

A Guide to Locating Settlements in Rural New South Wales

J. H. WINSTON-GREGSON

This paper describes a model for predicting the location of rural settlements. The author is a consultant archaeologist specialising in the historical landscape and finds models like the one described to be useful in combatting the time constraints placed on consulting research. The model is essentially an exercise in reading the cadastral map, the paper offers guidance and a demonstration.

1. INTRODUCTION

The intention of this paper is to describe an archaeological predictive model for settlement location and to draw attention to the cadastral map. Together they are an aid to planning fieldwork and their potential application to theoretical considerations in settlement studies and in forming research strategies will be apparent. The reasonable question of what is to be gained by studying historically obscure or forgotten settlements has been anticipated by a previous article.¹

As the previous paper demonstrated, settlement in the nineteenth century did not occur necessarily where active settlements exist today or are known historically to have existed. Nor did settlement distribution necessarily reflect nineteenth century land administration policies. For example, there was active private enterprise at what are now the major inland cities of Wagga Wagga and Albury before their proclamation as town sites and when Tumut was discovered at the foot of the Snowy Mountains by a surveyor in 1848 it was already a thriving community with a surgeon, 12 tradesmen and a private tollbridge—all hitherto unknown to the administration in Sydney and of course unrecorded.² As Jeans has pointed out,³ when Police Districts were established in 1840 the boundaries did not follow proclaimed county or parish boundaries but followed the distribution of known settlement. The reality of colonial settlement lies in the landscape where the people really were. Discerning that settlement is therefore an archaeological task that requires a predictive model.

Fortunately the information an inductive archaeologist⁴ needs to determine an area of concentrated search (as distinct from loping across the horizon or attempting to impose a statistical sampling programme) is recorded on cadastral maps.⁵ There are five indicators for locating nodes of settlement:

1. A concentration of parish portions with low numbers.
2. A concentration of portions of small area.
3. A junction of land routes.
4. A major topographical feature.
5. A major homestead.

A conjunction of three of these indicators suggests a probable settlement; four or five makes it almost certain. As a predictive model, this is easy to apply, requires no local knowledge and it is reliable. In addition, cadastral maps cover the whole of Australia, consequently a predictive or interpretative model based on a cadastral map has the potential to be replicated anywhere, although it is emphasised that the model described has not been tested outside the Australian Capital Territory and New South Wales and not within eighty kilometres of Sydney. As a further caution, it should be noted that although the model was developed to detect any form of nucleated settlement—indeed an early trial, outlined below in Section 5, revealed an abandoned mining community

unknown to published history, local historians and local residents alike—the nature of the data base will favour detecting settlements that were extant or recently abandoned at the time when land occupation for a given region became codified.

2. THE CADASTRAL MAP

The cadastral map shows an administrative division of the State, so the map may reproduce a suburb, town, parish or county. Its purpose is to summarise on a cartographic base every effective administrative decision regarding land administration taken up to the present time, or to the day when the map went out of use. It is a cartographic cumulative index, and it is therefore the first document sought in a title search.

The cadastral map displays for its given area all varieties of land occupancy and tenure known to the Crown Lands Office at the time of publication, and major topographical features. It also indicates the sequence and legal basis of land occupancy, and has references to other sources. All of the information will be current at some time in the life of the map edition and much of the original documentation can be found. It should be noted that there is a catch to the 'currency' of certain data: except in special editions, the county and the parish cadastral maps do not show the name of the present occupant of a piece of land. Instead, because the cadastral map is in part a key to land title, it shows the name of the person who originated the *current title* (commonly by applying for freehold via a form of convertible Crown Lease). The name shown does not reflect any subsequent title dealings to which the Crown is not a principal party, e.g. a transfer of mortgage, or a deed of conveyance, these are recorded separately in the Office of the Crown Registrar. Once the nature of the title data is recognised on a cadastral map, the map becomes a useful tool in delineating the origins of settlement.

In New South Wales cadastral maps are supplied by the Department of Lands. The Central Mapping Authority independently is presently producing 1:25,000 scale topographic maps with an overlay of cadastral boundaries that are useful for field orientation. Every Shire Office of local government should have a current edition of the cadastral map of its area. Regional Lands Board Offices maintain an up-to-date copy by annotation of occurrences (lease transfer, road alignment, school location, mining permits, etc.). The annotations are reproduced on duplicate maps in the Registrar General's Office, Sydney, where they are publicly available and appear periodically as new editions of the cadastral map. The hand-annotated copy is consigned ultimately to the Archives Office of New South Wales. Since there is no fixed life for an edition of a cadastral map, the annotated copy can remain in use for thirty years or more, accumulating an

astounding quantity of information—all of it referenced to a related document (internal file, title deed, public notice, etc.).

