NEWSTEAD 1996
THE NORTHERN VICUS & THE AMPHITHEATRE
EXCAVATION and SURVEY

Amphitheatre

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Introduction

Fieldwork in 1996 examined two very different parts of the Newstead complex: a suspected amphitheatre and an area of extramural settlement between the fort and River Tweed (see figure 1). Each area of research in its own way appreciably added to our understanding of the Roman complex. Confirmation that Newstead possessed an amphitheatre adds another dimension to the activities of the Roman garrison, that of pomp and ceremony. As the only example of an amphitheatre yet known in Scotland it also underlines the importance of Trimontium to Rome's strategy of occupation in northern Britain. The identification of another area of extramural occupation is also an important advance. It increases the likely size of Newstead's population, already one of the largest in Roman Scotland, by several hundred. More importantly, however, it contributes significantly to our understanding of the status of annexes and other extramural areas outside forts.

The Amphitheatre NT 5716 3460

The hollow at the north east corner of Newstead Fort has been recognised as probably artificial for a long time. Richmond (1950: 26) for example suggested that it was the clay source for the construction of the late Domitianic Fort's rampart. However in the early 1990's a local amateur archaeologist, Bill Lonie, suggested the rather more exciting possibility that it represented a small amphitheatre (Keppie 1993: 282-3). This led in 1993 to the examination of the site by contour survey and geophysics.

Both magnetometer and resistivity survey were carried out with a 1 m sample interval. However only resistivity produced useful results. This indicated that the "arena" consisted of a low, resistivity area and that the "bank" was high resistivity. This conformed to the expected pattern for an amphitheatre, but did not prove its existence. The same effect could have been caused by natural geological conditions. For example the hollow might have been caused by the erosion of soft clay surrounded by rock outcrops. This possibility was in large part eliminated by the contour survey. Using an Electronic Distance Meter to take spot heights about every 2 m, it was possible to create a very accurate map of the hollow's shape. This indicated that the hollow's centre was at least 28 cm lower than the lowest point on the bank. No natural formation process was likely to have created the hollow, but its date and function had yet to be proved conclusively. The issue could only finally be decided by excavation.

Four trenches were cut: two across the suspected line of the amphitheatre's bank (on the north and east sides) and two small box sections within the arena area. Excavation in the arena showed that the hollow had originally been much deeper. Although modern pottery was present in considerable quantities in the top 30 cm it was absent further down. The feature's artificial nature was therefore confirmed and a pre-modern date strongly suggested. Below the plough zone the hollow's infill was virtually sterile to a depth of 1m. The relatively small quantities of Roman period material recovered almost all came from a narrow band below this. This probably represented material trampled into the Roman ground surface, which seems to have been simply beaten earth. The failure to detect a metalled surface for the arena was disappointing at the time. However upon reflection its absence was not surprising. "Arena" means 'sand' in Latin, and the earth surface encountered would probably have been more suited to games and manoeuvres than a slippery cobble surface (or "harena"). The main problem with such a surface in the British context would have been drainage. However, torrential rain during the excavation season drained away very rapidly, due probably to the underlying cobble / gravel geology.

The bank provided the most convincing evidence that this was indeed an amphitheatre. An artificial hollow could have been created incidentally, simply by the extraction of gravel and cobbles for use in the fort's construction. This activity may indeed have occurred, but the creation of a bank around the lip of the hollow can only represent the deliberate creation of an amphitheatre. Two sections were cut (see figure 3), both indicating that material quarried from the amphitheatre's centre was piled up in a simple dump. This survived to a depth of up to 50 cm, but must originally have stood much higher. Presumably much of the material worked into the hollow originated from this structure. No buried soil existed to separate undisturbed natural geology from the very similar artificially deposited layers. However, the latter could be distinguished by their more soily matrix, occasional voids and inclusion of Roman period artefacts and animal bone. At the bank's inner edge, both sections indicated that the dump stopped abruptly at a near vertical face. The material was far too unstable to have remained in this condition by itself and some sort of timber retaining wall must have existed. A collapse of banking in the northern section actually preserved a probable timber slot c. 20 cm wide. Presumably a series of substantial horizontal beams or logs was held in place by posts, every two or three metres around the arena's perimeter. These were not recorded in the narrow sections examined, however. With only these two sections there would obviously be too little information to accurately assess the shape of the arena. However, combining the excavation with the 1993 contour survey it was possible to suggest an approximate outline with some confidence (see figure 2). Even after infilling with over one metre of hill wash, the shape of the hollow suggests that the arena was not circular, but elliptical with its long axis c. 40 degrees west of north. If the hollow's present low point represents the amphitheatre's centre the arena would have measured c. 37 m by 30 m (an area of c. 870 m²).

