

LOCATIONAL MODELS AND THE STUDY OF ROMANO-BRITISH SMALL TOWNS

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URBAN HIERARCHIES IN ROMAN BRITAIN —————

When we attempt to consider the role played by urban settlements in Roman Britain we usually work on the assumption that larger settlements occupied a more senior position within the central place hierarchy. Hence a large city like Corinium is usually seen as having served as a major economic as well as administrative and political central place. Small towns like Worcester, which were clearly major centres for industry are often assumed to have performed administrative duties, as capitals of tribal septs or in some cases to have achieved *civitas* capital status. However it is clearly dangerous to assume that central place functions existed just because a large population is present. Clearly all men are not equal in the Roman world, in political terms for example one noble man is more significant than any number of landless farmers. When we consider the role that a settlement played we must remember that size is not important, it's what you do with it that counts. This paper will reconsider the nature of the central place hierarchies in Roman Britain placing much more emphasis on the settlement's character rather than simply its size.

CHRISTALLER'S CENTRAL PLACE THEORY —————

Central place analysis in archaeology has borrowed heavily from the New Geography of the 1960s. The most influential theory to be pressed into

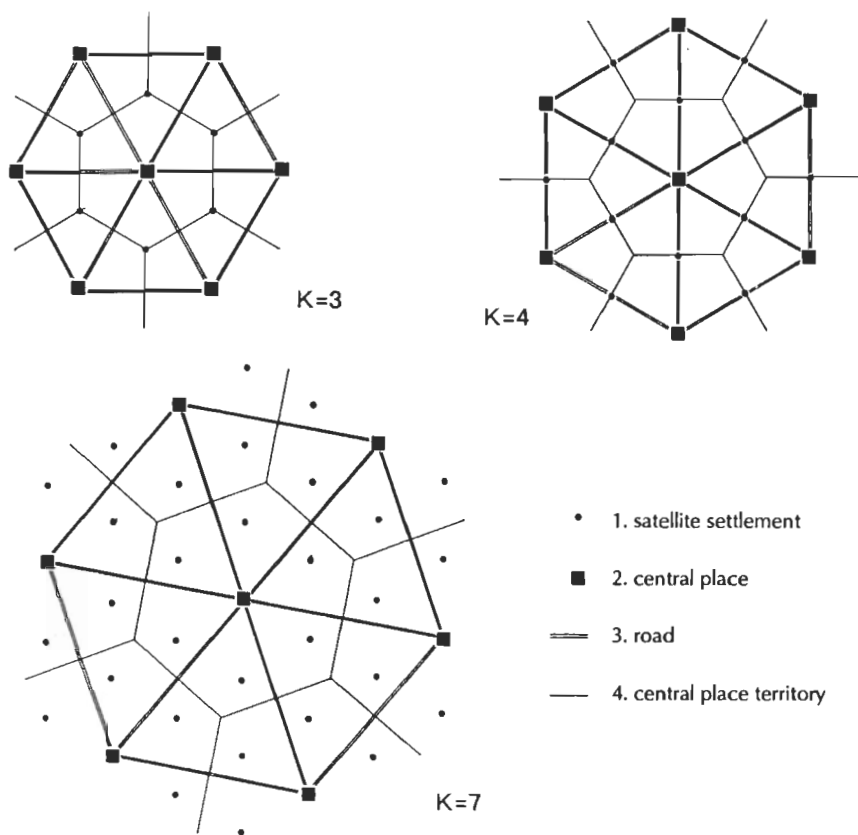


Figure 6.1. Christaller's central place theory.

service in the prehistoric and early historic periods is without doubt Christaller's model which attempts to define an optimal, least cost organisational structure within a network of related sites (Fig. 6.1). This was first outlined in the 1930s (Christaller 1935), but did not become widely known until it was brought to the attention of the English speaking world by Baskin in the mid 1960s (Baskin 1966). The theory is summarised by the following five points:

i. Specialisation. Even in simple agrarian societies, certain sections of the population demand products or services that they cannot provide for themselves. Service centres are necessary for the circulation and exchange of these services or products.

ii. Minimisation. To reduce the effort of obtaining services to a minimum

they are agglomerated within a single centre, which is located centrally within a roughly circular territory. This also has the effect of maximising the trade opportunities for those offering the services.

iii. Lattice packing theory. Assuming a featureless plain with even population density a triangular arrangement of centres each surrounded by an hexagonal tributary area, has the most efficient geometric characteristics (Haggett 1965: 49).

iv. Tiered hierarchy. The settlement hierarchy would be made up of distinct levels.

v. Variations of the pattern. Within the above frame work a number of different patterns are possible. The three simplest hierarchies are as follows.

