



## 9. Use of Space and Variability of Ground Plans: a study of legionary centurions' quarters.

*by Birgitta Hoffmann*

Modern houses display a wide range of arrangement of rooms, and a number of architects prosper by developing ever more ways to arrange a living room, a kitchen, a bathroom and varying numbers of bedrooms etc within four (or more) walls. In most cases, however, these arrangements boil down to a very few basic ideas about how a house should work.

In modern Britain, the dominant ground plan puts the living room at the front and the kitchen at the back, whilst bedrooms and bathrooms go upstairs. Many European countries have similar ideas, but there the living room tends to be at the back of the house, overlooking the garden and not at the front, where, the Germans, in particular, would expect the kitchen to be. These arrangements are almost part of our subconscious expectations of the world around us and so are rarely explicitly laid down. They are simply a sort of vague mental standard, referred too indirectly, so that people might think of houses as being 'proper' if they go along with such arrangements or 'strange' if they do not.

The existence of building traditions like these seems to date back to at least the Roman period, and probably much further. But, how does one detect such a tradition for a period in which there are very few expressed statements of what a house should look like, and these so few and far between that it is difficult to know whether the views expressed are personal or reflective of more widely held opinions?

Turning to the archaeological record may often be considered a more reliable method of studying buildings, but archaeology has had distinct weaknesses when it comes to establishing the use of particular rooms, for the evidence it uncovers is notorious for always being too fragmentary or too badly preserved to make a straight forward study possible. This was certainly a problem encountered by the writer during recent studies of legionary centurions' barracks and this paper is meant as a short introduction to the methodology eventually employed to get results from these structures.

### *Sampling*

Legionary centurions' quarters are one of the commonest building types found in legionary fortresses, but their very frequency has often led to a rather casual publication record, despite their perplexing variations in internal ground plan, especially when other 'more interesting' features such as the gates, baths, *principia* and *praetorium* could be elaborated on.

Excavation standards have ranged from cursory depictions of whole fortress ground plans, as at Lambaesis (Cagnat 1908), to very detailed feature descriptions as at Colchester (Crummy 1992) and Vindonissa (Tomasevic 1963). Moreover, building activity in certain fortresses could

span up to four centuries, leading to architectural ‘excesses’ like Carnuntum, where the fourth century ground plan all but obscures the original design, a situation made worse by the fact the buildings are often only partially excavated, so that even their original size has not been established (Nowotny 1914). It was fairly clear from the outset, however, that only two of the *c.* 100 buildings studied were exactly identical, and the aim of the study shifted from establishing the ‘exact’ building plan of a standardised structure to establishing a building tradition for what proved to be a much more heterogeneous group.

### *The checker board ground plan*

To prevent this study becoming bogged down with detailed variations in the internal partitioning of centurions’ quarters, a schematised ground plan (see Fig. 9.1) was developed

