

SOCIAL RANKING AND SPATIAL STRUCTURE: EXAMPLES FROM INDIA

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Introduction

In his seminal article on spatial archaeology, Clarke (1977) observed that, while environmental, distance and technological considerations were the chief influences on regional settlement patterns, cultural forces were also dominant in determining intrasite spatial structure. Since his death, innumerable studies of the former have appeared while the latter has suffered from comparative neglect. Could this be due to our difficulties in dealing with the cultural values of past societies?

Difficulties certainly surface in the analysis of social divisions, themselves important determinants of spatial structure. Consider the following statement by Cowgill (1984, 165) on Teotihuacan:

It is somewhat surprising that regions near the centre of the city do not show higher proportions of regular Thin Orange [a well-made imported ware, considered an indication of high status]. Teotihuacan does not show a simple gradient from high social status in the centre to lowest status on the outskirts, and there is evidence for marked differences in status between nearby residences. Nevertheless there is a tendency for the proportion of residences judged to have been of high status to be higher in neighbourhoods nearer the centre of the city and lower towards the edges.

Such a statement exemplifies the popularity of reducing social divisions and their associated spatial manifestations to a single variable -- essentially wealth, here represented by house size and richness of artefact content. This appears to echo modern values whose hold is so great that even when the evidence contradicts them -- as in the case of Teotihuacan -- solace is found in the "tendency" of past patterns to at least partially conform to our expectations, and the information content of unexpected discrepancies is overlooked.

This emphasis on a single scale of measurement, mirrored in settlement pattern studies by the dominance given to distance factors, is perhaps the main stumbling block to our utilisation of the rich information content of intrasite spatial patterns. While the reflection of alternative means of status evaluation in spatial structure has at times been pointed out (Raper 1977), the alternatives were themselves based on single variables, and were chronologically distinct. What this paper aims to show, by using the testimony of both classical Indian texts and of contemporary ethnographic observation, is not only

that several competing sets of values, each influencing social ranking, can be present in any society, but that their influence will be primarily reflected in the spatial order of settlements. This does not mean that multiple criteria of status evaluation must always exist, but even in those examples where the dominance of a single criterion can be demonstrated, we may see the operation of several factors, as discussed below.

Intrasite settlement patterns in India: the classical paradigm

Although Indian literature abounds in instructions to town builders, most of the discussion of architectural treatises centred on the role of cosmic symbolism in the layout of settlements. While the ideas of Wheatley (1971), based mostly on the work of Dutt (1925), certainly merit discussion, lack of space prevents their consideration here. We must instead concentrate on the presence of alternative systems of ranking members of a society, as reflected in the settlement layouts advocated by the texts.

The importance of the architectural treatises is underscored by the fact that most ancient texts in fact clearly advocate the use of a single criterion -- purity -- for ranking society, and favour town plans consisting of concentric rings, each inhabited by a single class whose degree of purity is directly reflected in its distance from the centre. Hence the Puranas -- traditional histories -- assign the central ring to Brahmins and subsequent rings to Ksatriyas, Vaisyas, and Sudras, while untouchables do not even find a place within the settlement's perimeter. However, such a pattern materialised only in a few temple-cities of Tamil Nadu, such as Srirangam, even though it most faithfully parallels the strict division of society into four orders (varnas) based on degrees of purity, which all the legal texts insist upon. It must be remembered in this context that, since ancient literature was composed almost exclusively by Brahmins, it is natural to find a stress on the supremacy of religious values, which would support the privileged position claimed by members of this class. It is equally predictable that, given the weak political position of Brahmins, their exhortations would only be partially heeded.

