stina 8	not exc'd	1	1	· ·	апання			Daicoviciu <i>et al.</i> 1962; 468
Rudele	Building 1	exc'd 1957	00	6	ŝ	yes	no	Relatively little pottery, all fragmentary; an iron ring and three pieces of quartz	Daicoviciu <i>et al.</i> 1959b, 344
	Building 2	not exc'd	***************************************	saanse	-	1	Į		Daicoviciu et al.
	Building 3	exc'd 1956	yes	т	D-shaped	yes	no	Abundant pottery including complete vessels; some iron tools including a pruning hook and a blade; no nails etc	19570. 341 Daicoviciu <i>et al.</i> 1959a: 386–91, Fig. 1
	Building 4	exc'd 1957	yes	2	square	yes	ou	Abundant pottery but no complete vessels; whetstone; variety of iron tools inc. a chisel and an	Daicoviciu <i>et al.</i> 1959b: 341–4, Fig. 10
	Building 5	exc'd 1957	yes	guine)	oval	yes	yes	anvit, possitor ton stag. Pottery, all fragmentary	Daicoviciu <i>et al.</i> 1959b: 344, Fig.

TSix mounds on the plateau were sectioned 1958, and then one excavated fully (stina 2;Daicoviciu et al. 1959b, 311).

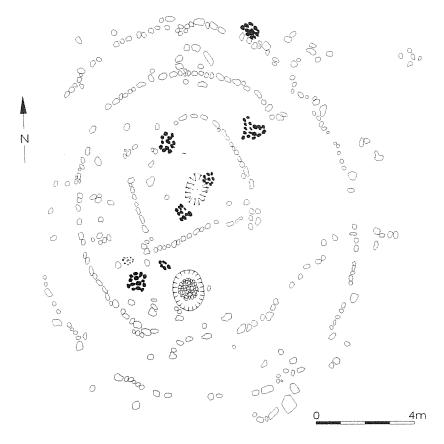


Fig. 2.12. Structure from mound 3 at Rudele (after Daicoviciu et al. 1959a, fig. 1).

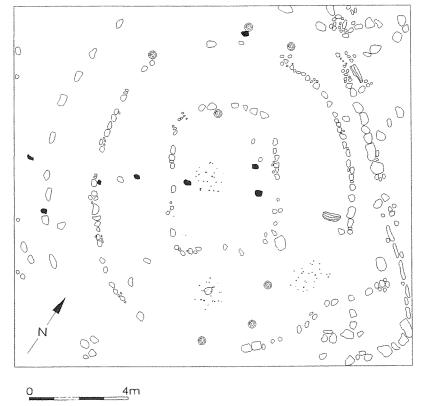
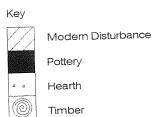


Fig. 2.13. Stîna 2 from Meleia (after Daicoviciu et al. 1961, fig. 9).



Key for figs. 2.12-15

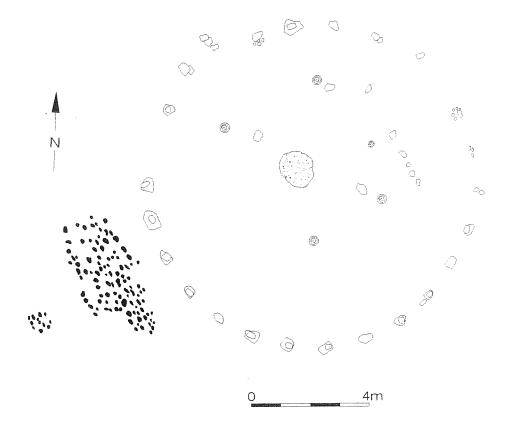


Fig. 2.14. Stîna 3 from Meleia (after Daicoviciu et al. 1962, fig. 3).

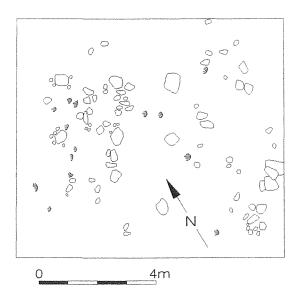


Fig. 2.15. Structure on terrace VIII at Meleia (after Daicoviciu et al. 1961, fig. 7).

As might be expected from such settlements, the finds associated with most of the structures are poor, consisting of pottery and occasional iron tools such as knife blades and pruning hooks. Two of the more substantial *stîne* at Meleia, however, had much richer assemblages, including very large quantities of pottery (over 500 vessels between them) and small quantities of painted ware, alongside a variety of iron and stone tools. Some of the structures were associated with metal slag which, along with the hoard of tools discovered in 1970, led Glodariu and Iaroslavschi to suggest that Meleia at least, and perhaps Rudele, were seasonal settlements for

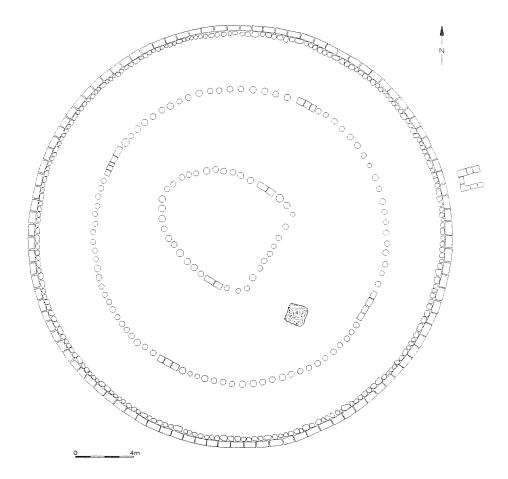


Fig. 2.16. Plan of the Great Circular Sanctuary at Grădiștea Muncelului.

workers exploiting the ores found at the confluence of the pîrîul Jigureasa and the Valea Strîmbului, and on the crest between the Valea Mlăcii and the Valea Pravăţului. Although this interpretation may answer the question as to why these structures, if stîne, were so concentrated and in a few cases rather rich, it raises the equally difficult question as to why they were not situated right at those deposits, and why no trace of furnaces has been found.

Some of the structures, especially that from terrace II at Meleia and building 3 from Rudele (fig. 2.12), bear an uncanny similarity to the plan of the Great Circular Sanctuary at Grădiștea Muncelului⁹⁶ (figs. 2.16-17), which has led some scholars to interpret them as religious buildings.⁹⁷ This idea will be discussed below in connection with the sanctuaries. It is, of course, possible that all these interpretations are correct, in the sense that a structure, let alone a settlement, need not have just a single function. What is clear, however, is that the exploitation of these mountainous regions was an important facet of Dacian society and economy.

The last sites to be considered are linear defences. A peculiar group of earthworks is known at Cioclovina-Ponorici high in the mountains west-southwest of Grădiştea Muncelului. They are poorly dated — only a single coin of Domitian has been found — but most regard these works as Dacian, probably of the time of Decebalus. There is also a Roman marching-camp at the site that re-uses one of the earthworks for one side of its defences. The main feature is a bank some 1.5 km long, which cuts right across the valley. The bank has a series of shorter banks at right-

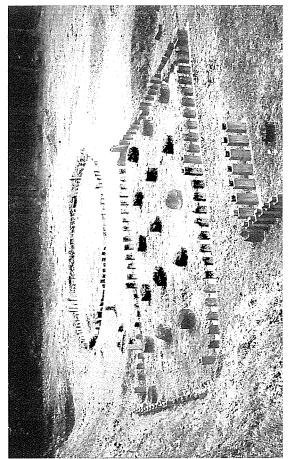
⁹⁵ Glodariu and Iaroslavschi 1979, 17-19.

⁹⁶ Glodariu 1976b; Nandris 1981.

⁹⁷ Sanie 1995, 21, 23 and 27.

TABLE 2.3. PRINCIPAL CHARACTERISTICS OF CIRCULAR SANCTUARIES. Primary references only are given. Meleia, Rudele and Pustiosu are omitted (see below).

Site	County (country)	dia. (m)	No. of conc. features	foundations	other features	references	20
Brad	Bacău	16.0		post-holes	Some horizontal carbonized beams found	Ursachi 1982; Ursachi 1995: 62-71	
Butuceni	(Moldova)	6-8	2	post-holes	stone platform in centre	Babeş 1994	
Dolinean	Hotin	c. 16	73	post-holes,	yellow clay ring inside posts, inside of which a	Smirnova 1976; see also Sanie 1995: 21, 23-4,	
	(Ukraine)			small stones and clay	central pit	27, 36, 38–9, 273–4	
Fetele Albe	Hunedoara	10.8		limestone	poorly preserved but appears to have alternating	Daicoviciu & Glodariu 1969; Daicoviciu 1971;	
			,	blocks	shapes of blocks cf the Great Circular Sanctuary	Daicoviciu et al. 1973b.	
Pecica	Arad	c. 6.4	_	post-holes	central hearth defineated with boulders; gold ring found	Crisan 1966; Crisan 19786: 98-106	
Racoş	Brașov	19.2	3	stone & 'white	innermost feature apsidal building with two	Glodariu & Costea 1991	
Gradistea Muncelului	Hunedoara			i			
Great Circular Sanctuary		29.4	3	post-holes with	innermost structure D-shaped, entrances	Daicoviciu et al. 1951; Daicoviciu et al. 1959b:	
				inmestone bottoms &		al. 1983: 233.	
				andesite blocks	:		
Small Circular Sanctuary		12.5	 -	andesite	interior of well-smoothed yellow clay	Daicoviciu <i>et al.</i> 1953: 153–6; Daicoviciu <i>et al.</i> 1959b, 336; Daicoviciu <i>et al.</i> 1961: 303; see	1,
						Daicoviciu 1972: Fig. XXXII, 261, and plate 56	.1.1
						for illustrations; laroslavschi 1986.	.0



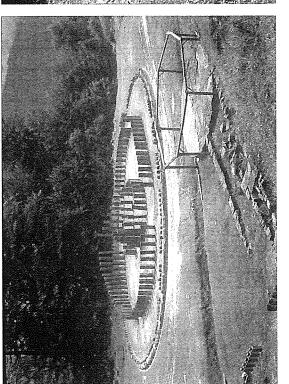


Fig. 2.17. The Great Circular Sanctuary at Grădiștea Muncelului (K. Lockyear).

