MAJOR DEVELOPMENTS IN THE RURAL INDIGENOUS ARCHITECTURE OF SOUTHERN AFRICA OF THE POST-DIFAQANE PERIOD

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A thesis submitted to the Faculty of Architecture,
University of the Witwatersrand, Johannesburg
for the Degree of Doctor of Philosophy.

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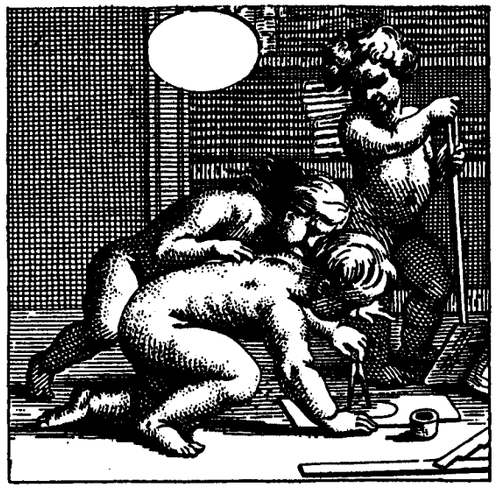
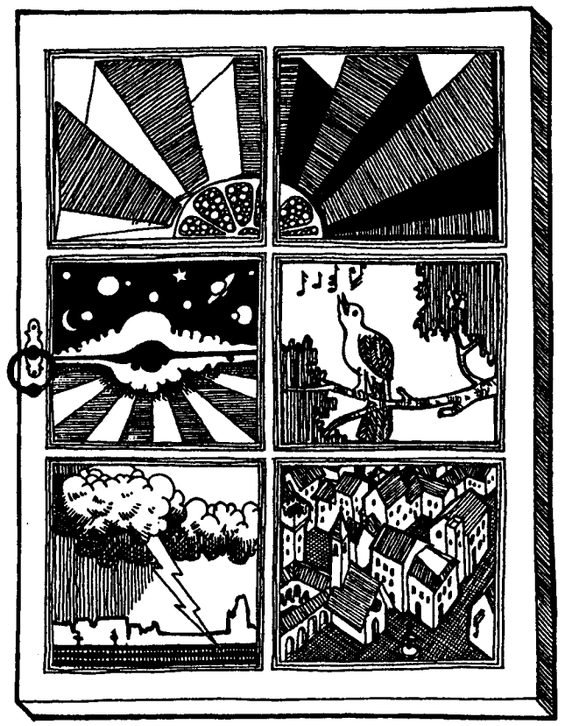


DECLARATION

I hereby declare to all concerned that this thesis is my own unaided opus. It is being submitted to the tender care of the Faculty of Architecture, University of the Witwatersrand, Johannesburg, for the degree of Doctor of Philosophy. It has not been submitted before to any other university, for degree or examination purposes, none of the others in this country having been deemed worthy of my attentions.

Signed by me upon this twentyeighth day of November in the year 1985 Anno Domini.



TO LESLEY

I love you more than madness
more than dreams upon the sea,
I love you more than life itself
you mean that much to me.

Bob Dylan : "Wedding Song", 1974

ABSTRACT

This research programme is concerned primarily with developments in the indigenous built environment of southern Africa between 1822 and 1925. It is based upon the hypothesis that the period of Difaqane, 1822-1837, represents an era of major socio-political, economic and cultural change in the region's history. It was a time which witnessed the displacement of whole communities, widespread famine, military conflict and increasing contact between the indigenous black and immigrant white populations of the sub-continent. These events had extensive repercussions in the habitat patterns of the region. Although much of this argument is based upon data of a historical and archaeological nature, an awareness of the issues involved was derived largely as a result of contemporary field research.

The discussion is divided into three major components. The first begins with an analysis of the physical and social context of the architecture in question. This involves a brief introduction to the historical and geographical background of the region. The social processes and cultural perceptions surrounding the creation of indigenous habitat are examined as well as the interaction existing between the rural dwelling, its physical environment and the economic system of its builders. The existence of a number of general areas of technological and building practices is discussed in both historical and current terms.

The second component focuses upon the history of the southern African dwelling form. The general nature of the indigenous habitat is discussed as well as the dissemination, between 1800 and 1925, of certain structures derived from a European background. The nature of white-black cross-pollination at an architectural level is examined. It is concluded that although a measure of material and technological transmission has taken place, this has been primarily of a pragmatic rather than a cultural nature. The process of acculturisation and the creation of architectural stereotypes is then debated in the context of a number of local case studies, both historical and current. The existence of such stereotypes based upon environmental, economic and cultural predeterministic theories is acknowledged as being valid, if only in the most general of senses. However it is also found that whilst such elements of the dwelling as form, material texture and decorative motif have a measure of group identity attached to them, these are also manipulative and hence cannot be assigned strict cultural values.

The final section of this thesis is concerned with rural settlement. The various components of settlement are defined in the context of southern African indigenous society and the habitat of a number of rural groups is examined at the level of the individual family homestead. It is discovered that rural living patterns are governed by a cognitive system of values which are part of a larger language of architecture. This represents a direct reflection of the people's social hierarchies, economic systems, ritual practices and cosmological beliefs. As such these are considered to be a wider and more reliable indicator of cultural identity than any manipulative values attached to the dwelling form. Although settlement patterns are also perceived to have undergone a number of changes since the colonial era, these appear to be part of an evolutionary social and economic transition rather than a direct process of cultural transmission. Finally an analysis of the language of local architecture indicates the existence of two separate settlement cultures in the region, the vhaVenda and the wider Nguni/Sotho/Tswana grouping.

The development of ideas surrounding this research programme over an eight-year period and the methodology of field research are also discussed in this document in the form of two interludes. A glossary of relevant terminology is appended.

"Therefore it is to be hoped that some
great architect will undertake to save architecture
from eccentric opinions by disclosing
its fixed and unchangeable laws."

Marc-Antoine Laugier, 1753

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INTRODUCTION

The origins of this research project may be traced back to the early 1970s when, as an undergraduate student, I began to explore the possibilities and implications of a return to "grass root" architecture as a strategy for resolving some of the issues which surround the provision of housing on a large scale within an urban environment. Although, at the time, concerns were focused largely upon those aspects of the problem peculiar to the southern African region, it was hoped that, ultimately, the principles derived would find application in the larger context of the under-developed and developing world in general. Then, as now, there was an underlying awareness that, in the architecture of our rural people, there exists an excitement, originality and complexity of habitat which had somehow failed to find translation in the growing urban environments of the post-1945 era.

These concerns have not been lost. Indeed, with the passing of time and as more research data has become available, they have gained in strength of conviction. The focus of research has, however, undergone a degree of re-orientation of emphasis, chiefly because this was a multi-disciplinary study seeking to bring together data obtained from numerous and diverse sources. Invariably some of these sources provided meagre harvests whilst others proved rich beyond all original expectations. Thus, although it is true that a measure of pre-determination is generally accepted to be implicit in the statement and proof of an academic hypothesis, a rigid adherence to such a principle is often impossible when dealing with multi-disciplinary research. In this particular case, a research programme which originally set out to map the multitude of cross-cultural architectural influences which could have occurred in the ethnic cauldron of southern Africa, has ultimately made a strong case for black cultural homogeneity. The two ideas are not, in fact, dissimilar. The first relied upon the existence and discovery of "cultural cores". When current field work, supported by historical studies, failed to uncover these, the concomitant conclusion had to be that, in an architectural sense, we were dealing with one predominant settlement culture for the southern African region.

One of the disadvantages which was keenly felt from the onset of this research programme was the absence of an established body of literature on the subject. Whilst it is true that a great deal was already known about the rural cultures of southern Africa, it soon became obvious that researchers in this field had largely ignored the rural built environment. The few records that existed, had been made largely by missionaries and anthropologists whose concerns and backgrounds were generally anything but architectural. This does not mean to say that no architectural data of a historical nature was available. On the contrary the literature of southern Africa, from Kolbe in 1727 through to the present day, is sprinkled with a wealth of relevant information. Unfortunately much of this data is incidental to lengthy chapters on indigenous fauna, flora, hunting expeditions and pious intentions. It was also usually perceived in the light of white western culture and nineteenth century Victorian society. Few people of that time, it seemed, had looked at the subject from the viewpoint of the rural builder or analyzed it in terms of indigenous value systems and realities. No-one had brought this information together into a single body of research.

It was also found that the availability of historical data followed a cyclical pattern. The earliest information on southern Africa becomes available from the mid-fifteenth century onwards as the result of shipwrecks and the landings of sea-bound explorers. The quality and quantity of data increases with the establishment of a permanent white settlement at Cape Town in the mid-seventeenth century, but for many years remains limited to the KhoiSan and, later, to the amaXhosa. At the turn of the nineteenth century came the travels of Barrow,

19th CENTURY EXPLORERS AND MISSIONARIES

1.

2.

3.

4.

1. William John Burchell, c 1816.
   Traveller and botanist.
2. David Livingstone, 1873.
   Missionary and explorer.
3. Emil Holub, 1881. Traveller.
4. John Campbell, 1815.
   Church minister and traveller.

Burchell, Campbell and Bain,which had the effect of opening up the hinterland right up to present-day Botswana. Missionary accounts become predominant from the 1830s onwards until the 1880s when the writings of Holub signal the end of a literary era. At that point, it might appear that the book-reading public of Europe had had a surfeit of travels and adventures in southern Africa for little of major importance was to be published until after the 1900s when the first major anthropological studies began to be produced.

In more general terms it could be said that early southern African literature in this field may be divided into two major periods : firstly, an era of travel and exploration spanning from the mid-1500s to the turn of the twentieth century; and secondly an era of study and consolidation, starting from the early 1900s through to the present day. It is fortunate that the forty-year hiatus separating the publication of the last traveller's accounts and the first anthropological studies was to coincide with the rise of commercial photography in this country. Although the first daguerreotypist is recorded as having operated in Grahamstown as early as 1845 (1), the engraved graphic was to remain the most popular form of printed illustration until the 1880s. Thereafter the availability of improved photographic equipment and of lithographic reproduction techniques made photography the dominant medium of book and newspaper illustration. At about the same time and for roughly the same reasons the picture postcard was to reach the height of its popularity as an art form, becoming a fashionable collector's item in late Victorian and Edwardian societies. Admittedly the themes of many such postcards were of a frivolous nature irrelevant to this study, but equally, a number of them were concerned with the recording of local scenarios, some of which reflected the architecture and life-style of this country's indigenous inhabitants. In many ways therefore the picture postcard has given us the only surviving pictorial record of much of the ethnographic data of that time.

It is important, at this point, also to make brief reference to the contribution made to this study by pictorial records of a historical nature. Regrettably many of the written references to indigenous architecture to be found in the early bibliography of the southern African region are often ambiguous and incomplete, using an inappropriate nomenclature and reflecting the writer's prejudices and values. Fortunately, most such volumes consulted generally also proved to be illustrated by means of graphics to a greater or lesser extent. The value of such illustrations however tended to vary from book to book, from author to author and, in some instances even, from edition to edition.

This may be ascribed to two major factors. In the first place, it was found, when dealing with pre-nineteenth century publications, that the same illustrations kept reappearing, under different guises and even under the banner of different authors. Such illustrations were often mirrored or subjected to minor alterations; seldom, if indeed ever, was reference made to their original artist or author (2). Secondly, the elementary nature of certain errors being made in some of these drawings made it obvious that these had been executed in Europe, perhaps under the direction of the author, but certainly remote from the original sources of data (3). This has had the effect of casting doubt upon the validity of other pictorial information of an architectural nature, such as in the case of Kolbe, where it is clear from at least one drawing that the artist had little idea of the structural implications involved in the construction he depicted (4).

While it is true to claim that a study such as this has lacked the support of a sizeable body of specialised literature, it would be remiss not to give credit to what work has been conducted by pioneers in this field. Some have had a direct bearing upon the subject under investigation; others, whilst working in areas not generally associated with architecture or, for that matter, even southern

Africa, have contributed fundamental philosophical concepts or suggested new approaches to research.

Perhaps the one person who has done most to stimulate not only this research, but the study of vernacular architecture as a whole, has been James Walton. He is the one man who, in his time, had the foresight and vision to labour in a field of endeavour offering little glory and few rewards. A prolific writer of learned as well as popular articles, he has not fought shy of publishing the results of his field research. For a long time his book "African Village" (1956) was the only publication available on the theme of southern African rural architecture and is still used by many as the 'bible' on the subject. Walton was supported by others, most prominent amongst them being A.L. Meiring, who is still remembered fondly by the amaNdebele of KwaMatabeleng, and Barrie Biermann, whose gentle and learned approach has done much to raise the scholarship of this subject.

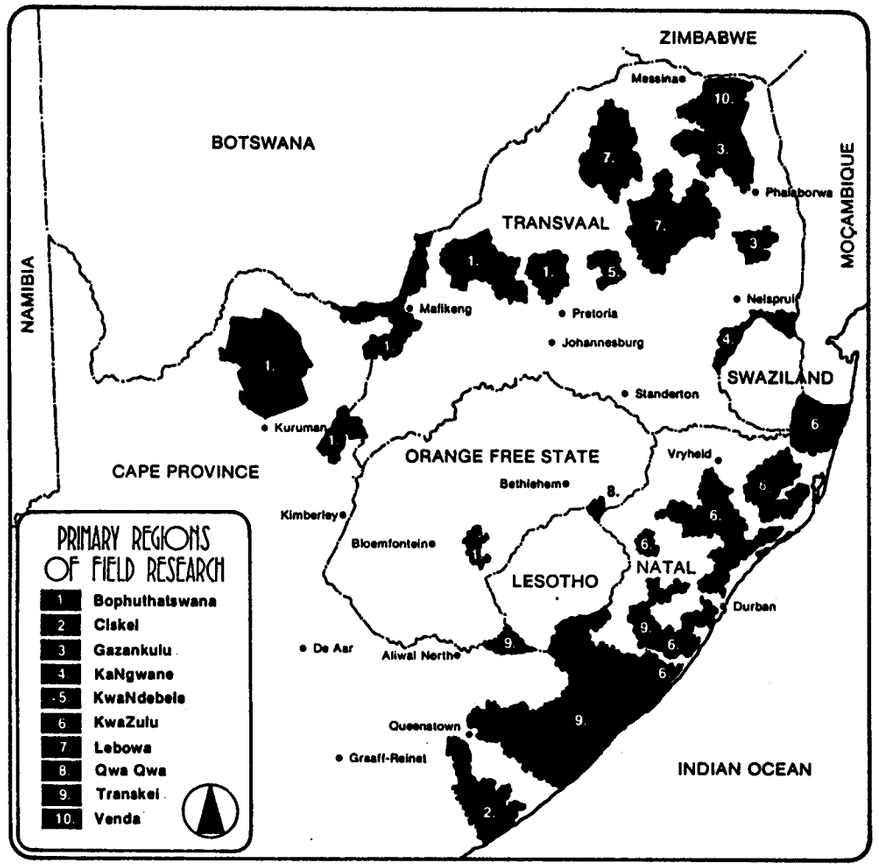
Another man whose work has been seminal to this field is Amos Rapoport. Although he has not written in the southern African context to date and indeed never visited the country until comparatively recently, his publication "House Form and Culture" (1969) and, more recently, "The Meaning of the Built Environment" (1982) have proved to be major stimuli to the research which follows.

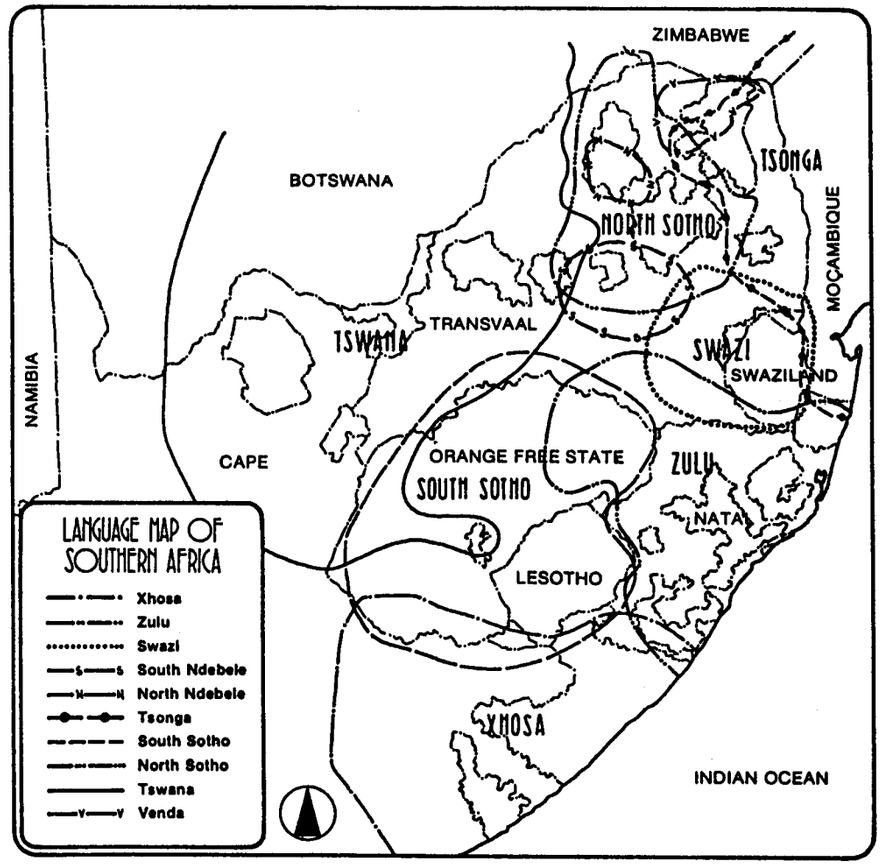
Reference must also be made to the writings of Claude Lévi-Strauss, whose structuralist approach was of assistance in developing an understanding of the make-up and symbolic language of local indigenous settlements and the social hierarchies which govern their composition. With him should also be grouped Adam Kuper whose seminal article "Symbolic Dimensions of the Southern Bantu Homestead" (1980) suggested new avenues of research and interpreted Lévi-Strauss' theories in the context of southern African rural culture.

Research for this programme was conducted between July 1981 and June 1984, although hitherto unpublished information gathered since 1976 has also been included in this manuscript. The process of data collection took the primary form of personal on-site investigations, assisted, wherever appropriate, by the use of translators or persons familiar with local conditions. Accreditation to this effect is given where appropriate. Although, in some instances, it was found necessary to employ senior students for the performance of certain tasks, such as the measurement of some settlements, this was done under the direct supervision and guidance of the author.

Field work for this project took place in the broad context of the southern African region and included in its scope the Republic of South Africa, Eastern Botswana, Swaziland and Lesotho. For reasons not relevant to this project it was not possible to extend the work into neighbouring Mozambique and Zimbabwe although, strictly speaking, it was not deemed necessary to do so, the Limpopo and the Eastern Transvaal escarpment providing convenient lines of demarcation for this region. Much of the actual work was concentrated in those areas of southern Africa currently referred to as the "Homeland States" and although sites were also visited in white-controlled farm lands, settlement patterns, architectural styles and building technologies in the latter were generally found to be as valid as in the former and, for the purposes of this study, no balance was sought between the two.

The collection of data concerning current rural architectural practices was conducted by means of personal on-site interviews. These included questions on rural building technology, building, architectural and settlement nomenclature, settlement development and growth and, where relevant, land organisation and management. Although formal survey forms were prepared and a small quantity printed, their use was soon abandoned as it was found that they tended to intimidate those being interviewed and inhibited





a free flow of information. They were also too long and it was generally found that, after an hour or two of close questioning, informants became restless and impatient, although usually too polite to make this fact overtly evident. It was therefore found that a strategy of using a pad of blank A3 cartridge paper (best under windy conditions) which allowed informants to see what was being written and drawn and, more important, encouraged them to do some sketching and writing of their own, was preferable to the use of preprinted and official-looking forms. The written surveys were supported by extensive photographic documentation of the informant's own built environment as well as, in some cases, by the careful measurement of the homestead and its immediate surrounds. This included the determination of orientation, ground slope and prevailing winds as well as the location of animal byres (if any), immediate agricultural activity, middens and, if at all possible, burial grounds. In some instances where circumstances permitted it, photographic aerial surveys of the area were either made personally or adapted from photographs made available by official sources.

It was also found that a more informal approach to data collection allowed the author to sit in on gatherings of men, usually in the cattle byre,where, once the subject of hut building and settlement layout was initiated, it could take its own informative course, often lasting a whole afternoon or so. On some such occasions, the subject of the author's eligibility to sit in on such a gathering was gently and tactfully probed but the status of being a married man and father to a child usually proved sufficient credential. In the majority of cases, the status of university lecturer, leading to the title of "tisha" or "teacher", gave ready access to the information required.

Interviews were generally sought either with elders in the community or with local persons engaged in the everyday practice of architecture and building. These were usually men, but as it was found that on many such occasions the meetings were held in the presence of women who contributed freely to the conversation, it was not felt that the picture given was unduly distorted. In fact where a distinct division of labour was found to exist between the sexes, the information pertinent to the work of each family member was given by the person concerned if he or she was present. Whenever possible the correct etiquette of approach with local people was established beforehand and contact was made through the local leadership hierarchies although, in a few cases, this was not necessarily found to lead to productive interviews. In all instances however, where requests were made either to visit certain homesteads or to conduct research unaccompanied, this was always acceded to.

One difficulty which was guarded against but which, in the long run, proved to be unwarranted, related to the question of "misinformation". There is always the possibility, in work of this nature, either that an informant, eager to please, will give data of an incorrect or doubtful nature or that a researcher, eager to accept, will faithfully record it. In this case it was ultimately found that the open and co-operative format of data gathering adopted in the field was one of the strengths of this project. Questions posed would be discussed at length by the group as a whole before a definitive answer was given and upon those rare occasions when an individual ventured incorrect information, the meeting would pounce upon it and correct him. The fact however that several surveys were always conducted for any one location served as controls to the information.

In this respect it also became necessary to differentiate between hard data and the telling of beautiful tales. The latter is an ancient rural tradition in southern Africa, a form of impromptu folk theatre which could take place at the side of a footpath during the day, about the fire at night or anywhere else that fancy might dictate. Credo Mutwa is the teller of many such beautiful and imaginative stories which, unfortunately, are sometimes accepted at face value by the white media, much to the amusement of the black population.

Contact or association with local representatives or agents of the South African government was invariably found to be counterproductive and prejudicial to the performance of work in the field. As a result of previous experience gained in this matter, no attempt was made to obtain official sanction outside the University of the Witwatersrand for the research being done. On the other hand, authorities in Botswana, Lesotho and Swaziland were found to be extremely cooperative.

Research of a historical and biographical nature was conducted personally in the libraries and archives concerned. Also consulted were the maps and researches of various government departments as well as the records and archives of numerous local and overseas organisations and bodies. Further expert assistance and opinions were sought and obtained from relevant authorities in their own fields, as and when such aid was required. Full accreditation to all of the above is given in its appropriate place.

Much of the historical and bibliographical research done in conjunction with this project has involved the perusal of some one hundred and fifty-odd books and pamphlets, most of which are not usually associated with the study of architecture. Some, like Burchell's "Travels in the Interior of Southern Africa", proved to be rich in data relevant to the built environment; others, like Selous' "A Hunter's Wanderings in Africa", were frustratingly barren. For the purposes of this programme those passages and illustrations of an architectural interest were taken out of their original texts and arranged chronologically by author in book form. Ultimately it is hoped to republish this manuscript in some kind of "Anthology of Southern African Architecture" to make this material more generally available to other students and researchers.

A brief note must also be made of the fact that, sadly, the linguistics of this country are bedevilled with a language and vocabulary which reflect its tragically bigoted history. It is difficult for a researcher in a field such as this to ignore the existence of certain terms which have come to express the racism of some people and which are obviously hurtful to others. It is also difficult not to appreciate that the currency of some words has also tended to change with time and that whereas such terminology as "bushman", "Hottentot", "Mapogga" and many others besides were in common usage up to a generation ago, these have now largely fallen into disuse. For the purposes of this manuscript, where such words do appear as part of a historical text being quoted, it is proposed to omit them and replace them, between brackets, with the noun which would have been used had they been penned in more recent times. Thus the following text :

> "The huts at Genadendal, unlike those of genuine Hottentot construction, which have a hemispherical shape, and are covered with mats, are merely rude imitations of the quadrangular buildings of the colonists".
>
> BURCHELL, William J. "Travels in the Interior of Southern Africa". 1822.

will read as follows :

> "The huts at Genadendal, unlike those of genuine (Khoikhoi) construction, ... etc".