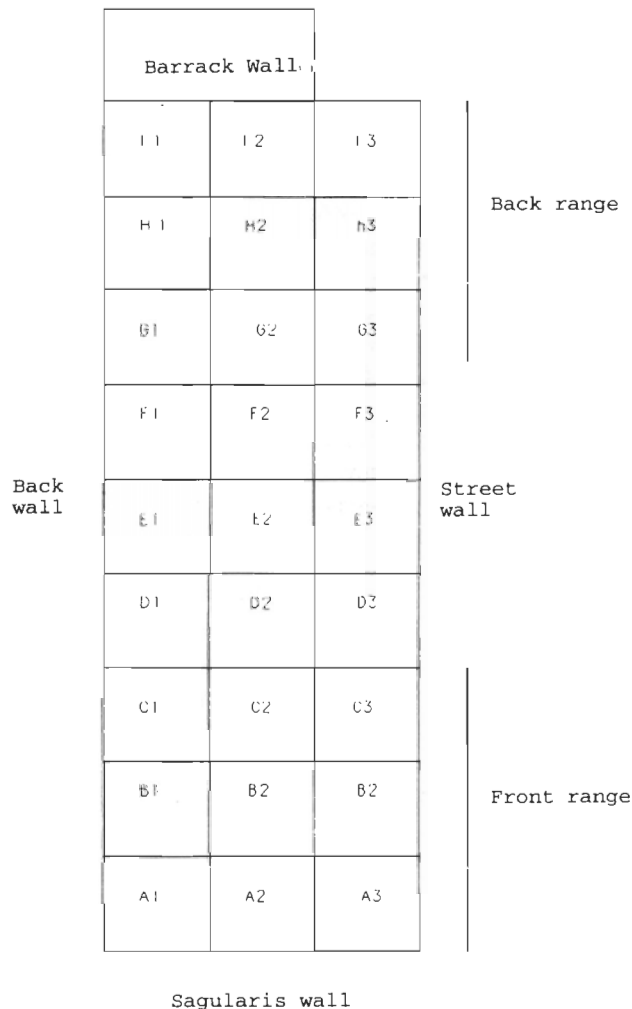


Fig. 9.1. Schematic plan of a centurions' quarters

that divided the buildings into different areas rather than individual rooms, based on an outline provided by the normal 3:1 ratio of the external walls. This outline was then subdivided into a grid of squares and, since many of the buildings studied produced a corridor running along their long axes — dividing the interior into three long segments — a grid of 27 (3 x 9) was chosen, to reflect the overall 3:1. As well as allowing greater clarity, this approach had the additional advantage of allowing evidence from incompletely excavated quarters to be included as long as the length and position of one of its short axis walls was known.

*Establishing the structural details*

Using this grid, the presence and position of particular features from a number of quarters could be mapped onto the same diagram allowing us to see whether they showed any consistent tendency to appear in specific areas of the buildings and/or in combination with (or to the exclusion of) others.

- Of particular interest were
- drains and water containers
  - various floor types
  - wall painting
  - hypocausts and hearths
  - courtyards and widened corridors.

Attempts were also made to study the ways in which centurions' quarters design may have changed over time (Fig. 9.2), a particularly necessary exercise since a lot of the primary results were distorted by the evidence from Carnuntum, where the structural evidence had survived particularly well, but where the excavation techniques used around the beginning of the century were not always able to distinguish between different phases of activity.

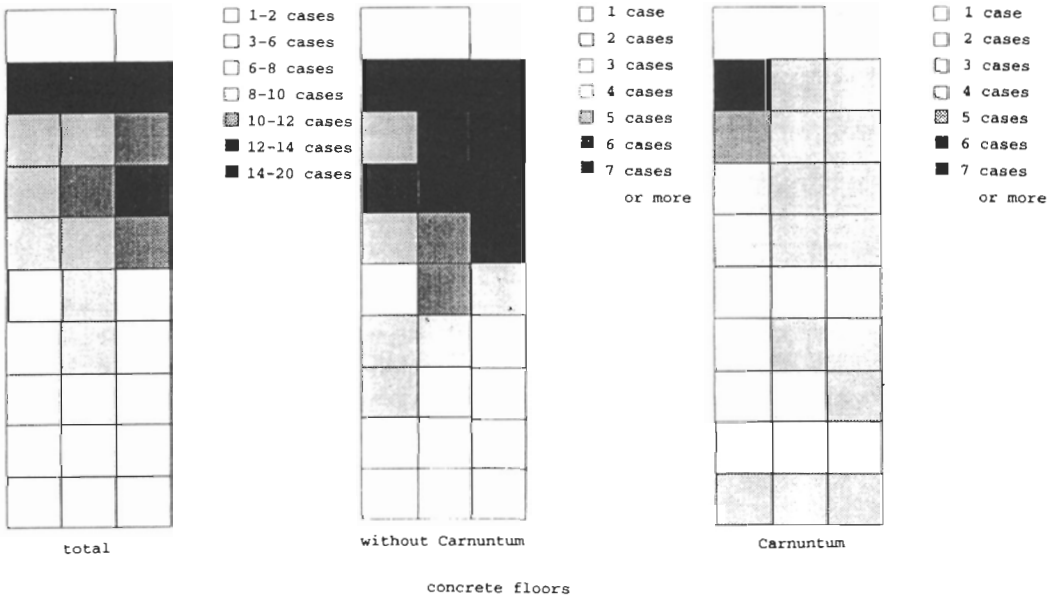


Fig. 9.2. *Chronological changes in centurions' quarters*

### *Access and lighting*

Doors and especially windows have frequently not survived in the archaeological record, but a number of hints can be used to infer their position, for example the presence of moulded plaster, stone blocking, door sills, and corridors that end against walls. In many cases, however, it was necessary to rely on general physical limitations to form hypotheses of what such buildings would have required. For example, it has to be assumed that a building of *c.* 10 m in depth would need to be lit from both sides in order to provide enough light to work in. This was frequently impossible in centurions' quarters, however, as Roman barrack blocks were often built back to back. In these cases the only ways of lighting the back range of rooms would have been clerestories, a solution for which there is very little evidence in writings on residential buildings elsewhere in the Roman world, or light wells, which are known in a number of parts of the empire.

