MILITARY VICI IN ROMAN DACIA: AN AERIAL PERSPECTIVE

Introduction

There is surprisingly little known about those civilian settlements located immediately outside forts in Dacia that did not achieve municipal status. The current state of knowledge has been summarised by Benea who notes a total of 53 sites, though 10 are regarded as only possible. However, it is difficult to follow the basis of her identification in a number of cases, since it seems to rely on the discovery of brick stamps which are not themselves evidence of the presence of civilians. Nonetheless. a more critical assessment of the evidence she assembles would still indicate that the sites of at least 27 military vici are attested in Roman Dacia. Unfortunately, though there have been a number of excavations in military vici, very few have been extensive and for even fewer of them is the information readily accessible. Benea collects reasonably extensive data on buildings excavated outside the forts of Tibiscum, Porolissum and Micia, and the more limited evidence from Cășei, Brâncovenești, Mehadia and Ilisua². While this does include building plans, one of the biggest problems is the lack of overall site plans that would enable us to gain a better appreciation of the full extent of the settlements and their layout. This, in turn, would contribute to a broader understanding of the importance of the settlements and their function. This is one aspect where aerial photography can provide some assistance.

Aerial Photography:

In the right specific circumstances modern methods of archaeological prospection, and especially archaeological aerial reconnaissance, are able to reveal the general pattern of an archaeological site without recourse to excavation. This is particularly useful in the prevailing conditions in Romania where only a very small percentage of known archaeological sites are likely to be excavated. Indeed, it is now general practice in most countries not to undertake excavation on archaeological sites unless they are endangered, either by modern development or by natural erosion, or because a primary evaluation suggests that a more in-depth study would make such a major contribution to knowledge that the costs and effects can be justified.

The focus of the aerial reconnaissance programme currently being undertaken by the authors is the mid-Mureş river basin and Tara Haţegului. One advantage of the current agricultural regime in this area, with its high proportion of arable cultivation, is its potential to reveal archaeological sites by cropmarks which can best be recorded by aerial photography. Cropmarks are patterns of differential growth in crops reflecting the existence of archaeological remains otherwise invisible beneath the surface. They are caused by variations in soil depth over these buried archaeological

¹ D. Benea, *Die Urbanisierung der Militärvici in Dakien. Einfluß der demographischen Faktoren auf ihre Entwicklung* in R. Frei-Stolba, H. E. Herzig (eds.), La politique édilitaire dans les provinces de l'Empire Romain Il^{ème}-IV^{ème} siècles aprés J. C., Berne 1995, 231-41; D. Benea, *Die innere Organisierung der Militärvici aus Dakien (I. Die Wohnungen)*, in H. Ciugudean, V. Moga (eds.), Army and Urban Development in the Danubian Provinces of the Roman Empire, Alba Iulia 2000, 33-61.

² D. Benea (n. 1).

features that effect the availability of moisture and nutrients to the growing crop above. Positive cropmarks, where growth is enhanced, can appear over buried pits and ditches, while negative marks, where crop growth is impeded, occur over buried stone walls or road lines. These marks are ephemeral and appear only when the growing conditions and the crop type (ideally cereals) are suitable. The visibility of the remains is further constrained by the pattern of cereal production in strip fields which are common in much of the western Mureş valley. All too often those cereals that are most conducive to producing cropmarks (wheat and barley) represent only a small proportion of the sown crops, and adjacent strips rarely carry the same crop, so that only glimpses of the archaeological remains may be visible at any one time. Best results are obtained from cereal crops around the time of ripening, particularly in periods of sustained dry weather. Accordingly, though the research area was first overflown in July 1998, it was not until the very dry weather experienced in the summer of 2000 that some of the results described here were obtained. These were further enhanced and augmented in the relatively dry summer of 2002.

Results from military vici

Micia:

The existence of an auxiliary fort at *Micia* has been known since the 18th century.³ Excavations, particularly focused on the military barracks and the external baths, have taken place over a number of years starting in 1929⁴. Occupation at the site is known to have continued from at least the reign of Hadrian through until the immediate post-Roman period (4th-5th centuries AD), though excavated buildings tend to show three phases of construction through the 2nd and 3rd centuries AD. The main focus of the associated civilian settlement as currently known lies to the north-east of the fort on the south bank of the Mures and is subject to ongoing investigation.