By contrast, the attitude of the architectural treatises or Silasastras (Acharya 1946) closely reflects the prevalent form of social ranking. While the Puranas were written to perpetuate sacred knowledge which was always a prerogative of Brahmins, architectural treatises were addressed to rulers, and thus had to accept political realities. These included the economic dependence of priests on the wielders of political power, which was as great as the latter's need for religious sanction of their position. As a consequence, while purity remained the basic criterion for dividing society, the role of power had to be at least tacitly acknowledged. For example, members of the Ksatriya varna were ranked above agricultural and artisan castes in spite of such polluting practices as drinking and meat-eating. Likewise the rulers' role in maintaining society was placed on an equal footing with the ideological leadership of the priestly class. (Dumont 1980 contains the best discussion of the caste system)

Such competing standards are best brought out through a study of idealised town-plans. In them the supremacy of religious values is acknowledged through the assignment of the central space to a religious structure, such as a temple. Political power, however is accommodated in two ways. To begin with, Ksatriyas and royal functionaries are given room on the same ring as Brahmins (nearest the centre), and the rest of the castes and varnas are all mixed up on the outer rings. Secondly, while the temple is at the physical centre of the settlement, the rings containing the various orders are orientated with reference to the royal palace, usually situated just to the west or northwest. With a subtlety characteristic of the classical religious sources, the latter fact is nowhere explicitly acknowledged, but simply becomes evident as soon as the plans drawn up on the basis of the texts are examined carefully (see Figure 1 for an example). On the whole we can see both the retention of the aim of ranking society on an absolute scale (as evidenced by the strict spatial segregation of social orders), and the complexity generated by the admission of alternative criteria of ranking, which is so evident in the idealised town plans and so glaringly absent in other texts. With these brief remarks we must now turn to an analysis of contemporary settlement patterns, where the classical ideals were put into practice, and where much finer details are available.

Intrasite settlement patterns in India: the present situation

A multitude of studies have appeared on Indian villages, some commissioned by the Censuses, others carried out by anthropologists in search of the day-to-day realities of the caste system. While descriptions thus exist in abundance (Mayer 1966, Mathur 1964, Majumdar 1958, Beteille 1971, Gough 1971, Sivertsen 1963) little serious analysis has been performed on settlement patterns. Some of the factors influencing general patterns -- such as historical background, topography, soil fertility and water supply -- have been studied (Ahmed 1952, Gough 1971, for example), but the spatial distribution of castes has not been seriously examined, besides noting a general tendency for castes to inhabit discrete areas.

While no reliable data exist for the distribution of population according to caste in cities, the village plans resulting from these census and ethnographic reports provide a wealth of information regarding the complex intrasite settlement patterns generated by the simultaneous presence of several criteria of social status. As the social system operated at both village and city levels and as the idealised plans of the ancient texts themselves were meant for both types of settlements, we may expect to find our hypotheses drawn on the basis of village plans to be confirmed in cities.

We may begin by noting broad regularities, found all over the subcontinent, among which the tendency of castes to reside in separate quarters is the most immediately visible. It is the degree of regional variation, however, which is most informative for a demonstration of the potential of intrasite spatial studies, since it directly reflects variation in the relative strength of the various factors influencing

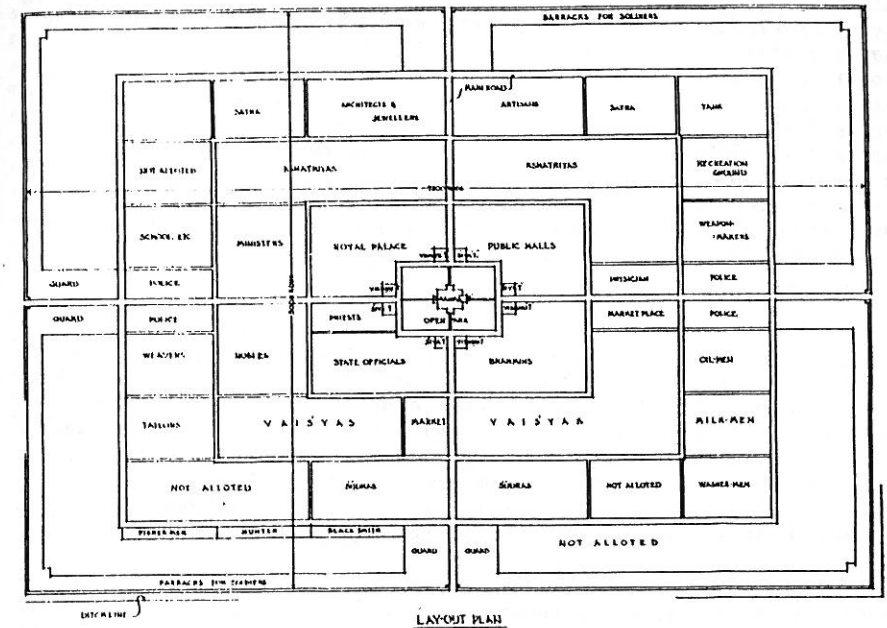


Figure 1: Idealised plan of the fortified city of Rajadhaniya. After Acharya 1934.