### *Applying Standards*

In order to reach conclusions as to the likely uses of the rooms themselves the data for the various features of the buildings had to be collated according to a meaningful scale of their likely standing in the eyes of the inhabitants. For in most societies certain things are associated with certain attitudes so that, for example, whilst interiors decorated with wall paintings would probably have been seen as luxuries which raised the standard of life, close proximity to open sewers would rarely have had such a connotation.

A survey of the writings of Roman equestrian and senatorial writers, a class to which many legionary centurions would either have belonged or aspired, shows that they looked to their houses for light, warmth (though not heat), quiet and clean air, and that they sought to surround themselves with wall paintings, hypocausts and mosaics and whilst trying hard to avoid the damp, darkness, smells and noise, that Seneca, Martial and Juvenal complain of. If we apply this to centurions' quarters, we might make the following distinctions between the features a Roman would have thought highly of and those that, although sometimes essential, he might have looked down upon.

<b>Positive</b>	Windows, courtyards, basins of fresh water, heating, hypocaust, concrete floors, mosaics, wall paintings.
<b>Negative</b>	open drains, open sewers, latrines, unlit rooms, doors (cold and noisy).

If we also take into account the fact that most centurions' quarters were aligned along a main sewer and one of the principle roads of the fortress, so that the roadside was probably noisy and smelly, this all goes to suggest that the areas with the highest living standards were at the back of the buildings whilst the front was more suited to utilitarian functions (Fig. 9.3).

### *Identifying Usage*

Returning from here to the actual ground plans shows that the largest room of the house can usually be found at the back and that its furnishings usually equip it as a living room or a room for modest reception purposes, in other words as a room to which one could happily invite friends. It was rarely, however, bigger than the average modern living room and so would

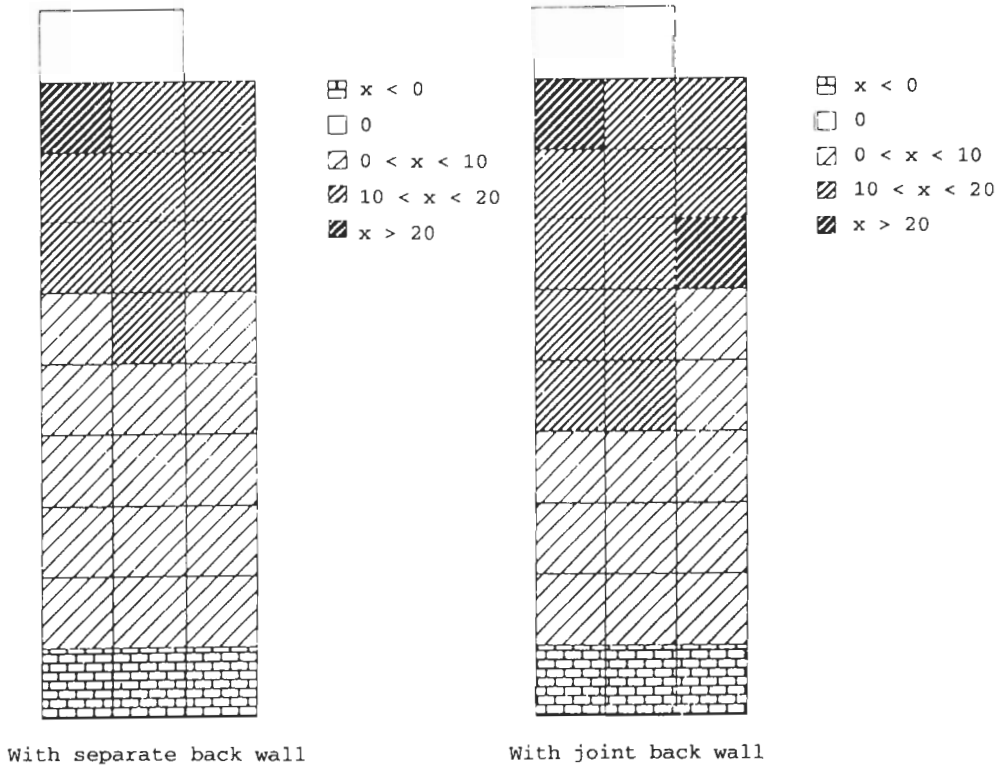


Fig. 9.3. Living standards in different areas of centurion's quarters

probably not have been of much use as a room for briefings or other military business or as a room in which meetings of large bodies of people could be held. The only room that could be described as a bathroom, on the other hand, is in the likeliest place for a compromise between not having one at all and having to live with the smells all day — at the opposite end of the building.

A number of other rooms do not usually display any distinguishing features and it is therefore impossible to confidently identify any bedrooms or storerooms and the office which has often been assumed for these buildings has also eluded identification.