The whole of the fort and the immediately surrounding area remain under intensive agricultural use, though excavation has confirmed that structures still survive well beneath the ground. However, little is apparent above the ground apart from the approximate outline of the fort, still partially visible as a slightly elevated rectangular platform, and those buildings which have been restored for public display, including the small amphitheatre and the baths-palaestra complex to the north-east of it. The only published overall plan of the site which draws together the results of these various excavations is provided by Alicu and Opreanu, but at a scale too small to appreciate much detail. However, the original is held in the Museum of Dacian and Roman Civilizations in Deva and was made available to the authors through the kind auspices of the Director, Dr. Adriana Pescaru.

To summarise previous work on the military *vicus*, various buildings and other remains have been discovered, concentrating around the north and east sides of the fort. To the north on the river bank a group of unidentified buildings and a baths and *palaestra* complex have been excavated, and to the south of that a small amphitheatre.⁶ Some 35 m east of the amphitheatre a large building with cellar and hypocaust,

³ N. Gudea, Der dakische Limes: Materialien zu seiner Geschichte, JRGZM 44, 1997, 37-39.

⁴ For a full bibliography see D. Alicu, *Bibliografia așezărilor antice de la Vețel-Micia*, Sargetia 27, 1997-98, 401-425.

⁵ D. Alicu, C. Opreanu, Les amphithéâtres de la Dacie romaine, Cluj Napoca 2000, figure 12.

⁶L. Teposu-Marinescu, *Cu privire la urbanizarea Miciei*, Sargetia 18-19, 1984-85, 125-29; O. Floca, V. Vasiliev, *Amfiteatrul militar de la Micia*, Sargetia 5, 1968, 121-152; CIMEC 1995 http://www.cimec.ro/scripts/arh/cronica/detaliu.asp?k=736.

Fig. Plan of military *vicus* at Micia based on aerial photographic evidence (copyright I. A. Oltean/W. S. Hanson)

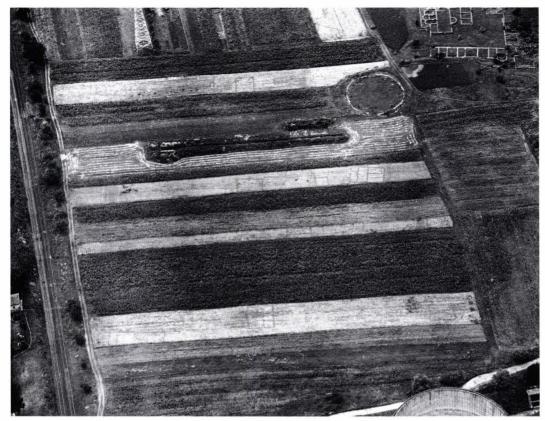


Fig. 2. Aerial photograph of the eastern area of military *vicus* at Micia (2002) (copyright W. S. Hanson)

interpreted as a possible basilica, has also been excavated⁷. To the south of that, along the line of the modern road, several private houses have been recorded, though that nearest to the fort has also been characterised as a possible public building⁸. Further to the north-east 11 pottery kilns were recorded during the construction of the factory, as was one of the two cemeteries⁹. A second cemetery is located 1 km to the south-west of the fort in the vicinity of a temple for the native gods of the Moorish garrison. A second temple, for Jupiter Erapolitanus, was located some 400 m south-east of fort¹⁰.

Recent aerial reconnaissance has revealed a large number of buildings. Comparison with the overall plan of Micia suggests that several of them, particularly to the north of the fort, have previously been recorded, but in a number of cases they are entirely new discoveries (fig. 1). To the east of the amphitheatre, negative cropmarks revealed a number of buildings or possible wall fragments (fig. 2). These included two subrectangular buildings with internal room subdivisions, one with a portico facing the road and a central corridor, and a number of simple rectangular structures, two of

⁷L. Teposu-Marinescu (n. 6), 126-7; but see interpretation/analogies section below.

⁸L. Mărghitan, *Micia a fost un "pagus" in tot timpul stăpânirii romane?*, SCIV 21, 1970, 4, 579-594; but see interpretation/analogies section below.