The full width of the bank was only examined at one point, the north section. The surviving width of 7 m would have made the amphitheatre's capacity much smaller than most known Romano-British sites. However, the bank at this point may not have been representative of the amphitheatre's "seating" as a whole. This section was very close to the suspected position of one of the entrances and would have required the most building-up of any part of the bank, located as it was on the downhill side. On the other hand, given the size of the fort, a "seating" depth of about seven metres would not have been unreasonable, suggesting a capacity of one to two thousand.

One final piece of structural information can be gleaned. If Newstead's amphitheatre followed the normal pattern it probably had two opposed entrances on its long axis. The position of the southern entrance has been completely obliterated by the modern road embankment, but the expected north gateway is evidenced by a probable gap in the amphitheatre's bank.

Relatively few finds were made in the amphitheatre (less than 100 of all types) but what was recovered is worthy of note because it was so unlike the assemblages of the other excavation areas. The amphitheatre bank yielded an exceptionally low density of material. This included iron nails and hobnails and a very small quantity of animal bone. This scarcity of material was easily explained by the lack of opportunity for rubbish build up during the (short) period of construction. However the absence of rubbish accumulation in the arena was also marked. Only a very small number of abraded orange sherds were recovered (almost all came from context 3 of trench 1, and could conceivably have originated from one vessel). Ceramic finds, normally the most common at Newstead, were outnumbered by metal work. The most numerous were hobnails, but there were also nails, a belt fitting and (illegible) bronze coins. These were clearly mainly accidental losses rather than discarded material. It is not unreasonable to conclude that the area was deliberately kept clear of rubbish, in contrast to many of the complex's occupation areas.

Comparable Sites

The Roman world's largest amphitheatres were vast structures capable of holding in excess of 50 000 spectators with correspondingly complex provision for access. Newstead's amphitheatre was obviously nothing like this. Even Britain's largest amphitheatres, at major cities, were primitive, holding for the most part less than a fifth of the Colosseum's capacity. These still dwarfed the structure at Newstead (see figure 4), which is hardly surprising given Trimontium's relatively small population (at its height a garrison of no more than 1 500, a civilian population probably somewhat smaller). In terms of scale the two closest comparable civilian amphitheatres are those at Carmarthen civitas capital (south-west Wales) and the small town of Frilford (Oxfordshire). Aerial photography and. limited excavation at Frilford have revealed a masonry-reveted bank c. 10 m across, surrounding a circular arena c. 37 m in diameter (an area of 1075 m²). Carmarthen 's arena was smaller and elliptical, 25 m by 42 m (an area of 825 m²). Its bank, though not fully excavated, was perhaps rather more substantial.

Newstead, of course, was a military arena or ludus. A fairer comparison is therefore with other fort sites. Not surprisingly, the known legionary amphitheatres at Chester and Caerleon are larger and far more elaborate than Newstead's. A surviving earthwork outside the 1.34 ha auxiliary fort at Tomen-Y-Mur (N. Wales) however provides an example of an amphitheatre even smaller than Newstead's. Sub circular rather than elliptical, it measured 25 in by 20 m internally (an arena of c. 400 m²) and was surrounded by a 4 m wide earthen bank. Structures of this simplicity and limited scale are clearly likely to have been overlooked more often than not. The discovery of a new example at Newstead should therefore cause no real surprise. Recently a rather larger example has been discovered during rescue excavation at Catterick in North Yorkshire (Moloney 1996: 129-130), while another may be represented by cropmarks at Binchester Fort, Co. Durham (R.F.J. Jones).