### *The Finds*

It has become something of an adage over the last few years that high status areas are usually notable for their absence of small finds. It is, thus, hardly surprising that very little material has been found in the occupation layers of centurions' quarters, although they abound in destruction deposits (e.g. Dangstetten [Fingerlin 1986], Chester [Droop & Nowstead 1931]).

The only material that could possibly be linked to the a room's principle occupation would be finds trodden into clay surfaces, or which had slipped between the planks of timber floors, both of which, especially in the later periods, would have been restricted to lower status areas

thanks to the growing use of higher quality floor types elsewhere and, even taking these cautions in mind, any research has to be extremely limited since, in the past, most site reports have failed to link finds to any particular room, let alone level. In fact, only two excavations have provided enough properly documented finds from occupation layers to be of much value: Nash-Williams' excavation at Caerleon (Nash-Williams 1932) and Newstead's in Chester (Droop & Newstead 1931). But, although their results must be treated with extreme caution, given the tiny sample, they do show concentrations of containers and kitchen wares along the back walls of the buildings, and further research may well confirm the presence of storage facilities in this area.

### *Linking to the civilian world*

The Roman empire did not detach the military completely from other areas of administration, and, certainly, its senatorial and equestrian office-holders found themselves drifting constantly in and out of military offices. In fact, centurions were probably the highest ranking officer with a life-long military career. Even they often came from equestrian families, however, indeed several cases are known where one brother had an equestrian career whilst another became a centurion, and there is evidence that centurions often displayed very much the same 'upper class attitudes' as the higher ranking officers and tended to side with them, rather than the men, in mutinies. The likeliest places to find parallels for the structural traditions displayed in centurions' quarters is, thus, urban Italy in an 'upper class' context and such parallels can be identified in the sort of apartments often occupied by the sons of senatorial families in the city of Rome; such as those described by Cicero and actually lived in by Seneca. Where luxurious apartment blocks like these have been excavated — as in Ostia — the individual units have often proved remarkably similar to centurions' blocks (Meiggs 1960; Packer 1971).

Vitruvius elaborates on this type of living, and states that such flats were the appropriate housing of people without the sort of social and political obligations that had to be fulfilled at home. Reapplying this to centurions' quarters might hint that the buildings were exclusively for private use and thus that the actual administration of the *centuriae* took place elsewhere in the fortress. Interestingly, provincial urban housing (and especially strip buildings) have been shown by a preliminary survey of urban sites in Southern Germany, to show similar structural traditions in operations, a parallel which would appear to become closer with the increased use of stone structures. Should further study verify these results, this could have interesting ramifications. Traditions as to how to arrange a house seem to become very deeply entrenched into people's minds so that British houses occupied by Germans will often be modified to have the living room at the back of the ground floor whilst Turkish workers in Germany, often try to preserve the idea of different areas for men and women despite the considerable restrictions imposed by German architecture. If we, therefore, detect Italian structural traditions in provincial towns, this might set us thinking about the motives and origins of the owners. Were they 'settlers'; new to the country? Were they following a new status fashion, or were they perhaps provincials that had become so inwardly Romanized as to abandon their original native ideas on the usage of houses?

### *Bibliography*

- Cagnat M.R. 1908. *Les deux camps de la legion IIIe Auguste a Lambese d'apres les fouilles recentes*. Paris: imprimerie Nationale.
- Crummy, P. 1992. *Excavations at Culver Street, the Gilberd School and other sites in Colchester 1971-1985*. Colchester Archaeological Report 6. Colchester: The Colchester Archaeological Trust and English Heritage.
- Droop J.P. & Newstead, R. 1931. Excavations at the Deanery Field, Chester. Part 1: The Excavation. *Annales of the Archaeological and Anthropological Society of the University of Liverpool* 18: 6-18.
- Fingerlin, G. 1986. *Dangstetten I. Katalog der Funde*. Forschungen und Berichte zur Vor- und Frühgeschichte in Baden-Wurtemberg. 22. Stuttgart.
- Hoffmann, B. forthcoming. Legionary centurion's quarters of the Principate. *Britannia*.
- Meiggs, R. 1960. *Roman Ostia*. Oxford.
- Nash-Williams, V.E. 1932. The Roman Legionary Fortress at Caerleon In Monmouthshire. Report on the Excavations carried out in the Prysg Field. Part II and III. *Archaeologia Cambrensis* 87: 48-104 and 265-349.
- Nowotny, E. 1914. Ausgrabungen im Lager Carnuntum. in: Kaiserliche Akademie der Wissenschaften (ed.) *Der römische Limes in Österreich*. Heft 12. Wien, 1-222.
- Packer, J.E. 1971. *The Insulae of Imperial Ostia*. American Academy in Rome Memoirs 31. Rome