In any case, the quotation being fully referenced, the reader may, if he so wishes, go back to root source and obtain it in its original form. In the eventuality of such words appearing in the text, they do so purely in a historical or anecdotal context.

The reader will also notice that, wherever possible, some efforts have been made

to retain the integrity of usage of southern African indigenous nouns. The tendency mostly on the part on the part of local whites, to use one single term, such as "Sotho", to describe everything to do with that group of people is erroneous. Thus, in this particular case, the term "baSotho" would be used to describe the people themselves, "seSotho" to describe their language, "Lesotho" to describe the land they occupy. It has also been attempted, in a few instances, to re-establish the indigenous nomenclature of certain prominent natural features which was changed during the process of colonialization in the last century. Thus the "Drakensberg" mountains are returned to being the Kahlamba, the "Orange" river to the Gariep and the "Vaal" river to the KiGariep. The anglicisation of other local nouns is also corrected thus changing the "Tugela" to Tukela, "Umfolozi" to Mfolozi and so forth. This has not been done for any reasons of "radical chic" but because these are the terms in actual use among the local black residents of southern Africa's rural areas. I believe that, ultimately, it is only a matter of time before such local names as Johannesburg and Cape Town are changed to their indigenous counterparts of "eGoli" (place of gold) and "eKapa"(5) respectively.

Finally it must be stated in unequivocal terms that whilst the names of what some people euphemistically call "The Homeland States" are frequently used in the text which follows, this is being done in order to describe a particular region or artificially imposed set of political boundaries. They should not, under any circumstances, be taken to mean acceptance of or acquiescence in the political ideologies which have brought such a state of affairs into being.

Franco Frescura Johannesburg, November 1984.

NOTES AND BIBLIOGRAPHY

1. ROSENTHAL, Eric
"Encyclopaedia of Southern Africa". London and New York : Frederick Warne & Co. Ltd., Sixth Edition, 1973.

2. Le Vaillant's drawing of a Khoikhoi woman underwent at least eighteen different transformations between 1790 and 1819. Some were merely re-engravings and differed from each other on relatively minor points. Others however were either reversed or, in the English, Dutch and German editions, modestly altered by the addition of a small 'tablier' or apron upon the lady in order to safeguard readers from improper thoughts.

3. One of the more amusing examples of this may be found in the Dutch edition of Kolbe (1727) which includes an illustration of a fierce-looking elephant baring a wide set of dentures as well as the more customary tusks.

4. KOLBE, Peter
"Beschryving van de Kaap de Goede Hoop". Amsterdam : Balthazar Hakeman, 1727.

5. MYBURGH, A.C.
"Native Names of Industrial Addresses". Ethnological Publications No. 24. Pretoria : Department of Native Affairs, 1948.

ACKNOWLEDGEMENTS

Gratitude is a strangely ambivalent emotion in man. He who shows too much runs the risk of embarrassing his patron and being considered obsequious by his peers; he who shows too little may be deemed an ingrate, unworthy of further support. Matters, of course, have not always been thus. Up to Renaissance times, it was not unusual for painters to incorporate portraits of their benefactors into their pictures, and the visage of many a wealthy merchant has been destined to beam down upon posterity from the serried ranks of holy saints and cherubim. In later years it became popular for artists and writers to dedicate their works to noble patrons in terms which abounded in flattering superlatives. Even up to the last century it was not uncommon for travellers and explorers to rename prominent natural features they encountered after their king and country. Had, for example, Emil Holub had his way, the name of Franz Joseph of Austria would have featured prominently on current maps of southern and central Africa. Historically therefore one can begin to appreciate the cynicism underlying the old Italian bar-room ditty which proclaimed that :

"Che sempre sia lodato
il fesso che ha pagato".

which, loosely translated, recommends that "the fool who paid be praised evermore".

It is for this reason that, in more recent times, pages of acknowledgement such as this one have tended to be reduced to a set of polite and unimaginative formulas. This means that whilst grant administrators, prominent professors, parents and spouses all gain deserved recognition, the role of advice-givers, bed-warmers, shoulder-profferers and all good Samaritans is minimised or even ignored. This is wrong, not only for the more obvious reasons of civility, but also because it discounts the larger interplay existing between researcher and the society about him or her.

This is especially important in a project of this nature where the large number of people who contributed to it is a direct reflection of its wide scope and direction. Various lessons have been learnt during the course of this research programme, one of the most important perhaps being the realization that southern African vernacular architecture arises out of the cooperative and collaborative nature of local rural society. Like the rural dwelling this work would not have been possible without the participation of many people and communities originating from a wide spectrum of southern African society. Like the stone burial mounds erected in some parts of the country which grow in size as each passerby tosses his pebble onto the pile, so this research has grown as each person has made his own contribution. Thus the acknowledgements which follow are not a list of professors and peasants, they are a directory of people who have participated, in one way or another, in this project. My heartfelt thanks go to each and every one of them.

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if somewhat unwillingly, by the Human Sciences Research Council (HSRC) towards the cost of this research and it is hereby acknowledged. This body however desires it to be announced that opinions expressed or conclusions arrived at in this document are those of the author and should not be regarded as those of the HSRC, (as if they would be anyhow!).

Throughout this project a great deal of guidance and stimulation has been provided by Dr Dennis Radford who has been more of a friend and a colleague than a thesis supervisor. The same thing can also be said of professors Amancio Guedes, David Hammond-Tooke and Thomas Huffman, all of the University of the Witwatersrand, Barrie Biermann of Natal University and Victor Papanek of Kansas University.

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Cape Archives, Cape Town.
Cory Library, Rhodes University, Grahamstown.
Duggan-Cronin Bantu Gallery, Kimberley.
Kaffrarian Museum, Kingwilliamstown.
Natal Museum, Pietermaritzburg.
Natural Sciences Library, Witwatersrand University, Johannesburg.
Royal Engineers Corps Library, UK.
Union Archives, Pretoria.

They not only bore my forays with remarkable fortitude but, in many instances, went out of their way to exhume unusual and interesting material from their archives which added greatly to the scope of this study.

One of the strengths of this project must lie in the wide range of persons who, each in their own way, contributed to it. Many were rural residents who provided invaluable first hand information on the architecture and technologies of their regions; some were students and friends who assisted in the recording of physical environments; others were interested in the debate surrounding the issues which arose and helped to formulate many of the ideas expressed in the pages which follow. All deserve a special mention in their own right. They include the following :

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Final and hence, by convention, most important recognition must be given to the rural people of southern Africa who are the ones who really wrote this book. They are the moulders of clay, the layers of thatch and painters of walls. I have been recorder and interpreter but it is they who have been the builders and creators of the environment which future generations of South Africans will be proud to acclaim as "Our Vernacular Architecture".

BOOK ONE : CONTEXT

CHAPTER 1 : THE SCATTERING OF A PEOPLE

> "Kuening, for that is the name of the place, was formerly inhabited by tribes of Bechuana-Bakwenas. In the neighbourhood there is a number of deserted kraals, and everywhere around, the ground is covered with human bones, and skulls, and broken pots, and such like remains."
>
> ARBOUSSET, T. and DAUMAS, F. "Narrative of an Exploratory Tour to the North-East of the Colony of the Cape of Good Hope." Cape Town : Saul Solomon & Co., 1846.

It is almost inevitable that a multi-disciplinary study such as this will have to rely, to a certain degree, upon the work of researchers in allied fields for some of its background data. It is almost equally inevitable that, in the process, a wide range of hypotheses will be offered, in the context of different experiences, as explanations of the same phenomena. The origins of the indigenous people of southern Africa is a good case in point. Here we find that archaeologists, anthropologists, historians, linguists and geneticists have all played a role, at one time or another, in this research. All are in agreement that the subcontinent was inhabited by indigenous groups from at least the sixteenth century onwards; few are in agreement as to how they arrived here.

Generally speaking we find that most researchers tend to subscribe to one of three major theories :

a. That groups of root crop agriculturalists and fishermen indigenous to West Africa spread to East Africa where they acquired knowledge of grain, cattle and metal working from local sources. (1)
b. That the same groups were already possessed of such knowledge when they spread into East and South Africa. (2)
c. That no migration process occurred but that indigenous groups of hunter-gatherers already inhabited the region during the Late Stone Age and evolved an iron-based culture locally. (3)

Various other theories of a more peripheral nature have also emerged from time to time, such as that propounded by Hromnik (which presupposed a "civilising" Indian presence in the sub-continent) (4), but have failed to gain much academic credence to date.(5) It is not desirable that this work become embroiled in debates which are clearly outside its sphere of concern. Where however such opposing theories that do occur are perceived to have an architectural context, it is proposed to debate them equally. The three hypotheses described above may be seen to be the product of two mutually exclusive philosophies : that the peoples concerned migrated and then became sedentary, and that they have been sedentary all along. Obviously these represent two socio-economic systems which would have given rise to life-styles and hence architectures which would have differed quite radically from each other. For the purposes of future discussion it is proposed to refer to them as the "Theory of Migration" and the "Theory of Sedentary Evolution."

The background notes which follow are not intended to present a full and definitive history of the region but merely to sketch an outline of some of its aspects which will give the reader a basic perspective of events which took place during or just before the nineteenth century which may have had a bearing upon the current population distributions of southern Africa.

Before the Difaqane

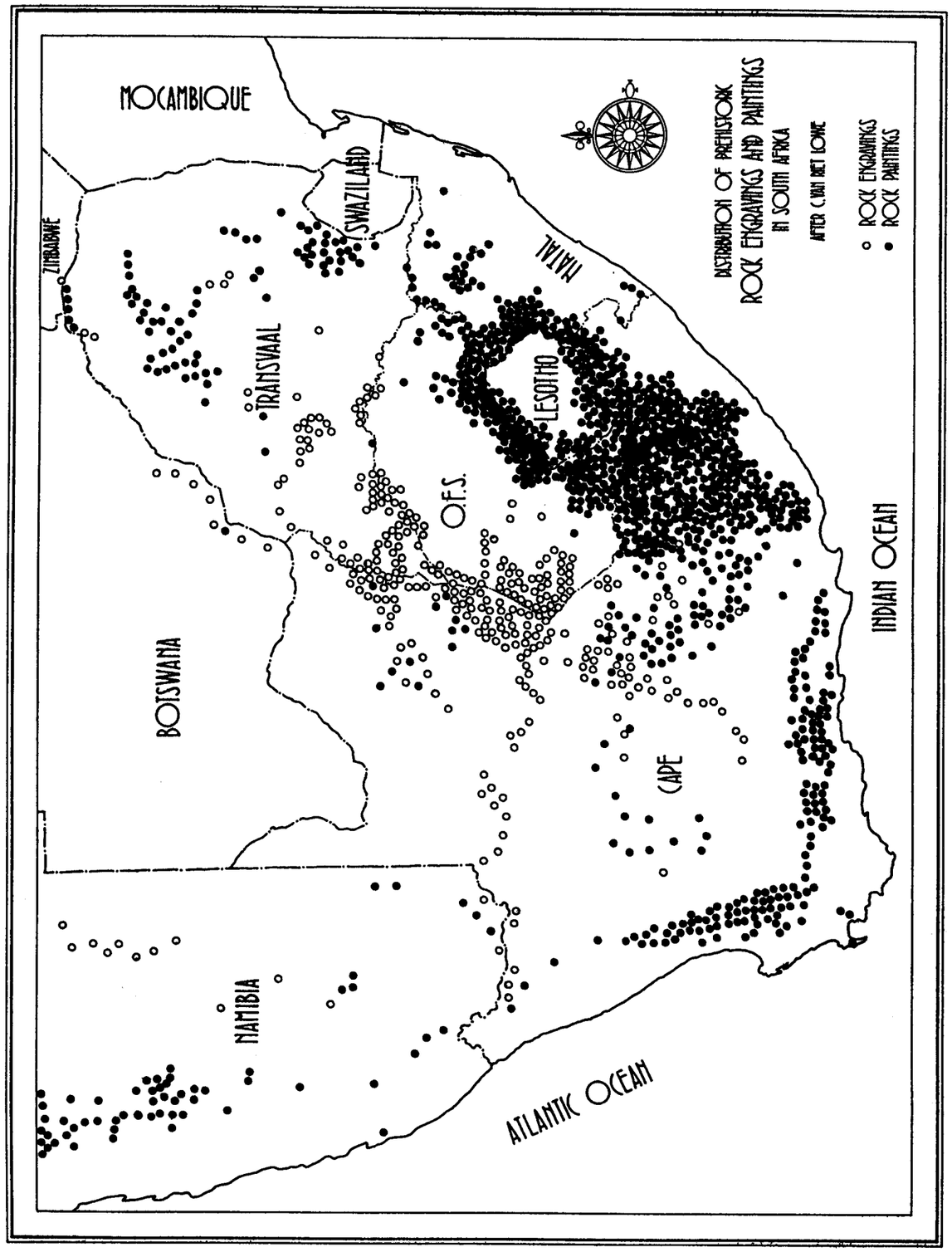
The seSotho word "difaqane", or to give it its Nguni equivalent "mfecane", means, literally, "the scattering of the people." (6) It has come to signify a period in southern African history between 1822 and 1837 when, as a result on the one hand of internal pressures within the Nguni kingdom of the amaZulu and, on the other, of an increasing encroachment by white immigrants from the Cape upon the country's interior, the major part of the sub-continent was to enter a period of upheaval and turmoil. It is the view of most historians today that the era of the Difaqane represents a time of transition which was to transform the whole nature of rural tribal society and pave the way for changes in the region's economy and system of government. Certainly the resultant massive population shifts, the concentration of people into some areas and the depopulation of others was to set the pattern for the future growth of the modern states of southern Africa as well as provide the inception of many of its later problems.

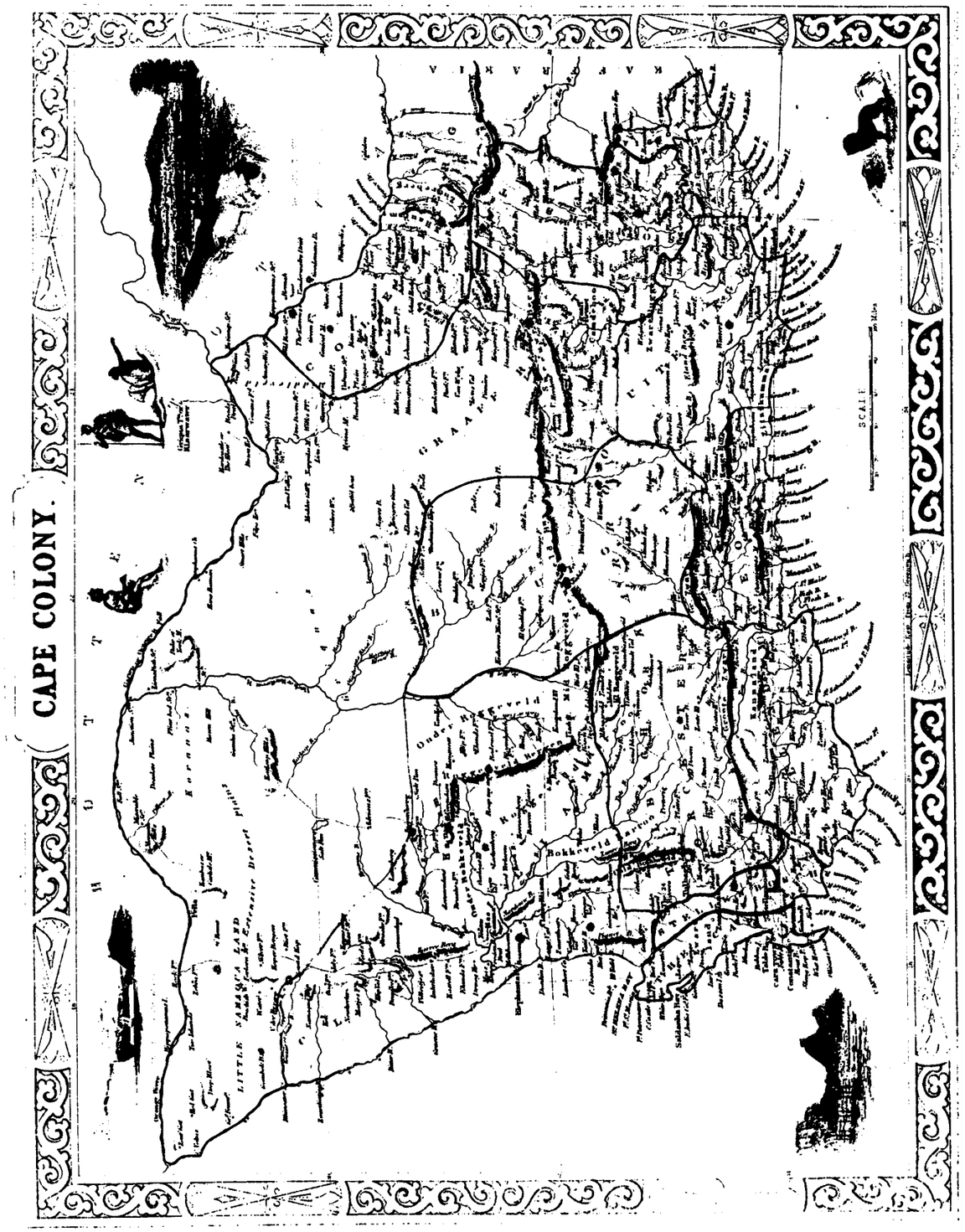
The period of Difaqane, far from being an isolated event in the history of an indigenous people, was in many ways interlinked with parallel events in the sub-continent's white immigrant community. Although scattered missionary infiltration had begun some time before, it was given considerable impetus by the publication of Campbell's accounts of his travels through the region during 1812-13 (7) and again in 1820. (8) As a result, missionary activity in southern Africa increased rapidly between 1822 and 1837, most particularly in the northern Cape, the Eastern Cape and Lesotho, all three areas being the backdrop for some of the most momentous events of this era. British efforts to create a power balance in British Kaffraria by the introduction of immigrant white farmers from 1820 onwards had the unwanted result of accelerating British military involvement in the region. Finally, itinerant Dutch farmers and pastoralists from the Cape migrated northwards in 1836-7 filling a power vacuum which had been created as a result of the Difaqane. (9) In a way it may be said that it was the latter's intervention in the affairs of the region, when they brought about the defeat of Mzilikazi's Matabele in the Marico valley of the western Transvaal in 1837, that finally brought to an end this period of southern African history.

Before the Difaqane, the region's population could be considered to fall into five major groupings:

a. The migrant pastoralists of the southern region which encompassed the larger area of the Cape and southern Namibia (10) although Maggs suggests that their settlements may have reached as far north as the Riet river in the southern Orange Free State.(11) Today these are mostly described as Khoikhoi although it is thought that some San groups may, at one time, also have existed under a mixed hunter/gatherer and migrant pastoralist economy.(12) Indeed current thinking is that the previously perceived divisions between hunter/gatherer, migrant pastoralist and agrarian pastoralist economies should not be viewed in such set terms but rather that the three should be seen as overlapping and, depending upon circumstances, even interchangeable activities. (13) It is known, for example, that early travellers into the region during the last century at times experienced difficulty in distinguishing between San and Khoikhoi groups. (14) It is also known that both San and Khoikhoi settled among and intermarried with southern Nguni agrarian pastoralists. (15)

b. The agrarian pastoralists of the eastern littoral extending from the coast of the Indian Ocean to the east up to the foothills of the Kahlamba or Drakensberg mountains in the west and from the Sunday's River to the south (16) up to the Transvaal lowveld in the north. (17) Today these are described as Nguni speakers, although this would appear to encompass a broad range of dialects.





c. The agrarian pastoralists of the interior plateau extending from the Kahlamba to the east through to present-day eastern Botswana in the west, and from parts of Lesotho up to the northern Transvaal. (17) Today these are described as Sotho/Tswana speakers although it is known that some groups of predominantly Nguni background, notably the South amaNdebele, had migrated to this region and settled here some considerable time before the Difaqane.(18)

It may be noted at this point that the distinction being made here between a coastal and a highveld agrarian pastoralist economy might appear to be somewhat arbitrary, especially when such a division is strongly argued against in subsequent chapters. This is being done for reasons of expediency. Much of the published research on the Difaqane makes use of these terms and they are being used in order to avoid any unnecessary confusion in nomenclature.

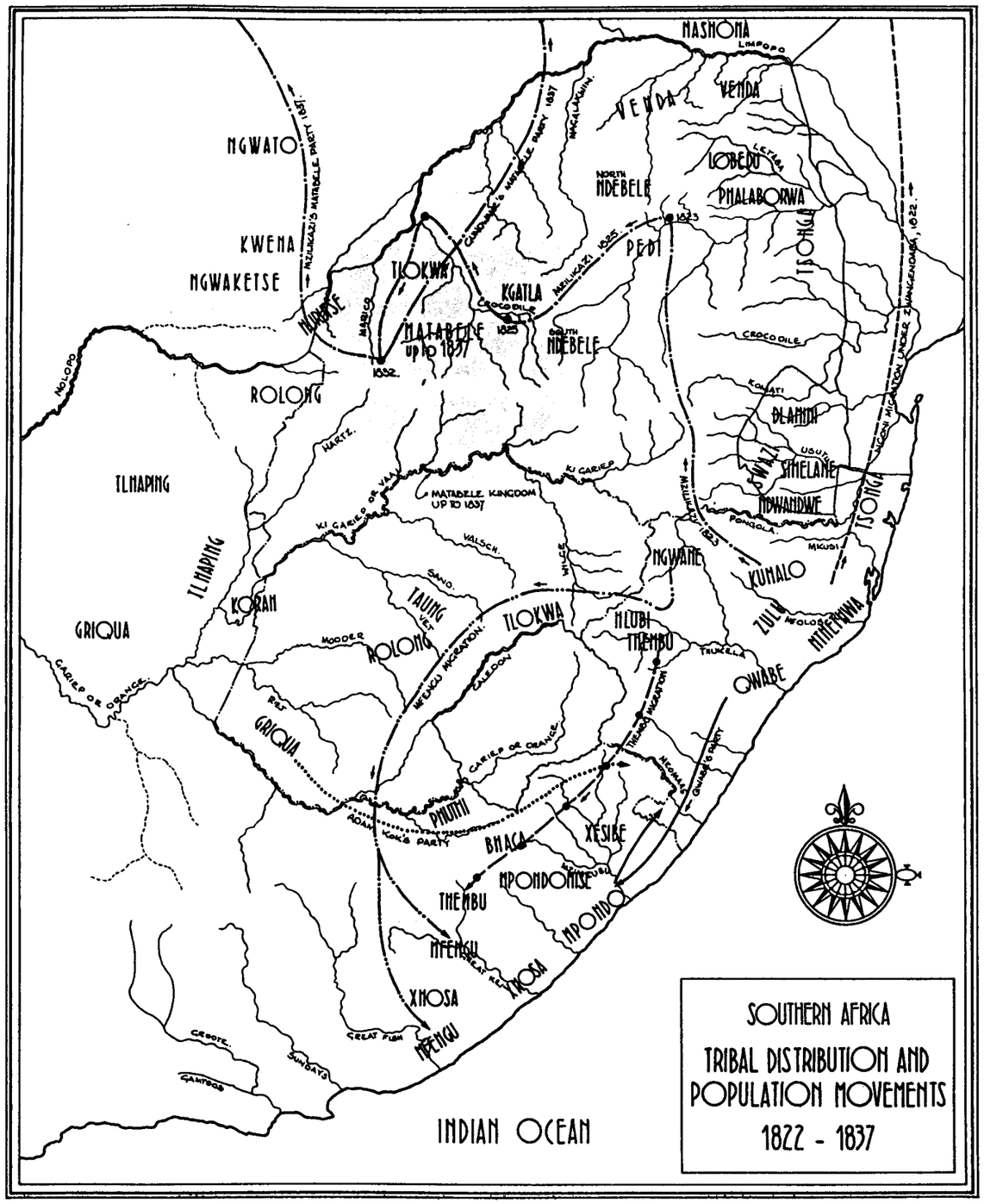
d. The agrarian pastoralists of present-day northern Transvaal, inhabiting an area between the arc of the Limpopo and just south of the Soutpansberg, who are today described as vhaVenda.(19)

e. The nomadic hunter/gatherers of the southern African hinterland commonly known as the San. Due to the nature of their society and the fluctuations which would have occurred in their economy from time to time, it is difficult to assign to them a definite area of historical occupation. Most early authors such as Barrow (20) and Burchell (21) consign them to the drier semi-desert areas of the southern African interior but by then the process of white dispossession of KhoiSan territory would have been well advanced. Elphick rejects the idea of a separate Khoikhoi and San identity (22), arguing that any distinction which may originally have existed between the two would have become blurred by the time of white immigration. He shows San location as part of a common KhoiSan occupation. Perhaps the clearest picture of San presence which has been presented to date is that published by van Riet Lowe in his survey of the distribution of rock paintings and engravings in southern Africa. (23) Although this was published in 1952 and is probably in need of revision by now, it nonetheless clearly shows that San presence neatly overlays the areas of occupation of Khoikhoi, Nguni, Sotho/Tswana and vhaVenda alike, covering as it does virtually the whole of southern Africa. Areas of sparse distribution were noted in the upper reaches of the Lesotho mountains, the Cape Karoo and the more arid parts of Botswana and Namibia, the reasons for an absence of residential evidence in these areas being fairly obvious.