Fig. 2.18. Front to back: sanctuary F, sanctuary E and the small circular sanctuary at Grādiştea Muncelului. Note the replacement pillars which were part of the restoration work in c.1980 (K. Lockyear).

angles to the main one, as well as a series of 'bastions'. To the southwest of this feature are three more complexes of earthworks: a simple oval enclosing the top of Dealul Feţei; a quadrilateral enclosure *c*.300 m north of the first enclosure; and a complicated enclosure and bank system *c*.300 m to the west on Dealul Măguliciului. There is a further fortification at Dealul Bradului (also known as Dealul Troianului) 1.5 km to the north of Dealul Măguliciului. The many questions raised require further fieldwork. The standard interpretation is that they represent an attempt to stop Trajan's armies crossing the Carpathians and reaching Grădiştea Muncelului from the southwest. Linear earthworks of possibly similar date are also found at Porţile de Fier ale Transilvaniei, often identified with Tapae, the location of battles between the Romans and the Dacians in A.D. 88 and 101.98

Sanctuaries

A number of buildings excavated within the Munţii Orăştiei have been identified as 'sanctuaries' or 'temples'. The two principal types are 'circular' and 'rectangular' although some other types of building have been claimed to have religious functions.⁹⁹ It is now acknowledged that a distinct division between religious and secular is a modern phenomenon; although we may be able to identify distinctly religious buildings or practices in the archaeological record, we cannot expect to be able to separate these domains, nor should we seek to.

Both types of sanctuary are relatively rare, and their distribution is concentrated in the Munții Orăștiei. Although this may be partly due to the distribution of the archaeological work, the pattern is not entirely artificial, and it becomes more marked when one examines the variation within the two categories.

a. Circular sanctuaries

The principal structures claimed as circular sanctuaries are listed in Table 2.3. The first to be discovered, and the most remarkable, was the 'Great Circular Sanctuary' at Grădiștea Muncelului, originally found in 1787 during a treasure hunt.¹⁰⁰ Major excavations took place in the 1950s¹⁰¹ and 'restoration' work was undertaken in the late 1970s/early 1980s.¹⁰² This unusual structure is worth describing in detail.

The sanctuary consists of three concentric features (figs. 2.16-17). The outer circle, over $29.4~\rm m$ in diameter, consists of two rows of andesite blocks: the outer row has rectangular blocks 80- $99~\rm cm$ long, 47- $50~\rm cm$ thick and 43- $45~\rm cm$ high; the inner row has a repeating pattern of 6 narrow, tall pillars interspersed with a single, low flat block. Within this outer circle was an inner circle of $84~\rm post$ -holes $c.40~\rm cm$ in diameter and 36- $40~\rm cm$ apart. This circle was interrupted on the NW, NE, SW and SE sides by flat paving slabs marking probable entrances. Within this circle was a further circuit of $34~\rm post$ -holes, although here they take an apsidal shape, with two further entrances on the SW and NE sides. The sanctuary appears to have been deliberately destroyed and damaged; a thick layer of burning is evident across the whole terrace, and the tops of the andesite pillars were broken. 103

The stratigraphic sequence in this building is poorly known. The published section¹⁰⁴ shows the wooden posts using limestone blocks as foundation stones. There is a vague hint of more than one phase. The entire sanctuary lies on a man-made terrace, and trenches through it revealed

Ponorici: Moraru 1985; Moraru and Tatu 1985; Tatu and Moraru 1983; Porțile de Fier ale Transilvaniei: Tatu 1983, Gheorghiu 2001 (under Bucova).

⁹⁹ See esp. Sanie 1995.

¹⁰⁰ Daicoviciu et al. 1989, 123.

¹⁰¹ Daicoviciu et al. 1951; 1959b, 336-37.

¹⁰² For example, Daicoviciu et al. 1983, 233.

¹⁰³ Daicoviciu et al. 1961, 302; Daicoviciu et al. 1951, esp. pl. 4.

¹⁰⁴ Daicoviciu et al. 1951, 116.

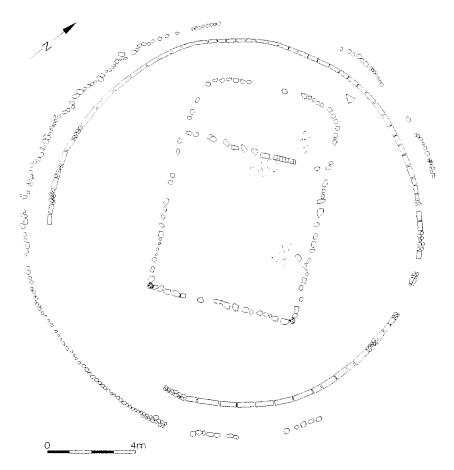


Fig. 2.19. Plan of the circular sanctuary at Racoş (after Glodariu and Costea 1991).

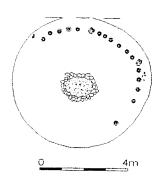


Fig. 2.20. Plan of the circular sanctuary at Pecica (after Crişan 1978b).

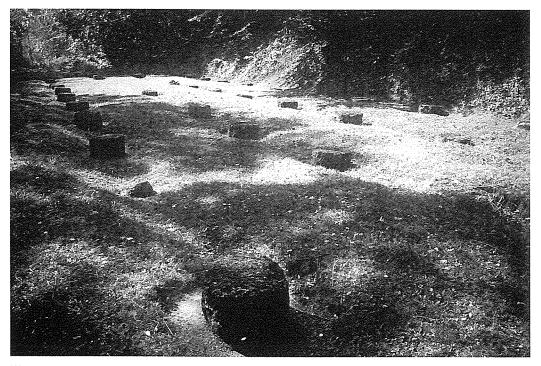


Fig. 2.21. Alignment I (Great Rectangular Sanctuary) at Costești (K. Lockyear).

further structures 2 m below on the natural subsoil. Originally they were thought to be earlier sanctuaries, but this was not confirmed by later work. 105

An astronomical function has often been claimed for the Great Circular Sanctuary and others in the 'religious' precinct, ¹⁰⁶ but the lack of a detailed plan hampers any such interpretation, and in 1980 the plan of the 1950s was shown to be in error, the number of posts in the middle circle increasing from 68 to 84. ¹⁰⁷

The andesite used, present also in special structures such as the circular 'altar', is a significant feature of these sanctuaries. It has long been known that andesite is not local to Grădiştea Muncelului, and it had been suggested that it was mined at Uroi, near Simeria, Hunedoara county, ¹⁰⁸ but recent work using thin sections has argued for the source being Dealul Bejan near Deva. ¹⁰⁹ In either case since the andesite was brought 35-40 km into the mountains, it must have had some significance.

The uniqueness of this structure and those around it allows us to think of it as some form of sanctuary or temple. The small circular sanctuary nearby, also of andesite (fig. 2.18), and the similar structure at Feţele Albe across the valley, all appear to fit this interpretation. The structure at Pustiosu, not thought of by the excavators as a sanctuary, 110 shows some formal similarities, especially in its use of andesite, and it is classified as a sanctuary by Sanie. 111

The only other relatively similar structure is found at Racoş, Braşov county (fig. 2.19).¹¹² It consisted of an outer ring of roughly fashioned limestone blocks, an inner ring of friable tuff (thought by the excavators to be too soft to support a wall), and an internal apsidal building with two rooms, similar in plan to the innermost part of the Great Circular Sanctuary. It seems to be the same kind of structure as ones in the Munții Orăștiei.

The other structures claimed as circular sanctuaries (Table 2.3) are quite different from those discussed above. They range from a simple circle of post-holes around a clay platform, as at Pecica (fig. 2.20), to the rather bizarre and complex structure at Dolinean. The latter has no good dating material; it has been suggested to be a sanctuary solely on the basis of form. The site at Butuceni, consisting of two concentric circles of posts and a central platform of stone, is also much earlier (4th-3rd c. B.C.). Given their wide distribution, it seems difficult to consider these cases part of the same phenomenon in anything more than the loosest sense.

Sanie has also claimed the structures excavated at Meleia and Rudele (discussed above) as sanctuaries.¹¹³ Arguments in favour are their similarity in plan with the Great Circular Sanctuary, and the presence of relatively high-status sherds of painted pottery from *stînele* 2 and 3 at Meleia.¹¹⁴ On the other hand, the inventory from all the *stîne* at Rudele and on the terraces at Meleia was relatively poor, and their location on high mountain pastures suits seasonal settlements associated with transhumance.

b. Rectangular sanctuaries

Structures belonging to the rectangular category are more numerous (Table 2.4) and are far more concentrated within our study area, with only 5 out of 23 or 24 found outside it; 8 or 9 are

¹⁰⁵ Daicoviciu 1972, 240.

¹⁰⁶ See particularly Bobancu et al. 1980.

Daicoviciu 1972, 239 states there are 68 posts in this circle, but the note by Daicoviciu *et al.* 1983, 233 states that there 'were not 64, as was thought, but 84'.

¹⁰⁸ For example, Glodariu 1986.

¹⁰⁹ Mârza 1997.

¹¹⁰ Daicoviciu et al. 1957, 270-76.

¹¹¹ Sanie 1995, 27.

¹¹² Glodariu and Costea 1991.

¹¹³ Sanie 1995, 27.

Daicoviciu et al. 1961, 314 and 1962, 469. See Daicoviciu 1972, pls. 5 and 7 for coloured illustrations.

Kris Lockyear

TABLE 2.4, PRINCIPAL CHARACTERISTICS OF RECTANGULAR SANCTUARIES.