K=3, Market maximising hierarchy, secondary settlements lie at the boundary between three central places, to maximise choice of market. A settlement system based on this pattern is part of a highly commercialised society.

K=4, Transport maximising hierarchy, secondary settlements lie on roads between the central places. This too is a highly commercialised system.

K=7, Administrative hierarchy, secondary settlement lie entirely within the territory of the central place so that there is no scope for competitive marketing.

(Note that K refers to the number of settlements that lie within a central place field. Where a settlement lies on a boundary between central places it counts only as a fraction.)

APPLICATION OF THE CENTRAL PLACE MODEL TO ROMAN BRITAIN —

Surprisingly little work has been directed towards locational models in the study of Romano British settlement since Ian Hodder's study of larger walled small towns (Hodder 1972) (Figs 6.2 and 6.3). Hodder saw urban location as conforming closely to Christaller's K=4 model. The model had much to commend it. That the large public towns were central places for the wider tribal area cannot be disputed. The choice of small towns plotted as the next layer in the hierarchy also appears logical as they do represent the largest walled areas. However there is no clear division in size or characteristics between second and third tiers of settlements as suggested

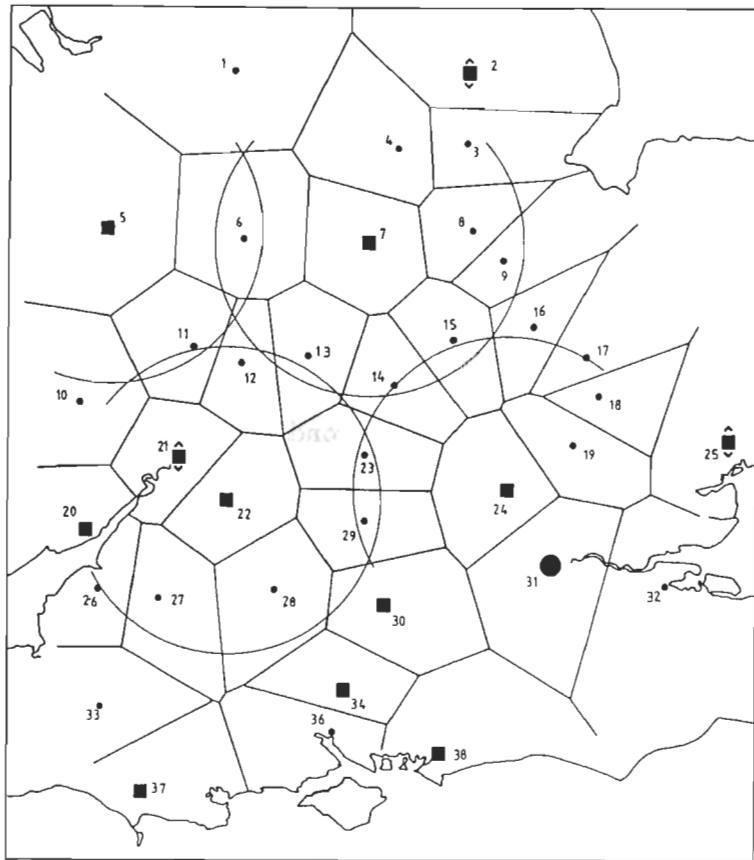


Figure 6.2. Small towns (after Hodder).

by Hodder. A number of walled small towns only slightly smaller than those towns plotted by Hodder might reasonably be added to the map, seriously disrupting his neat pattern of central places surrounded by six satellites.