the ranking of social groups. Therefore, discussion of universal features will be limited. One such fact has been the separation of untouchables from the residential quarters of caste Hindus. This can even take the extreme form of confining untouchables to their own villages, as in the South and in the Ganges Valley. On the negative side the absence of any attempt at correlating social ranking with physical distance may be noted; high castes often live in proximity to the lowest, which often serve them, and settlements are rarely oriented physically around any particular point of reference. The only exceptions to this occur when a spot of particular sanctity is included within the confines of a settlement, in which case those of higher castes may be located nearer to it. Even here this factor must coincide with the general acceptance of religious values as the decisive factors in ordering society. One example is a village studied by Beteille (1971), which was located on the bank of the sacred river Kavery; as bathing in certain rivers enhances one's spiritual merit, it is not surprising that Brahmins resided nearest the river, other caste Hindus at greater distance and untouchables farthest away. This was made possible also by the general dominance of the Brahmins in the village, and consequent acceptance of their value system, which revolves around the concept of purity.

One final important generalisation that can be advanced is that exclusivity in residence is more characteristic of castes at the extremes of the ritual hierarchy than of those nearer the middle. As social ranking is clearer at the extremes, owing to the dominance of a single criterion of social standing (purity) such a pattern may be expected. As important as the segregation of the highest and lowest castes from the rest is the segregation of castes within the same level. Such a fact, on the one hand, is the result of competition between low castes for recognition among the higher castes -- usually manifested by severe rules of commensality and the adoption of customs of the higher castes, and, on the other hand, it enables and even encourages the dispersal of the lower castes. In any case, we may already note strong parallels even on a general level between social ranking and residential patterns.

It is by examining regional variation, however, that the full rich variety of forces represented in spatial arrangements may be found. They will now be discussed before an assessment of their relevance to archaeological research can be made. We may begin by looking at villages with clear residential segregation, which suggest the unproblematic nature of social ranking in these areas, due to the dominance of a single factor. Examples come from Tanjore District in South India (Beteille 1971, Gough 1971, Sivertsen 1963), and from Lucknow District in Uttar Pradesh (Majumdar 1958).

In both these areas, we find a dominant caste, defined by Srinivas (1966) as numerically and economically strong, which is also high on the ritual scale of purity. In Tanjore, an area left untouched by Muslim conquerors, it was the practice of pious kings to grant land revenue to Brahmins in recognition of their spiritual merit. Either revenue from an existing village was assigned to Brahmins settling there, or a new Brahmin settlement was founded, complete with tenant farmers, artisans, service castes and labourers (See Gough (1971) for the best description of this process). As a result many villages, including those studied, had a sizeable Brahmin population, in our examples up to 25% to 30%, owning even today c. 60% of the land. By contrast, most non-Brahmins are tenant farmers and most untouchables are day-labourers and village servants. Although recent changes in law have led to Brahmins losing their dominance, the patterns of settlement and interaction change more slowly, and the village still reflects its traditional social basis (see below). A similar situation exists in Lucknow District, but here the dominant caste is Thakur, traditionally of the Ksatriya (martial) varna. Its origins of ownership also extend back to Mediaeval times, probably owing to grants of land from the Muslim rulers. Such grants were the reward for military services, as one would not expect Muslims to so benefit the priests of a heretical religion. Even today, after the introduction of land ceilings, Thakurs, comprising c. 22% of the population of the surveyed village (Majumdar 1958) own over 40% of the land.