Primary references only are given

Primary references only are given. **†** = possibly two halves of a single sanctuary. A '?' in a cell = data destroyed; blank cell = data not published.

Site	County	obs. Size (m)	obs. columns × obs. rows	foundations	other features and comments	references
Sarboşi	Galați		$2 \times 3 (+1)$	'stains' from wooden	clay floor	Sanie 1988: 62-4; 1995: 33-36
Sănița	Hunedoara	ê	i×i	stone tamburi	no details or plan published	Floca 1966: 27
Sitea Doamnei Sanctuary (†	riana iveaniț	c. 76.5 × 78.1	2 × 5	limestone tamburi	possibly 4×5 tamburi? Limestone kerb to west	Gostar 1969: 18-19; Sanie 1995: 29-33
Sanctuary II†			3×7	limestone tamburi	possibly 4 × 7 tamburi? Limestone kerb to west	Gostar 1969: 18-19; Sanie 1995: 29-33
Slidariu — Pietroasa lui	Hunedoara	i	i×i	limestone tamburi	six <i>tamburi</i> observed; appears to have been deliberately destroyed	Daicoviciu 1972, 207; Daicoviciu et al. 1989: 197; Glodariu 1995; 123
Srad	Bacău	14 × 8	n/a	post-holes and beam slots	rectangular structure delineated by post-holes and beam-slots	Ursachi 1982; 1995: 62-71
Çapîlna	Alba	ć	i×i	limestone tamburi	inferred from finds of tamburi not in situ	Glodariu & Moga 1989; 56–60
ostești Alignment I	Hunedoara		4 × 15	limestone tamburi		Daicoviciu et al. 1961: 302; Daicoviciu
Alignment II			73 × ?7	limestone tamburi	poorly preserved, only one found inside the defences	1972. 203 Daicoviciu 1972: 205–6
Alignment III Alignment IV	Unnadonna		5 × 5 5 × 5	limestone <i>tamburi</i> limestone <i>tamburi</i>		Daicoviciu 1972: 206 Daicoviciu 1972: 206
Gradiștea Muncelului Sanctuary A	runcuoara		4 × 13	limestone tamburi	Perhaps originally 15	Daicoviciu <i>et al.</i> 1952: 290–1; 1959a: 395–9; 1959b: 337–41; 1961: 304–5; Daicoviciu 1972: 207–9: 1980.
Sanctuary B			3 × <i>i</i> 6	limestone <i>tamburi</i>	not destroyed by fire	Daicoviciu 1972: 209; Daicoviciu et al. 1973a: 63–5
Sanctuary C		15 × 29	1×7	limestone tamburi	overlies sanctuary A, perhaps surrounded by	Daicoviciu 1980
Sanctuary D Sanctuary E		? 9.2 × 12	3 × × × × × × × × × × × × × × × × × × ×	limestone <i>tamburi</i> andesite <i>tamburi</i>	and some primers bases found during excavation of Sanct. E outer rectangle of andesite pillars, and some socketed andesite blocks within	Daicoviciu 1972: 209 Daicoviciu et al. 1951: 117–8 and plan 3; 1952: 287–8; 1961: 303; Daicoviciu 1972: 209–10; Glodariu et al. 1988: 102–
Sanctuary F		i	¿×¿	¿	badly destroyed, but with traces of an andesite	Daicoviciu 1972: 210
Sanctuary G		? × 37.5	é×é	ć	badly destroyed but limestone outer edge survives on one side, and part of limestone	Daicoviciu et al. 1953: 158–60; Daicoviciu 1972: 210; Glodariu et al.
Ѕапсшагу Н		31.5 × 37.5	6 × 10	andesite <i>tamburi</i>	pavement unfinished?	1988: 122 Daicoviciu <i>et al.</i> 1951: 108–110 and plan 3; 1952: 292–6; 1953: 156–64; Daicoviciu 1972: 210; Glodariu <i>et al.</i> 1988: 122–4
Piatra Craivii Terrace V	Alba	? c. 8 × c. 11	x +	gritstone tamburi	tamburi to west of main alignments may be an	Berciu <i>et al.</i> 1965: 126 & Fig. 7; Moga 1981: 109-10
'Balcony terrace'		8 × 17	4 × 10	tamburi of unspecified stone		Berciu & Moga 1972: 69 & Fig. 4; Moga 1981: 111–2
Piatra Roșie Racos	Hunedoara	c. 6 × 8	2×4	limestone tamburi 'plinths'	six <i>tamburi</i> survive Found on slope of site not <i>in situ</i>	Daicoviciu 1954: 55–7 Glodariu & Costea 1991: n. 18

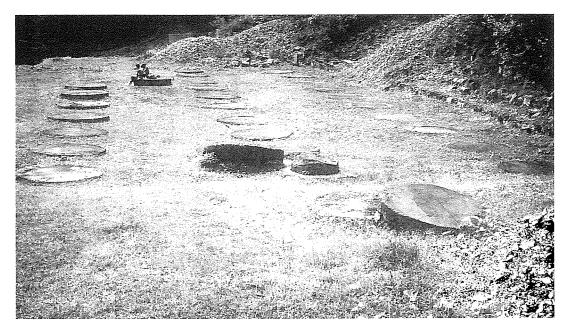


Fig. 2.22. Sanctuary H at Grădiștea Muncelului (K. Lockyear).

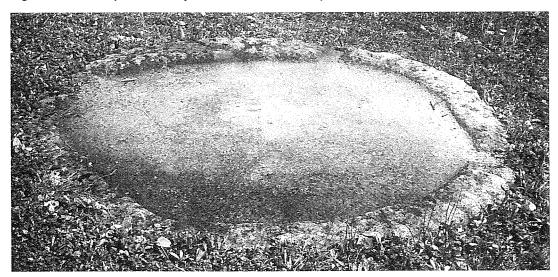


Fig. 2.23. One of the andesite bases of Sanctuary H at Grădiștea Muncelului (K. Lockyear).

found at Grădiștea Muncelului itself. These structures usually consist of lines of stone bases (tamburi), usually circular or sub-circular, laid out in such a way as to form a rectangular foundation. They were first discovered at Costești by Teodorescu (fig. 2.21). At first their function was a matter of debate, but since the discovery of the Large Andesite Sanctuary (H) at Grădiștea Muncelului (fig. 2.22) they have been interpreted consistently as sanctuaries.

The stone *tamburi* vary considerably in size and quality of carving. At Piatra Roşie the bases are *c*.60 cm in diameter, whereas the bases for Sanctuary H at Grădiştea Muncelului are 205-225 cm in diameter and very finely carved (fig. 2.23). The numbers of *tamburi* also vary greatly, although in part this may be an accident of survival. There have been many attempts to assign calendrical or astronomical functions to these structures, but incomplete preservation and publication hinders such interpretations. Very little survives to indicate what sort of superstructure may have existed. Almost no sections are available, early excavators following along the line of the *tamburi* rather than cutting across them. There are some slight hollows in the centres of some of the *tamburi* at, for example, sanctuaries A¹¹⁵ and H (fig. 2.23). Recon-

¹¹⁵ Glodariu et al. 1988, 108.

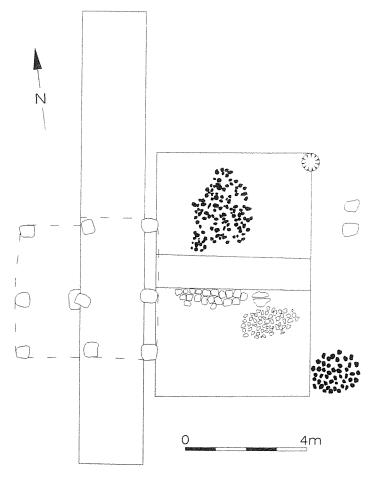


Fig. 2.24. Plan of part of the excavations on the *terasa cu grîu* (this plan was to be published by Nandris [1981] but it was omitted from his report; I am grateful to him for supplying me with the plan from which the present figure is drawn).

structions vary from a forest of columns supporting vessels or cult objects¹¹⁶ to wooden, temple-like buildings.¹¹⁷ Given the degree of burning reported, some form of wooden superstructure seems likely.

At Grădiştea Muncelului we have a sequence of structures, with Sanctuary C replacing A which itself may replace an earlier structure, ¹¹⁸ and Sanctuary H replacing G. Sanctuary E is a little different, having a rectangular border of andesite pillars reminiscent of the second line of stones of the outer circle of the Great Circular Sanctuary (fig. 2.18). Sanctuary F may have been similar. The excavators argue that sanctuary G was unfinished at the time of the Roman conquest. As far as we can tell, there is no chronological differentiation between the two types. The only site that shows a definite chronological sequence between sanctuary types is Brad, Bacău county, where the rectangular sanctuary was replaced by an apsidal building and then by a circular sanctuary. In this case, however, although the rectangular structure can be argued to be a sanctuary, it is very unlike the rest of the group, being a rectangular post-built structure.

No comprehensive inventory of finds associated with these structures is available to help with their interpretation. Terrace V at Piatra Craivii, supporting a sanctuary, has the richest and deepest deposits on the site; it also has a 'ritual pit encrusted with animal bones and pottery fragments'. 119

¹¹⁶ For example, Daicoviciu 1972, fig. 27.

¹¹⁷ For example, Glodariu et al. 1988, fig. 15.

¹¹⁸ Glodariu et al. 1988, 108.

¹¹⁹ Berciu et al. 1965, fig. 8.

In an early publication, before the extensive discoveries at Grădiștea Muncelului, C. Daicoviciu suggested that the alignments at Costești might be granaries. ¹²⁰ Indeed, they are reminiscent of such structures elsewhere. The 'terrace with wheat' (terasa cu grîu), which lies 'to the west and south of the sanctuaries ... on Dealul Grădiștei, a quarter of an hour's walk away', ¹²¹ was excavated in its entirety and 'the remains of a large wooden granary with walls resting on stone' was discovered. ¹²² The terrace is so-named from the large quantities of carbonised grain easily visible across it. The only plan available to me (fig. 2.24) shows two structures described as dwellings by Nandris and consisting of limestone bases arranged in a rectangular fashion. ¹²³ Be they granaries or dwellings, the rectangular sanctuaries appear to be a reflection of them, if on a grander scale.