⁹ Pottery kilns: O. Floca, St. Ferenczi, L. Marghitan, Micia. Grupul de cuptoare romane pentru ars ceramica, Deva 1970; north-eastern cemetery: R. Ardevan, Viața municipală în Dacia romană, Timișoara 1998, 76 and fig 13.

¹⁰ South-western cemetery and Moorish temple: D. Tudor, Orașe, târguri, sate, în Dacia romană, București 1969, 123; temple for Jupiter Erapolitanus: A. Rusu-Pescaru, D. Alicu, Templele romane din Dacia 1, Deva 2000, 77.

which may be linked by walls to form a compound. The lines of minor roads dividing up the area were also apparent at various points. Some 250 m to the west of the fort negative cropmarks revealed a rectangular building, internally subdivided, with a large yard attached to its southern side. This seems best interpreted as a domestic dwelling. A further 200 m to the west of the fort, further negative cropmarks define a large, partially subdivided structure, c. 55 m by at least 40 m in extent. Contained within, but integral to it, lies a rectangular building approximately 16 m by 10 m, which is itself subdivided. The size of the structure was first thought to hint at an official function, but more detailed examination of additional photographs suggests that it is more likely to be a domestic structure within a yard. Finally, two small rectangular buildings, possibly temples or mausolea, were located to the south of the fort.

Cigmău (Germisara):

The site of the fort is well known, despite a recent attempt to misplace it¹¹. It is located on a narrow spur the right bank of the river Mureş between Bobâlna and Geoagiu, some 5 kilometres south of the Roman hot springs resort of Geoagiu-Bǎi. Until July 2000 no excavation had been undertaken, though that is now ongoing under the direction of Dr. Adriana Pescaru and Mr. Eugen Pescaru (Museum of Dacian and Roman Civilizations, Deva). Aerial photographs taken in June and July 2000 revealed much of its plan in advance of that work¹² and a study of the fort combining the results of aerial photography and field excavation is in preparation. According to brick stamps and inscriptions, the fort has been used by the *numerus singularium Britannicorum*, and by *vexillations* of the *legio XIII Gemina*¹³.

The existence of a civilian settlement associated with the fort has also been known from archaeological finds recovered over the last century, though its precise limit on the ground was unclear. The *Tabula Peutingeriana* and epigraphic material attests the name of Germisara, which seems to have been in use for both the fort/vicus complex and the Roman baths at Geoagiu-Băi¹⁴, presumably because the latter were considered to belong to this settlement. A similar situation might have existed in the case of another famous hot springs complex at Băile Herculane some kilometres away from the fort and settlement at Mehadia.

Large quantities of archaeological material have been discovered in the fields east of the fort and to the west of the neighbouring modern village of Geoagiu. The quantity of remains brought to the surface every year by ploughing is significant, as proven by the debris still scattered on the cultivated fields or collected around them. These remains include not just the usual pottery fragments or bricks, tiles and stones used in construction, but also larger stones normally used for the pavements of public spaces or roads, and even possible architectural fragments. Recent aerial reconnaissance has revealed the walls of numerous stone buildings through a combination of parchmarks in what appeared to be rough grazing and negative cropmarks in cereal crops, mainly barley. Ground inspection indicated that the areas where these buildings were located are visibly raised compared to the normal field level.

The cluster of buildings began immediately beyond the eastern rampart of the fort, but the focus of the settlement lay on the flatter ground to the north east of

¹¹ N. Gudea (n. 3), 103-4.

¹² W. S. Hanson, I. A. Oltean, forthcoming, *The identification of Roman buildings from the air: recent discoveries in Western Transylvania*, Archaeological Prospection.

¹³ D. Tudor (n. 10), 130-1; CIMEC 2000

http://archweb.cimec.ro/CronicaCA2001/rapoarte/rapoarte_maine.htm, no. 70.

¹⁴ Cf. A. Rusu-Pescaru, D. Alicu (n. 10), 66.