It will have been noticed that the Tsonga/Thonga of the eastern Transvaal and Mocambique region have not been mentioned thus far. Regrettably it has not been possible to date to conduct field research in Mocambique and such work which has been done to date in Gazankulu has not proved conclusive enough to warrant inclusion in this study.

The Scattering (24)

The beginnings of the Difaqane have their roots in the early years of the nineteenth century when Dingiswayo acceded to the leadership of the amaMthethwa clan, a Nguni group inhabiting the coastal region about the Mfolozi river. He was to begin a programme of social reform which abolished the holding of initiation schools and organised the young men into military regiments of approximately the same age. It is not thought that he was personally responsible for the introduction of any major tactical innovations, but this new system of organisation appears to have been enough to have intimidated most of his neighbouring clans into a confederation which acknowledged his paramount chieftainship. One of the clans which fell under the suzerainty of Dingiswayo was that of the amaZulu, a small



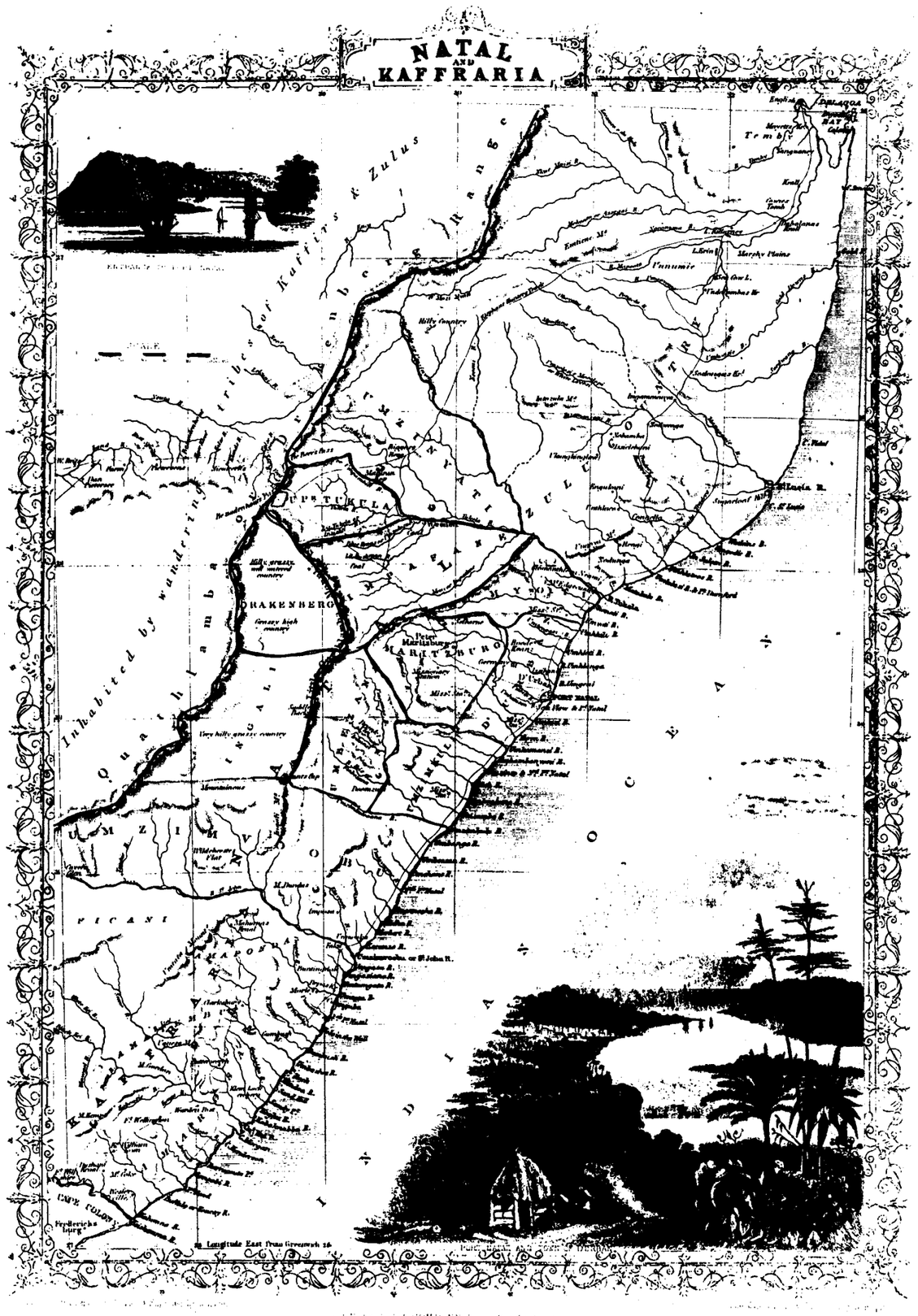
group which is not thought to have exceeded more than two thousand people at that time and who inhabited the area between the upper Mhlatuzi and the White Mfolozi. Senzangakona, their chief, had caused a minor scandal in about 1787 when he fathered a boy child with a woman called Nandi. Despite her being installed as a junior wife, the disgrace persisted and Nandi and her son, whom she had named Shaka, were forced to leave and eventually found sanctuary with the amaMthethwa. There Shaka was enrolled in one of Dingiswayo's regiments where he soon distinguished himself as a resourceful leader and was elevated to its command.

When Senzangakona died in about 1816, Shaka was designated by Dingiswayo as the new chief of the amaZulu. He immediately set about reorganising his small army along amaMthethwa lines, at the same time redesigning his warriors' equipment, discarding the longer throwing spear in favour of a shorter stabbing weapon. He also schooled his troops in new military tactics involving the faster movement of men about the countryside and their deployment in the now-famous "bull's horns" fighting formation. The amaZulu were soon to become a formidable fighting force and after the death of Dingiswayo in about 1818, the growth of Shaka's kingdom was rapid as clan after clan was absorbed into a larger amaZulu identity and their young men drafted into his regiments. By 1819, a scant three years later, Shaka controlled virtually all the eastern littoral from the Pongola in the north to the Tukela in the south.

Perhaps the most important changes brought about by Shaka in the military thinking of the region had little to do with innovative battle tactics or an improved weapons technology but rather with the larger concept of conflict and conquest. Up to that time traditional warfare had been a somewhat medieval affair, limited in its scope and following some long-established ritualistic patterns. (25) If anything the wholesale slaughter of the opposition was seen to be counterproductive to the aims of conflict and although bloody battles were not unknown, generally speaking casualty figures were kept low. Shaka changed that and introduced a concept of total warfare which did not stop at the elimination of the ruling family or perhaps the killing of the menfolk but at times even included the massacre of women and children as well. By the time he had brought the whole of Zululand beneath his wing, his troops had gained a fearsome reputation for themselves.

Thus we find that, as a result of this policy, conquered peoples who previously might have held their ground and paid a yearly tithe or tribute to a paramount ruler, were now left with no option but to flee for their lives. Between 1818 and 1824 refugees from Shaka's regiments began to pour south into the Transkei and westward over the Kahlamba into the highveld. In many cases the displaced sought in their turn either to plunder the food from the people they encountered or displace them from their land, often displaying a Zulu-like ferocity in their task. A vicious game of territorial musical chairs had been unleashed.

Thus we find that in about 1818 the amaNgwane were attacked successively by Dingiswayo's amaMthethwa from the south and the amaNdwandwe from the north. After this second invasion the amaNgwane were forced to flee their lands and fell upon the amaHlubi to their west settling an old quarrel and forcing them in their turn to migrate over the Kahlamba onto the highveld where they attacked the baTlokwa, a seSotho group under the leadership of their queen-regent MaNthatisi. For a while the amaNgwane occupied the land vacated by the amaHlubi but were themselves forced to flee westward again in 1822 when the amaZulu invaded and annexed that region. The amaNgwane also crossed over the Kahlamba and once more attacked their old foes, the amaHlubi. This event is generally acknowledged to mark the beginning of the Difaqane and for the next few years hordes of landless amaNgwane, amaHlubi and baTlokwa (more commonly referred to as Mantatees) roamed the southern highveld region plundering or absorbing some groups, annihilating others and generally



creating a state of anarchy. Ultimately in 1825 the amaHlubi were defeated and annexed by the amaNgwane who then proceeded to harrass the southern Nguni and spread the Difaqane to the eastern Cape region. This alarmed the Cape authorities who organised a mixed force of white soldiers and farmers and ameXhosa and abaThembu allies under the leadership of Colonel Henry Somerset. They engaged and defeated the amaNgwane forces in 1828, the survivors being absorbed by the Nguni communities to the south.

By this time the entire highveld had become embroiled in the Difaqane and although the dispersal of the amaNgwane and the settlement of the baTlokwa at Kooaneng (near modern-day Ficksburg) had gone some way towards normalising matters, the ripples from the original invasions had spread and now other wandering hordes of displaced, hungry and landless people continued to make the pacification of the region an impossible task. This state of affairs was further complicated by the fact that in 1822, as the result of internal rivalry within the amaZulu nation, a small group of some 300 warriors belonging to the amaKumalo clan had broken away and, under the leadership of their chief, Mzilikazi, had migrated northwards into the Transvaal.

The Matabele, or "refugees" (26) as they had been styled by the Sotho/Tswana, slowly moved across the Transvaal highveld settling at first on the upper reaches of the Oliphants river (1823), then near modern-day Pretoria (1825) and finally on the Marico river in the western Transvaal (1832). On the way they came into conflict with numerous highveld groups, defeating and incorporating them under a larger Matabele (Nguni) identity. Ultimately this kingdom at its height was to encompass a large area from the Limpopo to the Vaal and from the Crocodile to the Marico, although their military expeditionary forces are known to have ranged much further afield.

The era of the Difaqane can probably be considered finally to have come to an end in 1837 when Mizilikazi was defeated by a Dutch commando led by Potgieter and Uys in a running battle which lasted nine days. At its end Mzilikazi and his followers, both Nguni and Sotho/Tswana, were forced to migrate northwards to present-day western Zimbabwe where they were to create a new kingdom for themselves, this time at the expense of the maShona.

The Impact of the Difaqane

It would be wrong to conclude that the defeat and subsequent emigration of the Matabele in 1837 was to bring about the complete pacification of the southern African sub-continent. It is true that the two major proponents of sustained political growth through conquest, Shaka and Mzilikazi, were either dead (27) or gone by 1838, but they left behind them a legacy of displaced people and confused issues. (28) Also the political struggles of the region began to revolve increasingly about the encroaching presence of immigrant Dutch farmers who, from 1836 onwards, were to play an ever-growing role in the affairs of the peoples north of the Gariep or Orange river.

Perhaps the major single impact that events of the Difaqane were to have upon southern Africa lay in the political field. Before 1822 the political organisation of the region appears to have been based largely upon the ability of any number of individual leaders to bring about the confederation of various clans and tribes recognising their paramount chieftainship. The mechanics of such confederations varied greatly but most relied upon the continued exercise of personal authority by one charismatic leader. Few such organisations appear to have survived beyond the lifetime of their initiator.

19th. CENTURY LEADERSHIP

1.

3.

4.

2.

5.

1. MERENSKY, 1875. Sekhukhune, of the baPedi.
2. WANGEMANN, 1875. Cetshwayo, of the amaZulu.
3. CASALIS, 1861. Moshweshwe, of the baSotho, in 1833.
4. HOLUB, 1881. Khama, of the baNgwato.
5. WANGEMANN, 1872. Sandile, of the amaXhosa.

The formation of the amaZulu kingdom changed all that. In its fifty-one year history it created a military system which not only acted as a means of exerting political power but also played a unifying role within the amaZulu nation, being based upon age groups and cutting across distinctions of clan and tribe. Its ability to extend amaZulu power well beyond the boundaries of Natal was to force other regions of the country to organise new social structures of their own in order to counter this imbalance. Some, like the amaSwazi, Matabele and amaTsonga adopted Zulu-like organisations, others like the baSotho had to create new ones to suit their own local needs. Thus the Difaqane was to break down many of the old tribal and clan distinctions existing at that time, effectively bringing togehter groups with common regional interests into larger political associations leading in their turn, in some cases, to the growth of wider national identities.

The impact of the Difaqane in architectural terms is a little more difficult to assess. Certainly the massive population dislocations which did occur may be seen to have had an enormous disruptive influence upon the socio-economic make-up of traditional rural society. It is probable that many culturally-linked social patterns survived this trauma, but others, such as architecture and agriculture, which rely to a greater extent upon the existence of an active interaction between society and its physical environment must have undergone a period of extensive adjustment and modification. If ever there was a time when evidence should have been produced to support the hypothesis of a cultural predeterminism in dwelling form, the Difaqane should have been able to provide it. It is proposed to debate this point more fully during the course of a later chapter.

Theoretically speaking it should also be necessary to revise the previously described patterns of population distribution for the region subsequent to 1837. In fact we find that the general picture has changed relatively little. It is true that some individual tribal groups and clans underwent fairly traumatic displacements and that during the course of the Difaqane some regions developed a larger political identity which tended to transcend local loyalties. However the Nguni largely remained on the eastern littoral, the Sotho/Tswana retained occupation of the highveld and the vhaVenda were left mostly untouched by events further south. What did happen was that the old Khoikhoi and San areas of influence,which had been diminishing steadily before the Difaqane,continued their rapid decline. The Khoikhoi were reduced to two small enclaves in southern Namibia and the northern Cape respectively, the latter migrating from there in 1861 and resettling in what they named Griqualand East, a virtual no-man's land which was created during the course of the Difaqane between the Transkei and Zululand.(29) Little information is available on the movements of San groups at this time but it is thought that those who still followed a hunter/gatherer economy had either taken refuge in the more remote reaches of the Kahlamba or had moved with the game deeper into the arid hinterland.

For the purposes of this research we are concerned with the relocation of only three other groups. The first has already been mentioned briefly, and consisted largely of those Nguni who sought refuge from the Difaqane among the southern Nguni. These may be considered to have been the result of two distinct waves : those Natal Nguni who, in escaping from the ravages of Shaka's regiments, made their way south through the Transkei, largely between 1818 and 1824; and the defeated remnants of the Ngwane/Hlubi horde which rampaged through the highveld at the height of the Difaqane and were defeated by a combined colonial force under Somerset in 1828. Remnants from both groups straggled southward and were ultimately allowed to settle among the abaThembu and amaXhosa of the southern Transkei where they adopted their locally-applied name of amaMfengu (Fingo) or "beggars".(30)

The second group to undergo substantial relocation was that of the baRolong, a baTswana group who, wishing to escape the Difaqane, in 1833 removed themselves under the guidance

of missionaries of the Wesleyan Missionary Society, from their homes in the northern Cape to a site at Thaba 'Nchu, where they settled under the protection of Moshoeshoe. (31)

A third group which, unlike the amaMfengu and baRolong, were not displaced as a result of the Difaqane but of their own free will some forty years later were the baTlokwa, a baSotho group who had assisted the British in their invasion of Zululand in 1879 and who had previously distinguished themselves as mercenaries for the Natal government. (32) Their chief, Hlubi, was granted control of a large tract of land surrounding Nqutu and Isandhlwana during the partition of the Zulu kingdom by Wolseley in 1879, where he and his followers subsequently settled. (33)

Finally the Difaqane should also be considered to mark a point of no return in the study of the indigenous architecture of southern Africa. Before 1822 the contacts made between immigrant white settlers and indigenous black inhabitants were still scarce enough to be nearly uncommon. By soon after 1837, groups of white travellers, missionaries, traders, colonists and soldiers had all penetrated deep into the subcontinent. Whereas there is enough evidence to show that before the Difaqane white immigrants had been adapting themselves quite freely to living in indigenous structures, after it, as white settlement increased and building resources suitable to an immigrant architecture became available, square-plan dwellings built with ridged roofs and in an imported technology began to proliferate. Thus the era before 1822 can probably be considered the last period of rural settlement before the indigenous builder came into large scale contact with a new and different set of dwelling forms and building technologies. Whether this opportunity for white/black, or indeed inter-black, cross-cultural architectural pollination did come to anything will be discussed during the course of subsequent chapters.

The Boundaries Harden

Many of the clashes which have occurred in the past 300-odd years between the white immigrants to the sub-continent and its indigenous inhabitants have revolved about each side's respective interpretation of exactly what constitutes land ownership and control. The two represent such diametrically opposing philosophical conceptualisations of land holding and usufruct that it is not difficult to see how this issue was never resolved satisfactorily in the past and lives on to plague relations between the two groups today.

Western society has, over the years, evolved numerous systems whereby its members could gain control of areas of land for the purposes of settlement and usufruct. Most are based upon the concept of ownership or tenure whereby the individual person is able to acquire and use land and dispose of it or hand it down at his own whim and desire to other individuals. The stress here is upon land control by a single person or corporate body. The community, via the state or central government is given certain rights over the property, but should they wish to dispossess him for the common good they must recompense him for his loss of usufruct.

In contrast, indigenous southern African society views land as being owned in common by the group but held in trust for them by their leader or chief who is able to dispose of it at his own discretion to sections of the community for their own usufruct. Land may not be acquired or disposed of unless done through the chief and should the usufruct of it cease through the resident group or family vacating it, then it reverts back to a common ownership for the chief to dispose of again at a later date.(34)

It is obvious that where an indigenous population holds their land under one system

of ownership and an immigrant group gains control of it under another, somewhere along the path of history, a process of land alienation and dispossession must have taken place. (35) It is not for this text to analyse in great detail the workings of such a phenomenon. It is sufficient to record that it did occur. Thus while the end of the Difaqane signalled the end of fifteen years of major internecine warfare between indigenous groups in the subcontinent, it did not signal the end of all conflict there. Aside from the odd isolated regional difference which still had to be resolved internally, henceforth most of the region's disputes were to centre upon the question of land ownership between white and black.

It is true that some clashes had already taken place between white settlers and indigenous communities of the interior before the period of the Difaqane, but these had largely been limited to the eastern Cape. After 1837 however contact between the two groups was to increase across a broad front and although the same patterns of land-deprivation occurred as with the KhoiSan, the new settlers were generally met with far greater resistance than they had encountered a century earlier. This could probably be attributed to a number of factors, foremost among them being the greater permanence and stability of an agrarian pastoralist community and its economy. (36) Also the very nature of migrant society facilitated the process of gradual dispossession adopted in the Cape with the KhoiSan for, as soon as the grazing in one particular area became exhausted, the indigenous pastoralists could usually be persuaded to move on to fresh fields.(37) Sedentary agrarian settlements however were far less likely to choose such an option of their own free will and, understandably, tended to resist the alienation of their land.

Although the philosophy of indigenous land ownership and the processes (and hence morality) of dispossession were understood as early as the eighteenth century and probably sooner (38), very little appears to have been done before the Difaqane to bring about a reconciliation of the two land tenure systems.(39) Some concern was shown for the plight of both Khoikhoi and amaMfengu during and immediately after the Difaqane years when land was set aside for their settlement. The motives for such a move however were hardly altruistic and the solution proposed little better than palliative.

By 1841 however the idea of setting aside special areas for the purpose of indigenous settlement was gaining acceptance in white colonial circles.(40) This not only sidestepped the question of what to do with the pockets of local population once white infiltration had alienated the surrounding land all about them, but it also proposed a method whereby the two systems of land tenure could co-exist side by side without either philosophy having to give way to the other. Although it hardly need be pointed out that such a system held the seeds for the iniquitous land distribution of a century later (41), in a way the establishment of reserves can also be seen to have retained a measure of land control in indigenous hands long after the best farming land in southern Africa had been alienated.(42)

The next step in this process was to be taken in 1913 with the passing in the Union Parliament of the "Natives Land Act, No. 27 of 1913" which defined areas (referred to as "Scheduled Areas") outside which blacks could not purchase land and within which people other than black could not purchase land. (43) The scope of this was consolidated in 1936 with the "Native Trust and Land Bill" of that year which established the South African Native Trust and extended the area set aside for exclusive black settlement by 7.25 million morgen of land (44) which the Trust was empowered to buy. The net result of the limitation of black rural settlement into what effectively represents 13% of the land area of South Africa (45), has been an increasing overloading of natural resources in these regions. Already in 1913 complaints were being made by rural dwellers of over-

crowding in some districts (46) and we find that after the 1925-30 period, increased overburdening of existing agricultural and grazing land led to diminished crop yields, impoverishment of the soil and an acceleration in top soil erosion. Cattle, a traditional measure of rural wealth, amounted to 1.6 million head in 1918, increased to 3,8 million in 1930 but have continued to decline ever since; sheep decreased from 4,7 million heads in 1930 to 3,3 million in 1950 whilst goats, who are notorious destroyers of natural vegetation, increased by nearly 23% over the same period. By comparison the cattle populations of both Swaziland and Botswana have more than doubled between 1920 and 1950.(47)

The effects of a "Homeland" policy upon the architecture of rural southern or, more specifically, South Africa have not been fully documented to date. Previous as well as current research seems to indicate that the period between 1920 and 1930 may well have been critical in the development of novel dwelling forms and the adoption of new building technologies in these regions. They appear to have been stimulated by a growing over-population of certain areas which led to increased competition by homebuilders for a limited supply of traditional building materials, mainly timber and grass. This, in its turn, may have led to the adoption of new roofing materials and the development of new wall-building techniques.(48) It should also be borne in mind that a decline in the traditional agrarian and pastoral economy would have led many individuals or families to find employment and livelihood in cities and towns. There they would have entered into a cash-earning economy thus giving them the means to purchase money-intensive goods such as corrugated iron roof sheeting, doors, windows, cement and furniture, all of which, it will be shown in a subsequent chapter, had substantial roles to play in the development of a new rural architecture.

Conclusions

While it is obvious that a study of the historical forces which have moulded the fate of rural man is important in gaining an idea of how his built environment has been able to respond to them, the picture is by no means yet complete. Despite recent valuable work in this field, the interactions between town and country dwellers, their economies and hence their architecture has yet to be fully recorded and analysed.(49) The migrant worker must have been an important link between the two, yet no research of any magnitude has yet been conducted to determine his role in the transplant of new materials, technologies and dwelling forms from the urban to the rural environment. Until this and other allied work is tackled, preferably by architects, this picture must, of necessity, remain incomplete.

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9. This is a hypothesis which has two interpretations. Theal propounded his theory of the "Empty Highveld" in 1891 which sought to create the impression that the Dutch 'trekboers' moved into empty land. (Theal, 1891). However this is not supported by all eyewitness accounts of that time. Backhouse (1844), Arbousset and Daumas (1846), Broadbent (1865) and Mackenzie (1871) all tell of unburied bones and deserted villages on the highveld between 1823 and 1879 - but they also tell of other settlements which were far from abandoned and of refugees hiding in thickets, too scared to show themselves. This is further supported by Captain W.C. Harris' sketch map of his expedition through the highveld during 1836-7 which clearly shows that a number of groups "Lihoya, Bushmen, Koranas, Barolong, Abaka and Bargpootsa" (sic) inhabited the central and southern highveld at that time (Cory Library, Grahamstown MP 285).