Sanctuaries: conclusion

It seems, then, that both the circular and rectangular sanctuaries reflect other, more mundane buildings such as the upland structures at Meleia and Rudele and various structures on the terraces around Grădiștea Muncelului. We should probably seek to explain the form of the sanctuaries in the light of these parallels, rather than in terms of calendars or astronomical observatories. Many religions have an explicit link to agriculture, and perhaps these structures echo pastoral exploitation of the uplands and arable exploitation of the lowlands, linking through religion the various parts of the Dacian landscape to this centre of power. In this respect it is worth noting that amongst the metalwork from Piatra Craivii, a highland site far from land suitable for arable farming, there is an iron ploughshare (possibly two). 125

Burial

There are very few excavated burials from this region. The data is conveniently summarised by V. Sîrbu. 126

Within the counties surveyed here, the defended hilltop at Cugir has provided the most spectacular burial. The site is associated with a necropolis of tumuli to the southwest, of which 3 or 4 were excavated, one with a rich cremation burial. A terrace 8 m in diameter had been cut into the slope and the deceased placed in a 'fabulous' cart with three sacrificed horses, before being burnt. After cremation, the remains were gathered up and covered with a layer of clay, in turn covered with an imported Italian bronze *situla*, a small jar, and an unusually large pedestal bowl (*fructieră*); they, in turn, were covered with a mound of soil, local stone and river boulders across the whole terrace. Burnt fragments of the cart, weapons, armour, silver decorations (including part of a *phalera*), and a gold plaque were found among the ashes and charcoal. Crişan dates the burial to the first half of the 1st c. B.C. The remaining three tumuli had more modest inventories. 128

Excavations between 1997 and 1999 examined a *tumulus* on a terrace near the fortress of Costești in which a single cremation burial was found. The burial was accompanied by pottery, weapons, cart fittings, and 13 bronze coins of Histria. It is possibly 'contemporary with Burebista'. A 'ritual pit' found nearby contained, amongst other items, a small silver plaque. 129

¹²⁰ Daicoviciu and Ferenczi 1951, 17-18.

¹²¹ Nandris 1981, 231.

¹²² Daicoviciu et al. 1989, 165.

Nandris 1981, 232-34 (he thought they were weathered sandstone).

Glodariu 1976b discussed the similarity between *stîne* and the circular sanctuaries; Nandris 1981, 251-52 noted the similarity between the structures on the *terasa cu grîu* with the rectangular sanctuaries.

Glodariu and Iaroslavschi 1979, 60 and fig. 24.4; Berciu and Popa 1971, 268, figs. 10.1 and 11.1.

¹²⁶ Sîrbu 1993.

¹²⁷ Crişan 1980 and 1994.

¹²⁸ Sîrbu 1993, 71-72.

This burial has not been published in detail; information at http://archweb.cimec.ro/scripts/[con't]

At Tilişca, Sibiu county, two cremations and a pyre (*ustrinum*) were found in the field below the settlement to the northwest.¹³⁰ The burials were set directly in relatively shallow oval pits (0.67 by 1.55 m and 0.72 by 1.10 m). The first burial was accompanied by a variety of silver jewellery, including a necklace with 'teeth' pendants and several *fibulae*, deliberately cut into pieces. The second burial was poorer, with a more limited inventory of ironwork, some silver, and some glass beads. Lupu dates the former to the 1st c., the latter to the 2nd c. B.C.

The burial at 'Brod', Blandiana, Alba county, was found in 1979 when it was partially washed out of the bank of the Mureş. ¹³¹ The cremation, dated to the 2nd c. B.C., was accompanied by a curved Dacian iron dagger, a fragment of an iron sheath, a spearhead, an iron buckle and a highly ornate horse-bit. The Teleac burial, also from Alba county, was a chance find consisting of two jugs, a bent spearhead, and a curved knife; it dates to the 2nd or 1st c. B.C. ¹³²

Sîrbu lists some groups of burials outside Transylvania, 133 including the Lipița group in the Lvov region of the Ukraine (1st-2nd c. A.D.), a 'Scordisian' group in Oltenia (primarily 2nd c. B.C.), and further 'Dacian' groups in Muntenia and Moldavia. Within the Moldavian group, the large defended settlement at Brad had a necropolis of 12 tumuli lying 1.5 km to the south-east. It is now destroyed by agriculture¹³⁴ but three of the *tumuli* were excavated. The first covered a large central rectangular pit, which contained only a couple of finds, and two cylindrical pits, one possibly predating the tumulus, the other containing a few cremated bones and a jug. The second mound covered another large pit but no finds were recovered. Mound 3 covered a central pit (1.8 x 4.5 m) in the bottom of which was a strange raised base perforated in all directions; the only other find was a small part of a bronze vessel. A little to the east, however, was an area of burning from which were recovered 3 bronze pendants, 135 9 rivets, an arrowhead, and various other bronze fittings, along with some burnt bone. Another pit to the west was empty, but on the S edge of the mound were two inhumations, a child and an adult, each accompanied by a single glass bead. ¹³⁶ Other small *tumulus* cemeteries are known, such as that near the large settlement of Poiana, c.1.5 km from Popești. 137 At Brad, in addition to the tumuli, a further inhumation in a pit, relatively richly furnished, was found by accident near the open settlement, and a further 16 inhumations were found in 8 cylindrical or bell-shaped pits within the settlement, with up to 4 burials in a pit. 138

Sîrbu lists these last finds amongst 196 examples of uncremated remains in 'non-funerary' contexts, of which 77 (39%) were complete skeletons. Of these, the only ones within the study area are three skeletons within the rural settlement at Şura Mică. ¹³⁹ One, found in pit 108, was accompanied by a small silver plaque from a strap fitting and an iron belt-buckle. A second pit (119) contained two skeletons and a few sherds of pottery. The second skeleton had a broken neck, chest, pelvis and knees, although osteological analysis would be needed to assess whether this was post-depositional damage or not. The majority of these finds come from a small number of settlements including Orlea (Olt county, 2nd c. B.C., 23 individuals), Piscu Crăsani (Ialomiţa county, 2nd-1st c. B.C., 27 individuals), Poiana (Galaţi county, 4th c. B.C.–1st c. A.D., 23 individuals) and Popeşti (Giurgiu county, 2nd-1st c. B.C., 13 individuals).

arh/cronica/detaliu.asp?k=925 and http://www.dacii.go.ro/materiale/articole/texte/mormint_dacic.rtf (viewed 08/10/2003).

¹³⁰ Lupu 1981 and 1989, 33-35.

¹³¹ Ciugudean 1980.

¹³² Moga 1982. This burial is listed as uncertain by Sîrbu 1993.

¹³³ Sîrbu 1993.

¹³⁴ Ursachi 1995, 253-55.

¹³⁵ Ursachi 1995, 256; cf. Sîrbu 1993, 71 who erroneously states they are silver.

¹³⁶ Ursachi 1995, 255-57.

¹³⁷ Sîrbu 1993, 72-73.

¹³⁸ Ursachi 1995, 258-62.

¹³⁹ Sîrbu 1993, 93.

Despite these examples, the principal characteristic of this period is the lack of burials. Very few have been found in our study area, and and only one has been excavated within the Munții Orăștiei. Sîrbu lists a maximum of 300 individuals from Romania spread over three or four centuries, but even so the evidence is concentrated at a few sites, such as the 29 cremations from Spahii, Gorj county, or the 'pit burials' listed above. It is thus impossible to speak of a common Dacian rite or to define a common set of 'Dacian' beliefs concerning death and burial.

The evidence of coinage

The earliest history of coinage in this region is unremarkable. The first 'pre-monetary' specie is a series of copper-alloy 'arrowheads' and 'dolphins' found on the Black Sea littoral and in neighbouring regions, followed by Greek issues from the city states there, especially Histria. Coins of Macedonia from the mid-4th c. B.C. are found more widely, with some in Transylvania. Probably inspired by these issues, the locals started to strike coins of their own during the 3rd c. B.C. These coins have relatively localised distributions. Preda dates the end of these issues to Burebista, M. H. Crawford somewhat earlier. In the 2nd c. B.C. further series of Greek coins arrived, including tetradrachms of Macedonia Prima and Thasos, and drachms of Apollonia and Dyrrachium — the latter being more common in Transylvania.

Each phase of coinage is marked by an increase both in numbers and area of circulation, but all are dwarfed by Roman Republican *denarii*. The finds of *denarii* in this region have been described as "one of the most remarkable phenomena within the pattern of monetary circulation in antiquity ...". This phenomenon has two aspects. The first is the sheer quantity of hoards that, though not spread evenly, are found across most of modern Romania (only Italy has more hoards in the 1st c. B.C.). The second is the evidence for high-quality copies, including dies such as those from Tilişca and Grădiştea Muncelului, cast coins from Breaza, and struck copies from Poroschia (fig. 2.25). These coins raise a host of questions, including:

- When did *denarii* start arriving in this region, what was the pattern of supply, how many are copies, and when did copying begin?
- Why did the Romans export so much coin to the region, why did the local populations want *denarii*, why did the local populations copy *denarii* so precisely, abandoning their own coinage, and what did the local populations use these coins for?

The first group of questions is more straightforward, the second group more difficult.

There has been considerable debate over when *denarii* started to arrive, but detailed statistical analyses have shown that there was a massive influx between *c.*75 B.C. and 65 B.C., after which the supply was greatly curtailed.¹⁴⁶ There may have been a smaller secondary influx during the Civil Wars of the 40s and 30s B.C., but it is difficult to be certain since the production of coin in this period was high.