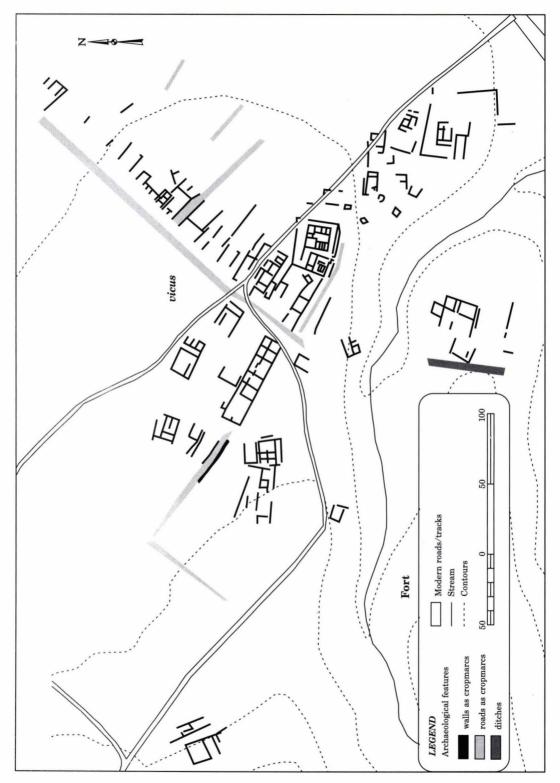


Fig. 3. Plan of military *vicus* at Cigmău based on aerial photographic evidence (copyright I. A. Oltean/W. S. Hanson).



Fig. 4. Aerial photograph of rectangular barrack block building and corridor building in military *vicus* at Cigmău (2000) (copyright W. S. Hanson)

the fort, extending at least 370 m away from the east gate (fig. 3). Some basic strip buildings were revealed, particularly aligned with a road leading off to the north-east, which look very similar to other examples of *vicus* buildings from Dacia or elsewhere. Nearer to the fort, however, the buildings showed greater complexity. They include at least one large rectangular building c. 15 m by 60 m subdivided in the manner of a military barrack block; one corridor building within a walled enclosure (fig. 4); at least 4 examples of less elongated buildings subdivided into a number of rooms; and two similar buildings within small enclosures. Different building alignments are perhaps suggestive of at least two phases of construction or settlement planning.

The *vicus* settlement was laid out on a north-west/south-east alignment, with a rudimentary street grid subdividing the main settlement area as at Micia. One road leads further east beyond the settlement, and is probably the main road of the province. Thus evidence has now accumulated of a complex of sites (an auxiliary fort, civilian settlement, cemetery, hot springs, etc.), occupying a significant area from Cigmău to Geoagiu and Geoagiu-Băi.

Războieni:

Knowledge of the *vicus* at Războieni was restricted to the discovery of finds of Roman artefacts in the vicinity of the fort. However, in the summer of 2002 aerial reconnaissance revealed a series of buildings located to the west of the fort site showing as negative cropmarks in three separate fields sown with cereals. The



Fig. 5. Aerial photograph of the complex of vicus buildings at Războieni (2002) (copyright W. S. Hanson)

buildings extended for some 500 m and appeared to be placed on either side of the road, which was visible also as a negative cropmark in two of the fields. Furthest away from the fort were two simple rectangular buildings, one divided in two. Next was a single, large, almost square building with ranges of rooms around an internal yard. Finally, closest to the fort was a cluster of simple rectangular structures, including one apparently defined both by walls and a series of post-pads that may be of more than one phase (fig.5). Linear alignments, probably property divisions, were also apparent.

Interpretation and analogies

The site plans presented here (figs. 1 and 3) represent the authors' interpretations of the settlements based on the cropmark evidence currently available from a series of photographs, a few examples of which are also included. It has not yet been possible to produce a plan of the remains at Războieni without access to a suitable modern map on which to base the transcription from the oblique photographs. Inevitably these interpretations are partial because of variations in crop and soil conditions across each site. Further reconnaissance in future years will reveal more, as has already been demonstrated at both Cigmău and Micia where different buildings were visible not only in different summers, but at different times during each summer. Because of the nature of local soil conditions¹⁵, mainly negative cropmarks are visible indicating the presence of stone buildings. Rarely are positive cropmarks recorded,

¹⁵ W. S. Hanson, I. A. Oltean (n. 12).