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24. Unless otherwise stated, the historical data used in the section below was drawn in the main from three major sources.
WILSON, Monica and THOMPSON, Leonard. Op. Cit.
OMER-COOPER, J.D.
"The Zulu Aftermath." London : Longman, 1978.
GUY, Jeff
"The Destruction of the Zulu Kingdom." Johannesburg : Ravan Press, 1982.

25. LICHTENSTEIN, Henry
"Travels in Southern Africa." London : Henry Colburn, 1812 and 1815.

26. The word "Ndebele" is a shortened and anglicised form of the Nguni word "amaNdebele" which, in its turn, is an adaptation of the seSotho word "Matabele" (Rasmussen, 1975) meaning "fugitive" or "refugee". Van Warmelo (1930) has suggested that it may have been used by the Sotho/Tswana as a general name for the Nguni but in view of the fact that MaNtatwane's baTlokwa (and hence baSotho) were also referred to by other baSotho groups as "Ndebele" (Smith, 1957), this does not appear to be likely. More recent research in the Ngutu region of Zululand has also shown that the baSotho families living in and about the St. Augustine's mission station also describe themselves as "Ndebele" although they are careful to point out that they are not "Middleburg amaNdebele" or South amaNdebele. The subject was given a different perspective by some

baTswana informants who claimed the word to originate from the seTswana "tebele" meaning "plunderer."

27. Shaka was assassinated outside his cattle byre by two of his half-brothers, Mhlangana and Dingane on 24 September 1828.

28. Some of these issues remain unresolved to this present day. The political struggle which is taking place currently between the MaShona and the Matabele of Zimbabwe may be considered to be, in part, a legacy of the Difaqane.

29. DOWER, William
"The Early Annals of Kokstad and Griqualand East." Port Elizabeth : Jas Kemsley and Co., 1902.

30. WILSON, Monica and THOMPSON, Leonard. Op. Cit.

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"A Narrative of the First Introduction of Christianity ... etc." London : Wesleyan Mission House, 1865.

32. The baTlokwa or "Mantatees" were one of the groups which bore the major brunt of the Difaqane. Hence it was probably no coincidence that their men should find employment as fighting troops under the British in the latter's invasion of Zululand in 1879.

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The discrepancy between white immigrant and black indigenous attitudes to land is nowhere better illustrated than by Charles Brownlee who, as Native Commissioner to the Gaika, reported upon the following legal case :

> "This man had built a nice square cottage, and had also enclosed the ground belonging to him and had planted fruit-trees. The chief being desirous of possessing the cottage offered to purchase it as well as the improvements on the ground. A price was agreed upon and the seller left the district. Shortly after this the chiefs and headmen called a meeting at the residence of the chief, at which they protested against the purchase of the cottage as contrary to native law, according to which when a man removed from a district, the land and improvements left by him reverted to the tribe. They therefore protested against what had been done as illegal. In course of time the seller of the cottage and improvements applied for the first instalment of the price, and he was told by the chief what had taken place, and that as the sale was illegal, it had been cancelled. The man then laid his case before the magistrate, who decided that (as in purely native cases he had administered Native law, and as the sale was against Native law) - it must be cancelled; that the plaintiff therefore had no claim. The case then came before me in appeal. My decision was that when a man removed from one locality to another, he was at liberty either to put a fire-brand to his hut, or pull it down and take away the materials. In this case the chief offered, in order to prevent the man from doing such a thing, to buy the cottage. There was nothing in Native law forbidding a man to sell his property! the transaction therefore was not opposed to the law, and the bargain entered into must be upheld.
> The same decision might have been given on other grounds. When a native, for instance, builds his hut it does not cost him a single shilling. The men assist in cutting the wattles and erecting the frame of the hut, and the women collect the thatch and finish the hut. In the case of the square cottage it is quite otherwise. The builder has to pay for doors, windows, and other materials, besides having to engage a skilled workman. A house built in this way is beyond the reach of Native law - which never contemplates the erection of a building costing perchance from £50 to £100. In this case had the house not been purchased, the owner would have taken it down, and removed the doors, windows, and building material to the locality in which he settled.
> The case therefore on the grounds stated had to be reversed, and the chief was ordered to pay the appellant the sum originally agreed upon."
>
> BROWNLEEE, Charles
> "Reminiscences of Kafir Life and History". Lovedale : Lovedale Mission Press, c 1916. Second Edition.

35. CAMPBELL, John. Op. Cit. 1815.

36. DAVENPORT, T.R.H. and HUNT, K.S. Op. Cit.

37. Ibid.

38. Ibid.

39. Ibid.

40. Ibid.

41. Ibid.
Not all proponents of a policy which would establish "reserves" for indigenous settlement saw this measure as being either oppressive or unfair to the people it sought to shelter (Davenport and Hunt, 1974). L. Anthing, Special Magistrate in Bushmanland, witnessed the process of dispossession of San land by white settlers and proposed in 1863 the establishment of a "Bushman Reserve" in order to "... save from perishing the remnant of a poor and weak race of people whose land has been appropriated by us, ..."

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It is also worthy of note that a recent symposium held in April 1984 in Cape Town by the Carnegie Foundation, on the subject of "Poverty in South Africa", did not invite a single architect to present a paper. Discussion on housing and related matters was instead led by geographers and political scientists.

> "Whereas in the month of January our missionaries complained of a great drought, at the present moment the sole topic of their letters is the absolute deluge which compels them to spend weeks on end, as it were, half drowned ... They wondered whether the brick houses would not collapse over the heads of their occupants."
>
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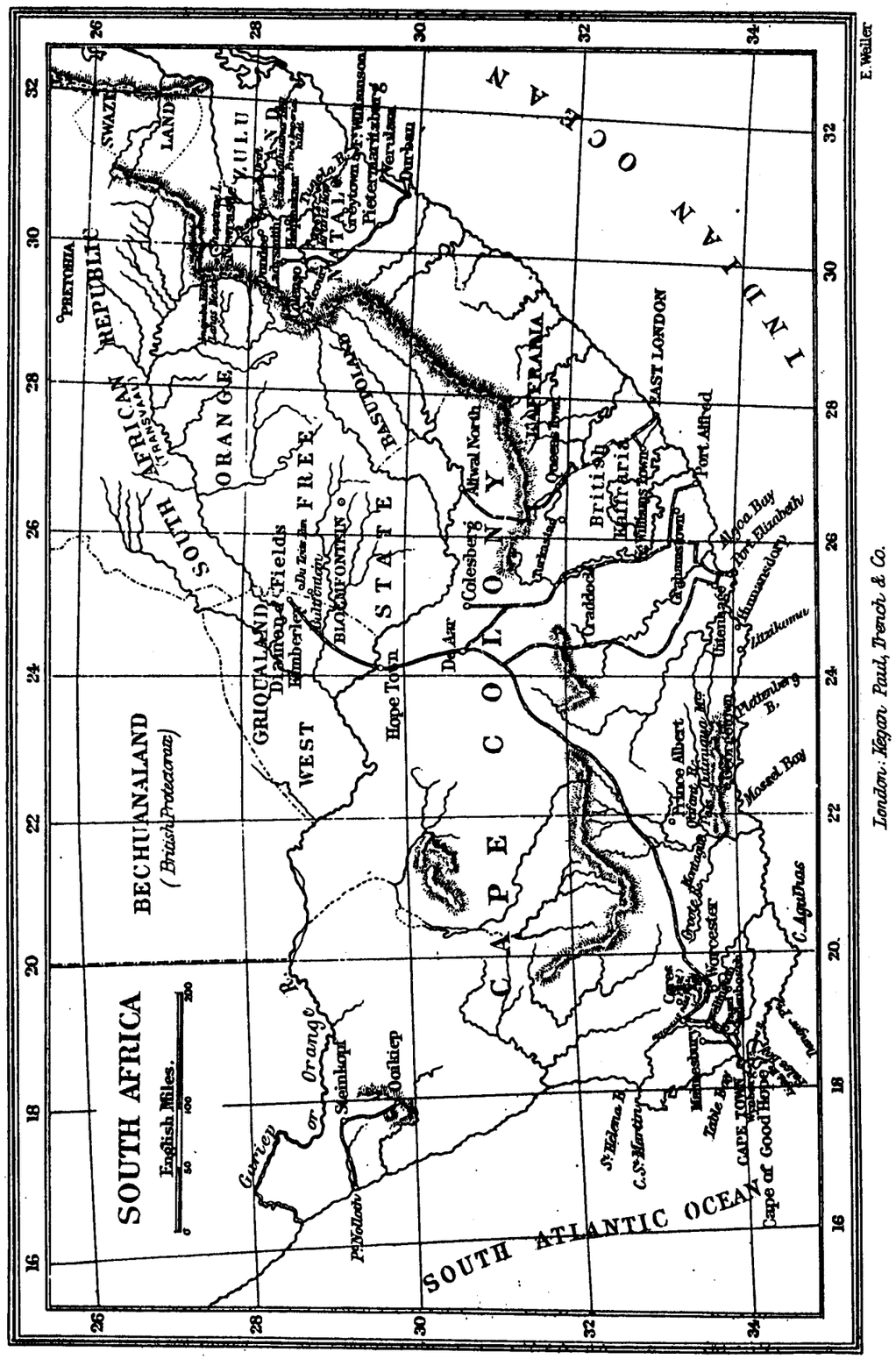
1. Geological Structure (1)

The greater part of the southern African region is considered by geologists to consist of an ancient continental area which has not been submerged since the early Paleozoic era. Apart from those movements associated with major continental changes, the plateau has remained little disturbed since that time.

Although the geological evolution of the region spans a relatively large period of (geological) time, some of its rocks being estimated to exceed 1500 million years in age, its composition is relatively simple. It would appear that the major rock formations were laid down during five eras, each one separated from the next by prolonged periods of erosion, earth movement or volcanic activity. These were :

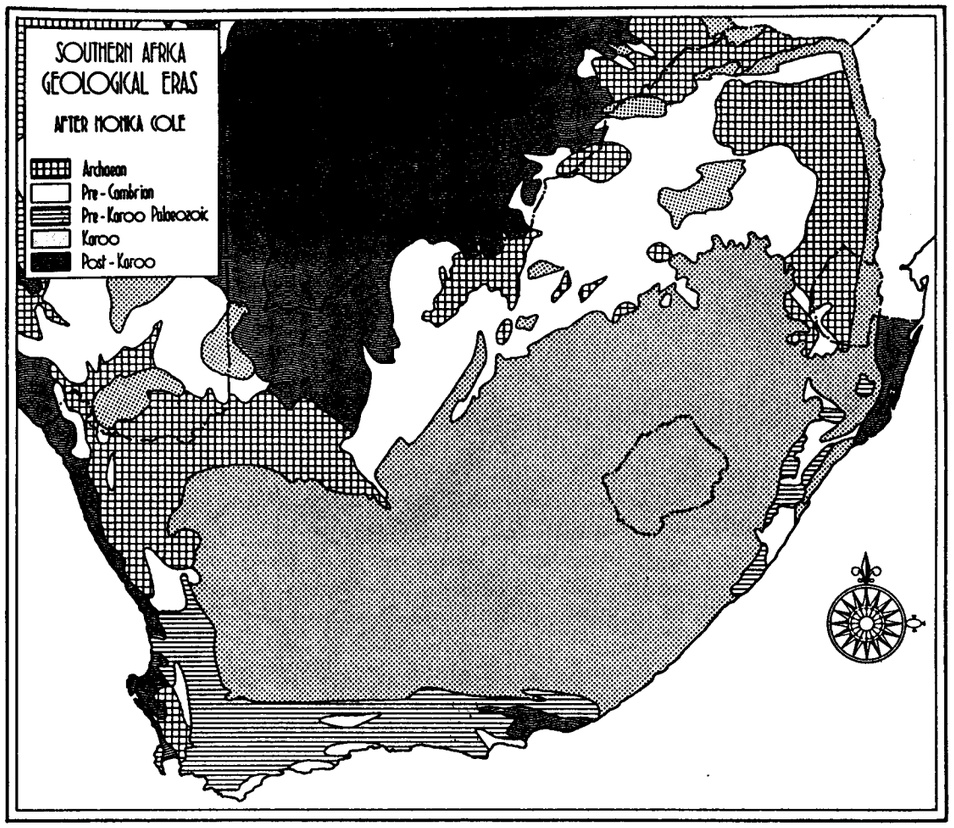
a. The Archaean Era during which the most ancient rock formations in the region were laid down. They were probably the result of several cyclical periods of mountain building, volcanic activity and erosion.
b. The Pre-Cambrian Era saw the invasion by water of the southern Transvaal/ northern OFS region, thus creating a shallow sea. Following extensive sedimentation, it eventually drained, probably as the result of an uplift of land to the north and west which was accompanied by volcanic activity. This was followed by a prolonged period of erosion during which the land was worn quite flat thus allowing the return of shallow seas to their old areas as well as the northern and western Cape. The end of this era was once again punctuated by great volcanic activity in the Transvaal region.
c. The Paleozoic pre-Karoo Era was marked by the development of a basin to the south of the region in the south-western Cape, which gradually deepened thus creating a geosyncline into which sedimentation began to collect.
d. The Karoo Era. By this stage the Cape geosyncline had been extensively sedimented and was of relatively shallow depth. Most of the country was of low relief but highlands rose over the central Transvaal, northern Cape and central Namibia. This was a period of great glaciation initially, but once the ice retreated and the temperature rose, flats, deltas and swamps were formed along the edge of the old Cape geosyncline. Here forests flourished and gradually moved northward as the sedimentation of the south increased. By this time the geosyncline had been virtually filled and pressure exerted from the south began to compress the Cape sediments giving rise to the folded mountain ranges of the region. These were to cast a rain shadow over the rest of the country, thereby changing the conditions for erosion and hence deposition in the interior. By the close of this period, southern Africa must have resembled a vast, sand-covered wasteland. Finally, sheets of lava issued from numerous fissures in the Transvaal/Lesotho region to cover the greater part of the eastern subcontinent.
e. The post-Karoo Era. The outpourings of the Karoo lavas were followed by a lengthy period of erosion and crustal adjustments. Folding had ceased in the southern Cape and, barring a few minor changes, the region began to assume its present outline.

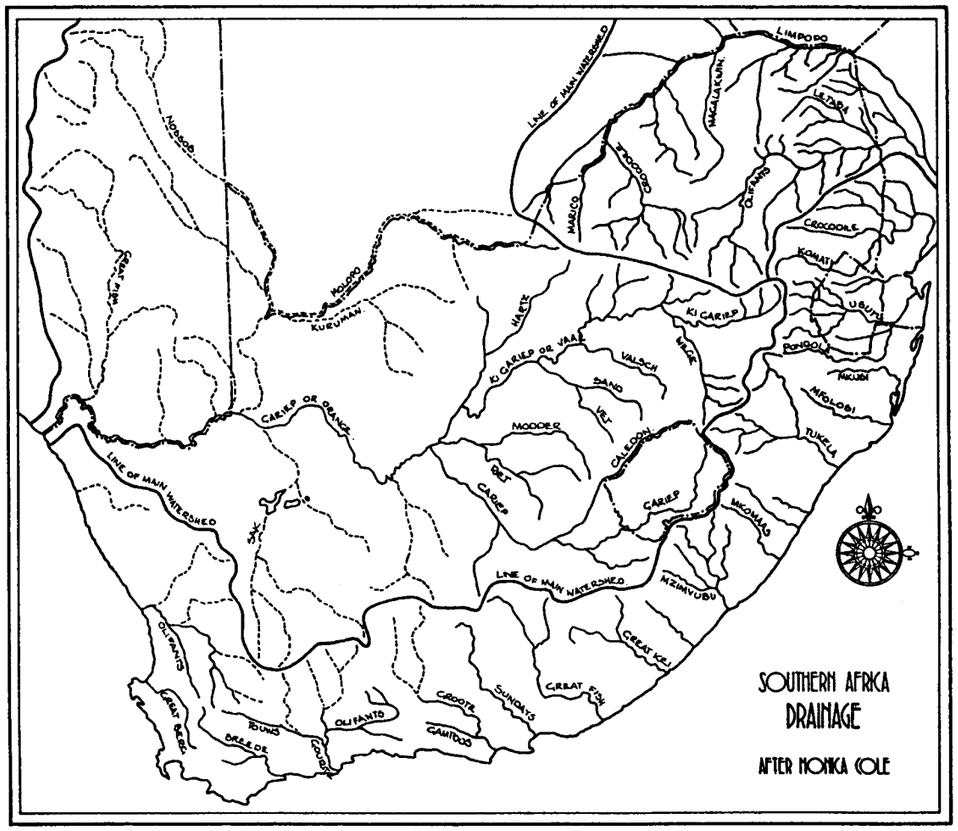


PHYSKAL AND POLITIKAL MAP OF SOUTHERN AFRICA c.1885

London: Kegan Paul, Trench & Co.

E. Weller





2. Drainage

Generally speaking the major southern African watershed coincides with the line of the Great Escarpment although in the Transvaal it swings westward following a line linking the southern Transvaal and the northern Cape thereby separating the Limpopo from the Orange/Vaal (Gariep/Ki Gariep) complex. A smaller watershed in the eastern Transvaal serves to separate the Crocodile-Komati river basin from the Limpopo.

3. Relief

The outstanding relief feature of southern Africa is the Great Escarpment which divides the sub-continent into two major physiographic provinces - the generally more arid plateau, characterized by extensive level surfaces, and the wetter coastal littoral.

4. Weather and Climate

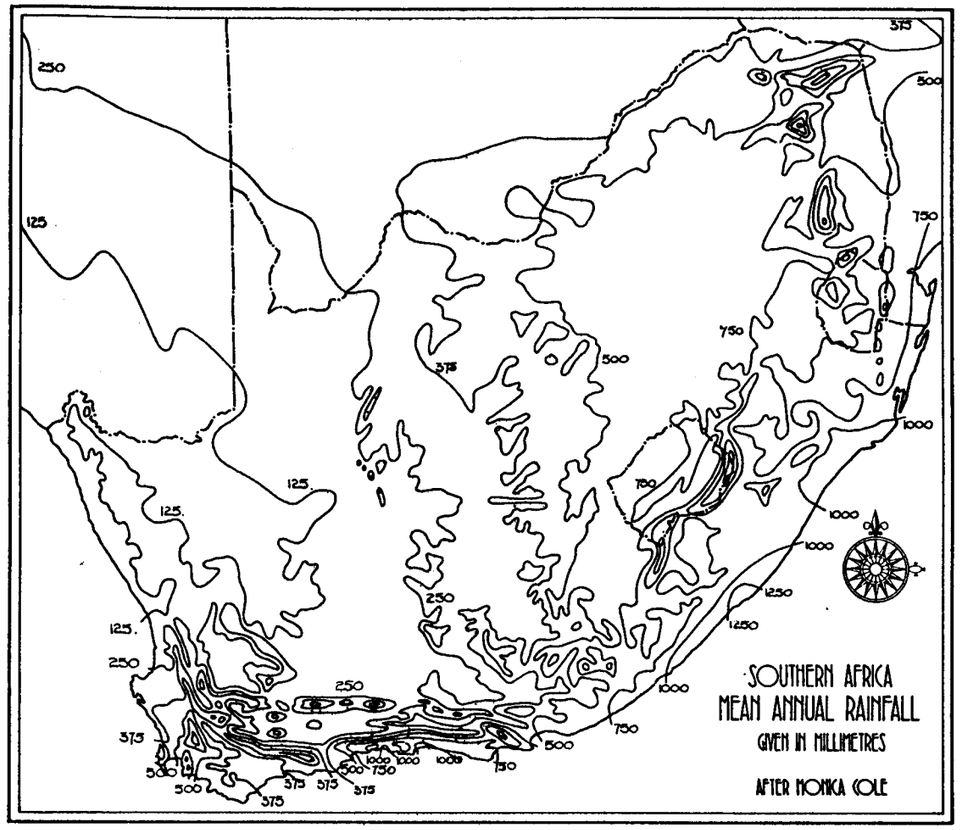
The weather experienced at any moment over a land mass is determined by the behaviour and properties of the air mass or masses over it. In the case of southern Africa this is complicated by the fact that the greater part of the country consists of a plateau having an average elevation of 1200 m above sea level, delimitated sharply by a mountainous escarpment below which a belt of marginal low lands extends to the sea.

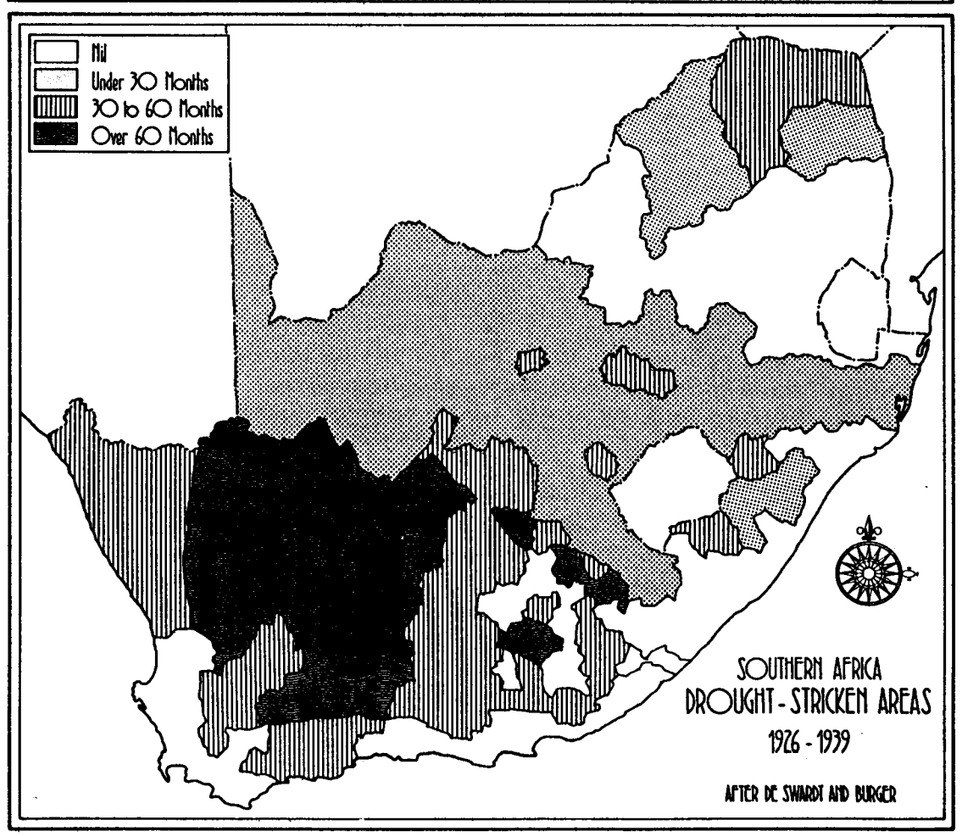
It would appear that weak anti-cyclonic conditions tend to prevail over the eastern half of the country throughout the year. However these are not static and migrate periodically between the Limpopo valley to the north in winter and the Mont-Aux-Sources mountain region in the summer. In effect this means that, in July, westerly winds bringing winter rainfall penetrate the southern Cape region while in January easterly and north-easterly winds prevail over the greater part of the country, bringing with them moist air from the Indian ocean, thus effectively creating distinct regions of summer and winter rainfall.