Where does this lead? In a materialist society, a synopsis of property movement is a key to studying settlement. When it functions also as a key to comprehensive records, it can lead through related archives (e.g. education, post and telegraph, mines records) to solicitors' deed boxes and personal papers, and to the lives of the people whose structural and domestic leavings the archaeologist is studying in the field. Successful archival research steers a partly intuitive course between reflecting numbed confusion and producing a catalogue of tedium; it is not to everybody's taste. However, with appropriate usage, the cadastral map can lead one not only to an archive but directly to unsuspected remains in the field.

3. THE COMPONENTS OF THE CADASTRAL MAP

3.1 Parish portions

The predictive model refers to *parish portions* of low number and of small area. The parish portion is the basic unit of rural land alienation from the Crown to an individual. A rural area is represented, therefore, as a jigsaw of numbered portions within a parish; a group of parishes comprises a county map. An urban plan by contrast shows numbered 'sections', within 'blocks' separated by streets.

The parish portion may vary in size from a few hundred square metres to thousands of hectares. Portions are predominantly quadrangular and aligned to the cardinal points. They are numbered sequentially in parishes in the order in which claims are registered to alienate land (the claims themselves have a different number that is not shown on a parish map). Until freehold is granted, all land is vested in the Crown and certain rights, for example mineral rights, are not wholly alienable, so that the Crown through its agents retains an interest in all land. Note that when freehold is granted, no further title changes are shown on the cadastral map.

The *size, shape, alignment and number* of parish portions are significant interpretative features. In the early and middle nineteenth century, before freehold became widespread in New South Wales, the fixing of disputed run boundaries was a function of the peripatetic Commissioners for Crown Lands. The system was adequate for a dispersed population. The passage in 1861 of the *Crown Lands Alienation Act* and the *Crown Lands Occupation Act* radically altered administration. These *Acts* were intended to facilitate freehold instead of leasehold and in particular to encourage smallholding and an enlarged rural population. The *Acts* engendered intense competition for land between leaseholding pastoralist squatters and freehold-seeking free selectors.⁶ Unlike South Australia, New South Wales permitted land to be selected before it was properly surveyed. By the 1870s when the *Acts* began to take effect over a wide area of the colony, District Surveyors were scarcely able to keep pace with development. Consequently there is a tendency for the first portions allotted in a parish to display irregular boundaries as well as low numbers, being those parts of a pastoral leasehold that the squatter moved at once to alienate and protect against the inroads threatened by free selection. The administration often seems to have adopted, as expedient boundaries, definitions known from gazetted lease descriptions, without particular regard to linear smoothness.⁷ Such portions usually indicate the core of a pastoral run.

Corresponding anomalies occur when land claims approach the fringe of a pastoral run. A long, wandering, or oblique boundary, particularly between large portions, say over 300 ha., is almost certainly a relic boundary of a pastoral leasehold. This can be confirmed from run descriptions published in the *New South Wales Government Gazette*. Such portions represent the pastoralist pre-empting selection of the outskirts of the run, usually having given first attention

to the more desirable areas (creek flats, water holes). Alienation of this type is the antithesis of free selection for smallholding and while not indicative of a settlement or village, it may indicate local competition from such a place.

The marks of free selection are *portions of small area and regular shape*. The size of an initial purchase was limited to 640 acres (256 ha.) costing around one pound per acre plus compulsory improvements. Consequently a free-selection portion is usually small, commonly 100 acres (40 ha.) or less. Wherever possible the boundaries roughly established by the selector were always corrected by later survey to equate with a rectangle aligned to the cardinal points. By contrast to relic pastoral leasehold features, a group of such portions is very suggestive of a community of smallholders.