representing ditches, pits, drains or sunken-houses. The latter are more common to agricultural villages and pre-Roman settlements, but are attested in at least one military vicus in Dacia at Căşei/Samum and recorded elsewhere, as at Mautern in Noricum¹⁶. The negative cropmarks represent the stone phases of construction at the settlements, for only in the very best conditions are the slight traces of the construction trenches of timber buildings visible as positive cropmarks. Most probably, however, there was also an earlier phase of timber construction in most of the military vici, as has been demonstrated recently by excavation at Micia¹⁷. Moreover, these plans are composite pictures of the settlements, for it is rarely possible from the air to distinguish the relative date of visible features, even though it may be possible to demonstrate that more than one period of building exists on the basis of different alignments, as is suggested at Cigmău, or where structures overlap. Accordingly, more details of the plans of individual buildings and, in particular, clarification of the chronological succession would be provided by excavation.

Despite these limitations, the aerial photographic evidence provides considerable insight into the nature of military vicus settlements in Transylvania. It offers for the first time some indication of the nature and extent of the sites at Cigmău and Războieni. Similarly, despite the many years of excavation at Micia, the new aerial discoveries provide more details of the extent of the settlement. Indeed, this is one of the most striking aspects of the aerial discoveries. Buildings are now attested on all sides of the fort at Micia, extending for approximately 1 km from north-east to south-west across the limits of the settlement, though the main focus of intense activity remains to the north and east of the fort. Micia might be categorised, therefore, as a partially dispersed settlement, a term used to describe the vicus at Housesteads on Hadrian's Wall with its clusters of buildings interspersed with cultivation terraces.¹⁸ The limited evidence from Războieni indicates that the vicus there extends for at least 500 m to the west of the fort, though this may be simply a linear layout along the road line, a pattern typical of the first stage of development in small towns¹⁹. At Cigmau, the vicus is more focused and compact, but still extends for over 500 m around the north and east of the fort and extending away from it along the main road. It is highly reminiscent of a well-known military vicus from northern England, also recorded entirely from aerial photography, at Old Carlisle in Cumbria²⁰. Here, too, the buildings cluster quite closely around the north and east sides of the fort, but also extend along a main road not oriented on any of the fort gates. Thus Cigmau fits into a combination of two types of vicus layout (tangent and circular) as defined by Sommer²¹. Finally, the very size of the settlements, particularly at Cigmau and Micia, attests their importance as examples of what would have been the most common form of substantially Romanised settlement in the province.

¹⁶ Cășei/Samum: D. Benea (n. 1), 45; Mautern: information from Dr. S. Groh.

¹⁷ Information from Mrs. V. Rådeanu.

¹⁸ M. E. Snape, *Roman and native; vici on the north British frontier*, in V. A. Maxfield, M. Dobson, (eds.), Roman frontier studies 1989, Exeter 1989, 469.

¹⁹ B. C. Burnham, J. Wacher, The 'small towns' of Roman Britain, London 1990, 244-5; but see the reservations expressed about the chronological development in C. S. Sommer, The military vici in Roman Britain: aspects of their origins, their location and layout, administration, function and end, Oxford 1990, 45-6.

²⁰G. D. B. Jones, D. Mattingly, Atlas of Roman Britain, London 1990, 174.

²¹ C. S. Sommer, *The Roman army in SW Germany as an instrument of colonisation: the relationship of forts to military and civilian vici*, in A. Goldsworthy, I. Hayes, (eds.), The Roman army as a community, Portsmouth – Rhode Island 1999, 81-3.

The latter two sites also hint at the pressure on space in the vicus and the importance of proximity to the fort itself. At neither Micia nor Ciamau is there any sign of restrictions on buildings encroaching right up to the defences of the forts. Though the natural topography constrains the extent to which this is possible at Cigmau, there are buildings immediately outside the east gate on the plateau occupied primarily by the fort. Similarly, at Micia buildings occupy the limited space between the fort and the river Mures. A similar pattern has been observed in a number of military vici in northern and western Britain²². There it is assumed, on relatively slight evidence, that this reflects a development in the Severan period as a result of the abolition of the ban on military marriage increasing the demand for space in the vicus and the peaceful character of the northern frontier reducing the need for a security cordon beyond the defences. Without excavation it is impossible to say whether the crowding of buildings up against the defences of the forts is a similarly late development in Dacia, or merely a normal reflection of the close association between the military and civil communities. But in Germany, where more extensive excavations of military vici have taken place, there is no indication that empty space was ever left between the fort ditches and the first houses²³, so the latter explanation seems preferable.