GENERAL OBJECTIONS TO CHRISTALLER'S CENTRAL PLACE THEORY —

One of the strongest objections to this use of central place theory is that there is a tendency to assume that lower order settlements develop chronologically after and at the dictate of the larger settlements. For instance Got-

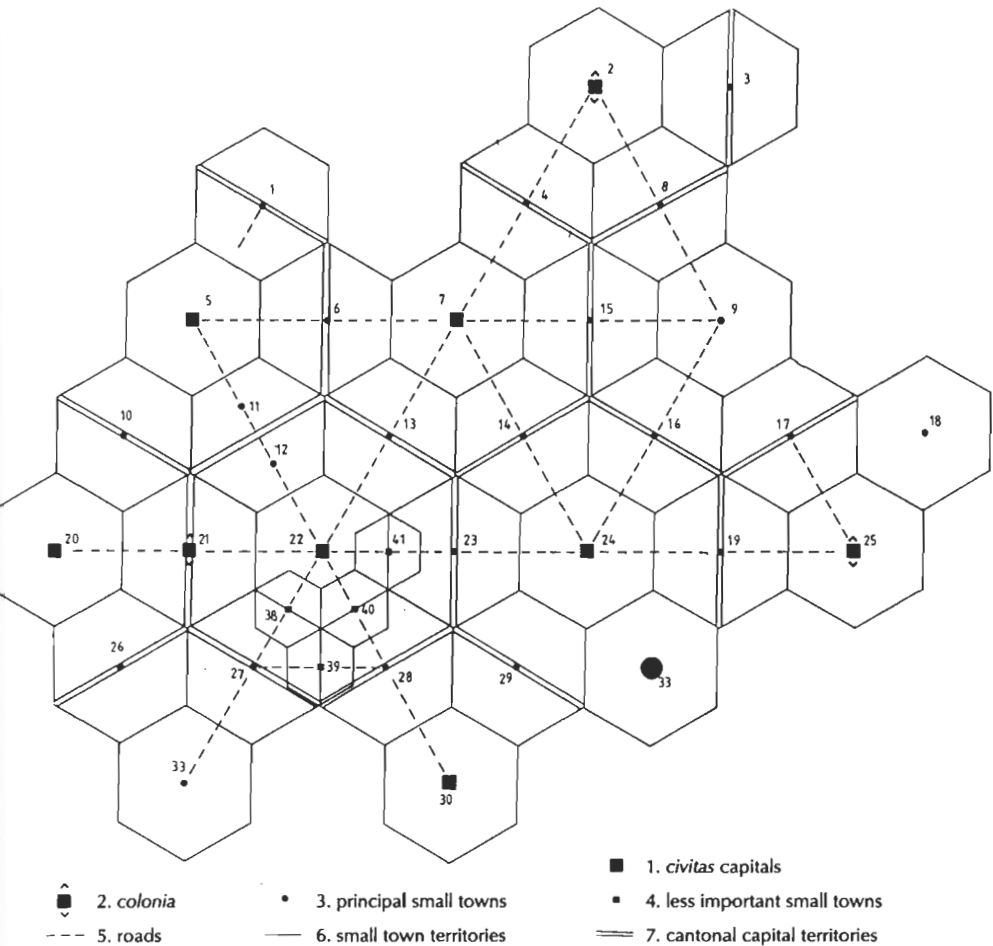
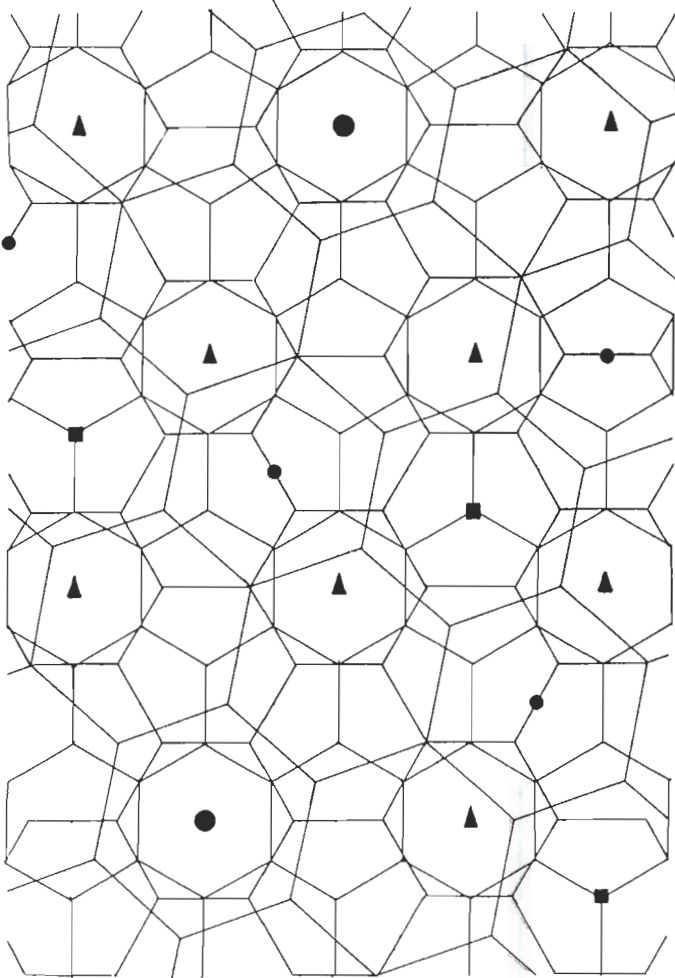