The mention in the predictive model of portions of small area subsumes officially designated Small Portions. These are land set aside for official purposes, such as Police Station reserves, School reserves, for institutions such as churches, or a restricted use such as mining. Although the designated use may be redundant, Small Portions for official purposes remain on cadastral maps long after the land has reverted to sheep. Small Portions rarely exceed a hectare and are always catalogued separately on the parish cadastral map legend. The catalogue may not give the original land function but rather the date of reversion (which itself is useful) and only a minority of official-purpose sites attained Small Portion status, but such a feature obviously deserves attention as a former administrative focus. Tracing in this manner the passage of schools across the landscape, reveals much about regional population shifts and can hint at transient communities of miners or railway workers.

Reference to *portion numbers* is important, since it is unusual for a portion or its number to be altered once determined. Because the sequence of numbering is linked to the registration of land alienation claims, it is possible to separate from later infill claims those areas that attracted early attention. The relative 'earliness' or 'lateness' of numbers must be seen in the context of the size of the parish, which may contain several hundred portions. The interpretative key to a potential nucleation of settlement is a bunching of roughly consecutive numbers, with a sprinkling of high numbers to indicate developmental growth and localised infill.

Portion numbers should be balanced against *portion dates* and the dates of nearby reserves. Where there is room on the map, the year in which a portion was selected is shown with the nature of the title and the name of the claimant. This is not an infallible guide to delineating close settlement but ironically, in two ways can depict its failure. Firstly, a swathe of portions bearing a single name is generally either a speculator or a pastoralist. Secondly, the details shown relate to the last claim lodged, whether or not lapsed, so that a temporal sequence in one name, irrespective of the portion numbers, may represent a pastoralist reasserting his interest in an area abandoned by selectors who failed to complete freehold. This can be confirmed by a rudimentary title search. It must be remembered that the cadastral map is not a static document but a progressive accumulation.

Each portion has an individual *plan number* as well as a portion number and an alienation claim number which can help to clarify the sequence of land alienation claims. The majority of plans are indexed by a serial number prefixed by the initial letter of their county. Administrative boundaries can change. Thus Counties Goulburn and Wyndham were created from County Murray about 1855 and the prefix 'M' became redundant. That prefix is therefore an infallible guide to an early land claim in Goulburn or Wyndham and often marks the site of a squatter's homestead. Further, the plan number itself reflects the sequence in which plans are registered. This is not always the same as the sequence of portion numbers, because an amended plan may be registered when an earlier alienation claim has lapsed. Since this will not affect the parish portion number, any disconformity of plan number is interesting.

3.2 Land routes and other reserves

The presence or absence of public reserves is informative. Every portion must be accessible to the beneficial owner, so early editions of cadastral maps show myriads of little lanes tacking around the edge of portions, sometimes branching only to end abruptly after a few more boundaries. These road reserves are an arbitrary imposition without regard to topography or practicability. As a rule the farmer pays a peppercorn rent to incorporate them in his paddock. Reserves that are demonstrably redundant may be gazetted closed, so that their disappearance from successive cadastral maps illustrates the growth of a united property having no competition for access. Conversely, the continuance of a road reserve suggests activity—particularly if the reserve crosses a large part of the map or has only one visible terminus. Also if a road reserve crosses a portion, or separates portions of uneven shape, or has curves instead of right angles, then it almost certainly follows a track that was extant before survey—denoting traffic—although the reserve may since have been gazetted closed.

Many types of reserve change through time in nature and extent. The disappearance of Stock Routes from cadastral maps is a clear statement of changes in primary industry (reliance on wheeled transport, silage provision, expansion of cereals, reduction of mountain pasture leases). Along with the Stock Routes have gone the associated Camping Reserves, Camping And Stock Reserves etc. Like former Timber Reserves and Water Reserves they are marked in the field by a high proportion of trees and native grasses, since it is only in recent decades that they have come into private hands. They are extremely useful in the field as microcosms of the nineteenth-century landscape. They deserve attention also as instruments of commerce. The interpretative key to the location and development of a vanished settlement lies partly in tracing the outline of redundant reserves, to be seen either as anomalous portion boundaries or as an identified feature.