Nor are the layouts of the vici haphazard. Rather they indicate a considerable level of planning control and organisation, either by the military or the vicani themselves, as has been variously suggested²⁴. Indeed, Piso has demonstrated that military jurisdiction extended for 2 leuga around legionary bases²⁵. Only at Micia is there precise evidence of the location of the cemeteries, at some distance to the south and east of the fort. This is the norm elsewhere and, as Sommer has argued²⁶, implies that their location was planned to be sufficiently far away to allow adequate space for the construction of the vicus. Smaller temples and shrines, too, are usually located towards the limits of the settlement²⁷, sometimes associated with the cemeteries, as is evidenced at Micia. The limited evidence currently available from Războieni indicates that the buildings focused on the main road, a not uncommon occurrence in military vici and small towns, which often show what is referred to as ribbon development²⁸. A similar arrangement is apparent to the west of the fort at Micia, but to the east in the main focus of the site and at Cigmau the use of space is more highly structured. In particular, systems of minor roads are apparent, forming a loose grid pattern and emphasising the proto-urban character of the settlements.

The aerial perspective also offers the opportunity to identify particular types of activity within the settlement on the basis of the morphology of the buildings revealed. The most common form of building in a military *vicus* is generally considered to be the so-called strip-house, a long rectangular structure usually positioned with its narrow end facing the road to maximise access to the street frontage²⁹. Such buildings

²² Listed by C. S. Sommer (n. 19), 109, note 91.

²³ C. S. Sommer, Life beyond the ditches: housing and planning of the military vici in Upper Germany and Raetia, V. A. in Maxfield, M. Dobson. (eds.), Roman frontier studies 1989, Exeter 1989, 472.

²⁴ P. J. Casey, *Civilians and soldiers – friends, Romans and countrymen?*, in P. Clack, S. Haselgrove, (eds.), Rural settlement in the Roman north, Durham 1982, 126-7; C. S. Sommer (n. 19), 22-29; C. S. Sommer (n. 21), 86-9; *contra* P. Salway, The frontier people of Roman Britain, Cambridge 1967, 165.

²⁵ l. Piso, Die Inschriften von Pfaffenberg und der Bereich der canabae legionis, Tyche 6, 1991, 131-170.

²⁶C. S. Sommer (n. 23), 472; idem (n. 21), 86.

²⁷ Rorison, Vici in Roman Gaul, Oxford 2001, 44.

²⁸B. C. Burnham, J. Wacher (n. 19), 24-5; Rorison (n. 27), 33.

²⁹ P. Salway (n. 24), 167-9.

are frequently characterised as taverns or shops, possibly involving small-scale production on the premises. Possible examples of such structures are apparent at the north-eastern limit of the *vicus* at Cigmău lining the main road from the settlement, for they are frequently found along major arteries and through routes³⁰, but other and more complex forms of building seem to be more common at all three of the *vici* under consideration here.