Figure 6.3. Schematic model of small town distribution in Roman Britain (after Hodder).

lund's model (Gotlund 1956), as utilised by Hodder, which suggested that secondary centres had developed at the intersection of two central place territories, where commercial competition was weakest. However Marshall argued that normally lower tiers of settlement hierarchy should come into existence before central places. Higher order settlements should develop as a result of stimulation from the preceding tier, not vica versa (Marshall 1964). In studies of Roman Britain this tendency has been encouraged by the obvious desire to work from known to unknown; from the better

understood *civitas* capitals, to smaller urban sites, not all of which have been identified and which are generally much less extensively excavated.

A second and more fundamental objection to the application of Christaller's model to Roman Britain was its assumption that all central place functions were concentrated in a single location. The principle of minimisation of effort by agglomeration of functions at a single site cannot be taken for granted. The large numbers of major religious central places (for example Chedworth and Lydney Park) and production centres (for example the highly dispersed Oxfordshire pottery industry) located within the country side strongly suggest that centrifugal as well as centripetal forces were in existence. Furthermore there is a growing realisation that urban settlements did not take administrative responsibility proportional to their importance as commercial centres. Conversely industry did not necessarily take off at the important administrative and cultural centres. Corinium though a *civitas* and possibly later a provincial capital has so far produced very little evidence for industrial production. Sjoberg has noted that societies' administrative elite and merchant and artisan classes were drawn to the same locations by their mutual interdependence. Merchants and artisans needed a market for their goods while the aristocracy needed the material symbols of power and to keep a tight grip on what was an alternative power base, which might have become a threat to their traditional position (Sjoberg 1960). However there is some reason to believe that these elements in society repelled as well as attracted each other. Although this is a factor which has frequently been overlooked it should come as no shock to the student of urbanism. It has long been noted that towns, while acting as centres dedicated to the perpetuation of the ruling class and their value system (Sjoberg 1960) on one hand, also acted as a source of innovation, social change and modernity on the other. Of course what one element of society saw as progress could be seen by another as social pathology, moral disorder and destruction of the community (Holton 1986: 1). Although the landed elite needed the services of merchants and artisans they might have wanted to limit their contact with such a polluting influence. Artisans and merchants might similarly have withdrawn from those elements of society which sought to depreciate manual and commercial activity as degrading. In short the models proposed by Christaller and used by Hodder were too simplistic. The relationship between settlements cannot be treated as a single dominant force. It must be broken down into its constituent parts: political, military, ideological and economic.