3.3 Topographical features

Cadastral maps show major topographical features like water courses and mountains but not contours. The information is generalised but is useful in helping to delimit those areas most suited to close settlement, such as flat land near perennial water. The author has no confidence in the commonplace 'creeks and crossings' model, whereby road junctions and creek crossings are presented simplistically as the arbiters of settlement distribution but there is a grain of truth in it. Figure 1 shows a government village reserve proclaimed at the junction of the Port Philip Road and the Adelaide Road, close to a major creek. The sites of Camden and Picton townships, for example (which were privately established close to Sydney), surely reflect the influence of topography, for Camden lies along a low ridge surrounded by a flood-plain and Picton stands at the neck of the passage between the plains of the Nineteen Counties and the plains of Goulburn. The surest guide as far as the predictive model is concerned, however, is not to generalise from preconceptions, nor from a topographic map, but to remark the topographic features that the cadastral cartographer has determined as being notable on the basis of surveyors' field books.

3.4 Major homesteads

This is not a single specific component of the cadastral map but it represents, within the predictive model, the importance shown in the previous article⁸ of the pastoral squatter in determining settlement distribution. The names of administrative creations such as shires and parishes commonly reflect local squatter influence (in a nice sense of proportion counties and cities tend to be named after senior civil servants). For example, Mate Parish in County Wynyard was named after Thomas Mate, who was the local Member of the Legislative Assembly from 1860 to 1869 and owned numerous stations in the County. The presence on the cadastral map of

a station bearing the same name as the parish or shire, especially if it is situated on a very early portion number—say between 1 and 6—is a sure indicator of a long-established property that was sufficiently influential to catch the attention of the Lands Department. If the parish name is that of a natural feature, like a watercourse, it will often be found that the spelling is archaic and repeats the name of an early, or the original, homestead, which may no longer be marked on the map.

4. TRAPS

There are several cautionary remarks in the above and some more may be appropriate. Firstly, researching land records deeper than the cadastral map itself requires fortitude. Conveyancing solicitors charge extra for Old System Title (i.e. pre-Torrens Title), which covers the greater part of the nineteenth century, simply because it is not so much a system as the residue of decades of *ad hoc* bureaucracy. It is something of a Herculean challenge. The modern practice of issuing consolidated title schedules makes title verification easy but aggravates the problem of retrieving related original data.

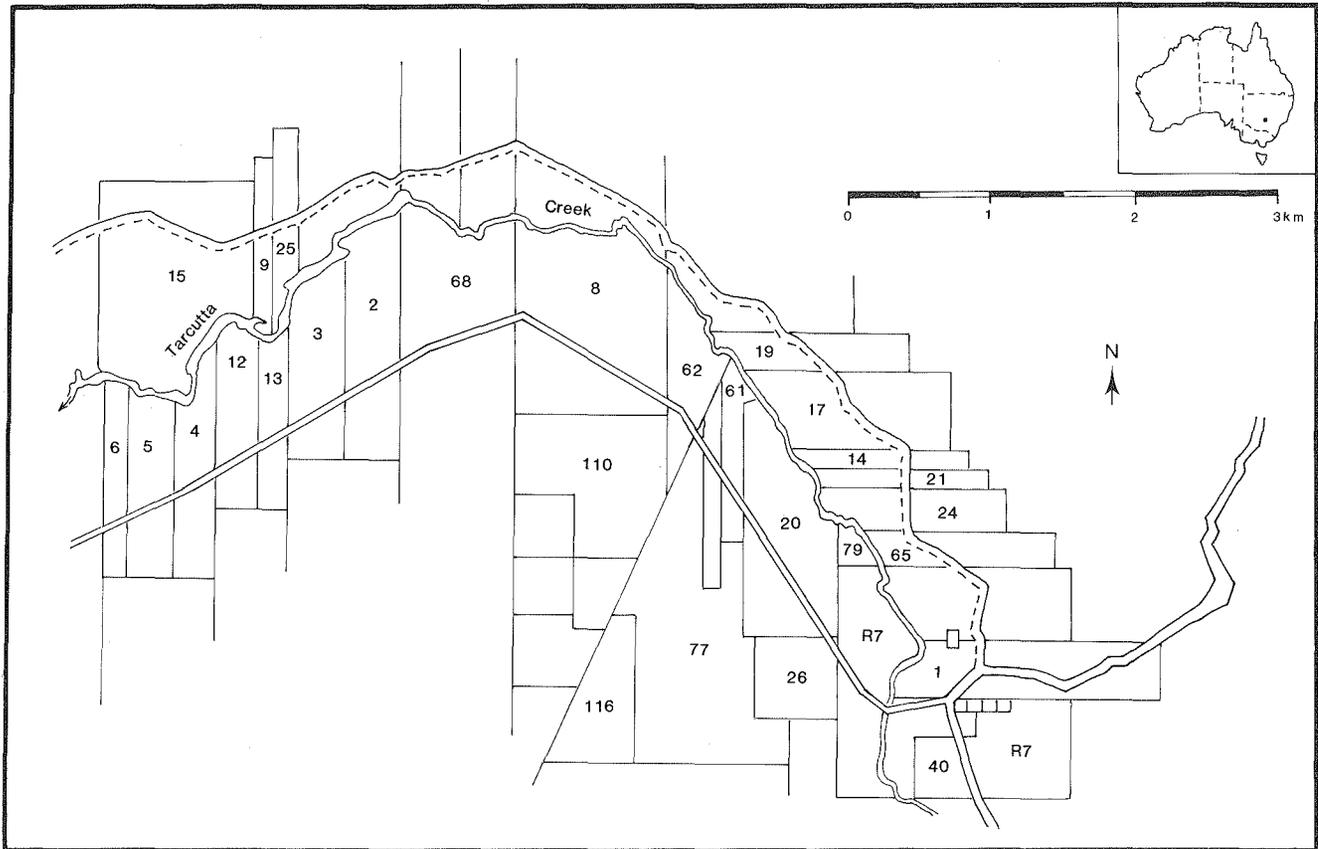
Secondly, there are traps on the face of the cadastral map itself. The 1861 *Acts* are notorious for the number of ways in which their intent could be circumvented. Thus mining reserves can appear in the most unlikely places because a squatter has registered a dummy mine to preclude land alienation by another party. Also where no features like a public reserve are evident on the cadastral map and there is merely a simple grouping of similar portions, the group is probably indicative of a pastoralist employing dummy selectors to safeguard his run, especially if neighbouring portions have consecutive numbers. Alternatively, if the group numbers are relatively high, say beginning at 40 in a small parish of 100 portions, they may represent the formation of a new pastoral property. In either of the latter cases there may be a few structural remains to greet the eager archaeologist but not a settlement.