Estimating the proportion of copies is much more difficult as the copies are so good and hard to identify. Romanian scholars such as Chiţescu believed the proportion to be very high; Crawford believed it to be very low. A programme of archaeometallurgical analysis has shown that, although known copies and genuine coins have distinct metallurgical compositions, there is no clear division between them. Statistical analysis of the compositional data, how-

¹⁴⁰ Preda 1998, 94-115.

¹⁴¹ Preda 1998, 178; Crawford 1985, 228, n.24.

¹⁴² Preda 1998, 238-80.

¹⁴³ For example, Mihăilescu-Bîrliba 1990, fig. on p. 119.

¹⁴⁴ Crawford 1977, 117.

Tilişca: Lupu 1967. Grădiștea Muncelului: Glodariu *et al.* 1992. Breaza: Poenaru Bordea and Ştirbu 1971. Poroschia: Chițescu 1980 and Lockyear 1996b, 405-7.

¹⁴⁶ Lockyear 1995, 1996a and 1996b.

¹⁴⁷ Chiţescu 1981; Crawford 1977 and 1980.



Fig. 2.25. Reverses of 6 struck copies of *denarii* of L. Satvrn (*RRC* 317/3b) from the hoard at Poroschia (*RRCH* 436). All 6 coins have die-linked obverses and reverses (K. Lockyear).

ever, suggests that the level of copying in some hoards could be as much as 50%, although the overall figure is likely to be in the region of 35%. 148

Exactly when copying starts is more difficult to determine since the 'closing date' of any hoard in Romania is unlikely to reflect closely its date of collection or disposal because of the pattern of coin supply and the presence of copies; thus the latest issue can only form a *terminus post quem*. A 'logical' scenario would be that copying started once the supply of official *denarii* had been curtailed, i.e. *c*.65 B.C. The find of dies at Grădiștea Muncelului, sealed in a layer associated by the excavators with the First Dacian War, suggests that copying continued up until the incorporation of the province, if their interpretation is correct. ¹⁴⁹ Cast copies have been detected continuing in the Imperial period, for example the two cast coins of Hadrian found in the small hoard from Leţcani. ¹⁵⁰

The second set of questions is much harder to answer. Crawford believed that the influx of coins was due to the need for slaves in Rome and because the suppression of piracy in 67 B.C. cut off supply. He believed that the disparity between the date of the coinage in Romania and the date of the suppression was due to the time it took for coinage to reach the region through mechanisms of exchange. This 'lag' would imply a series of 'down the line' exchanges. The problem with this model is that there is no evidence for a spread of *denarii* between Italy and Dacia, either by the route overland or by sea through Black Sea ports. Given the great similarity between the bulk of the coins in Romanian hoards and hoards in Italy of the late 70s, an alternative model is that the coins were removed from the Italian pool and taken direct to Dacia for whatever purpose, implying that they arrived *before* the suppression of piracy.

If, instead of the coins being seen as a result of the suppression of piracy, they are seen as one aspect of the same phenomenon, we could suggest that a short-lived burst in supply and piracy were both taking advantage of a short-term crisis in Italy, namely replacing slaves killed and executed during Spartacus' revolt. This may explain why these coins were exported from Rome, but it does not explain the more interesting question as to what was happening in Dacia. I will return to the second group of questions below.

Lockyear 1996b; Lockyear et al. forthcoming.

¹⁴⁹ Glodariu et al. 1992.

¹⁵⁰ Popescu and Talmaţchi 1997.

¹⁵¹ Crawford 1977.

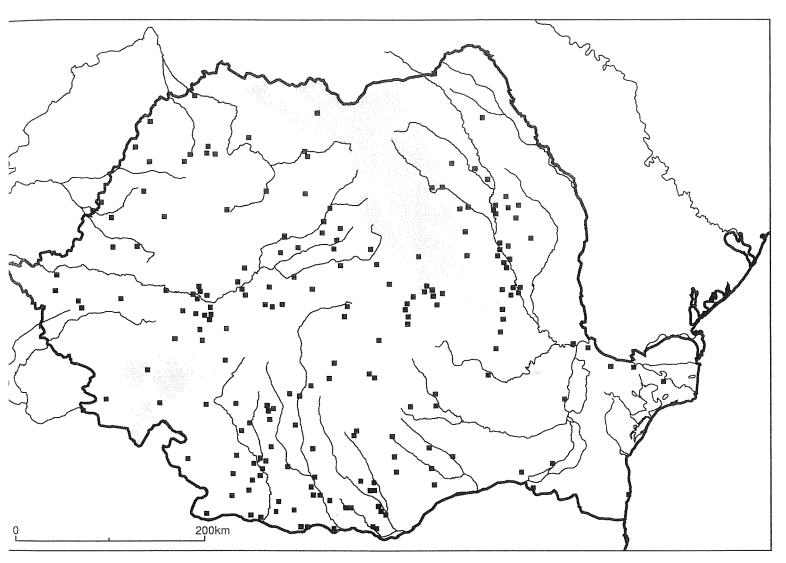


Fig. 2.26. Hoards of Roman Republican denarii from Romania (after Chițescu 1981).

Hoards of silver vessels and jewellery

In addition to coin hoards, large quantities of other silver work (*fibulae*, other jewellery, and vessels) have been recovered.¹⁵² Mărghitan lists 200 find-spots.

This material raises a number of questions, including ones of distribution, composition, provenance, dating, and significance. Figure 2.27 shows the distribution of silver-work in Romania. There is a distinct bias towards Transylvania, particularly its W half. This appears to contrast with the distribution of hoards of *denarii* (fig. 2.26) which, although there are some concentrations, are not notably biased towards Transylvania. The former distribution may, however, contain a bias, in that early academic interest was concentrated in Transylvania, leading to better antiquarian records there. Two further biases exist common to all 'dot' distribution maps: first, no account is taken of the quantity of material in each hoard; second, the sorts of items contained within the hoards are not examined.

Of the 111+ hoards listed by Horedt, 80 have reasonable find-spots and some usable information on contents. ¹⁵³ Of these, 28 (35%) come from the three counties of Hunedoara (8), Sibiu

¹⁵² Crişan 1969b; Horedt 1973 and 1974; Mărghitan 1971 and 1976; Popescu 1960, 1971 and 1972; Zirra and Spânu 1992.

¹⁵³ Horedt 1973.

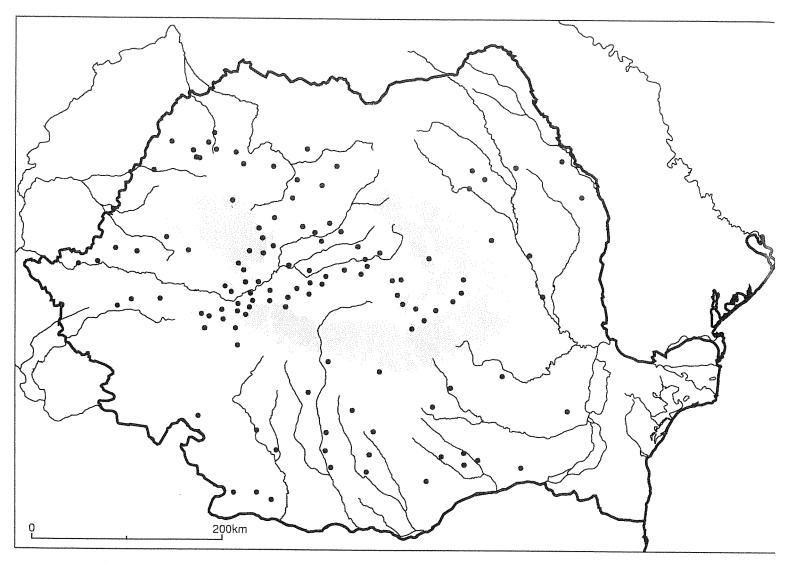


Fig. 2.27. Finds of silver work from late Iron Age contexts from Romania (after Mărghitan 1976).

(7) and Alba (13). The items found in these hoards include various types of jewellery (*fibulae*, chains, neck-, arm- and finger-rings, and other items), silver vessels, and coins. Their distribution is not even: for example, the 26 vessels listed by Horedt come from only 7 hoards. A preliminary Correspondence Analysis of a presence-absence table of these finds failed to produce any strong pattern.

Much of this material is obviously of local manufacture, but there are some imports — for example, some of the silver vessels from the Sîncrăieni hoard. ¹⁵⁴ Equally interesting is the source of the silver. Precious metals were relatively plentiful within Dacia. The original publication of the hoard from Stăncuţa, containing 34 denarii, 53 tetradrachms of Thasos, and 2 silver bars, suggested that the coins were being melted down to make jewellery, ¹⁵⁵ but archaeometallurgical analysis of 4 of the denarii, 3 of the tetradrachms and the 2 silver bars showed the picture to be much more complicated. One of the denarii, one tetradrachm and one of the bars had similar compositions, with comparatively high levels of gold (>1.5%). On this and other grounds, the denarius is likely to be a copy, as discussed above, but what was being melted down to make what is impossible to deduce.

Some of these finds are associated with Roman coins, which can provide at least a terminus post quem. Horedt lists 15 such hoards with dates ranging from the late 2nd c. B.C. to the

¹⁵⁴ Glodariu 1975b, 20-21.

¹⁵⁵ Preda 1957 and 1958.

Flavian period and a concentration between 80 and 40 B.C.¹⁵⁶ Naturally, this reflects the supply of *denarii*; the actual date of loss may be much later.

The significance of these finds is much more problematic. Of the finds listed by Horedt, some come from graves (e.g., Tilişca, discussed above), a few from settlements, but the majority are hoards (50%) or single finds (29%). This may reflect another facet of the coin hoarding activity discussed in more detail below.