- Acts as a central place in the K=3, 4 and 7 systems
 - Acts as a central place in the K=3 and 7 systems
 - Acts as a central place in the K=4 and 7 systems
 - ▲ Acts as a central place in the K=3 and 4 systems
- note that only sites that act as central places to more than one system have been plotted

Figure 6.4. Losch's modification to central place theory.

LOSCH'S MODIFICATION _____

Christaller's model assumed fixed-K hierarchies in which the relationship between settlements at one level could also be applied to higher levels. Christaller himself noted that under ideal conditions administrative, trans-

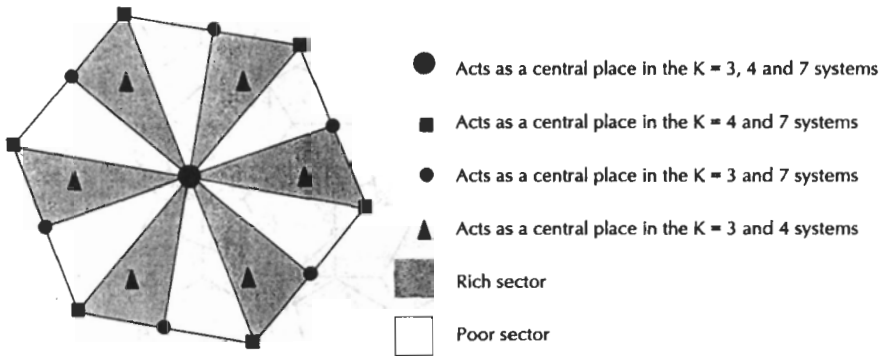


Figure 6.5. Rich and poor sectors in the Loschian landscape.

port and market central place systems had different requirements. A modification to the model was proposed by Losch in which the requirement that central place functions be concentrated in a single location was removed allowing the $K=3, 4, 7$ and higher order systems to diverge in their selection of central place locations (Losch 1954) (Fig. 6.4).

If the different order hierarchies are rotated about a common hub until the maximum number of central places overlie each other a predictable pattern emerges. Figure 4 demonstrates the principle with just $K=3, 4$ and 7 . The Loschian landscape created by the overlaying of many hierarchies (the nine simplest K systems) with a city centre at the hub, was one of twelve alternating rich and poor sectors (Haggett 1965: 122, 124, figure 5.9) in other words, sectors which contained many central places and those with relatively few (see Figure 6.5).

The theory has been used to explain rich and poor city sectors in modern cities, including Chicago (Haggett 1983: 391), but its relevance here is in explaining the distribution of minor urban sites around the *colonia* and *civitas* capitals of Roman Britain. For the sake of simplicity the landscape has not been built up past the $K=7$ hierarchy. As a result a pattern of contiguous hexagons has been created. This consists of a single settlement which operated as a central place to all three hierarchy systems and eighteen settlements which possessed various combinations of two central place functions (see Figure 6.6).

VARIATIONS IN THE SMALL TOWNS —————

In the Roman period these 'two function' central places might have been represented by the so called small towns. This settlement class was perhaps