The cadastral map will sometimes show a Recreation Reserve, Village Reserve, or Camping and Village Reserve. These can represent degrees in the establishment of a settlement but their appearance need not indicate a settlement site. It would be rash to assume that such a reserve had ever been settled, since it was not unknown for pastoralists to arrange the gazetting of such reserves and then immediately purchase the allotments to prevent the alienation of the land to free selectors. Speculators could do the same and force the pastoralist to buy back his best land.

The date given for a public reserve should be treated with caution, since it will be the date of the most recent gazettal, which may record a change rather than inception or original function. However, the date when a reserve was cancelled may be given, which may suggest redundancy through population shift, or economic, or technological change, in the area at a particular time. It is worth noting in this respect, that parish details as a whole were sometimes not united formally on a cadastral map for many years after settlement and survey began, although the early traces can be seen in names, spelling and boundaries.

5. DEMONSTRATION

Figure 1 is a simplified extract from the second edition of the cadastral map for the Parish of Tarcutta, County Wynyard, Land District of Wagga Wagga, in the eastern Riverina of New South Wales. Notice the group of small area portions forming a herring-bone pattern along the banks of Tarcutta Creek to the right of the figure. Tarcutta Creek is the only topographical feature on the map. The portion numbers are fairly low (the parish has 143 portions) and are not con-



secutive, which indicates a process of development. Contrast these with Portions 2 to 13 at the left of the figure. The latter represent the Donnelly brothers securing Borambola Pastoral Holding. The boundary between Borambola and Umultbee properties has been preserved by a row of irregularly shaped portions, stretching south-west from Portions 61 and 62 on Tarcutta Creek near the centre of the figure. A junction of land routes is marked at the lower right, and running north-west from it, across the small area portions and parallel to Tarcutta Creek, is an abandoned road reserve. The irregular shape of the reserve indicates that the line of route was in use before the land was partitioned. Clustered at the junction are several Small Portions that are annotated on the original map as including a cemetery, Public School and school paddock. There is no clear indication of a large homestead but Portion 1 is at the nexus of the small area portions, Small Portions and the land route junction and it is beside the major topographic feature.