Imports

Glodariu's corpus of imports is the chief source of information on this topic. Although more finds have now come to light, it is unlikely that the overall picture has changed substantially.¹⁵⁷ I do not intend to examine this topic in detail here, except for one aspect of the distribution (noted by Crawford) that imported amphorae are rare in Transylvania but relatively more common outside the Carpathian arc.¹⁵⁸ The distribution map given by Glodariu is a little misleading since the points do not indicate scale; thus, for example, the assemblage from Cetăţeni, one of the largest in the corpus, lies on the S foothills of the Carpathians, away from the other concentrations in Moldavia and along major rivers.¹⁵⁹ Crawford contrasted the distribution of amphorae with the distribution of silver (presumably coins, although he does not specify) which he thought were more concentrated in Transylvania (cf. figs. 2.26-27) and attributed this to differences in fashion: "within the mountains one threw silver around, without them one got drunk."¹⁶⁰ The Cetăţeni assemblage suggests a different scenario, that wine was being decanted into wineskins or the like, before being transshipped across the high Carpathians.

Conclusions

What can we conclude from this quick overview of the evidence?¹⁶¹ In Britain, the middle and late Iron Age is increasingly seen as a period of regional diversity, with neighbouring groups ('tribes') appearing, on occasion, deliberately to differentiate themselves, for example by their types of settlement and use (or otherwise) of coin. Rarely do groups appear occupying an area larger than an English county, even in the immediate post-Roman period. Similarly, the evidence from Romania, whilst displaying some broad overall trends, can be seen as a period of distinct regional diversity. This is shown by Dacian coinage, burial traditions (when recovered), and settlement types. The sanctuaries show as much variation as similarities. Even if one accepts that they imply some religious connections across Dacia, we cannot draw ethnic and/or political inferences. To move our understanding forward, we need not only to abandon 'Burebista's empire'; we also need to move 'beyond Celts, Germans, Dacians and Scythians' (to misquote the title of P. Wells' book¹⁶²).

What is clear, however, is that the complex of settlements, structures and finds in the Munții Orăștiei is extraordinary. If we are ever to understand the processes by which this concentration of material and power found in this area by the time of the Roman conquest came about, we need far greater chronological refinement and an abandonment of the use of pseudo-historical horizons. Full reports are needed for the many unpublished and partially published excavations. This should be the priority for the immediate future. The greater availability of mapping information should also permit more detailed analysis of the landscape in which these sites are set.

¹⁵⁶ Horedt 1973, Table II.

¹⁵⁷ Glodariu 1976a.

¹⁵⁸ Crawford 1977.

¹⁵⁹ Glodariu 1976a, pl. 2.

¹⁶⁰ Crawford 1977, 121, n.31.

¹⁶¹ The themes in this section are developed more fully elsewhere (Lockyear forthcoming a and b).

¹⁶² Wells 2001.

Meanwhile, can we suggest a different interpretative framework? The coinage suggests one possibility. We now know the date of the arrival of the majority of *denarii* and have a plausible context for the start of copying. Rather than seeing these coins as evidence of trade and markets, perhaps we can see them as one expression of competition between and within polities. The use of Roman coins was, perhaps, not just one of the trappings of Mediterranean 'civilisation', ¹⁶³ but a symbol of power. Word of Rome's military prowess must have circulated in the N Balkans after Rome's victories in the south in the later 2nd and 1st c. B.C. ¹⁶⁴ After the influx of Roman *denarii* between 75 and 65 B.C. supplanted locally-made issues, possession of these coins — and perhaps a disingenuous allusion to Roman support — could have formed a part of local power-relations. Roman coins certainly represented freedom or slavery to captives facing the prospect of sale to Roman traders. The traders, however, had no interest in Dacian power-politics, and once the shortfall in slaves at Rome had been covered, the supply of genuine *denarii* dried up. It was then, I believe, that the *exact* copies of *denarii* started to be manufactured, allowing the élites to maintain the illusion of contacts with Rome, if not Roman support.

It is within this context of competition that the settlements in the Munţii Orăştiei could fit. If Grădiştea Muncelului initially represented a place sacred to a wider community, we could perhaps hypothesize that the various sites, towers and settlements represent not a unified plan but a series of competing élite residences, with walls of the *murus dacicus* type being but one element of this competition. Perhaps the very multiplicity of 'sanctuaries' is a reflection of this competition.

Over the course of the later 1st c. B.C., and the 1st c. A.D., however, one group gradually became more dominant in SW Transylvania, managing to gain control over such essential resources as iron and concentrate production at Grădiştea Muncelului. As this group rose, they ceased to rely on fictional Roman support and became increasingly hostile to Rome, which led to conflicts with Domitian and finally to the Dacian Wars. M. Millett has suggested that the rapidity of the Roman conquest of SE England was a reflection of the more centralised nature of the polities in that area compared to others such as the southwest. Perhaps the same was true of SW Transylvania. If my suggestion that control of the sacred site at Grădiştea Muncelului was an essential part of the power base of the ruling élite, this would explain its deliberate destruction by the Romans, not as a measure of any religious intolerance but to remove a locus of power and resistance, much like the attack on the Druids in Anglesey.

Why were coins hoarded if they were so important in this competition? Unfortunately, the patterns of supply and copying mean that we cannot rely on the closing dates of hoards to tell us when they were buried. Ethnographic studies have shown that the power of valuables can be mediated either by possession, or more forcefully through exchange, often as gifts, but most forcefully by their destruction, usually by making them gifts to gods. ¹⁶⁶ No single explanation will do for all hoards, but the possibility that simple possession became an insufficient means of élite competition, which led to a phase of deliberate destruction by burial, could explain the extraordinary number of hoards in this region.

This interpretation is only one possible 'story' that can be woven around the data we have. I expect, indeed hope, that it will soon be replaced by other stories based on better data, more refined chronologies, and more informed theoretical frameworks. It is offered here simply as one alternative to the pseudo-Marxist orthodoxy that has dominated discussion over the last fifty years, in the hope that it will stimulate interest in this key period of Europe's history.

¹⁶³ Crawford 1985, 233.

¹⁶⁴ Luttwak 1976 discussed the idea that military power rests on the projection of the threat of force rather than its actual use.

¹⁶⁵ Millett 1990, 48.

¹⁶⁶ Bradley 1982.

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Bibliography

Albu, I. P. 1971a. "Noi descoperiri arheologice pe dealul Cetății Deva (I)," Apulum 9, 139-54.

Albu, I. P. 1971b. "Noi descoperiri arheologice pe dealul Cetătii Deva (II)," Sargetia 8, 57-60.

Andrițoiu, I. 1973. "Sondaj arheologic pe dealul cetății Deva," Sargetia 10, 11-26.

Babeş, M. 1974. "Puncte de vedere relative la o istorie a Daciei preromane," Studii și Cercetări de Istorie Veche și Arheologie 25.2, 217-44.

Babeş, M. 1980. "Colocviul Româno-Britanic 'Dacii și locul lor în istoria Europei în vremea lui Burebista'," Studii și Cercetări de Istorie Veche și Arheologie 31.4, 645-47.

Babes, M. 1994. "Butuceni," in Preda 1994c, 231-32.

Banac, I. and K. Verdery (edd.) 1995. National character and national ideology in interwar Eastern Europe (Yale Center for International and Area Studies, New Haven).

Berciu, D. 1967. Romania before Burebista (London).

Berciu, I. and V. Moga 1972. "Contribuția Muzeului de Istorie din Alba Iulia la cunoașterea culturii dacice," Crisia 2, 65-78.

Berciu, I. and Al. Popa 1971. "Cetatea dacică de la Piatra Craivii," in Sesiunea de comunicări științifice a muzeelor de istorie.

Decembrie 1964 (Bucharest) 261-84.

Berciu, I., Al. Popa and H. Daicoviciu 1965. "La forteresse dace de Piatra Craivii (Transylvanie, Roumanie)," Celticum 12, 115-24 (Supplément à Ogam No. 98; Actes du IVe Congrès int. d'Études Gauloises, Celtiques et Protoceltiques, Sarrebruck 1964)

Bobancu, Ş., C. Samoilă and E. Poenaru 1980. Calendarul de la Sarmizegetusa Regia (Bucharest).

Boia, L. 2001. Romania. Borderland of Europe (London).

Bradley, R. 1982. "The destruction of wealth in later prehistory," Man n.s. 17, 108-22.

Chiţescu, M. 1980. "Tezaurul de la Poroschia (jud. Teleorman) și unele probleme privind monedele geto-dacice de tip roman republican," Studii și Cercetări de Numismatică 7, 53-70.

Chiţescu, M. 1981. Numismatic aspects of the Dacian state (BAR S112, Oxford).

Ciugudean, H. 1980. "Mormîntul dacic de la Blandiana (jud. Alba)," Acta Musei Napocensis 17, 425-32.

Collis, J. R. 1972. "The Dacian horizon settlements and chronology," Slovenská Archeológia 20.2, 313-16.

Conovici, N. 1980. "Sesiunea științifică 'Istoria și civilizația Geto-Dacilor în epoca lui Burebista'," Studii și Cercetări de Istorie Veche și Arheologie 31.3, 483-84.

Crawford, M. H. 1977. "Republican denarii in Romania: the suppression of piracy and the slave-trade," JRS 67, 117-24.

Crawford, M. H. 1980. "Imitation of Roman Republican denarii in Dacia," Studii și Cercetări de Numismatică 7, 51-52.

Crawford, M. H. 1985. Coinage and money under the Roman Republic (London).

Crișan, I. H. 1966. "Sanctuarul dacic de la Pecica," Acta Musei Napocensis 3, 91-101.

Crișan, I. H. 1969a. Ceramica daco-getică cu specială privire la Transilvania (Bucharest).

Crișan, I. H. 1969b. "Contribuții la problema lucrării podoabelor dacice," Acta Musei Napocensis 6, 93-114.

Crișan, I. H. 1978a. Burebista and his time (Bibliotheca Historica Romaniae Monog. 20; Bucharest).

Crișan, I. H. 1978b. Ziridava (Arad).

Crișan, I. H. 1979. "Premisele întemeierii statului dac centralizat și independent condus de Burebista," Sargetia 14, 59-68.