The Vicus Excavation and Survey NT 569 346

Immediately to the north of Newstead fort is a 3.7 ha field, which slopes down steeply from the modern road to a scarp above the River Tweed. Under permanent pasture since the 1970s, the field has not yielded the sort of cropmark and fieldwalking discoveries which have been so numerous in other parts of the complex. Partly because of this, and partly because of the perceived improbability of settlement on such a steep slope, the area received little attention during the Newstead Research Project. By no means the only area of extramural settlement at Newstead which would benefit from additional work, the main field is nevertheless important as the last remaining potential area of open settlement within the complex. It is now certain that annexes enclosed the extramural settlement areas on every other side of the fort in both the first and second century occupations. The identification of occupation areas and defences north of the fort is therefore vital to the debate on the function and status of annexes.

Newstead's fort was one of the largest and longest lived in Scotland: the presence somewhere within the complex of a civilian settlement with self-governing vicus status is virtually assured. Annexes are usually portrayed as military compounds, but unless the north field provided evidence for open settlement in both the first and second centuries some at least of Newstead's annexes must have enclosed civilian settlement.

The objective of the 1996 field season was therefore two-fold:

1. A geo-survey of the entire area using magnetometer and resistivity meters, in an attempt to define any defences and occupation areas (see figure 5).
2. Limited excavation over potential features revealed by geophysics, in order to assess their character and date (see figure 6).

Geophysics identified three groups of defensive features. Firstly, as expected, magnetometer and to a lesser extent resistivity survey revealed the fort's outer defensive ditches. These were already known from Curle's excavations (Curle 1911: figure opposite page 30). However the survey did confirm Richmond's (1950: figure 1) conclusions about the dating of the ditches. The outer ditches probably dated to the second century, broken as they were by the road leaving the second century fort's north gate. More importantly two previously unknown defensive lines were clearly identified. In the extreme west of the survey area resistivity showed a single wide ditch ran from the corner of the fort's ditches to the field edge. This probably represented the northern boundary of the West Annexe. The second century north-south ditch, cut between the bath house and 'mansio' is also visible, meeting the other ditch at right angles. The other discovery was a wide north-south ditch running from just east of the second century fort's north gate to the scarp above the River Tweed. It appears to represent the western defences of a previously unknown North Annexe, bounded on the north and east by the natural scarp slope and to the south by the fort and West Annexe (see figure 4). The ditch is clearly visible as a highly magnetic anomaly as far as the fort's outer second century ditch. Its relationship with these ditches is uncertain from the geophysics evidence.

The final major element in the evidence provided by geophysics is for minor ditches and general occupation 'noise', strongly suggestive of domestic and / or industrial settlement. This was located mainly in a broad band either side of the projected line of the road leaving the fort's more easterly north gate. As this was dated to the second century it seems probable that the detected occupation was of a similar date. This could only be proved by excavations

The relationship of the annexe defences to the spread of occupation activity was obviously of central importance to the interpretation of the settlement north of the fort. Therefore one trench was cut across the hillside to create a flat building platform. The most southerly part of the platform was occupied by a shallow gully, 1 0 cm deep, 75 cm wide which probably acted as a drain and eves drip. The full extent of the platform was not exposed and relatively little can be stated with confidence about the building which occupied it, beyond the fact that some (though not all) of the post holes discovered in this area probably belonged to it. Judging by the level of debris which accumulated on the terrace, the building was abandoned before the next major structural events. These were the cutting of small north-south ditch and narrow steep sided slot, probably a post trench for either a wall or fence.