Such domination by a high caste (leading in Beteille's words to the isometry of caste, class and power) seems to have the following effects. Most importantly, the dominant caste will maintain its

position by stressing the traditional method of ranking society through the medium of ritual purity, which in this case coincides with the alternative criteria of wealth and numerical strength, but will be stressed over the others owing to the relative ease of ensuring acceptance. They will impose severe limits on interaction: intercaste marriages are forbidden, as is for all intents and purposes commensality; apart from an annual festival in honour of the village deity, even the ritual ceremonies will be performed apart from the other groups living in the village. The high caste will have its separate temples, festivals and cremation grounds. In dealings with untouchables, even physical distance may be regulated (as in South India, Dumont 1980), and differences in dress enforced. Apart from an attempt to maintain orthodox customs (Vedic house rites, sacred learning, vegetarianism, and wearing of the sacred thread) the same may be forbidden to others, and the resultant differences in habits will in time be cited in further support of ritual superiority and social exclusivity. In contrast to separation from others, the dominant caste will strengthen its internal cohesion by frequent meetings (needed to discuss managerial problems), festivals, commensality and, of course, marriage.

As for the lower orders, they may be roughly classed into low-caste Hindus and untouchables. They will generally be in a position of economic dependence on the dominant caste, and because of the nature of the relationship (either tenancy, or service of individual families) each caste, and almost every family, will have its own arrangement with a member of the higher caste, thus frustrating any concerted action on the part of the latter. At the same time, dominance of a high caste will lead to the adoption of its value system even by the low castes, who will themselves stress the importance for society of hierarchical order based on patterns of interaction (for example, who accepts certain kinds of food/water/tobacco from whom) as well as on caste customs. The result will be bitter competition within the lower orders for ritual status, with little commensality, separate caste courts, separate festivals, and general lack of concerted action. Strict discrimination of the lower castes against each other and especially against the untouchables matches the exclusivity of the dominant caste.

It is highly instructive now to examine the internal organisation of the villages. Not only is there a clear division based essentially on varna (with Brahmins/Thakurs, lower caste Hindus, and untouchables the main orders), but also within the second and third orders the constituent castes try to maintain residential segregation, and those in sufficiently high numbers to form a ward usually do. Residential segregation by varna is a natural concomitant of the efforts of the dominant caste to maintain its superiority by all means at its disposal (one part of its strategy), while segregation within the varna on the basis of caste is the natural result of intercaste competition in the lower orders. The cited villages in Tanjore contain separate residential areas arranged around individual streets for all large varnas and castes; not only are they separate, but the layout of the streets does not even facilitate easy access from one area to another; at times even paddy-fields intervene between living areas (Figure 2, as well as

wealth -- means not only that a group's status is influenced by at least two sets of factors, but that there is no universal agreement on this issue, with differing groups holding differing ideas. Even an outsider, such as an ethnographer has difficulty in constructing a clear-cut hierarchy.

The settlement pattern is instructive: the absence of clear ranking criteria leads to what at first sight appears to be a very confusing pattern, with castes generally scattered. Closer inspection suggests, however, that while Khatis -- whose strategy is based on Brahmanical ideas of exclusivity -- group together, Rajputs mix more freely with castes considered ritually inferior, but for political reasons admitted to their commensal circle. The Brahmins show no inclination to group together. They are small in numbers and irrelevant to the political game being played, and in any case their ideal of residential segregation -- and social ranking -- based on ritual purity is not universally accepted, hence would be impolitic to enforce. Untouchables, on the other hand, remain segregated, as all the other classes in this case have an interest in maintaining their lowly status (Figures 3 and 4). Needless to say, the village has no clear focal point: not even the numerous *temoles* fulfil this function.

Conclusions

Having shown through a study of classical texts and modern rural settlements the existence of competing systems of status evaluation, and a corresponding complexity of spatial patterns, which bears no relation to our expectations, the final question to be addressed concerns the relevance of all this to archaeology in practical terms. It is comparatively easy to take settlements and explain their layouts by reference to abundant sociological information; much more difficult is the task of the archaeologist who tries the opposite, and wants to explain society through a study of its spatial patterns.

Even a cursory survey, such as that presented above, may demonstrate the futility of treating the space occupied by settlements as a geometric plane with each point determined -- and its significance measured -- through its distance from the centre. Some settlements have a focal point well away from the geometric centre, others have no centre at all, nor a single criterion for characterising its constituents. This appears to archaeologists as mysterious probably because we have been led by our modern value system (which reduces everything to wealth) to expect clear and easily identifiable gradations of status. The fact that a generalising approach dominates much archaeological thinking, seeking to set up laws of human behaviour, may also contribute to this tendency of oversimplification which will simply confirm our present world-view in the archaeological record.