Crişan, I. H. 1980. "Necropola dacica de la Cugir," Apulum 18, 81-87.

Crișan, I. H. 1992. "Granița de nord-vest a Daciei," Ephemeris Napocensis 2, 27-36.

Crișan, I. H. 1993. Civilizația Geto-Dacilor (Bucharest).

Crişan, I. H. 1994. "Cugir," in Preda 1994c, 387-88.

Crişan, I. H. and F. Medeleţ 1979. "Raport preliminar asupra săpăturilor din 1978 la cetatea dacică de la Cugir (judeţul Alba)," in Materiale şi Cercetări Arheologice — Oradea (Bucharest) 105-7.

Daicoviciu, C. 1954. Cetatea dacică de la Piatra Roșie (Bucharest).

Daicoviciu, C. 1960. "Apariția și formarea relațiilor sclavagiste în Dacia," in id. (ed.), Istoria Romîniei (Bucharest) 255-341.

Daicoviciu, C., I. Berciu et al. 1952. "Şantierul Grădiştea Muncelului," Studii şi Cercetări de Istorie Veche 3, 281-310.

Daicoviciu, C., A. Bodor et al. 1955. "Şantierul arheologic Grădiştea Muncelului-Blidarul," Studii şi Cercetări de Istorie Veche 6, 195-238.

Daicoviciu, C., I. H. Crişan et al. 1961. "Şantierul arheologic Grădiştea Muncelului," Materiale şi Cercetări Arheologice 7, 301-20.

Daicoviciu, C., I. H. Crișan et al. 1973a. "Șantierul arheologic dacic din Munții Orăștiei, jud. Hunedoara (1960-1966)," Materiale și Cercetări Arheologice 10, 61-86.

Daicoviciu, C., H. Daicoviciu, et al. 1962. "Şantierul arheologic Grădiștea Muncelului," Materiale și Cercetări Arheologice 8, 463-76.

Daicoviciu, C. and Al. Ferenczi 1951. Aşezările dacice din Munții Orăștiei (Bucharest).

Daicoviciu, C., O. Floca et al. 1951. "Studiul traiului dacilor în Munții Orăștiei," Studii și Cercetări de Istorie Veche 2.1, 95-126.

Daicoviciu, C., O. Floca et al. 1959a. "Şantierul arheologic Grădiștea Muncelului," Materiale și Cercetări Arheologice 5, 379-401.

Daicoviciu, C., N. Gostar and I. H. Crişan 1957. "Şantierul arheologic Grădiștea Muncelului-Blidarul," Materiale și Cercetări Arheologice 3, 255-77.

Daicoviciu, C., N. Gostar and H. Daicoviciu 1959b. "Şantierul arheologic Grădiştea Muncelului-Costeşti," Materiale şi Cercetări Arheologice 6, 331-58.

Daicoviciu, C., Şt. Ferenczi, et al. 1953. "Şantierul Grădiştea Muncelului," Studii şi Cercetări de Istorie Veche 4, 153-219.

Daicoviciu, H. 1964. "Addenda la 'Așezările dacice din Munții Orăștiei'," Acta Musei Napocensis 1, 111-24.

Daicoviciu, H. 1971. "Un sanctuar circular dacic la Fetele Albe," Apulum 9, 256-62.

Daicoviciu, H. 1972. Dacia de la Burebista la cucerirea romană (Cluj-Napoca).

Daicoviciu, H. 1980. "Le sanctuaire A de Sarmizegetusa Regia," Acta Musei Napocensis 17, 65-79.

Daicoviciu, H. (ed.) 1981. Studii dacice (Cluj-Napoca).

Daicoviciu, H., Şt. Ferenczi and I. Glodariu 1989. Cetăți și așezări dacice în sud-vestul Transilvaniei (Bucharest).

Daicoviciu, H. and I. Glodariu 1969. "Considerații asupra cronologiei așezării dacice de la Fețele Albe," Acta Musei Napocensis 6, 465-73.

Daicoviciu, H. and I. Glodariu 1976. "Puncte de reper pentru cronologia cetăților și așezărilor dacice din Munții Orăștiei," Acta Musei Napocensis 13, 71-80.

Daicoviciu, H., I. Glodariu and I. Piso 1973b. "Un complex de construcții în terase din așezarea dacică de la Fețele Albe," *Acta Musei Napocensis* 10, 65-96.

Daicoviciu, H., Şt. Ferenczi et al. 1983. "Cercetări arheologice la Sarmizegetusa Regia," in Materiale și Cercetări Arheologice — Brașov (Bucharest) 232-34.

Deletant, D. 1991. "Rewriting the past: trends in contemporary Romanian historiography," Ethnic and Racial Studies 14, 64-86.

Floca, O. 1956. Contribuții la cunoașterea tezaurelor de argint dacice: tezaurul de la Sărăcsău și Șeica Mică (Bucharest).

Floca, O. 1966. "Cetatea dacică de la Bănița," in M. Macrea et al. (edd.), Cetăți Dacice din sudul Transilvaniei (Bucharest) 23-33.

Floca, O. 1969. "Harta arheologică a municipiului Deva," Sargetia 6, 7-36.

Floca, O. 1971. "Cuptor dacic de ars vase descoperit la Deva," Apulum 9, 139-54.

Floca, O. 1977. "Singidava," Sargetia 13, 171-81.

Florea, G. 1993. "Archaeological observations concerning the Roman conquest of the area of the Dacian kingdom's capital," *Acta Musei Napocensis* 26-30.1 (1989-93) 33-37.

Florea, G. 1998. Ceramica pictată (Cluj-Napoca).

Florea, G. and A. Palkó 1991. "Ceramica dacică pictată de pe 'terasa depozitului de vase' de la Grădiștea Muncelului," Ephemeris Napocensis 1, 41-52.

Gheorghiu, G. L. 2001. Aşezări şi fortificații dacice în zona cursului mijlociu al Mureșului — sec. II î.e.n.—sec. I e.n. (Ph.D. diss., Babeș-Bolyai University, Cluj-Napoca).

Glodariu, I. 1975a. "Fortificația aeșzării dacice de la Arpașul de Sus," Cumidava 8, 23-27.

Glodariu, I. 1975b. "Vase de argint în tezaurele dacice," Sargetia 11-12 (1974-75) 19-34.

Glodariu, I. 1975c. "Un atelier de făurărie la Sarmizegetusa Regia," Acta Musei Napocensis 12, 107-34.

Glodariu, I. 1976a. Dacian trade with the Hellenistic and Roman world (BAR suppl. ser. 8, Oxford).

Glodariu, I. 1976b. "L'origine de la conception architectonique des sanctuaires daces circulaires," Thraco-Dacica 1, 249-58.

Glodariu, I. 1981a. Așezări dacice și daco-romane la Slimnic (Bucharest).

Glodariu, I. 1981b. "Contribuții la cronologia ceramicii dacice în epoca Latène tîrzie," in Daicoviciu 1981, 146-65.

Glodariu, I. 1983. Arhitectura Dacilor (Cluj-Napoca).

Glodariu, I. 1986. "Cariere și exploatarea pietrei în Dacia preromană," Acta Musei Napocensis 22-23 (1985-86) 91-103.

Glodariu, I. 1995. "Addenda aux 'Points de repère pour la chronologie des citadelles et des établissements daciques des Monts d'Orăștie'," Acta Musei Napocensis 32, 119-34.

Glodariu, I. and F. Costea 1991. "Sanctuarul circular al cetății dacice de la Racoș," Ephemeris Napocensis 1, 21-40.

Glodariu, I. and E. Iaroslavschi 1979. Civilizația fierului la daci (Cluj-Napoca).

Glodariu, I., E. Iaroslavschi and A. Rusu 1988. Cetăți și așezări dacice în Munții Orăștiei (Bucharest).

Glodariu, I., E. Iaroslavschi and A. Rusu 1992. "Die Münzstätte von Sarmizegetusa Regia," Ephemeris Napocensis 2, 57-68.

Glodariu, I., E. Iaroslavschi, A. Rusu-Pescaru and F. Stanescu 1996. Sarmizegetusa Regia. Capitala Daciei Preromane (Acta Musei Devensis, Deva).

Glodariu, I. and V. Moga 1989. Cetatea dacică de la Căpîlna (Bucharest).

Glodariu, I., Th. Nägler, M. Rill and E. Iaroslavschi 1983. "Cercetări arheologice la Şura Mică," in Materiale şi Cercetări Arheologice — Braşov (Bucharest) 242-45.

Gostar, N. 1969. Cetăți dacice din Moldova (Bucharest).

Gostar, N. and V. Lica 1984. Societatea geto-dacică de la Burebista la Decebal (Iași).

Horedt, K. 1964. "Așezarea fortificată de la Șeica Mică (raionul Mediaș)," Studii și Cercetări de Istorie Veche 15.2, 187-204.

Horedt, K. 1973. "Die Dakischen Silberfunde," Dacia n.s. 17, 127-67.

Horedt, K. 1974. "Die Daker in Rumänien und ihre Silberarbeiten," Apulum 12, 60-70.

Iaroslavschi, E. 1986. "Inventarul sanctuarului mic rotund de la Sarmizegetusa Regia," Acta Musei Napocensis 22-23.1 (1985-86) 453-57.

Iaroslavschi, E. 1995. "Conduits et citernes d'eau chez les Daces des Monts d'Orăștie," Acta Musei Napocensis 32.1, 135-43.

Iaroslavschi, E. 1997. Tehnica la Daci (Bibliotheca Musei Napocensis 15, Cluj-Napoca).

Jones, H. L. 1954. The Geography of Strabo (Loeb edn., Cambridge MA).

Jones, S. 1997. The archaeology of ethnicity (London).

Lockyear, K. 1995. "The supply of Roman Republican denarii to Romania," Studii și Cercetări de Numismatică 11, 85-102.