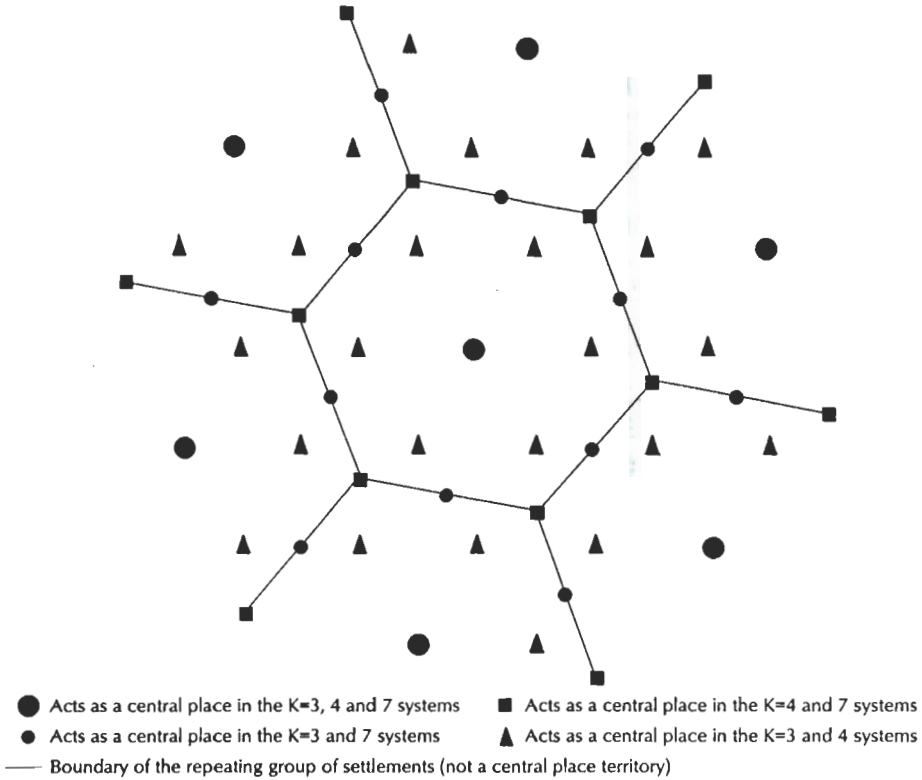


Figure 6.6. Repeating pattern of multiple function central places.

the most heterogeneous that has been applied to Roman Britain. Some possessed populations that were as large as those in the smaller *colonia* and *civitas* capitals, defensive circuits and large scale industry. The prime example of such a site was Water Newton. Others were without defences and would be better thought of as villages or 'local centres' as Hingley (1989) has described them. The Losch modification to Christaller's central place model may therefore be useful, not in its predicative ability, which Hodder thought so helpful (Hodder 1972: 887), but in helping to explain the variety of forms which urbanism could take.

THE EMERGENCE OF CIVITAS CAPITALS —————

It is important to stress that the settlement which is central to the hexagon in figure 6.6 is not a higher order central place serving the surrounding

settlements. However it is unique amongst the settlements of its hexagon in bringing all the central place functions together to one location. With this advantage that site might be the obvious choice as central place should a higher tier develop in the settlement hierarchy. This might explain why some Iron Age central places develop into urban centres in the Roman period, while others do not. In the Dobunni region there are at least four sites which have some claim to be oppida, but only one of these, Bagendon seems to have become fully urban, being succeeded by Cirencester a short distance away. The other sites were not wholly abandoned as central places however. Minchinhampton oppidum was succeeded by the major villa at nearby Woodchester (Clarke 1982), while another oppidum, Grim's Ditch became the location of a group of major villas. Such sites are frequently overlooked as central places even though Woodchester in particular is built on a scale similar to that of the largest public buildings. Villas of this order were certainly the homes of important 'central people' and as such occupy positions at the centre of extensive patronage systems. Similarly the large hillfort or oppidum at Salmonsbury (Bourton-on-the-Water) took on some but not all major central place roles in the Roman period. It became a communications node and important commercial centre, but failed to develop an important cultural or administrative role, although it may have been the site of a mansio.

CONCLUSION —————

In conclusion it can be said that a *civitas* region closely resembled a network of central places on the model of Losch rather than Christaller. The city represented the hub of the system, upon which all central place fields, from the highest to the lowest order focused. This created a fully urban site with a large non-agricultural population, planned form, defences and legal autonomy. The settlements of the *civitas* hinterland however presented a contrasting picture. Central place fields were out of phase due to the variations in their sizes. A number of central place functions could gather together in a single location by chance, but never with the frequency that they did at the systems hub, the *civitas* capital. This led to the creation of a range of rural and only semi-urban centres, some of which are commonly called small towns. Losch's work has often been overlooked as too complex a model to transfer from the uniform plain to the highly variable landscape of the real world. However I am not suggesting that his model can explain the distribution of central places so much as their character. *Civitas* capitals

were all pretty much of a much, their form easily described. Characterising small towns has proved much more difficult, requiring almost as many categories as known examples. I believe Losch's model helps us to understand this diversity and explains why there can never be a satisfactory definition for the minimum requirements of an urban site.

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