An alternative approach to spatial studies has recently been presented, which stresses not size attributes, but the control of movements and visual impressions through the layout of streets, placement of entrances, and use of open spaces (Hillier and Hanson 1984). We have already seen that these factors are far more important in

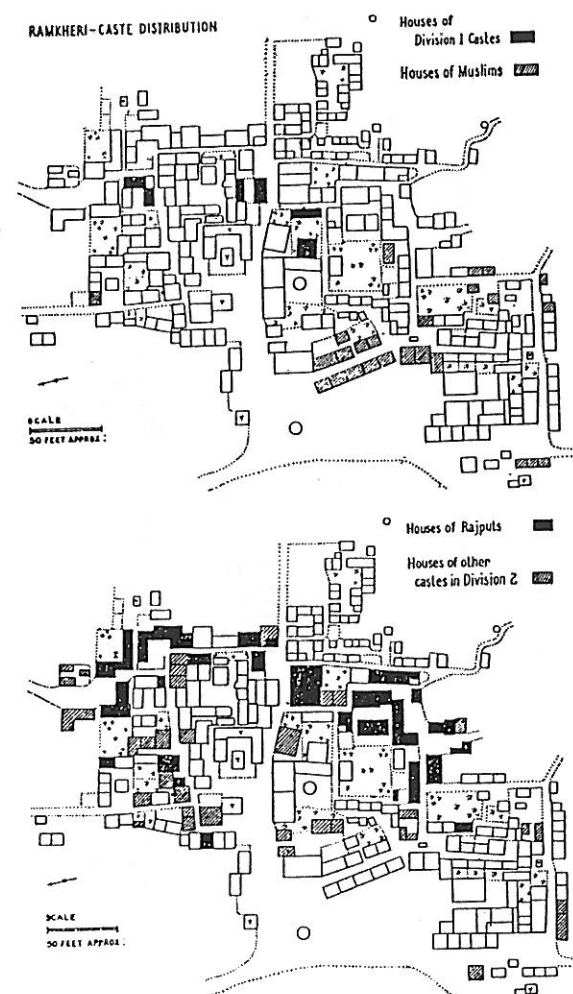


Figure 3: Caste distribution in Ramkheri: Divisions 1 and 2 castes. After Mayer 1966.

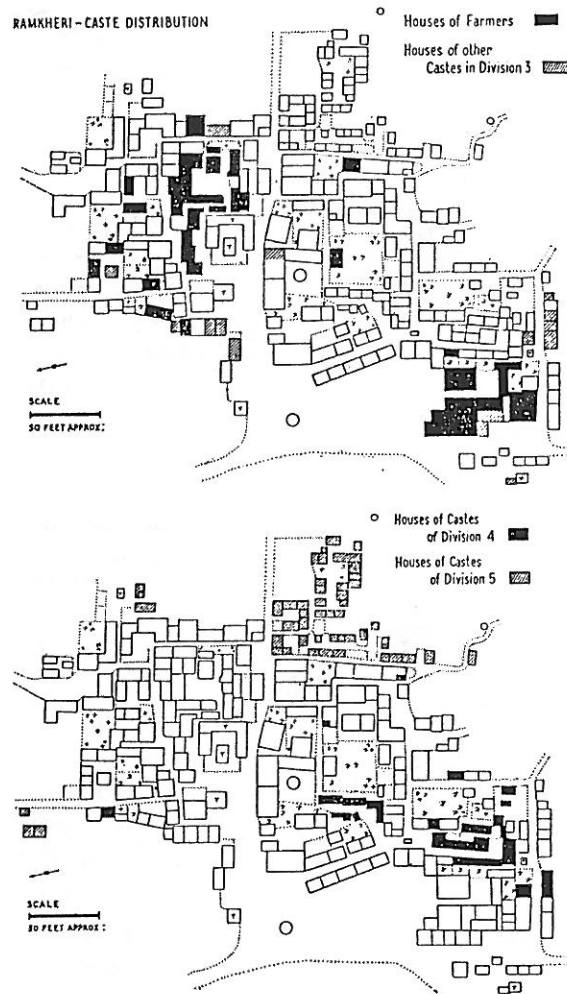


Figure 4: Caste distribution in Ramkheri: Divisions 3, 4 and 5 castes. After Mayer 1966.