According to the predictive model there should be evidence in the field, of settlement in the vicinity of Portion 1, and in fact this was the village of Lower Tarcutta. For the sake of visual clarity, some cadastral detail has been omitted from Figure 1 which is an extract reproduced at half scale from a much larger document. The original map has more data that enable interpretative refinements. For example, the abandoned road reserve followed Hawdon's 1838 route to Adelaide in South Australia and the more rectilinear reserve along the south of Tarcutta Creek is the modern Sturt Highway. Originally, this was a major route junction, not just a creek crossing. Similarly, it can be seen in Figure 1 that Portion 1 and the Small Portions interrupt the square R7 (Reserve number 7). The Reserve was last proclaimed in 1852, and (if one pursues the archival reference) it can be identified as a Village Reserve recommended in 1848 by Surveyor Townsend at the junction of the then Adelaide and Port Philip Roads. However, the absence of a street plan in R7 suggests that the intended settlement did not occur at the time, also the Portion 1 plan number (not shown on Fig. 1) is prefixed M

Fig. 1: Extract from the second edition of the cadastral map for the Parish of Tarcutta, eastern Riverina of New South Wales.

(for County Murray) but the neighbouring portions belong to a later series; so what happened? Again, the cadastral map provides a clue in that there is a number of mining leases, of varying types, in the vicinity (not shown on Fig. 1). Fieldwork confirms both that there is physical evidence of settlement and that the mines were active. Archival work then documents the artefactual interpretation of a bush inn on Portion 1 (licensed from 1847 to 1921) that became the hub of a mining and rural smallholding community, which flourished between about 1880 and 1900 and then vanished from memory.

The bones of the predictive model as shown in Figure 1 are straightforward. The essence of predicting the location of a deserted settlement lies in the correct interpretation of the relationship between portions, reserves and topography, as an expression of the quest for land ownership. In addition, as far as deserted settlements are concerned, the relative potential of sites located on the map can be ranked according to the number of criteria met (a great help if field time is short) and with practice in cadastral interpretation, it is possible to anticipate the nature of the settlement that will be found.

6. CONCLUSION

The document to which the model is applied attempts to be comprehensive and therefore can be complicated, so that all of the above needs to be considered when reading a cadastral map. However, a distillation of the major criteria is all that is needed as a field guide to places of archaeological interest, whether they be forgotten settlements, original pastoral leases, lines of route, or whatever manifestation of activity is sought. The criteria of the model itself are adaptable to the characteristics of the goal and the cadastral map in one of

its permutations or editions is likely to contain the raw data, or a notification of where it is to be found, if documentary research is warranted to supplement fieldwork.

ACKNOWLEDGEMENTS

A Fellowship at the Riverina College of Advanced Education in 1980 enabled the author to formulate and test a number of ideas on researching colonial settlement, that drew in part on earlier work by Buxton.⁹ Staff in the State and Regional Offices of the Crown Lands Office and the Crown Registrar's Office have continued to give many hours of advice and practical help.

NOTES

1. Winston-Gregson, J. H. 1984. People in the landscape: a biography of two villages, *The Australian Journal of Historical Archaeology* 2: 27-37.
2. Townsend to Surveyor General, 18/9/1848. See Townsend, T. S. Correspondence with the Surveyor General 1848. Archives Office of New South Wales.
3. Jeans, D. N. 1967. Territorial divisions and the locations of towns in New South Wales 1826-1842, *Australian Geographer* 10: 243-55.
4. Cadastral data reproduces contemporary information about sites and settlers and therefore is apt to the inductive nature of historical archaeology. See Bairstow, D. 1984. The Swiss Family Robinson Model: a comment and appraisal, *The Australian Journal of Historical Archaeology* 2: 3-6.
5. The cadastral map is an adaptable research tool. Although this paper discusses selected components of the cadastral map as a guide to locating deserted settlements in rural New South Wales, cadastral data also can be a guide both to research individual people connected with particular sites and to locate sites.
6. Legislative Council of New South Wales, 1883. Report of inquiry into the state of the public lands and the operation of the land laws, *Journal of the Legislative Council of New South Wales* 34: 1.
7. For example Hoddle's 1835 plan of 5000 acres given by the Crown to Charles Sturt was adopted as plan no. M68,743 for Portion 3 Parish Weetangera County Murray.
8. Winston-Gregson, op. cit.
9. Buxton, G. L. 1969. Land settlement in New South Wales: some research problems, *Australian Economic History Review* 10: 128-37.