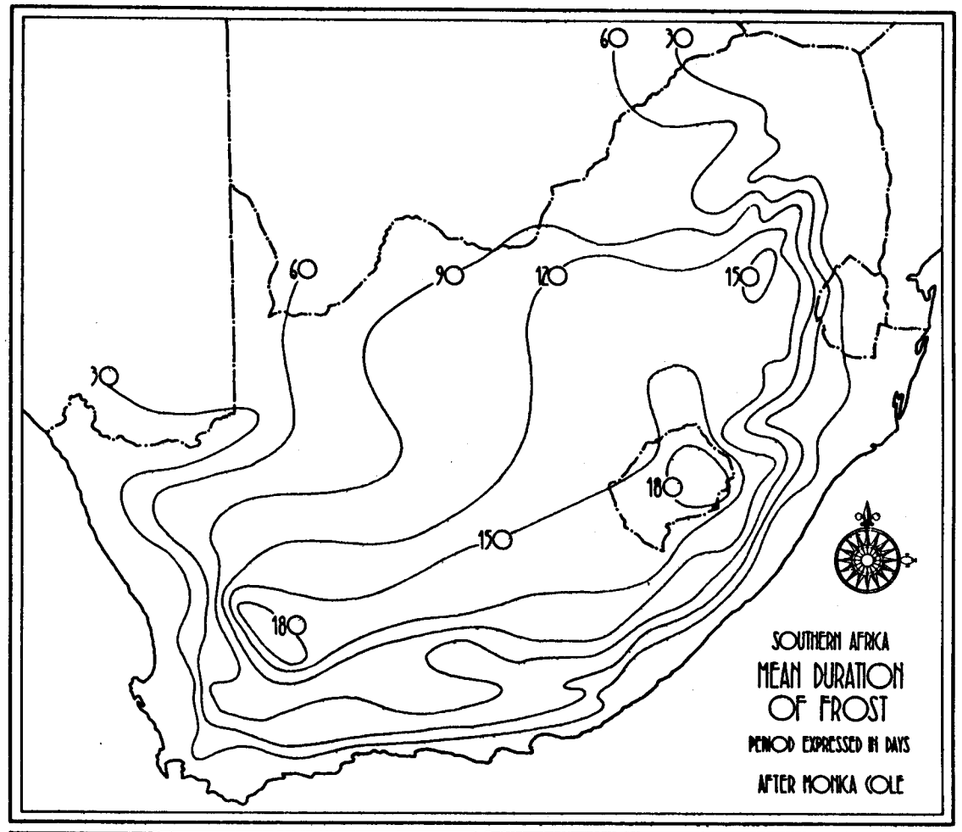
Prevailing wind conditions can vary quite considerably even on a daily basis. Generally speaking, in summer, winds over the plateau tend to be northerly to north-easterly in the morning swinging to north westerly and westerly in the afternoon, while over the coastal belt they blow in from the sea. In winter,air circulation over the plateau is similar while the coastal lands will experience north-westerly winds. As a rule the winds prevailing over the coastal region do not reach as far as the plateau,but occasionally in winter cold southerly air currents will sweep over the escarpment and across the highveld. Somewhat more frequently hot berg winds from the plateau will descend to the low lands.

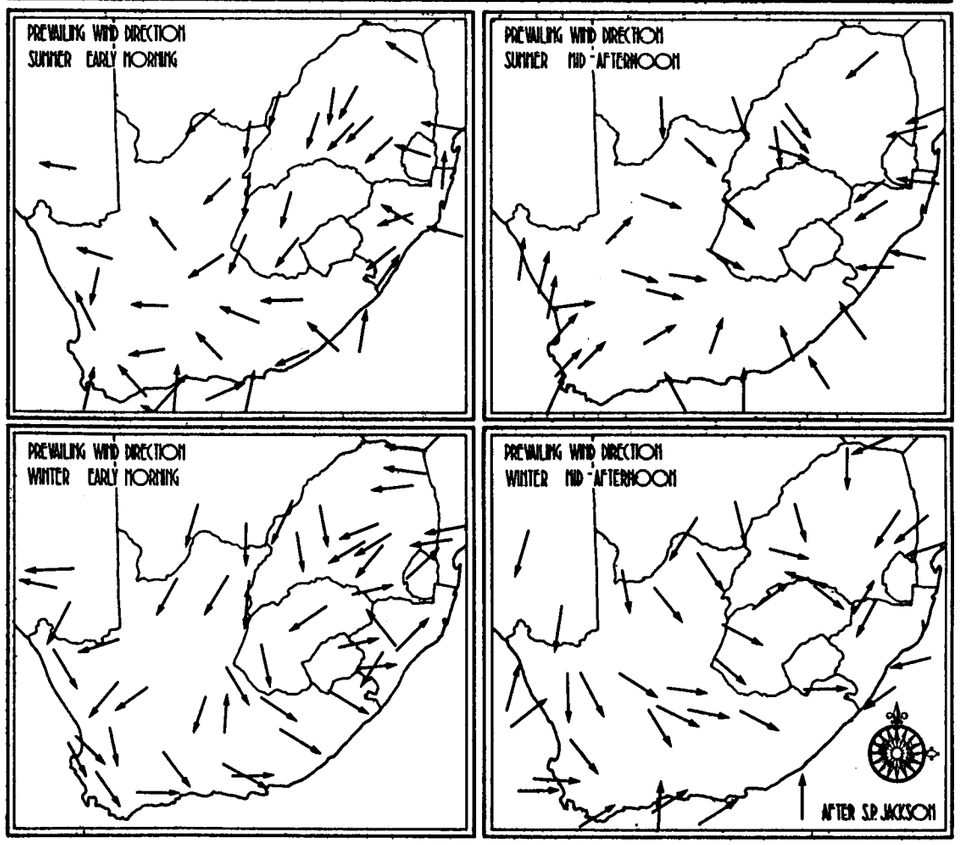
One of the more remarkable features of the southern African sub-continent is the uniformity it experiences in mean annual temperatures. This may be attributed in part to the extent of the plateau and in part to the presence of sea currents along its coastlines : the warmer Mocambique current to the east and the colder Benguella to the west. Generally speaking the highveld tends to enjoy high day but low night temperatures while the coastal belt has comparatively smaller diurnal variations. Frost is virtually unknown in the coastal areas, the Transvaal Lowveld and the far north,but increases in frequency as one moves inland towards the Escarpment.

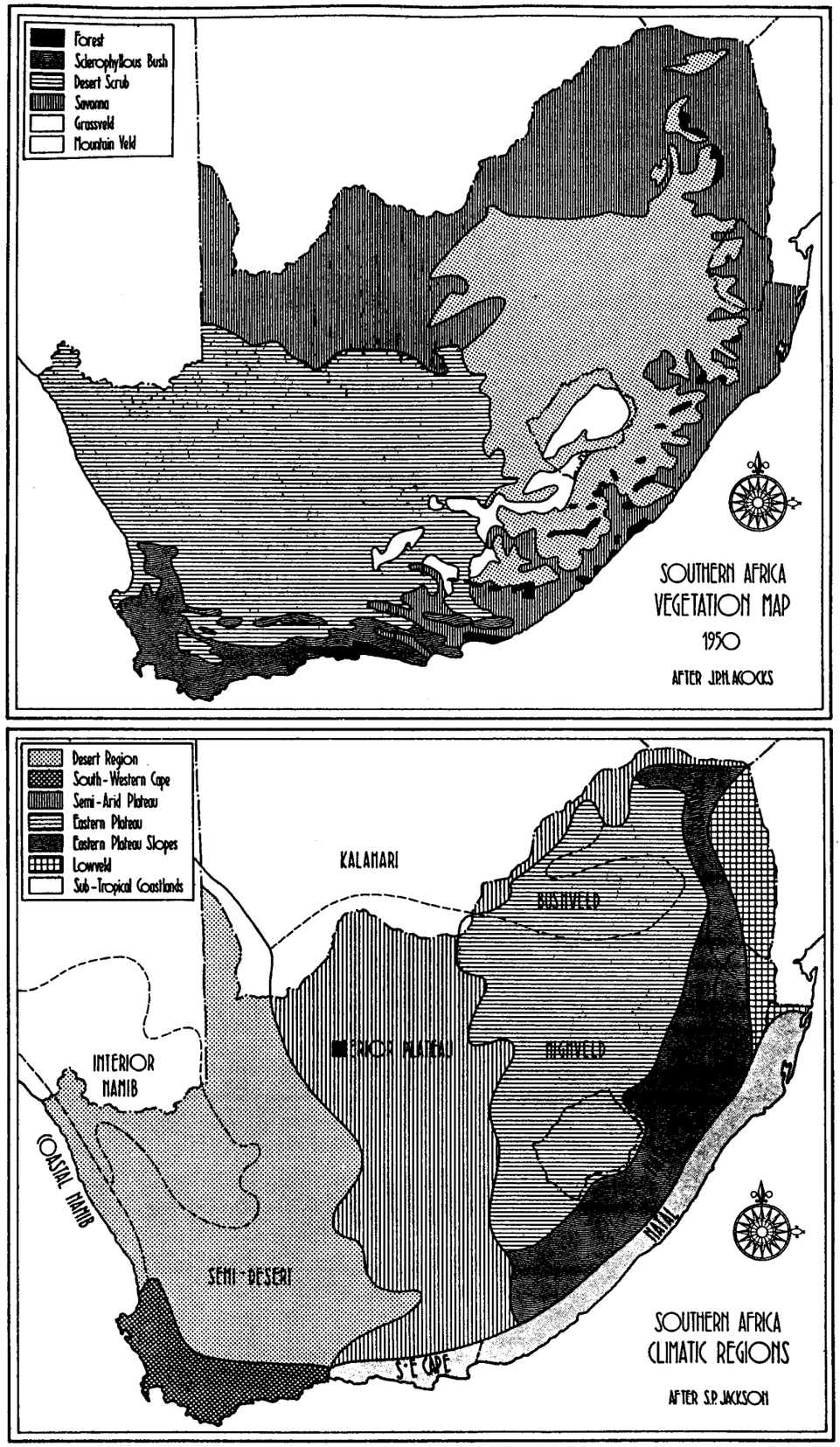
Rainfall distribution varies greatly with the highest precipitations occurring along the eastern coastal belt, decreasing sharply over the highveld and then tapering off gradually over the interior towards the west coast. Generally speaking


SOUTHERN AFRICA
MEAN ANNUAL RAINFALL
GIVEN IN MILLIMETRES
AFTER MONICA COLE


Nil
Under 30 Months
30 to 60 Months
Over 60 Months
SOUTHERN AFRICA
DROUGHT-STRICKEN AREAS
1926-1939
AFTER DE SWARDT AND BURGER


SOUTHERN AFRICA
MEAN DURATION
OF FROST
PERIOD EXPRESSED IN DAYS
AFTER MONICA COLE


PREVAILING WIND DIRECTION
SUMMER EARLY MORNING
PREVAILING WIND DIRECTION
SUMMER MID-AFTERNOON
PREVAILING WIND DIRECTION
WINTER EARLY MORNING
PREVAILING WIND DIRECTION
WINTER MID-AFTERNOON
AFTER S.P. JACKSON



most of the country, with the exception of the eastern and south-western coastal belts,is prone to drought conditions with their severity increasing towards the central south-western Cape.

5. Climatic Regions

In general terms it becomes possible to arrive at a division of the region along major climatic lines:

a. The Lowveld with very hot rainy summers and warm dry winters.
b. The equable sub-tropical coastlands of Natal and the south-eastern Cape.
c. The eastern plateau slopes, characterized by summer rainfall and seasonal extremes of temperature. Variations of temperature and rainfall occur with changes of relief from one place to the next.
d. The eastern plateau characterized by warm rainy summers and cool to cold dry winters.
e. The semi-arid plateau interior with low and unreliable rainfall and great extremes of temperature.
f. The desert region varying from the cool foggy west coast to a hot dry interior.
g. The south-western Cape with hot dry summers and cool rainy winters.

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1. The major part of this chapter has been drawn and summarised from the following sources:

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CHAPTER 3 : THE PROCESSES OF RURAL ARCHITECTURE

> "Every here and there was what might be called a peripatetic roof, being a thatch in the course of removal, nothing of its means of locomotion being visible but the thirty or forty feet of the bearers, ... many of the people were singing at their work, and some of them carrying heavy burdens passed me at a good smart trot."
>
> HOLUB, Emil. "Seven Years in South Africa". London : Sampson Low, Marston, Searle and Rivington, 1881

Since Kolbe published his treatise on the Khoikhoi in 1727 (1) much has been written on the subject of the indigenous people of southern Africa, largely by nineteenth century travellers, hunters and missionaries. Understandably the backgrounds of these early scribes were anything but architectural and, in consequence, only a small proportion of their accounts was devoted to the description of the built environment of the region. Also, being men of their time, the majority tended to view the local architecture in the context of their own experience and cultural values; few, it seems, considered it from the point of view of the indigenous builder, taking into account the materials available to him, his physical environment and the socio-economic factors which established the parameters limiting his options. None perceived it to be possessed of a recognisable idiom of land settlement (2) and studied it accordingly. This was ground which was left for anthropology to explore from the 1920s onwards.

Today it is generally recognised that the idea that the architecture of any given society can be studied in isolation from its socio-economic realities is patently absurd. (3) Yet, although the number of specialised studies being published on the subject of the rural architecture of the region has increased noticeably in recent times, with a few notable exceptions most still persist in viewing it through the spectacles of their own westernised conditioning.(4) It is true that the processes which generate rural architecture are often discussed but somehow the connections between process and product are seldom made, and then, at best, in a tenuous manner.

Process and Product

A brief and general explanation might be warranted at this point. For the purpose of this exercise, the word "process"is being used to describe the physical means employed to achieve a particular goal as well as the historical, social and economic circumstances surrounding such an event; "product" therefore is that ultimate goal. Thus, to give a simplistic example, in the case of an artist, a student of "process" would consider, amongst other things, such factors as the former's social background, his economic standing, his psychological make-up and the nature of his subject matter; a student of "product", on the other hand, might limit his studies to the artist's final output, the aesthetic properties of the pictorial rendition on canvas.

It is obvious that no picture can ever be as clear-cut as that. An analysis which ignores either process or product, favouring the one ahead of the other, runs the peril of being shallow and mono-dimensional. For this reason this study does not seek to embrace any one philosophy; it does however attempt to break the chicken-and-egg cycle which has arisen in the field of the arts, centering on the question of precedence between "function" and "aesthetics". In the context of current southern African society this argument is not simply academic, for it will be seen that its implications extend to the very heart of local political ideology and question the basis for the existence of a white preconception of

black ethnicity.

Architectural Stereotypes : Some Historical Beginnings

When considering the development of rural architecture in southern Africa, we are perhaps fortunate in that the events of the Difaqane, occurring as they did between the years of 1822 and 1837, represent the definite and recognisable end of an epoch in the history of the region. It was a time of irrational warfare, of scattering of whole peoples, of famine and of hunger. It was also a time which saw the emergence of great leaders and the coalescing of new nations. Naturally enough therefore, the Difaqane also marks the beginning of a new era which, because of the presence of white observers, has been extensively documented virtually from its onset. This means that missionaries and other travellers were witness to the displacement and resettlement of whole communities during that time and their accounts often made mention of the architecture of the people concerned.(5) Thus, by comparing these with the writings of subsequent visitors to the same regions, it becomes possible to trace the evolution which occurred from one generation to the next in the architectural styles of those areas.(6) As, in many cases, descriptions of the physical environment were also included, it becomes possible to see how changes in climate and region manifested themselves in the evolution of new styles of architecture and methods of construction among the people concerned. Thus, in the case of the baSotho, who could not be said to boast of a collective national and thus cultural identity prior to the years of the Difaqane (7), we know from the writings of Casalis in 1833 (8), Widdicombe in 1895 (9) and James Walton in 1956 (10) that they underwent at least three major stylistic changes in their domestic architecture during that period. These, in their own time and in their own turn,were all described by observers as "baSotho dwellings" leading to the creation, in white popular belief at any rate, of a baSotho stylistic stereotype. It must be obvious however that the concept of such a stereotype under these circumstances must be erroneous, not only because in this particular case it may be proved that its form has changed and evolved over a period of some eight generations, but also because it may be shown that stylistic changes are the result of physical and material fluctuations rather than conscious aesthetic and cultural choice. It therefore becomes possible to short-circuit the argument between function and aesthetics with the conclusion that process precedes product and therefore, by extension, that the concept of a regional architecture based upon pragmatic considerations of materials available and prevailing physical environment precedes the development or emergence of an architectural stereotype linked to the idea of an ethnic or cultural identity. This is not to deny the possibility that architectural stereotypes may exist as part of a group's cultural awareness; it is merely to state that such stereotypes are not constants and that they too are subject to change from one generation to the next.

This hypothesis has been stated briefly and only in the context of baSotho society for the benefit of the argument which follows. It is proposed to explore it further and make it relevant to the southern African region as a whole, using data gathered during the course of current field work, in a subsequent chapter.

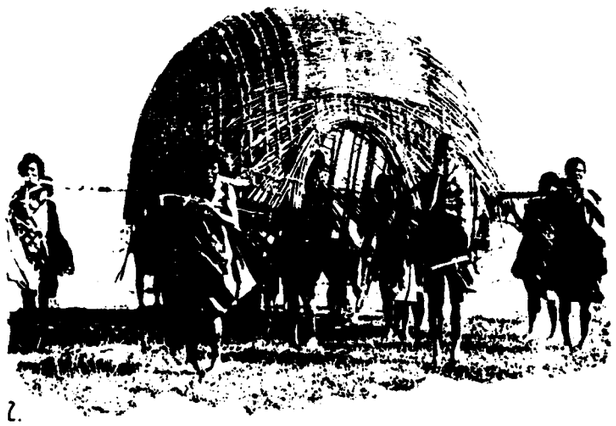
The Architecture of Pragmatism

The provision of indigenous shelter in southern Africa has always been a pragmatic and highly functional process. For a number of historical reasons, the region's rural economy never entered an industrial stage and although settlements of ten to twenty thousand persons were not uncommon (11), these areas never achieved a high degree of urbanisation as it is conventionally understood by western society. In fact mobility of domicile has always been a desirable quality of rural settlement

MOVING HOUSE

1.

1. HOLUB, 1881. Removal to New Sesheke (Serowe).
2. KUPER, 1963. AmaSwazi carrying the framework of a hut to a new site.
3. CHAPMAN, 1863. Namaqua Khoikhoi moving settlement.



2.

3.

for economic (12) and mystical (13) as well as political reasons.(14) Thus although certain sites are known to have been inhabited over a period of many centuries (15), the southern African rural dweller does not appear to have shared his European counterpart's preoccupation with permanence. In fact the former's whole concept of land ownership and tenure differed radically from the European example, being based upon a system of common ownership under the stewardship of a traditional tribal head.(16)

Because of these factors, it was found that rural architecture depended directly upon the local availability of building materials for its existence. It is true that at least one group, the Khoikhoi, are known to have made use of a dismountable and highly portable dwelling.(17) It is also true that certain Nguni groups are known to have transported their dwellings, ready-made, over relatively short distances.(18) However the former are a distinct exception to the general rule for the region, while the latter are not reputed to have transplanted themselves in this manner over any great distance. Therefore, the original statement must still stand : rural architecture derives its existence from the availability of found and natural materials in the immediate vicinity of a settlement. It uses the natural environment as a ready quarry, obtaining the sticks, the stones, the clay and the grass required from the surrounding countryside.

It is therefore a highly functional kind of architecture, using materials according to their natural properties. This, to a large extent, also has the result of affecting not only the resolution of some details of construction such as the treatment of the roof apex and the connection between wall and roof at the eaves but also, by implication, the dwelling form itself, giving rise to the beginnings of an architectural style which, with time, may become incorporated into a larger concept of cultural stereotype. It was found, during the course of current field work, that the image projected by such a stereotype among rural people themselves, was mostly based upon the aesthetic considerations of dwelling form rather than upon ones of structure. This meant that the textures derived from the use of different building materials, or the use of the same material, such as grass, but according to different techniques, were as important in contributing to the regional identity of the dwelling as was its overall form. On the other hand it was also found that although rural communities generally had an awareness of technological processes involved in the construction of dwellings in neighbouring regions, these were not perceived to be differences but variations upon the same theme.

The relationship existing between materials, environment and dwelling form is perhaps nowhere better illustrated than in the squatter camps which are located in the vicinity of some of southern Africa's major urban centres. During the course of a previous study which included squatter areas of the Western Cape, the Durban-Pietermaritzburg area, Thaba 'Nchu and the Winterveld district near Pretoria (19), it was found that because of the congested living conditions and hence the increased competition for building resources, a uniform style of squatter architecture had tended to emerge. Interestingly, it was noted that although the building technologies used were an adaptation of the region's rural know-how, in many cases the builders were not newly migrated rural workers but were, in fact, second and third generation urban residents who had not as yet been catered for in official housing programmes.(20) Indirectly this was supported by parallel research conducted in the Western Cape which showed that, because of the virtual absence of natural found building materials in this region, squatters of both local urban and Transkeian amaXhosa origins had uniformly turned to the consumer society about them, using its cast-offs to create dwellings from sheets of corrugated iron, wall and ceiling insulation from newspapers and printer's waste, welcome mats from milk trays, and gardens from empty food cans. Both groups, despite

obvious differences in their socio-economic and cultural backgrounds, had come to the same pragmatic conclusions regarding their habitat and shared in a common dwelling form built out of a common technology based upon local conditions. The degree of inventiveness shown by both communities in the taking of common objects out of their familiar context and adapting them to fulfil new functions successfully demonstrated a shared ability to grasp the fundamental nature and properties of materials when faced with the economic realities of their situation. (21)

The Ecology of Rural Habitat : the Dwelling Unit

One of the attractions of vernacular architecture lies in its ability seemingly to merge with and become part of its immediate environs. Whilst such aesthetics are undoubtedly part of its charms, they are also an outward manifestation of yet another important aspect of the rural habitat : the fact that the dwelling is part of a delicate environmental balance, both at the level of an individual unit and at the larger scale of regional settlement.

Traditionally the southern African indigenous rural dwelling has been a structure built predominantly out of saplings or timbers, clay, grass and cow dung. Depending on the region, stone rubble and shales have also been used in wall construction while natural lime has been found to be a good soil stabiliser. However, being natural materials, these have also tended to provide a home to a variety of insects, lizards and other small fauna which can subsist alongside or even in spite of men. This has led to the dwelling developing an internal balance of its own, with man and his activities on the one hand providing a check to the infestation of his environment on the other. Thus it has been found that rural residents tend to build fires in their dwellings for both heating and cooking functions. This is generally true in the instances of both cooking and sleeping huts although quite often in the latter's case it is only the hot coals which are brought in in a small brazier. The smoke from these fires is allowed to rise and percolate through the thatched grass roof thus effectively fumigating it and discouraging vermin infestation. To a certain extent this process must also be assumed to be effective where clay walls are concerned. Should, for any reason, the owner of a dwelling (22) decide to change its roof and replace the grass with zinc sheeting, he will no longer be able to build an effective fire within it without the assistance of a smoke flue; as in the majority of cases the flue has not found popular application in the region's architecture (23), it is likely that this person will cease to build internal fires in that dwelling thus terminating the fumigation process. One probable result of this action will be that he will need to introduce cement into his construction, both brick and plaster, in order to reduce or eliminate infestation, and once a family can afford to use cement in its walls, it is likely to cut down on its maintenance efforts by also using this material in the floor. However cement floors are hard and cold to sleep on and therefore European-style furniture will be bought to replace the traditional mats, thus also implying a transition from a local subsistence and craft-manufacturing economy to an externally-based cash-using society. But modern furniture joinery normally is based upon a 90^{o} technology and as circular floor plans are thus difficult to furnish, this might therefore bring about a change in the floor plan from the circular to the square, forcing a change in the roof technology.

It is obviously highly unlikely that any individual rural dweller would ever have undergone such a methodical step-by-step evolution in his life-style and personal economy. Indeed this entire chain was built up from the information obtained from various disparate and unrelated sources. It was also found that the breakdown need not necessarily begin at the cessation of the fumigation process. Often the purchase of furniture would be sufficient stimulus to bring about a change

in the dwelling's floor plan while in other recorded cases the cycle was broken when the family, tired of the constant maintenance work required on the floor, replaced it with concrete. The replastering of the floor is a necessary process for whilst the walls and roof may be successfully maintained by fumigation, the former needs to be recoated regularly every seven to ten days or, at the most, within a fortnight. The material used is normally a mixture of clay and cowdung which produces a warm, yielding and clean surface suitable for laying sleeping mats on.

A further factor which requires consideration is the role played by the vernacular dwelling within the larger environmental cycle of rural birth, life and death. Generally speaking we find that the rural builder draws upon the natural environment for his raw materials. These are given validity within the structure but once their function ceases the dwelling will be allowed to decay and, with time, return to its primary state. This means that certain materials, mainly soil, are not lost to the community but remain as part of its common wealth. Here the danger lies in the fact that this is a cycle which could easily be interfered with by the introduction of a soil stabilising technology. Although this could potentially lead to the development of a cheap and more permanent indigenous architecture, its indiscriminate use could also bring about the creation of large quantities of equally permanent rubble.