Lockyear, K. 1996a. "Dmax based cluster analysis and the supply of coinage to Iron Age Dacia," in H. Kamermans and K. Fennema (edd.), Computer applications and quantitative methods in archaeology CAA95 (Analecta Praehistorica Leidensia 28) 165-78.

Lockyear, K. 1996b. Multivariate money. A statistical analysis of Roman Republican coin hoards with special reference to material from Romania (Ph.D. diss., Institute of Archaeology, London).

Lockyear, K. forthcoming a. Money matters. Coins, politics and polities in late Iron Age Dacia.

Lockyear, K. forthcoming b. "State, swindle or symbol? The problem of Roman Republican denarii in Romania."

Lockyear, K., M. J. Ponting and Gh. Poenaru Bordea, forthcoming. "Copies of Republican denarii in Romania — a metallurgical analysis."

Lupu, N. 1967. "Aspekte des Münzumlaufs im vorrömischen Dakien," Jahrbuch für Numismatik und Geldgeschichte 17, 101-21.

Lupu, N. 1981. "Două morminte dacice descoperite la Tilișca (jud. Sibiu)," Thraco-Dacica 2, 197-207.

Lupu, N. 1989. Tilișca. Așezările arheologice de pe Cătănaș (Bucharest).

Luttwak, E. N. 1976. The grand strategy of the Roman Empire from the first century A.D. to the third (Baltimore, MD).

Macrea, M. 1957. "Şantierul arheologic Caşolt-Arpaşul de Sus," Materiale şi Cercetări Arheologice 4, 119-54.

Macrea, M. and I. Berciu 1955. "Şantierul arheologic de la Caşolţ şi Arpaşul de Sus," Studii şi Cercetări de Istorie Veche 6.3-4, 581-626.

Macrea, M. and I. Glodariu 1976. Așezarea dacică de la Arpașu de Sus (Bucharest).

Mărghitan, L. 1970. "Vestigii dacice de pe cursul mijlociu al Mureșului," Sargetia 7, 11-19.

Mărghitan, L. 1971. "Tezaurele de argint dacice," in Sesiunea de comunicări științifice a muzeelor de istorie. Decembrie 1964 (Bucharest) 304-9.

Mărghitan, L. 1976. Tezaure de argint dacice. Catalog (Muzeul de Istorie, Bucharest).

Mârza, I. 1997. "Andezitul utilizat de daci în construcțiile sacre de la Sarmizegetusa Regia — petrografia și proveniența," *Acta Musei Napocensis* 34.1, 819-23.

Mierow, C. C. 1915. The Gothic History of Jordanes (2nd edn., Princeton).

Mihăilescu-Bîrliba, V. 1990. Dacia Răsăriteană în secolele VI-I î.e.n. Economie și monedă (Iași).

Millett, M. 1990. The Romanization of Britain (Cambridge).

Moga, V. 1981. "Așezarea și cetatea dacică de la Piatra Craivii (jud. Alba)," in Daicoviciu 1981, 103-16.

Moga, V. 1982. "Morminte dacice de incinerație la Teleac (jud. Alba)," Apulum 20, 87-91.

Moga, V. 1995. "Remarques sur le mur de la citadelle dace de Piatra Craivii," Acta Musei Napocensis 32.1, 145-50.

Moraru, V. 1985. "Opinii referitoare la funcționalitatea complexului defensiv dacic de la Ponorici," *Sargetia* 18-19 (1984-85) 112-16.

Moraru, V. and H. Tatu 1985. "O nouă fortificație în zona Ponorici, județul Hunedoara," Sargetia 18-19 (1984-85) 109-12.

Nandris, J. G. 1976. "The Dacian Iron Age. A comment in a European context," in Festschrift für Richard Pittioni (Vienna) 723-36.

Nandris, J. G. 1981. "Aspects of Dacian economy and highland zone exploitation," Dacia n.s. 25, 231-54.

Olsen, B. and Z. Kobyliński 1991. "Ethnicity in anthropological and archaeological research: a Norwegian-Polish perspective," *Archaeologia Polona* 29, 5-27.

Pârvan, V. 1926. Getica. O protoistorie a Daciei (repr. Bucharest 1982, with notes, commentary and discussion by R. Florescu).

Pârvan, V. 1928. Dacia (Cambridge).

Paul, I., I. Glodariu *et al.* 1981. "Şantierul arheologic Şura Mică (jud. Sibiu) — raport preliminar (1976-1978)," *Studii și comunicări* — *Sibiu* 21, 39-48.

Pavel, V. and I. Andrițoiu 1994. "Tezaurul de monede romane republicane de la cetatea dacică de la Piatra Roșie," Apulum 31, 79-120

Poenaru Bordea, Gh. and C. Ştirbu 1971. "Tezaurul de denari romani republicani și de la începutul principatului descoperit la Breaza, comuna Lisa (jud. Brașov)," Studii și Cercetări de Numismatică 5, 265-82.

Popescu, A. and G. Talmaţchi 1997. "Un tezaur de denari romani republicani şi imperiali descoperit la Leţcani (jud. Iaşi)," Buletinul Societătii Numismatice Române 90-91 (1996-97) 253-57.

Popescu, D. 1960. "Cîteva observații asupra tezaurului de la Sîncrăeni," in Omagiu lui Constantin Daicoviciu (Bucharest) 447-53.

Popescu, D. 1971. "Tezaure de argint dacice (I)," Buletinul Monumentelor Istorice 40, 19-32.

Popescu, D. 1972. "Tezaure de argint dacice (II)," Buletinul Monumentelor Istorice 41, 5-22.

Preda, C. 1957. "Contribuții la problema provenienței argintului din tezaurele geto-dace, în lumina descoperirii monetare de la Stăncuța (r. Călmățui, reg. Galați)," Studii și Cerceiări de Istorie Veche 8, 113-24.

Preda, C. 1958. "Asupra descoperirii monetare de la Stăncuța (Reg. Galați)," Studii și Cercetări de Numismatică 2, 239-51.

Preda, C. 1986. Geto-Dacii din Bazinul Oltului Inferior. Dava de la Sprîncenata (Bucharest).

Preda, C. 1994a. "Arpașu de Sus," in Preda 1994c, 120.

Preda, C. 1994b. "Blidaru," in Preda 1994c, 188.

Preda, C. (ed.) 1994c. Enciclopedia Arheologiei și Istoriei Vechi a României, vol. 1, A-C (Bucharest).

Preda, C. 1996. "Fetele Albe," in id. (ed.), Enciclopedia Arheologiei și Istoriei Vechi a României, vol. 2, D-L (Bucharest) 133-34.

Preda, C. 1998. Istoria monedei în Dacia preromană (Bucharest).

Preda, C. (ed.) 2000. Enciclopedia Arheologiei și Istoriei Vechi a României, vol. 3, M-Q (Bucharest).

Reece, R. 1994. "353, 367, or 357? Splitting the difference or taking a new approach," Britannia 25, 236-38.

Sanie, S. 1988. "Cetățuia geto-dacică de la Barboși (II)," Arheologia Moldovei 12, 53-103.

Sanie, S. 1995. Din istoria culturii și religiei geto-dacice (Iași).

Shennan, S. J. 1989. "Introduction: archaeological approaches to cultural identity," in id. (ed.), *Archaeological approaches to cultural identity* (London) 1-32.

Shennan, S. J. 1991. "Some current issues in the archaeological identification of past peoples," Archaeologia Polona 29, 29-37.

Sherk, R. K. 1984. Rome and the Greek East to the death of Augustus (Cambridge).

Sîrbu, V. 1993. Credințe și practici funerare, religioase și magice în lumea geto-dacilor (Biblioteca Istros 3; Galați).

Smirnova, G. I. 1976. "Sanctuarul de lîngă satul Dolinean din regiunea Nistrului Mijlociu," Studii și Cercetări de Istorie Veche și Arheologie 27.3, 309-17.

Stahl, H. H. 1992. Probleme confuze în istoria sociala a României (Bucharest).

Suceveanu, Α. 2001. "Πρῶτος καὶ μέγιστος (βασιλεὺς) τῶν ἐπὶ Θράκης βασιλέων (IGB, i2, 13 r. 22-23)," Pontica 33-34 (2000-1) 319-35

Tatu, H. 1983. "Fortificații la Porțile de Fier ale Transilvaniei," Sargetia 16-17 (1982-83) 165-69.

Tatu, H. and V. Moraru 1983. "Dispozitivul defensiv dacic de la Ponoriciu (jud. Hunedoara)," Sargetia 16-17 (1982-83) 151-64.

Taylor, T. 1994. "Thracians, Scythians and Dacians, 800 B.C.-A.D. 300," in B. Cunliffe (ed.), The Oxford illustrated prehistory of Europe (Oxford) 373-410.

Ursachi, V. 1982. "Sanctuarul din cetatea dacică de la Brad, comuna Negri, județul Bacău," Memoria Antiquitatis 12-14.1 (1980-82) 93-105.

Ursachi, V. 1995. Zargidava. Cetatea dacică de la Brad (Bibliotheca Thracologica X; Bucharest).

Ursulescu, N. 1992. Dacia in cadrul lumii antice (Iași).

Verdery, K. 1988. "Moments in the rise of the discourse on national identity. 1: Seventeenth through nineteenth centuries," in I. Agrigoroaiei, Gh. Buzatu and V. Cristian (edd.), Românii în Istoria Universală, III.1 (Iași) 25-60.

Verdery, K. 1991. National ideology under socialism: identity and cultural politics in Ceauşescu's Romania (Berkeley, CA).

Vulpe, A. 2000a. "Poiana," in Preda 2000, 334-35.

Vulpe, A. 2000b. "Popești," in Preda 2000, 352-54.

Wells, P. S. 2001. Beyond Celts, Germans and Scythians (London).

Zirra, V. V. and D. Spânu 1992. "Observații asupra tezaurelor de argint din Latène-ul tîrziu," Studii și Cercetări de Istorie Veche și Arheologie 43.4, 401-23.