The corridor building to the east of fort at Micia is an example of an elongated strip-building with a central corridor similar to a type of 'row house' known in the Danube area, paralleled in the villa house from Winden am See, Austria³¹, but which also has analogies with a building from the vicus of the auxiliary fort at Tibiscum. In the latter case, a number of buildings were excavated with rooms ranged on each side of a central corridor and with a sort of entrance portico facing the road. This type of plan is common to the last-phase buildings at both Tibiscum and Porolissum where³², especially in the case of Tibiscum, the individual properties seem to have been well delimited by passageways or alleys providing access from the street to the workshops at the back. By way of contrast, the barrack-like structure from Cigmau (fig. 4) is not readily parallelled in Dacia, but it is not dissimilar in plan to, if larger in size than, several buildings in the military vicus at Old Carlisle in northern England, and in the civilian vici at Bliesbruck and Malain in Gaul³³. It is perhaps best regarded as the equivalent of a number of standard strip-houses conjoined, rather like the earliest phase of construction in insula XIV at the municipium of Verulamium³⁴, and seems likely to reflect some military influence in their construction. The use of tegulae produced by the local military and civilian officina in one building at Micia attests a similar relationship³⁵. The function of this building at Cigmau is likely, therefore, to involve a combination of residential and industrial/commercial activity. Finally, a number of buildings appear to be associated with enclosures or yards containing ancillary structures. The two buildings to the west of the fort at Micia are good examples and seem likely to be domestic in function, the most westerly having similarities with a town house excavated in the civilian vicus at Alise-Ste.-Reine in Gaul³⁶. Three buildings immediately to the east of the fort at Cigmau, including the striking corridor building (fig. 4), are probably also domestic, and one immediately to the west of the fort at Războieni may fall into the same category.

None of the military *vici* display obvious examples of buildings that might reasonably be interpreted as having a public function. There are as yet no indications of designated public market spaces as attested at some of the German sites³⁷, so trading activities must have taken place within the workshops. Also, there are no signs of formal spaces for local administration purposes, either *basilica* or *curia*, indicating that none acquired municipal status, despite their size and importance. The large building identified as a possible *basilica* by Teposu-Marinescu lacks adequate confirmation³⁸, but the provision of both a cellar and hypocaust is more indicative of a combined residential and commercial property than a public building. Indeed, cellars

³⁰ Rorison (n. 27), 44.

³¹ J. T. Smith, Roman villas: a study in social structure, London 1997, fig. 56.

³² D. Benea (n. 1), plates 3 and 10.

³³ Old Carlisle: G. D. B. Jones, D. Mattingly (n. 20), 17; Bliesbruck and Malain: Rorison (n. 27), 70-1.

³⁴ S. S. Frere, Verulamium excavations vol. 1, Oxford 1971, 14-19 and fig. 8.

³⁵ L. Teposu-Marinescu (n. 6), 126.

³⁶ Rorison (n. 27), 39-40.

³⁷ e. g. C. S. Sommer (n. 21), 86-7.

³⁸L. Teposu-Marinescu (n. 6), 126.

are common features of houses and workshops in both civilian and military *vici* in Gaul and Germany³⁹. Similarly, the possible public building nearest to the fort identified by Mărghitan on the basis of its architectural elaboration⁴⁰, has more in common with other domestic and commercial buildings in the vicinity, including the provision of hypocausts. The most frequently attested official buildings found in *vici* are *mansiones*⁴¹, though even on the basis of excavation these can be difficult to identify with any certainty. The only possible candidates at any of the sites discussed here are the subdivided buildings within enclosures at Micia and Cigmău which have already been mentioned above as more likely to be domestic structures.

One of the peculiarities of Dacia is that many military vici (e.g. Porolissum, Tibiscum, Drobeta) quickly developed to municipal status and fulfilled the administrative and economic roles which in other western provinces were provided by the urban centres of civitates. Though there are several physical features and public amenities that were necessary to a community in order to exercise the prerogatives granted by its juridical status, that status cannot readily be identified without written or epigraphic evidence. But settlements and their communities were not static. Indeed, in the case of Roman Dacia, most of the evidence indicates a quite distinct evolutionary process from lower to upper municipal status. Therefore, many of these settlements are likely to have continued to develop their functions, which may, or may not, in due course have been recognised by the award of a higher status. In such circumstances more attention should be devoted to understanding the function, rather than determining the status, of these settlements than has previously been the case. Though the primary function of military vici was to service the local garrison, both economically and socially, they had the potential to extend that function to the wider community, and in that sense were instruments of colonisation⁴². On the basis of their size and of the complexity and range of the structures they contain, these military vici seem likely to have had far more in common with their civilian counterparts, the small towns, than previously has been assumed.

³⁹ Rorison (n. 27), 38-9; C. S. Sommer (n. 21), 88.

⁴⁰ L. Mårghitan (n. 8), 591.

⁴¹ P. Salway (n. 24), 170-73; C. S. Sommer (n. 19), 47.

⁴² Cf. C. S. Sommer (n. 21), 92.