The Ecology of the Rural Habitat : The Settlement

The ecological balance achieved between the settlement of rural man and nature is somewhat more complex, being influenced by such factors as social custom, land ownership rights and traditional agrarian practices. For the purposes of this chapter it is only proposed to give a brief resumé of the issues involved.

In the past, when the rural dweller considered the site for his new homestead, his choice was influenced by a number of factors. Primarily these had to do with the availability of resources such as potable water and building materials but other elements such as ground slope, drainage, orientation and aspect were also important. Historically too elevation and defence were also considered but these have tended to be ignored in more recent times.

Perhaps the most critical of all these factors, however, was the availability of agricultural land in the immediate vicinity of the settlement. The rural homestead was part of a self-sustaining economy which relied upon the fruits of the soil as the major source for its food. Although the people were also pastoralists, cattle were regarded primarily as a source of wealth to be used for the purpose of obtaining brides for the family unit. The usufruct of cattle was limited to the obtaining of milk on a daily basis, but even so the cattle were not bred for their milk-producing capacity. In fact very little deliberate cattle breeding appears to have occurred. When the slaughter of an animal did take place, it was usually for ritual purposes, and then the whole community took part in the meal and no attempt was made at storage of the meat.(24)

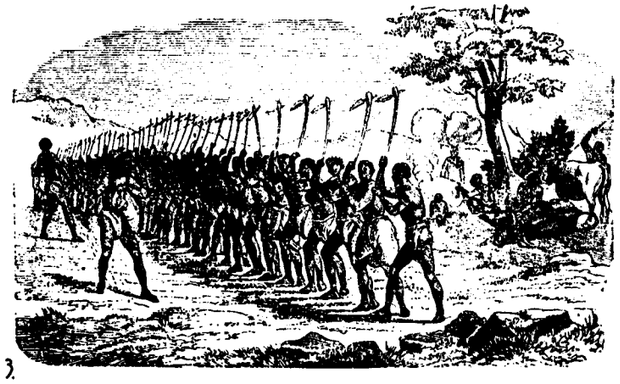
Traditional agricultural activity could be said to have been distributed across four major fields :

a. Grazing land which fell into two areas of seasonal activity : summer and winter grazing. The former was usually close at hand to the settlement whilst the latter could have been at a distance of several days travel from it. This gave summer grazing the opportunity of recovering for the new season.
b. Sandy soil planting land.

AGRICULTURAL PRACTICES

1.

2.



3.

1. CASALIS, 1861. MoSotho woman with hoe.
2. ANGAS, 1849. AmaZulu women making pottery.
3. WANGEMANN, 1872. MoTswana men breaking planting lands.
4. THE GRAPHIC, 1879. AmaZulu homesteads near Pietermaritzburg showing settlement intervals.

4.

c. Loam soil planting land.
d. Clay soil planting land.

Families were usually allocated planting lands in all three soil zones. This meant that not only was it possible to plant a variety of crops, some vegetables being more suitable to one kind of soil than others, but this acted as a form of insurance against the vagaries of the weather. Generally loam soils were considered to give a good crop in an average year; sandy soil crops prospered in wet seasons when the over-wet clay would have allowed the seed to rot; and clay soil crops fared well in the drier years when the clay retained moisture better than the well-drained soils.

It has been suggested by informants, during the course of current field-work, that three wives was the optimum number in the composition of a rural family. The first or head wife bore the family heir and was usually the result of an arranged marriage; the second wife might be brought into the family at the instigation of the head wife herself who felt she needed assistance in fulfilling the work-load; and the third wife, usually considered to be the youngest and prettiest, was the result of a love-match.(25) The temptation may exist to come to the conclusion that this optimum number of adults in a family is linked to the functional aspects of that family's agrarian activities, namely that the husband is in charge of animal husbandry whilst the three consorts each have the charge of one of the family's planting fields. This theory might find credence if all three marriages were conducted simultaneously or within a short space of each other, but generally this was not found to be the case, as informants usually also stated that the third wife seldom joined the family until the husband was relatively well advanced in years. It was also assumed that, in this instance, informants were talking of an historical ideal. Few polygamous homesteads were recorded during the course of this study and looking through the historical accounts of travellers into the region during the last century (26), it appears that even then polygamy was limited to the very few belonging to a wealthy elite, usually the chief and his advisors. At any rate such a theory ignores the autonomy enjoyed by women within many rural groups and more recent researchers (27) have found that wives were usually granted individual planting lands in all three areas.

It was not practical for a study which was primarily concerned with the architecture of the region to delve too deeply into the agricultural practices of the people concerned, and what information was obtained was gleaned during the course of normal conversation. The impressions which were gained in the process however were that, firstly, one family's planting lands could be anything up to forty kilometres from each other and, secondly, since 1913 and the first of the Land Acts which established the so-called "Native Reserves" (28), the whole pattern of rural agriculture has changed radically. Lack of suitable pastorage has increased rural poverty whilst the rising population within the confines of relatively small rural areas has led to the impoverishment of planting land and the loss of large tracts of former fertile fields.(29) Thus any discussion on the links between human settlement and agricultural land should be read in a historical context and not as a reflection of current conditions.

In the process however, a new factor has emerged in the question of rural settlement : that of rural overpopulation. Pictorial records of the Zululand countryside just over a century ago (30) show a landscape littered with small homesteads. Their location however, far from being haphazard, appears to be subject to some form of rule-of-thumb distancing which is reminiscent of the more recent researches of Konrad Lorenz (31) and Robert Ardrey (32) on animal behaviour. Similarly aerial photographs of the Buffelshoek 471IQ area (33) on the Vredefort ring, near Parys, also show a similar if closer grouping of homesteads. Both would appear to indicate

the existence of what Ardrey has called a "territorial imperative" in human settlement. The establishment of such an imperative is conditioned by the natural resources which a settlement needs to control in order to survive as a rural production unit. This means that the amount of land required cannot be easily quantified and may change from region to region (34) and from economy to economy (35) and may also vary in the history of a settlement as the size of the family fluctuates. However a rural production unit also tends to generate a certain amount of wastes, partly natural, partly manufactured, which are absorbed and processed by nature. Some, like those of the midden, are incorporated into the rural cycle of life where the farm animals contribute to the removal of food scraps and cattle roll in the spent hearth ashes as a means of controlling ticks. Others, like human wastes, decompose organically and are simply absorbed into the soil.

In more recent times we have seen the rise in southern Africa of large scale rural, semi-urban settlements in such places as Acornhoek, Bushbuckridge, Melelane, Thaba 'Nchu, Mabopane and Dennilton to name but a few. These towns are endowed with few social amenities and virtually no supporting physical infrastructure. In such areas many of the traditional concepts of 'homestead' have fallen by the wayside and the control of land for agricultural purposes has been overtaken by the need for residential space. Also the competition for building resources has forced rural builders into using modified rural technologies in order to provide themselves with housing of an acceptable standard. Despite the lack of fresh water and waste removal facilities they have generally met with a remarkably high degree of success. However in some areas population densities have reached such concentrations that natural processes have not been able to keep up with the inflow of waste materials resulting in the pollution of the water resources. The outbreaks of cholera experienced in the central and western Transvaal during the summer of 1981-1982 must be attributed directly to the overburdening of rural land by human settlements living in near-urban densities but under rural conditions.(36)

A Community of Builders

The concept of a vernacular architecture must also be seen to be closely linked to the social processes of rural society. It was found, during the course of current field work, that the construction of a dwelling was considered to be something more than just the provision of shelter; in many ways it acted as an opportunity for the community to collaborate together on a project, turning what was outwardly a social occasion into a display of solidarity between the larger group as a whole and the individual family. Not only did this tend to reinforce rural man's sense of identity but, more importantly in architectural terms, it brought the individual's dwelling, both in construction and aesthetics, in line with the community's norms.

The symbolism of this act is important. In traditional rural society a great deal of emphasis was and still is placed on role playing and task fulfilment. This creates a strong awareness in the individual of his role in his society and his personal contribution to its survival as a production unit. Anti-social behaviour is quickly identified and corrected and peer group pressure plays an important role in suppressing deviancy from the group's norms. This contrasts sharply with modern western urban society where a sense of identity is often associated with deviancy from its norms and, in some instances, is actually promoted and even applauded. In a sense therefore southern African rural society may be seen as encouraging self-identity through participation in group activities and, unlike western society where originality of style in domestic architecture is seen as a desirable statement of self, the former uses group participation as a means of ensuring norm conformance by its individual members.

In this respect therefore, the differences between urban and rural man may be seen

to centre upon the individual perceptions of their own basic economic and social units. The lowest common social denominator in western urban society is the nuclear monogamous family whose members may participate in the economic activities of the larger community, but generally need not exercise a direct control upon resources or the processes of production in order to ensure their economic survival. The southern African rural social unit, on the other hand, is the extended and potentially polygamous family which traditionally has depended upon its continued control of both natural resources and independent means of production in order to secure its own well-being. The first has currently developed a tendency to emphasise the residence of the individual family and has come to expect that its progeny will move off, often before marriage takes place, to establish core groups of their own - although this has not always been the case. This process of fission therefore tends to stress the survival of an individual as a potentially independent economic unit able to exist apart from the larger family group. The southern African rural community, by contrast, stresses the habitat of the larger group as a whole within which the individual member is given residence in commensuration with his age, sex and status. Fission within the group can and often does take place for social and economic reasons, but the individual is not expected to leave before marriage and, in many cases, is encouraged to remain with his spouse within his parent settlement after it has taken place. Where schisms do occur within the larger community, the split is seldom permanent, and symbolic, social and physical links are often retained between the parts. The retention of such links should in itself be seen to be part of a mechanism for reinforcing the status of the individual (and his family) within the larger social structure, links which emphasise the place of the individual within the group as well as the roles of economic collaboration and interdependence existing between the two.

The participation of the group in the provision of shelter for the individual family also gives us a valuable insight into the attitudes and values of rural man. By elevating building to the level of a group activity, the rural dweller places it alongside other communal functions such as harvesting and defence, thus, in a sense, recognising its importance as an element of rural survival.

Rural construction must also be seen in the context of the processes of interaction existing between male and female, young and old in rural society. All members of the community are considered to have a role to play in the building of a hut : in some groups the young may weave grass ropes under the guidance of their elders whilst hearing folk tales and singing memory-training songs in the evenings prior to the day of building; the women will be out collecting thatching grass and later will build and plaster the clay walls; the men will seek out the best building timbers, make the roof and thatch it. It must be stated that, although it was found during the course of current research that the division of labour between male and female must, at one time, have been strongly defined, in more recent times this separation has tended to disappear, due largely to the prolonged absence of the men, away in the urban areas as migrant workers. This has, in many cases, forced the women into fulfilling some of the tasks of the men in the provision of shelter for their families. Moreover, it has been found that the traditional division of building tasks between men and women is not always constant from region to region. For example one group may assign the task of thatching to women while another may reserve the construction of the entire roof to the men.

It was found difficult during the course of this study to assess the impact that the absence during the building process of one member, such as the father, may have had on the final built product. One case which was documented concerned the absence of courtyard walls about the dwelling of a bachelor in Sekhukhuneland. Among the baPedi, failure to marry is considered to be an antisocial act and although not directly punishable, it may be subject to a measure of social sanction.

Failure to marry and produce offspring will also prevent a man from taking his place in the gatherings of the men, thus effectively depriving him of full political rights.(37) In this particular instance, neither had the person concerned been accorded the courtesy of the community's assistance in the construction of his dwelling nor had he been able to build for himself the courtyard walls surrounding his dwelling in the custom of the region, such work being considered to be woman's work.

Producer vs. Consumer

Perhaps one of the more relevant lessons which rural architecture can offer to modern man lies in the economics of its production. At a time when many countries in the developing world are beginning to look to self-help methods as a means of resolving their local housing problems, the architecture of rural man is offering the dynamics which may make such programmes viable. Among the first to point this out was Amos Rapoport who, writing in 1969 (38) but in a different context, saw vernacular as the link existing between what he termed "primitive" and "high style" architectures. Rapoport's model uses socio-economic terms of reference to describe the processes of architecture at three levels of society : primitive, pre-industrial and modern. Although the distinctions he makes, particularly between the primitive and the pre-industrial (39), are somewhat too general to be entirely correct in the southern African context, the relationships which he described are nonetheless still valid. Thus by applying Rapoport's guidelines it becomes possible to divide the vernacular architecture of the region into four, not separate but interlinked, stages.

a. Hunter-gatherer society built shelters which were impermanent, generally badly constructed and easily discarded. Although outwardly it might appear that they had an imperfect knowledge of dwellings and had only a single, roughly thatched beehive structure in their vocabulary of forms, this was in fact incorrect. Hunter-gatherer societies in the region were not static but, as Elphick pointed out (40), had a dynamic interrelationship with a migrant pastoralist economy. For any number of reasons the one society could evolve into the next and, just as easily, devolve back again. It is also known that historically they have built a number of different dwelling forms. Not only were travellers to the region during the late eighteenth-early nineteenth centuries unable in some cases to make a definite distinction between the dwelling stereotypes of the San and Khoikhoi (41), but it is also recorded that over a century ago the Masarwa, a baTswana San group, were building their dwellings, albeit imperfectly in the style of the local Tswana stereotype.(42) This last development however was probably the result of the further economic evolution of their society.
b. Migrant pastoralist society developed a technologically sophisticated form of portable dwellings which could be mounted or dismounted in the time that it took to prepare a cooking fire.(43) Although it is true that the range of dwelling forms was somewhat limited, this should be attributed more to the technology possible under the circumstances than to a lack of innovation. Certainly, judging by the known spread of Khoikhoi society over the southern African region, this group must have come into contact with the agricultural pastoralists of the northern Cape and the eastern seaboard and hence known of their dwelling forms which, however, would have been totally unsuitable to a migrant economy.
c. Early agricultural pastoralist society is known to have built in a wide range of materials. Being sedentary, its value systems demanded a somewhat more substantial abode than the one found in a migrant pastoralist economy. Mobility of settlement was however still an important factor although greater permanence was probably thought of as being more convenient and even desirable. Their range of dwelling forms however was still somewhat small, being limited to the beehive and cone on cylinder.
d. Late agricultural society can probably be said to owe its evolution to the influx of white immigrants into the region after 1820 although its manifestation in terms of architecture does not appear to have become too evident until after 1925. Thereafter the processes of rural architecture underwent widespread changes which brought about the birth of a large range of dwelling forms involving the invention of new technologies and structures by rural builders. Ironically enough this final economic stage also implies a decrease firstly in pastoral and later in agricultural activities, bringing about an increased rural dependence upon a newly established urban industrial economy.

In Rapoport's terms it may be said that in all of the above building was and in many cases still is being conducted by the community as one of its everyday activities, much like hoeing the fields and cooking a meal.(44) Its performance involved the community as a whole, most of whom had knowledge and personal experience of the processes involved. In all cases the building forms used were part of a larger vocabulary of architecture common to the community as a whole. Changes however begin to take place in the final stage when there occurs the emergence of a class of specialist craftsmen, largely thatchers, who offer their services in exchange for a fee, usually paid in money. This does not necessarily preclude any of the other factors. The owner is still knowledgeable in the building process and most often is active within it but now for the first time we see the beginnings of an alienation between consumer and producer. The former has been induced to admit that someone can build better than he or that he has no time to do so; the latter has developed a special skill which he is able to market. The building form too has evolved. The traditionally preferred circular plans are difficult to furnish and hence square or rectangular plans are supplanting them. While this usually also involved a compromise in the structure and hence the technology in order to achieve a dwelling which still conforms to the prevailing architectural style of the area, even this is being subverted as greater conglomerations of settlement are forcing the rural dweller to turn to new building materials and hence new technologies and, in many cases, new dwelling forms.

In a larger sense Rapoport's analysis is concerned with the relationship existing, in the building process, between producer and consumer. In a rural economy the two roles are generally incorporated in the same person. The client, more often than not also being the builder, has an intimate knowledge of the building process and is aware of the type, style and form of the structure which he is getting. By way of contrast, virtually all building activity in urban areas is in the hands of specialist craftsmen, in some cases this being enforced by legislation; the client has no hand in and usually even no knowledge of the building process; and unless he is wealthy enough to be able to employ the services of a specialist designer, he will have only the most superficial of choices in the aesthetics of his dwelling. Often the structure will be purchased already completed much like an appliance at a retail store.

Thus rural architecture may be seen to short-cut the relationship established in modern urban society between consumer and producer. Because it uses locally available materials in a most economical way, incorporating them into a highly functional structure and employing the cheapest labour possible,that of the client, it must be seen to offer the solutions to at least some of the problems which beset the current provision of housing in the developing world, where the choice is not between a pretty house and an ugly house, but between having a house and no house at all.

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and others.

6. An example which immediately comes to mind is that of Dithakong, first visited by Dundas in 1801 and subsequently by Lichtenstein in 1805, Burchell in 1811, Campbell in 1813 and 1820, Burrow in 1835, Backhouse in 1839 and so on.

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22. FRESCURA, Franco. Op. Cit. 1981.

23. Ibid.

24. Although this may outwardly appear to be a pragmatic course of events based upon the inability of a pre-industrial society to store its meat in hot climes for prolonged periods of time, the cooperative nature of rural economy makes it difficult for it to occur otherwise. The principle of sharing work as well as resources is fundamental to rural philosophy and in exactly the same manner as some of the fruits of the harvest or the brewing of beer are made available to the chief as well as the community, so the slaughter of a beast will involve a certain etiquette of distribution.

25. R.M. Mfeka. Pers. comm.

26. BARROW, John
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29. Ibid.

30. ILLUSTRATED LONDON NEWS. 4 October 1879. 313.
THE GRAPHIC. London : 22 February 1879. 185-200.

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33. FRESCURA, Franco. Op. Cit., 1981.

34. This is best illustrated by the indigenous homesteads built by the residents of the more arid northern Cape/Botswana region as opposed to those of the wetter coastal belt. In the case of the former a scarcity of resources has forced the inhabitants into larger villages centering upon a source of potable water. Settlements are generally large, comprising numerous homesteads clustered together, and are often separated by considerable distances from each other. In the latter case, on the other hand, the general availability of water has permitted the growth of smaller and more scattered kinship units spaced at relatively close intervals to each other. This has given rise to interesting variations in the marriage patterns, kinship distributions and hence settlement patterns between the two groups.

35. The amount of land required to provide food for a group surviving under a hunter/gatherer economy will be greater in area than that required to feed a community of equivalent size living in a pastoral/agrarian system. The first requires land bearing roots and berries which are often seasonal and carrying game which is usually migratory. The second makes more intensive use of the land available to it and although a migratory pattern based on the availability of grazing is often adopted, their farming activities are normally of a more sedentary nature. Thus the settlements of a hunter/gatherer people will be perceived to be generally temporary, those of agrarian pastoralists to be of a more permanent nature.

36. FRESCURA, Franco
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39. Ibid.

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CHAPTER 4 : A QUESTION OF PERCEPTION

> "During this day the king gave a Mabunda dance in my honour - a performance of so objectionable a character that the negroes themselves are quite conscious of its impropriety, and refuse to dance it except in masks".
>
> HOLUB, Emil. "Seven Years in South Africa". London : Sampson Low, Marston, Searle and Rivington, 1881.

In the light of previous discussion, it becomes evident that the idea of "architecture" as something created by a class of specialist designers is not an easy one to defend in the context of traditional, or even modern southern African rural culture. Under such circumstances it would probably be even more difficult to conceptualise architecture as an aspect of the "fine arts". The reasons for this are not too hard to discover. The traditionally agrarian and pastoral nature of the rural economy has encouraged a pragmatic and highly functional approach towards a local architecture which is integrated into the value-systems and lifestyles of the people themselves. It would therefore be quite true to conclude that the role which a professional aesthete could play within such a society would be of a somewhat limited nature.

Another reason is probably that industrialised society has always tended to separate its artistic and creative functions from everyday life and objects, like some kind of "optional extra" in a consumer economy. This was foreseen and worked against by the Bauhaus movement of the 1920s (1) which adopted and extended many of the ideas of the Arts and Crafts movement of the previous century. Despite the obvious influence which these two have had upon the philosophy of twentieth century industrial design and indeed, the theory of design as a whole, today's western society still attaches a financial bonus to those consumer goods which are seen (or claimed to have) a "design" component. Examples may be commonly found in the mass media in such products as "designer" jeans, "architect-designed" homes and "foreign-styled" motor vehicles.(2)

Most important however is the fact that the understanding and appreciation of aesthetics has been removed from the public arena by critics and dilettanti who have surrounded it with what the layman has come to consider as unintelligible and often capricious comment : the arts, it would appear, were elevated a long time ago to a pantheon accessible only to the very rich and famous, and have not come down to earth since. This, of course, has not always been the case. In earlier times, the dividing line between craftsman and artist was relatively thin. Goldscheider tells us that :

> "In the early days of the Renaissance a Florentine would walk into an artist's workshop ... and would there give his orders - for anything from a decorated button to a painted altarpiece or a marble tomb could be ordered in the same workshop".(3)

Often it was merely a degree of excellence which separated the two. Both Ghilberti and Cellini were goldsmiths before being elevated by the quality of their work to the status of sculptors, and the apprenticeship conditions for becoming a painter before the Renaissance were much the same as those for becoming a cooper, a weaver or any other craftsman.

It is true that then, as now, the artist has always had to look to a patron for his living. But somehow the connection between artist/craftsman and his community as a whole was much more intimate before the Renaissance than it has been at any time since then. Vasari tells us that after Cimabue had completed a picture of Our Lady for the Church of Santa Maria Novella, the panel was considered to be

A CASE OF CULTURAL PERCEPTION

1.

2.

1. HOLUB, 1890. Emil Holub and friends using cold chisels and the "fire and water" method to acquire samples of San art. The plunder of historical and cultural artifacts was justified by contemporary European antiquarians who alleged an indifference to their intrinsic value by the indigenous population.
2. LE VAILLANT, 1790. White attitudes towards black sexuality and black physical beauty have varied considerably over the years. One myth which has persisted up to present times is that rural women go "au naturel" as a matter of course with little knowledge or awareness of their own sensuality. In reality nothing could be further from the truth. Only unmarried women may bare their breasts in public and married women are expected to show greater decorum. This has led to the idiosyncratic situation where the media censors the nipples of white women but allows their black sisters unbridled graphic coverage.

so magnificent as to be "carried to the sound of trumpets and amid scenes of great rejoicing in solemn procession ..." from his house.(4) On another occasion, when King Charles of Anjou passed through Florence, he was taken to Cimabue's house to see his painting and "... all the men and women of Florence flocked there as well, jostling each other and rejoicing".(5)

It is not intended to imply by the above discussion that the indigenous craftsman/artist/architect enjoys the same status in his society as that of his predecessors in pre-Renaissance Europe. For one thing, his skills have only achieved a limited marketability in comparatively recent times. For another, the values of the two societies are so dissimilar as to make direct comparison difficult. What is common to both societies is the absence of alienation between artist and layman. Southern African rural groups do not generally distinguish between the two; the skills of building, painting, basket-weaving, wood-carving, dancing and music making are all seen as being an integral part of everyday life and ritual. While it is true that some may be more versed in these activities than others and are subject to peer-group recognition for their talents, that does not prevent their fellows from also practising these same skills to the best of their ability.

In western, as in other societies, most children draw, unselfconsciously and with little inhibition, probably as part of an attempt to rationalise and come to terms with the social and physical environment about them.(6) But there comes a time when the western child reaches an age when he becomes aware of the shortcomings of his own picture making and the words "I cannot draw" are introduced into his vocabulary. Southern African rural society does not allow this to occur, partly because such specialisation is not recognised and hence is not economically viable and partly because the activities which surround the processes of building and decoration are integrated into the life cycle of rural existence. Every family has to build their own dwellings, most choose to give it a decorative texture, perhaps for practical reasons, or to fulfil a ritual function or to make a statement of identity, or perhaps even just for the inner joy of having an aesthetically pleasing residence.