the control of the interaction of social groups than any simple distance measurements. As a first step we may therefore use measures of permeability and so on to establish whether a clear division of settlement space actually occurs, since not even this should be assumed *a priori*. As we have seen through the example of a Malwa village (Mayer 1966), only a few areas within the village are distinct, and these are inhabited by a segment of society which uses its exclusiveness as a means of achieving high social status, not -- as we may perhaps assume -- by a group whose high status is recognised. The only people who always appear to live apart from the rest in India are the untouchables and they are at the bottom of everyone's hierarchy.

Identification of major spatial divisions may be followed by an examination of the artefactual content of habitations. This may show the attributes -- be they of wealth, occupational specialisation, ritual status and so on -- which are correlated with clear spatial divisions as opposed to those which are not. It is through this approach that we may begin to find the basis on which a society distinguishes its constituents. This would by no means complete an archaeologist's task, but would certainly provide a useful initial step in the examination of past social systems. It is certainly a more promising approach than one which starts by assuming the existence of social divisions through some simple attributes, and then explains the rest of the archaeological record -- functions of buildings, patterns of residence, the nature of political control -- on this dubious basis.

Needless to say, such an approach is not without difficulty. Above all, it would call for large-scale excavations, which need financial support that is less and less forthcoming. The solution may lie in new methods of data collection -- remote sensing, or the use of surface scraping as recently employed by Postgate in Mesopotamia may provide some of the answers. There are also areas such as Mesoamerica, where a good deal of surface architecture is preserved, and even streets and individual structures may be reconstructed. Finally, there is already a vast store of information in the reports of old excavations, where areal exposure was sought often at the expense of strict stratigraphic control. The methods of analysis here advocated could be performed on the old data, where architectural information is quite precise, and great numbers of artefacts have been found. Even if the stratigraphy of the sites is questionable, tight chronological control is of less importance to the problems addressed above. It may well be that good use could finally be found for these long-forgotten and much maligned excavations.

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THE REAL AND RANDOM ARCHITECTURE OF SIPHNOS: ANALYSING HOUSE PLANS USING SIMULATION

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Over the last fifteen years, there has been a growing diversity of theoretical and methodological perspectives in the archaeological literature. Marxist, structuralist, ecological, middle-range, ethnoarchaeological, experimental, systemic, post-processual, social or simulating form a rather poor sample of the terminology fairly recently coined, in an effort to rescue archaeological reasoning from the so-called pitfalls of traditional archaeology.

If this is the case with archaeology in general, it is even more so with spatial archaeology in particular: for "spatial studies" is a convenient term under which a number of rather diverse approaches to the meaning of space have found refuge.

This divergence in the conception of space varies from notions of site formation processes (Schiffer 1976, 1978), to notions of social reconstruction (for example Naroll 1962, Clarke 1972, Kramer 1982, Kent 1984), of conceptual, cosmological or symbolic qualities (Fritz 1978, Bourdieu 1979, Hodder 1982 and others), of locationally adaptive behaviour (Fletcher 1977) and finally of semantic (Preziosi 1979, 1983) or "grammar" systems (Glassie 1975) that relate to different social conventions.

A number of these approaches rely on different systems of metrics, whereas the rest have studied a variety of ways that different types of artefacts are distributed in space: so that types of artefact distribution have been treated as the bearers of the notion of spatiality.

It is true that different kinds of distribution plots are spatial by virtue of being in space. Such a definition however is redundant since whatever has to do with material reality is spatial from the same viewpoint. Moreover, being in space as a unit in a system of measurement and being in space as an artefact in a distribution plot are apparently two different ways of being in the same medium. In other words, being in space as an entity, for example as an artefact, and being in space as part of it, such as the enclosed space of architecture, are two different ways of being in space (since the former is somehow "contained" by the latter), that one may be justified to ask to what extent, and in what ways, are the variables of these studies spatial at all.

The tendency, therefore, to visualise and even to identify spatial aspects of society by means of metrical units or artefact distributions