Trench 7 examined an area just inside the annexe defences. It was intended to section a strong linear feature, known from magnetometer and resistivity survey to run north-south for at least 20 m before swinging sharply to the west. It proved to have been a v-shaped ditch, 2 m wide and 1.1 m deep. It was clearly dated by its fill to the second century. Although some residual first century material was present it now seems likely that the whole of the area of magnetic 'noise' identified by geophysics both inside and outside the defences related to the second century.

The Character of the North Vicus in the First and Second Centuries

Some comment should be made about first century occupation, even though it is not directly apparent from modern excavation or geophysics. Excavation in 1996 within the defended area discovered no more than a few sherds of first century pottery to support the existence of settlement. Furthermore magnetic 'noise' comparable to that now attributed to the second century open settlement was not recorded outside the first century north gate of the fort. Nevertheless a significant first century occupation is indicated by a series of deep shafts, probably cut as wells, noted by Curle in 1908 (Curle 1911: 129-132). Failure of either geophysical technique to detect occupation in association with these features does not prove its absence. Rather it suggests that buildings were of wood, rather than stonefounded, and that domestic and industrial debris was not allowed to accumulate. This is in marked contrast with occupation in the fort itself and second century South Annexe. First century occupation in the South Annexe and second century occupation in the East Annexe, both of which seem to have been clean settlement environments, may provide close parallels.

More can be said about the second century occupation, which supplied the bulk of the finds collection and some structural evidence. Because of the small scale of excavation the assemblage is still relatively small and too much should not therefore be read into it. Nevertheless some general comments can be made. Firstly, finds were very plentiful and it must be inferred that this was a relatively squalid environment, in which debris including animal bone was not systematically removed. The relatively low proportion of the 613 sherds of pottery made up by samian (just 10.4 %) suggests a community of modest means, but in other respects there is good evidence for wealth. Glass, including fragments of window panes was present in significant quantities and iron work was plentiful (113 objects). This consisted mainly of nails, but also included personal items such as a buckle and tools: mason's chisel, and leather worker's awl. Fragments of bronze (7 pieces) were also fairly common given the size of the collection, while a single coin provides anecdotal evidence for trade. The overall impression is of a community similar to that in parts of the South Annexe recorded in 1989 and 1993: civilians heavily engaged in industrial activities and trade.

Conclusion

These discoveries at Newstead are useful additions to our understanding of one of Roman Scotland's most important sites. However they also have a wider significance. In proving that during at least part of its occupation all of Newstead's extramural settlements were defended, excavation in the north field contributes significantly to our understanding of annexes. If it is accepted that an important base like Newstead must have processed a community of camp followers somewhere, some of these annexes must now be regarded as having protected civilian settlements, probably with legally independent vicus status. Confirmation that Newstead possessed a small amphitheatre is another small step towards the realisation that forts will normally have sat within a whole landscape of related features. Although Newstead is an unusually large fort it was probably not that exceptional in having been provided with an amphitheatre. The present rarity of such features at auxiliary and vexillation forts probably reflects simply the difficulty of identifying very simple constructions, which survive as only minor earthworks or cropmarks.

Figure 1

Key to Figure 1
A - amphitheatre. B - bath house, M -„"mansio", P - possible parade ground.

Figure 2

Figure 3

Key to Figure 3 bs - brown soil, c - cobbles, df - dark soil, rich finds, m - modern, p - primary fill, sb - stony brown soil ss - sandy soil, sy - stony yellow soil

Figure 4

Figure 5

Figure 6

Bibliography

Curle, J. 1911 A Roman Frontier Post and its People: The Fort of Newstead, Glasgow University Press
Keppie, L. 1993 "Roman Britain in 1992: Sites Explored: 2 Scotland", Britannia 24: 277-284
Moloney, C. 1996, "Catterick Race Course", Current Archaeology 148: 128-130
Richmond, I.A. 1950 "Excavations at the Roman Fort of Newstead", P.S.A.S. 84: 1-38.

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