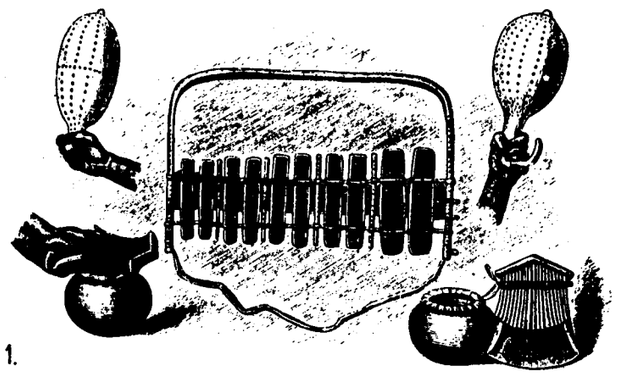
Regrettably, a significant breakdown of craft activity has been noted in some parts of the region, probably beginning as early as the 1900s but accelerating in more recent times. This has been particularly noticeable in the manufacture of household goods and other artifacts and may be attributed to a combination of different factors. These include the availability of cheap, mass-produced consumer goods; the shortage of certain key types of raw materials; the substitution of some traditional materials by more modern ones; the changing nature of the rural economy; and the growth of a white-induced tourist curio market.(7)

Rural Architecture : An Indigenous Value System

Although this research programme was initially formulated in the context of an architectural discipline, it was soon discovered that the concept of a southern African "architecture" could not be read in isolation from indigenous life and culture. Not only were its processes so integrated with the functions of society that it was impossible to analyse them without first knowing something of that society, but it was also subject to a value system which was based on some decidedly non-architectural principles. Many of these were related to social structures and environmental considerations which it was possible to quantify during the course of field work. Much of the preceding chapter is devoted to their discussion.

The economic survival of the basic rural social unit, the homestead, relies largely upon the ability of the group to synchronise its agrarian activities with the cycles of nature and to harness the forces of the environment about it. Although

RURAL ARTIFACTS OF SOUTHERN AFRICA c1870



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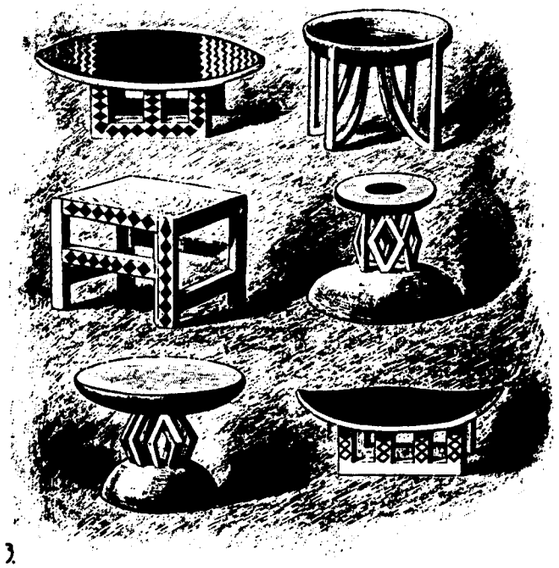

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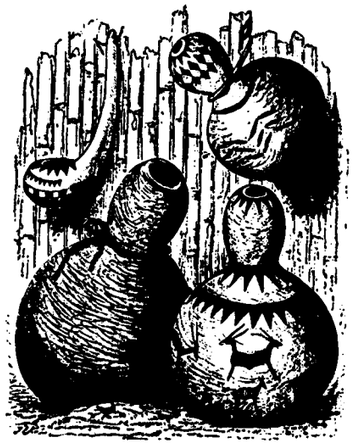

5.

1. HOLUB, 1890. Musical Instruments.
2. HOLUB, 1881. Bark basket and corn calabashes.
3. HOLUB, 1890. Stools.
4. HOLUB, 1881. Calabashes.
5. HOLUB, 1881. Ladle and calabashes.

this is a statement which is fundamental to all agrarian societies, it underlines the dependence that non-industrial man has upon nature, and the fact that, because of this, rural society is forced into a cycle of existence of its own. Unlike industrial and urbanised man who generally has been able to develop a lifestyle independent of many natural cycles, rural man is dependent upon these being completed for his very existence. Thus spring must follow winter, rain must follow drought, renewal must follow decay, life must follow death.

Rural society also recognises that within the greater rhythms of nature there exist innumerable other cycles, each running at its own pace yet synchronised to the others. Thus the sun, the moon, the seasons, the fauna and the flora as well as man himself are all perceived as being part of a larger scheme of things. Times of change and transition are also recognised by rural man who spends a considerable amount of effort in their celebration, partly as a means of reinforcing his social structures and partly to give meaning to the concept of time in a pre-literate society. It would not be too incorrect therefore to state that many of rural society's economic and social activities may be explained in terms of their interrelationship with the environment as a whole.

It is only natural that at least some of rural man's preoccupations with nature should be reflected in his built environment. What is of interest at this point is not only how these have manifested themselves, but how such concerns have coloured his perceptions of his own architecture.

When expressed in material terms and applied to artifact, the cycle of life may be seen as a process of creation, function and decay. Thus the dwelling is drawn and moulded from nature, it lives out its own given life-span and once the function has gone, it decays back into its natural components. The process of function of the dwelling is in itself, as we have seen, subject to its own internal cycle of life, with man and his activities holding that balance in check. The same considerations also apply to the other artifacts of rural man - his clay pots, grass baskets, wooden implements and his musical instruments - once the function has gone or decay has set in prematurely, the objects are discarded and replaced.

Similarly rural man distinguishes between those structures which are temporary and those he expects a longer service of. Many temporary structures are constructed purely for the purpose of celebrating a stage of transition in the life an individual, a family or a whole group. Some of these, like the temporary huts built in the planting fields as shelters for the harvesters are merely abandoned and rebuilt every year; others like the Zulu courting hut are merely revalidated and incorporated into the settlement to serve out more mundane functions until decay finally sets in; and others still are ritually destroyed, such as initiation lodges, which, with the exception of those built by the vhaVenda, are always burnt down at the end of the initiation period.

The human cycle of birth, life and death will also find reflection in the rural built environment. Although birth is not usually recognised by the construction of a special hut, some groups do erect a small screen about the confinement area thus, in a way, creating a hut within a hut. The erection of courtyard walls among the South amaNdebele usually only occurs once a family has produced its first born, and as this finally gives the father full political rights within his community, the creation of a territorial imperative about his family abode may be seen as a formal claim to those political rights. The fact that it is his wife who builds and maintains the walls may be interpreted as symbolising the cooperation of the woman in the obtaining of those rights not only for her husband, but for the family as a whole.

In the case of death a number of procedures are known to have been followed by various groups. Among the San, for example, the death of any member in the settlement was considered enough excuse to remove the entire group to a new site.(8) This also sometimes happened among other southern African groups in instances of lightning striking a hut although this may have been for the more functional reason that lightning is known to strike repeatedly in the same place. In other recorded cases, where death was thought to be imminent, a temporary shelter used to be built on the fringes of the settlement and the person left there to die, thus, presumably, leaving his hut uncontaminated.(9) Should the "patient" have recovered he was allowed to return to his dwelling. This practice however appears to have been limited to certain groups and was not personally recorded during the course of current field work. What was noted in a few isolated instances, however, was the fact that the body of the deceased was removed from his dwelling through a hole especially made in the rear wall. The symbolism here was fairly obvious : the deceased was now considered to have become an ancestor and many southern African rural groups hold that the ancesters reside to the rear of the hut. This is a practice however which also appears to have fallen largely into disuse with the spread of missionary influence in rural areas.

It should be pointed out that, on a number of occasions during the course of interviews, an impression was gained that, somehow, the whole concept of settlement layout and hierarchy centred to a large extent on the location of the burial site for the family head. Regrettably a lack of proficiency in the indigenous languages concerned made further research in this area impossible.

It was noted among certain groups, the most notable being the South amaNdebele, that certain rituals of transition were observed or celebrated by the renewal of courtyard wall decorations. This appeared to take place either in such cases where a son of the family was undergoing initiation (also referred to locally as the "mountain school") or a daughter was about to be married. As however some families were also observed to be renewing their decorations as part of general maintenance, it is difficult to assign a definite and categorical ritual function to this activity.

Similarly it was noted that most building and maintenance work in the rural areas appears to take place during the autumn and winter months. A symbolic "renewal" in preparation for the larger "rebirth" of spring could always be attributed to such activity, but it is also true that these are the months when the thatching grass is at its longest and when agrarian activity is at its lowest ebb, thus freeing the family from other more pressing work.

Although it is difficult to find cyclical patterns at the scale of the larger settlement, except perhaps for those already mentioned, it may be worthwhile to examine the case of the baPedi at a purely theoretical level. As it will be shown in a subsequent chapter, the baPedi extended homestead was traditionally laid out along lines which can best be described as "fan-shaped". We know that at the onset of the settlement, each wife within the group would have been allocated a wedge-shaped piece of land within that fan. Her sons in their turn would have settled behind the mother and their wives' sons behind them and so forth. Assuming the availability of unlimited land for expansion and that each wife's homestead would have been allowed to decay and disappear after her death, it will be seen that such a settlement pattern has built into it the mechanics for a methodical expansion which manages to preserve the hierarchical relationships of the members within each family and of the group as a whole. In practice however, land is not available in unlimited amounts both because of the traditional location of settlements at the foot of rocky outcrops and the proximity of other extended homesteads. Also the mother's dwelling is not usually allowed to decay upon

her death but is bequeathed to her youngest son.

The perception that the rural dweller has of his own built environment is perhaps a little more difficult to quantify. It is obvious in many examples that the cyclical nature of his society permeates his attitudes towards his material culture. Some buildings which could be restored and revalidated most often are not; the work of many a rural artist is often simply wiped out and repainted and certainly no attempt is made at its preservation in its original form; the vhaVenda and South amaNdebele create beautiful sculptures and incorporate them into their courtyard walls or ceremonial axis only to demolish them at a later stage; artifacts such as the carved doors of the vhaVenda recorded by Stayt in 1931 (10) and again by Walton in 1956 (11) have been rediscovered, this time in a state of disrepair and disregard. Yet informants showed little concern in these matters. A new hut can be built next year if needed, a new decoration painted once the rain has washed the old one off, a new sculpture made when the wife has the time to devote to the task and a new door carved when the old one breaks off its pivot. Many could not understand the western concern with keeping old things in museums or with preserving old buildings. Somehow the impression was gained that such places were considered to be dark and unhealthy.

This is a point which was also made by Duerden,(12) who, writing in the context of West African art and literature (and hence, by implication, architecture), puts forward the hypothesis that old artifacts remind us of those who have gone and while an individual may be remembered for a time, after a while he joins the larger and anonymous group of ancestors. His artifacts had validity in his own lifetime but may not necessarily have any significance for his sons and grandsons. By extension therefore each generation has its own problems to sort out and no generation has the right to impose its values and its problems upon subsequent eras. Thus old artifacts which may or may not have served some religious or domestic functions are used until they begin to decay whereupon they are discarded and new ones fashioned to take their place.

Western preoccupation with books is similarly seen as being unhealthy. Duerden points out that we :

> "... devote considerable time and attention to the collection of antiques but very little time and attention to the preservation of marriages, to clubs for adolescents or to the care of the old and infirm. Spouses, children, parents and grandparents can be discarded, but old objects, books and information are lovingly preserved."(13)

This is reinforced by the Ugandan poet Okot p'Bitek who wrote in 1966 (14) :

> "My husband's house
> Is a mighty forest of books,
> Dark it is and very damp,
> ..."

It is not easy to take this comparison, made from an artistic/literary standpoint and set in a West African context, and give it validity in terms of southern African rural architecture. On the other hand there are some elements which strike a strong emotive chord. Many informants could not understand what interest their buildings and wall decorations could have evinced in a white man; others replied with queries of their own, questioning western values in regards to marriage, marital fidelity, ease of divorce, attachment to material goods, definitions of wealth and so forth. A difference of attitude was also shown in regards to death. This was, in many cases, not seen as the sad closing of a cycle but the continuation of an existing one. Sadness was only expressed where a man died without heirs for then there was no one to remember him as an ancestor and some groups

had the social mechanics to deal with even that contingency.(15)

Evidently therefore, the conventional means used by architectural and art historians in the past in their analyses of rural architecture or indeed architecture as a whole, are proving clearly inadequate in this case. When dealing with the subject of the indigenous rural architecture of southern Africa, the picture cannot be accurately described by means of typologies or the mono-dimensional approach dictated by some disciplines. The interaction between man and his environment is complex and subject to many different variable factors which can only be approached from a multi-disciplinary standpoint. Regrettably only some of these variables are quantifiable and until such a time as further insights are gained in this field, the rest will have to remain subjects of interpretation and debate.

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1. TAFURI, Manfredo and DALCO, Francesco
"Modern Architecture". New York : Harry N. Abrams, 1979.

2. Although it is true that a certain degree of mystique has always been associated with individual designers as well as with the design process, there is no doubt that, in more recent times, this has become harnessed by both the advertising industry and the mass media. They have attempted to exploit foreign and unusual aspects of consumer products in order to create images which are both chic and esoteric. In the process however they have also tended to promulgate false social and national stereotypes and unrealistic economic expectations which have only magnified the alienative elements of modern industrial society.

3. VASARI, Giorgio
"The Lives of the Artists". Harmondsworth, Middlesex : Penguin Books, 1971.

4. Ibid.

5. Ibid.

6. PIAGET, Jean
"The Language and Thought of the Child". New York : Humanities Press, 1962.

7. Indigenous groups in southern Africa have engaged in the manufacture of domestic and decorative items since time immemorial. More recently these have gained a measure of popularity among collectors of handicrafts as well as curio seekers. Sadly the growth of a market in this field has also led to the debasement of the intrinsic value of such goods. During the course of current field work a number of cases were discovered where local craftsmen and women had been contracted by large retail concerns to manufacture "traditional" objects to commercial specifications. These included the weaving of specially designed basketry, the replacement of customary bead colours with others more marketable to European and American visitors and, in at least one case, the total redesigning of traditional amaNdebele dolls by the owner of a fashionable Johannesburg art gallery.

8. SCHAPERA, I.
"The Khoisan Peoples of South Africa". London : Routledge and Kegan Paul, 1930.

9. HOLUB, Emil
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10. STAYT, Hugh A.
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11. WALTON, James
"African Village". Pretoria : van Schaik, 1956.

12. DUERDEN, Dennis
"The Invisible Present". New York : Harper and Row, 1975.

13. Ibid.

14. Ibid.

15. MÖNNIG, H.O.
"The Pedi". Pretoria : J L van Schaik, 1967.

> "The door is of wicker-work; the hardened floor of broken ant-hills, wetted and pounded; the fire in a hollow in the centre of the hut; and three round stones support an iron pot".
>
> ALEXANDER, J.E. "Narrative of a Voyage of Observation ... and a Campaign in Kaffir-land ... in 1835". London : Colburn, 1837.

During previous discussion it has been shown that the relationship between rural architecture and the natural environment was not limited to a static interdependency between the dwelling form and its material components but was, in many ways, a dynamic one which relied upon the presence of man and his activities in order to maintain a mutual balance. It has also been shown how the introduction of materials and building technologies incompatible with the natural cycles of rural life tended to terminate the old cycles and create new ones of their own.

This means that rural man should not be considered to act as a passive agent, responding to his natural environment in an ad hoc manner, but rather to be an active manipulator of his surrounds in the provision of shelter for his kith and kine. Therefore, although it is true that in many ways the rural dwelling relies upon the natural properties of its constituent elements for many of its textures and building details, it is equally true that man the builder reserves and often exercises an option in the resolution of certain key details in the design of his dwelling.

This does not mean to say that a large degree of predetermination is not already being exercised in southern Africa by the nature and quantity of materials available for construction. It would be foolish for example to expect a timber-orientated technology to have developed in a treeless savannah country such as that found on the highveld.(1) On the other hand the eastern coastal belt which has traditionally been the preserve of a grass-orientated architecture, has now switched over almost entirely to wattle and daub construction. It is obvious in retrospect that, in the latter case, this region could have supported either technology but perhaps for cultural (2), economic (3), or even political reasons (4) opted for the one in preference to the other.

Although it is probably true to state that the beehive form was being built in most parts of southern Africa up to the period soon after the Difaqane (5), it has not been possible to ascertain the exact purpose of some of these structures. It is known, for example, that most indigenous groups traditionally built grass-and-sapling shelters to fulfil a number of different functions, mostly temporary, but these only achieved the status of permanent dwellings in some areas of the country.(6) In others, where a knowledge of beehive structures is recorded as having existed up to the later part of the nineteenth century, the people chose different forms and technologies for their more permanent domestic architecture.(7) There is no doubt therefore that, in the past, the people of certain regions had the technological know-how to build dwellings similar to those of other areas but, for reasons of local expedience and convenience, chose not to do so.

Historically we can only surmise what those reasons of local expedience could have been. However, since overall climatic, soil and vegetation conditions have not altered too radically since the last century, it may be assumed that it is still possible to arrive at some fairly accurate conclusions on this point through the use of modern data. Therefore, applying only the broadest of environmental criteria, it becomes possible to state that four major regions of technology arose in the past in the southern African region.(8) These, in their turn, were to

give rise to four major types of dwelling forms upon which most of the subcontinent's subsequent rural architectural developments were to be based.

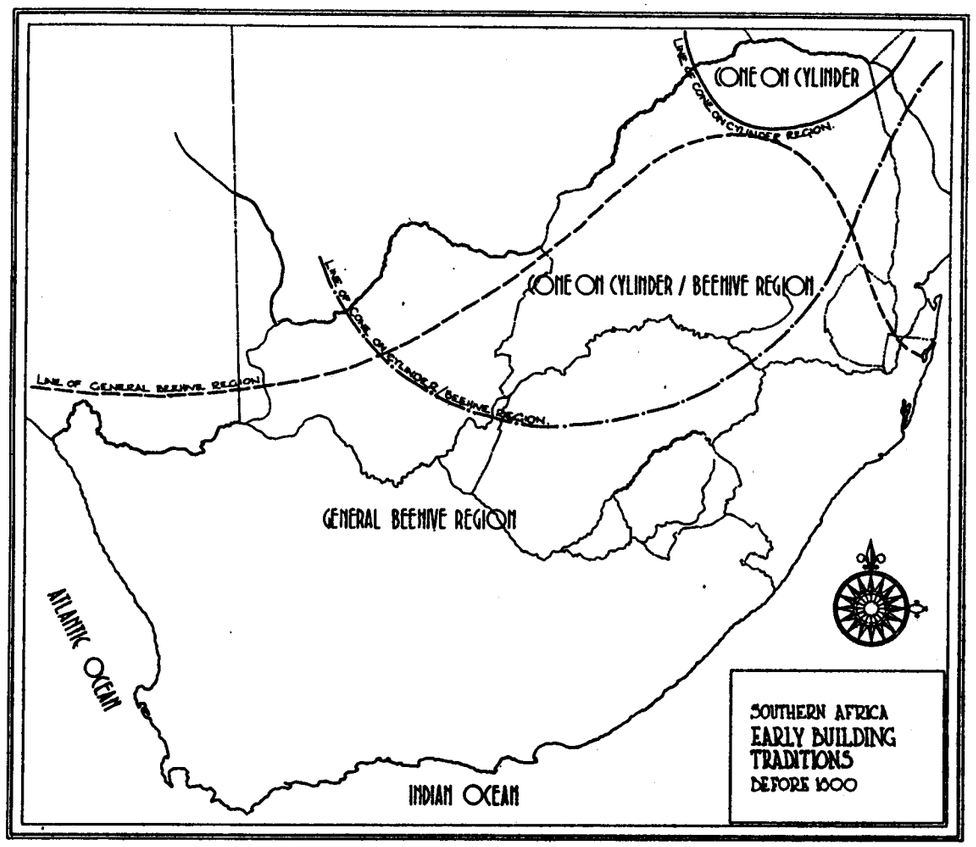
The Migrant Pastoralist Beehive Region

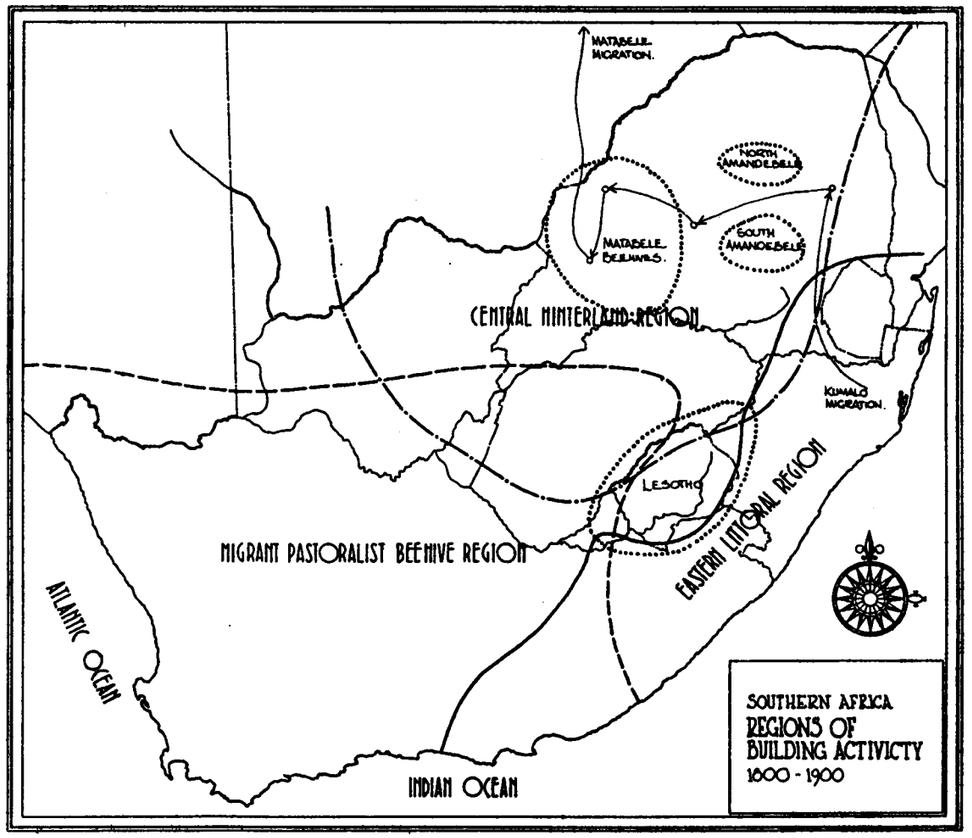
The first region encompassed the larger part of the Cape and included the well-watered south-western coastal belt as well as the more arid Karoo interior. A certain amount of overlap also occurred with the other regions to the north. This area was defined not so much by climatic and other environmental factors as by the presence of KhoiSan migrant pastoralist groups who inhabited it. They were able to evolve a dwelling type which, although of beehive form and hence similar to that found simultaneously on the eastern coastal region, differed from the latter in that it was dismountable and highly portable and hence suited to the nature of their economic activities. The structure consisted of a number of saplings bent into a series of arches which were set into the ground widely spaced from each other. The hemisphere thus formed would then be covered over with reed matting and, sometimes also, a layer of animal skins to create an adjustable ground skirt surrounding the bottom of the hut. It is not known today in which part of the country they acquired their building materials or what was the lifespan of their dwellings. It is obvious that they could not have collected the necessary reeds and saplings in the arid interior and therefore it can only be surmised that a stop at a location where such resources would be available must have been incorporated into their economic cycle.(9) The process of land alienation which this group was subjected to throughout the eighteenth and early part of the nineteenth centuries should be seen as having deprived the KhoiSan not only of their grazing land but of access to their traditional sources of building materials as well. The decision in 1813 of some Griquas at Hardcastle mission station to build for themselves more substantial (and hence permanent) dwellings should not be seen to be the result of missionary labours so much as a response to a shortage of suitable resources in the interior. (10) This is borne out by the fact that traditional Khoikhoi structures were still being encountered by travellers into the interior as late as 1876 in Botswana (11) and even later in southern Namibia (12) where the necessary materials were still available. The KhoiSan economic system has not managed to survive through to modern times and hence it is not proposed to include this region or its technology in discussions of subsequent developments.

The Eastern Littoral Beehive Region

The second region to be considered encompassed the rain and grass-rich reaches of the eastern coastal belt east of the Kahlamba foothills, stretching between Swaziland in the north and the Sunday's River to the south. Although today this area is, in the main, the preserve of cone on cylinder dwelling forms, historically it represents a part of the country where the grass-covered beehive structure achieved a high degree of technological development. In current terms the last strongholds of these dwellings in their purest and most traditional form may still be found here today.

Structures usually consisted of saplings bent into a series of arches set into the ground closely spaced to each other. This framework was then thatched over-with grass or a combination of grass and grass matting, held down with an over net of grass ropes.(13) Although complete frameworks are known to have been transported over relatively short distances (14), this was not an easily portable structure and must be considered to have evolved within the context of a sedentary agrarian economy. The reasons why it should have reached the high levels of technical performance it has (15) or have survived virtually unchanged this past century are difficult to assess. It may be that the simple availability of suitable





grasses on the one hand coupled with the fact that the region's steady summer precipitations may have precluded unforced experimentation with clay wall construction, could have contributed to and served to maintain the widespread popularity of an extremely functional housing system. On the other hand this is a dwelling form which may have become so integrated with the life and culture of its builders as to make change an extremely traumatic process.(16) It is probable that the truth lies somewhere between these two aspects.

The Central Hinterland Region : The Cone on Cylinder

Technically speaking it should be possible to consider the next two regions as one. (17) Certainly the dwelling forms of both are based upon similar structural systems, that is to say a conical roof supported by a series of timber posts about its perimeter.(18) However more recent research has shown that what was originally believed to be but a variant in fact represents a major technological division in its own right.

The third region was largely located on the comparatively drier highveld plateau spanning from Lesotho and the Kahlamba in the east to the OFS-northern Cape boundary in the west and from the Orange or Gariep to the south through to the southern/central Transvaal in the north. Although much of this region once consisted of treeless grassland, timber-framed cone on cylinder structures are known to have been erected by its population before and during the Difaqane years.(19) A measure of stone-wall technology is also known to have developed locally before the 1822 era, consisting in the main of rubble construction. However this appears to have been employed largely to erect non-load bearing perimeter and byre walls and, with one notable and highly problematic exception (20), does not seem to have found general application in the region's building of domestic shelters. Certainly the level of technology involved, as uncovered by archaeologists to date, does not equal the quality of masonry discovered among the vhaVenda of the northern Transvaal and the maShona of Zimbabwe.(21)

The exception referred to lies in the existence of corbelled stone huts, found largely in a belt which sweeps diagonally across the central and northern Orange Free State into the southern Transvaal.(22) Although their construction was initially attributed to a group called the "Lighoya" (23), an impression subsequently compounded by various authors (24), more recent researchers have shown them to have been built as part of many early Sotho/Tswana settlements of this region.(25) Further analysis shows that corbelled stone huts were of small internal size, possessed of entrances too narrow and low to allow entry to most normal grown men, and usually constructed in association with cattle byres - all indicating their use as herdboy shelters. This supposition is supported by the work of Walton (26) who found similar structures being used by herdboys in Lesotho up to 1956.(27)

The Central Hinterland Region : the Verandah Dwelling

It is not possible to state with any certainty whether the cone on cylinder building technology found in the southern African interior before the Difaqane varied markedly from one part of the region to the next. Certainly the nature of the materials used has not made it easy for archaeologists to build up a sizeable volume of data on the subject to date. One type whose form was closely associated with that of the cone on cylinder and which has left behind a certain amount of interpretable archaeological material has been the circular verandah dwelling. This form differed little in essence from that built to the present day by the inhabitants of the northern Transvaal, Botswana and the northern Cape and consisted of a basic cone on cylinder with wide eaves supported at their perimeter by a series of columns

or posts. The verandah thus formed not only served as a thermal control on the building itself, keeping the internal residential drum cool but, in the process, also created a belt of social activity about the dwelling itself. At one stage of the research it was also believed that the wide eaves served to keep rainwater off the inner drum wall, especially in those areas of the northern Cape where the soils are heavily leached and of a sandy consistency.(28) Subsequent testing of these soils however has shown that their structural strength is often higher than that of the clay soils found further south and east where cone on cylinder forms are endowed with considerably narrower eaves. The conclusion arrived at therefore was that rainwater exclusion was not a major consideration in the development of a verandah dwelling form in local architecture.

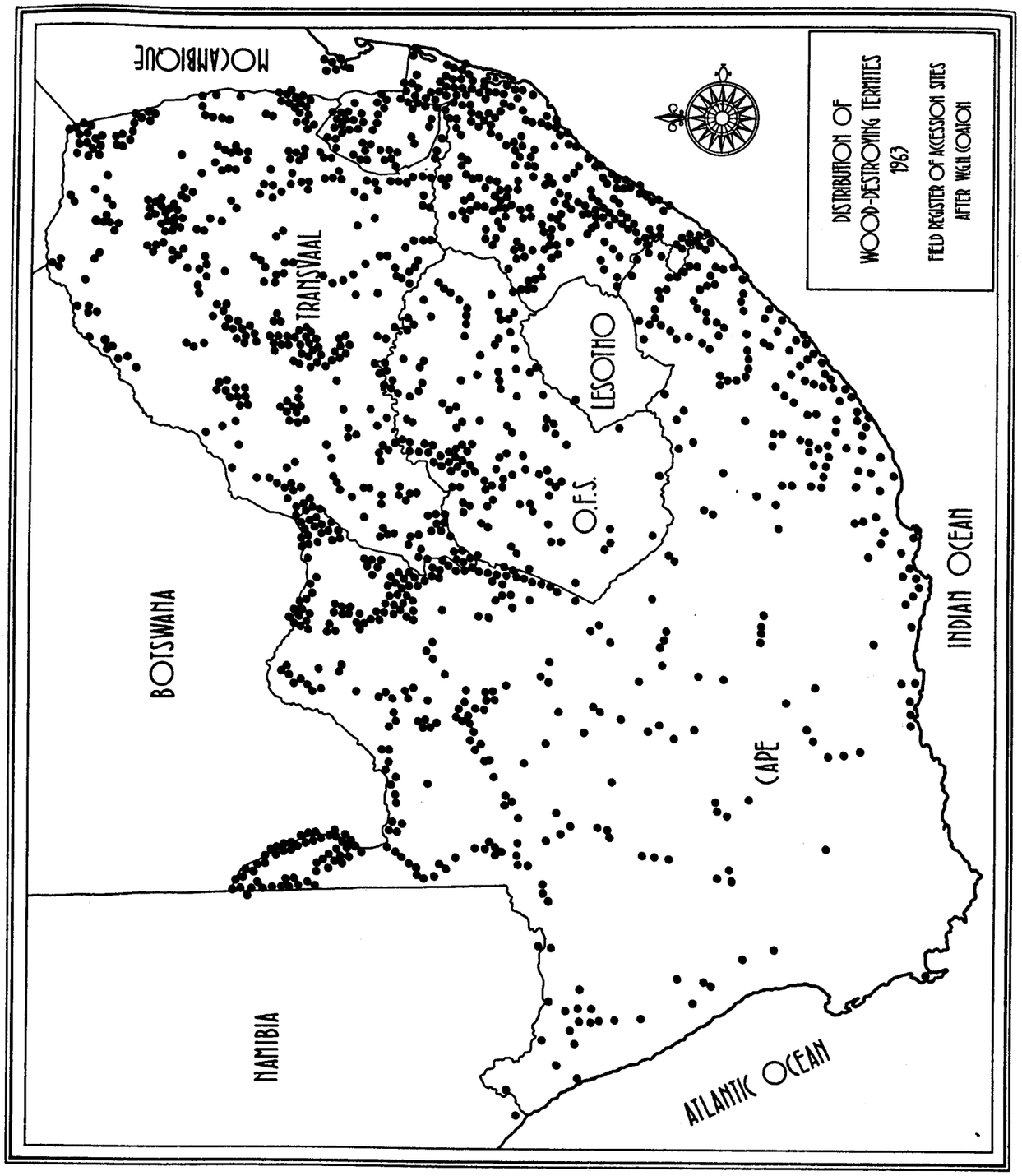
An interesting variant in verandah building technology was recorded in some parts of the northern Cape, Botswana and the western Transvaal. There it was noted that the full load of the roof was taken up by the perimeter posts and not by the internal drum wall as is the case in other areas. This fact was remarked upon by Lichtenstein, who visited Dithakong in 1805, where he recorded that :

> "The houses were all of a circular form, with the roof running up to a point; the roof rests upon a circle of posts, which are united together below by thin walls of loam; above, for a little way below the roof, they are left open to admit light and air". (29)

Lichtenstein's assumption that the gap left open between roof and wall was provided to allow light and ventilation to penetrate into the inner drum was, under the circumstances, reasonable and probably partly correct. However a more recent survey of verandah dwellings built in other parts of this region has shown that rural inhabitants generally had a low concern for both factors and often neglected to make any provisions in this regard. It was only in the western reaches that such details were part of the common building procedure and local builders did not ascribe them to a need for light and fresh air but rather to the necessity of keeping termites out of the roof structure. This discovery has therefore introduced a new variable into the architecture of the region which warrants further analysis.

Termites are a species of insect related to the cockroach family. They owe their more popular misnomer of "white ants" to some remarkable similarities between themselves and ants, most particularly in their social systems and methods of nest building.(30) Up to 1949, some 144-odd species of termites had been recorded on the southern African subcontinent but, according to Coaton (31), only eleven of these were thought to be directly responsible for damage to structural timber. Although it is obvious that Coaton's work in this field at the time had concentrated upon the reconciliation between local faunal conditions and conventional western building technology, we can nonetheless accept that his data for the distribution of wood-destroying termites is also applicable to indigenous vernacular architecture. His 1949 figures show that termite attacks upon timber could be expected throughout the country north of the Gariep and Lesotho as well as in two broad belts skirting the Namaqualand western sea board and the Transkeian coastal region.(32)

As may be seen, Coaton's data on termite distribution is largely coincidental with those areas of southern Africa subject to Nguni/Sotho/Tswana settlement. It is not surprising therefore to discover that the rural builders throughout this region make extensive use of soils obtained from termite nests, both above and below ground. They discovered that when these are mixed with water and a small amount of cow-dung, the resultant aggregate hardens to a near rock-hardness. The actual scientific reasons for this phenomenon have not been investigated fully as yet. It is not known, for example, whether termites tend to prefer settling



in soils which are also suitable for clay wall construction or, more likely, whether it is their presence in the soil which enriches it with their secretions during the course of their own building operations.(33) What is surprising however, in view of the widespread distribution of wood-destroying termites, is that, barring the Botswana/northern Cape region, so little attention has been paid in the past to termite infestation by the builders of indigenous architecture. It is obvious therefore that the ecological relationship between termites, the rural building and local materials has not yet been understood fully and is in need of further investigation.

The process of termite infestation which is known to have occurred in the indigenous architecture of Botswana, the northern Cape and the western Transvaal is not too difficult to trace. Infestation of walls does not appear to arise as the result of the use of termitic soils in the construction but either through the mis-location of buildings on or near an existing nest or through the migration of an egg-producing queen.(34) Because of this threat earth walls are seldom load-bearing. Thus the danger of structural failure only arises should the insects be allowed to reach the roof frame and its grass thatch cover. To safeguard against this eventuality, the rural builder has had to make certain allowances in his construction. The dwelling's framework could either be built out of termite-resistant timbers or be kept separate from the clay wall, thus leading to the distinctive verandah form; where timbers touch the ground, they are embedded in ashes or, more recently, old sump oil (35); the clay wall is not taken up to the eaves but is usually stopped short of the underside of the roof thus denying the insects a passage through to the roof structure. The fumigation process previously described does not appear to have been effective in the containment of infestation as these insects bore into the grass stems and their nests are enclosed in clay thus making their habitat impervious to smoke.

The possible presence of termites in the wall also affects the way in which rural man positions his furniture within his dwelling. Current research has shown that artifacts are seldom located against a wall (a difficult feat when dealing with a circular plan) and are usually raised above ground level by means of bricks, tins or other objects impervious to termitic infestation.

It is obvious that this picture can only be said to be true of recent times and it is probably difficult to assess the spread of wood-destroying termites in earlier eras. It may be that their habitat has spread slowly southward over the years and that, as a result, the dwellings of indigenous man have been forced to undergo adaptations in their technology as a result. Verandah dwellings were known in the Limpopo region as early as eight centuries ago (36) and on the southern Transvaal - northern OFS highveld as recently as the 1700s.(37) On the other hand the bounds of termite settlement could have remained relatively fixed over the years and it may therefore be surmised that termite soils have been a part of the region's building technology for some considerable time.

Conclusions

The technological scenario which has been drawn during the course of this chapter for the sub-continent as a whole is obviously incomplete and, barring startling new developments in the analytical arsenal of present-day archaeology, is likely to remain so. On the other hand it will be found that the regions which have been derived in the process do not differ too radically from those also found in current terms.

In many ways therefore it should be possible to gain an understanding of the historical background to the architecture of the region through a study of its current building practices. It is true that the range of dwelling forms to be found in the local

countryside today has become more varied and rich since the Difaqane of one hundred and fifty years ago, but the many building types from that era are still being constructed by the modern rural inhabitant. As the physical conditions have remained essentially unaltered since that time, it would probably not be too incorrect to assume that current indigenous building technologies are a fair reflection of those in use during the region's immediate historical past.

NOTES AND BIBLIOGRAPHY

1. In many ways the emergence of a timber-framed building tradition in some parts of fourteenth century Europe was linked to parallel developments in the technology of their local ship-builders. Neither would have been possible without the availability of suitable timber resources in the region. Southern Africa, on the other hand has, with a few exceptions, been largely lacking in trees big enough to support the growth of a traditional carpentry-based technology. Whether such a tradition would have arisen without the added impetus of such factors as trade and urbanisation is a question which is never likely to be fully answered.

2. BIERMANN, Barrie
"Nguni House Form and Settlement". Unpublished manuscript made available by author c 1983.

3. The grass-covered beehive dwelling, whether it be the highly portable Khoikhoi or the more complex Nguni type, could be transported and reused virtually at will and movements of single units, groups or even whole villages have been recorded by various authors in the past. The cone on cylinder did not offer the same advantages to its builders and only the conical roof appears to have been reusable. Few accounts of such events have been recorded by visitors to the region in the past. (Holub, 1881).

4. PEIRES, Jeff
"The House of Phalo". Johannesburg : Ravan Press, 1981.

5. The exception to this rule would appear to lie with the vhaVenda of the northern Transvaal region where current field work and research has failed to unearth examples or remains of, or even historical references to, beehive-type dwellings, permanent or temporary. This was also found to be true of the play villages constructed by vhaVenda children after the harvesting season (Stayt, 1931).

6. The most notable example, of course, being that of the Nguni of the eastern littoral although permanent beehive-form dwellings were also being built by the baSotho up to comparatively recent times.

7. This was certainly true in the case of the baTswana and perhaps also of the amaTsonga and baTsonga, who, probably for climatic and material reasons, preferred a form of cone on cylinder surrounded by a verandah.

8. For the sake of convenience, the KhoiSan-inhabited Cape region has been classified as one despite the fact that it encompasses such climatic extremes as the rain-rich south-western Cape as well as the arid Karoo interior. Regrettably not enough data has been handed down to us today to enable the formulation of a hypothesis as to how these two extremes affected the KhoiSan building technology of that time.

9. BURCHELL, William J.
"Travels in the Interior ... etc." London : Batchworth Press, 1953. Second Edition. He tells of reed suitable for mat-making being available near Genadendal and in the Roggeveld. Mats made from Hard Matjies Goederen (Scipus Tegetalis B.), found in the Roggeveld, tended to last for many years and were more durable than those made from Sagt Matjies Goederen (Cyperus Textilis) found nearer to Cape Town.

10. CAMPBELL, John
"Travels in South Africa". London : Black and Parry, 1815. Third edition.

11. HOLUB, Emil
"Seven Years in South Africa". London : Sampson Low, Marston, Searle and Rivington, 1881. Second edition.

12. HAACKE, Wilfrid H.G.
"Traditional Hut-Building Technique of the Nama (with some related terminology)". Cimbebasia, State Museum, Windhoek. B.3.2.1982.

13. This is only the general principle upon which most beehive construction is based. In the same way that the technology of the cone on cylinder is known to vary from area to area, beehive structures are also known to differ in their detailing within the same region (Knuffel, 1973; Frescura, 1981). Early travellers to the eastern Cape also recorded that on some occasions the local dwellings were lined, both inside and outside, with clay or daka (Sparrman, 1772-6; von Winkelman, 1788 and others).

14. KUPER, Hilda
"The Swazi". New York : Holt, Rinehart and Winston, 1963.

15. BIERMANN, Barrie
"A Case Study : An African Village". In "Housing People" edited by Michael Lazenby. Johannesburg : Ad. Donker, 1977.

16. Ibid.

17. FRESCURA, Franco
"Rural Shelter". Johannesburg : Ravan Press, 1981.

18. Ibid.

19. MAGGS, Tim M. O'C.
"Iron Age Communities of the Southern Highveld". Occ. Pub. of the Natal Museum No.2. Pietermaritzburg : Council of the Natal Museum, 1976.
TAYLOR, Michael O.V.
"Late Iron Age Settlements on the Northern Edge of the Vredefort Dome". Unpublished MA Dissertation. Department of Archaeology, University of the Witwatersrand, Johannesburg, 1979.

20. WALTON, James
"Early Ghoya Settlement in the Orange Free State". Bloemfontein : Memoir No.2, Researches of the National Museum, 1965.

21. WALTON, James
"African Village". Pretoria : van Schaik, 1956.
FRESCURA, Franco. Op. Cit. 1981.

22. MAGGS, Tim M. O'C. Op. Cit. 1976.

23. ARBOUSSET, T. and DAUMAS, F.
"Narrative of an Exploration Tour etc." Cape Town : A.S. Robertson, 1846. These were later identified as a Taung/Kubung group. (Maggs, 1976).

24. STOW, G.W.
"The Native Races of South Africa". London : Sonnenschein, 1905. Second Edition, Cape Town : Struik, 1964.
WALTON, James. Op. Cit. 1965.

25. MAGGS, Tim M. O'C. Op. Cit. 1976.

26. WALTON, James. Op. Cit. 1956.

27. The reports and drawings of Andrew A. Anderson (1887) are being disregarded, not only for what Maggs calls their "lithocentricity" (Maggs, 1976) but also for the sheer absurdity and invention of some of the structures and settlements he claims to have discovered in the western Transvaal.

28. FRESCURA, Franco. Op. Cit. 1981.

29. LICHTENSTEIN, Henry
"Travels in Southern Africa". London : Henry Colburn, 1812 and 1815.

30. LINSENMAIER, Walter
"Insects of the World". New York : McGraw Hill, 1972.
KRISHNA, Kinmar and WEESNER, Frances M. Editors.
"Biology of Termites". New York : Academic Press, 1970.

31. COATON, W.G.H.
"Infestation of Buildings in South Africa by Sub-Terranean Wood-Destroying Termites". Department of Agriculture, Entomology Series No. 30, Bulletin No. 299. Pretoria, 1949.
COATON, W.G.H.
"National Survey of the Isoptera : Field Register of Accession Localities as at 30 June 1983". Department of Agriculture, Project (A) I-PR II, Pretoria, 1983.

32. COATON, W.G.H. Op. Cit. 1983.

33. LINSENMAIER, Walter. Op. Cit.
KRISHNA, Kumar and WEESNER, Frances M. Op. Cit.

34. Ibid.

35. Quite often a piece of timber whose core is known to be termite-resistant will be left deliberately near a termite nest. Once the softer pith has been eaten away then the wood will be deemed to be ready for use, usually as a post.

36. FOUCHÉ, Leo
"Mapungubwe". Cambridge: Cambridge University Press, 1937.

37. TAYLOR, Michael O.V. Op. Cit.

CHAPTER 6 : TOWARDS A REGIONAL INTERPRETATION OF VERNACULAR ARCHITECTURE

"It is perhaps in the difficulty of procuring wood in Basutoland that we must seek the reason for which this tribe inhabits huts which are mainly composed of thatch grass".

JOUSSE, writing from Mothetho in 1852.

GERMOND, Robert C. "Chronicles of Basutoland". Morija : Morija Sesuto Book Depot, 1967.

The division of the southern African subcontinent into regions of building technology derived during the course of the previous chapter should only be seen as relevant in a largely historical context. Since the turn of the present century the country has undergone considerable social and economic changes which have led to the breakdown and even disappearance of these former regions. Certainly the major area of KhoiSan preserve in the Cape has been reduced to small, isolated pockets of Khoikhoi in Namaqualand and southern Namibia whilst the San have all but removed into the arid reaches of Botswana and Namibia; the eastern and predominantly Nguni coastal belt today supports a wide range of cone on cylinder technologies which, barring a few remaining settlement areas, have virtually replaced the beehive dwellings of old; indigenous architectural forms in the central highveld region have largely been displaced by flat-roofed lean-to structures originating from the Cape (1); and the former circular verandah dwelling belt of the north has undergone extensive changes in its technology.

A reassessment and revaluation of these regions as a whole therefore becomes necessary, not only to enable us to consider them in more current terms, but also because more recent research has shown them to be too general and simplistic to be relevant in a modern context. This generalisation is regrettable but also unavoidable. With modern hindsight there is no doubt, for example, that a number of different beehive-building technologies must have existed historically. Yet a lack of archaeological data forces us to recognise them only in the broadest possible terms. It is possible that this lack of accuracy may be remedied, to a small degree, by a study of current building technologies which, when read in conjunction with modern climatological and environmental data, will allow for a more detailed reconstruction, supported by archaeological data, of the region's traditional and historical building systems.(2)

For the purpose of modern study it is proposed to divide the southern African subcontinent into seven regions of building technology. An eighth, which would have encompassed the larger area of the Cape, is being excluded, as widespread indigenous Khoikhoi settlement of this region virtually ceased during the 1860s.

1. Semi-Arid Technology

a. Distribution

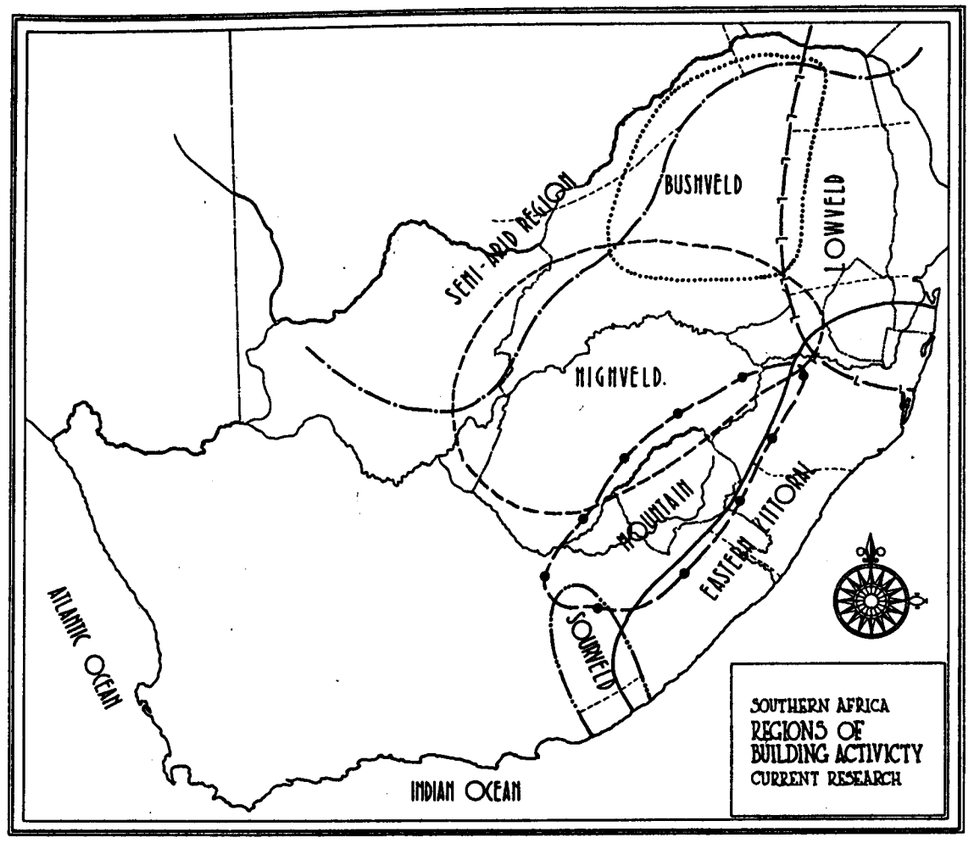
This region includes the northern Cape, Bophuthatswana, eastern Botswana and those parts of the western Transvaal which border onto Botswana. It also encompasses parts of the northern Transvaal and Venda north of the Soutpansberg.

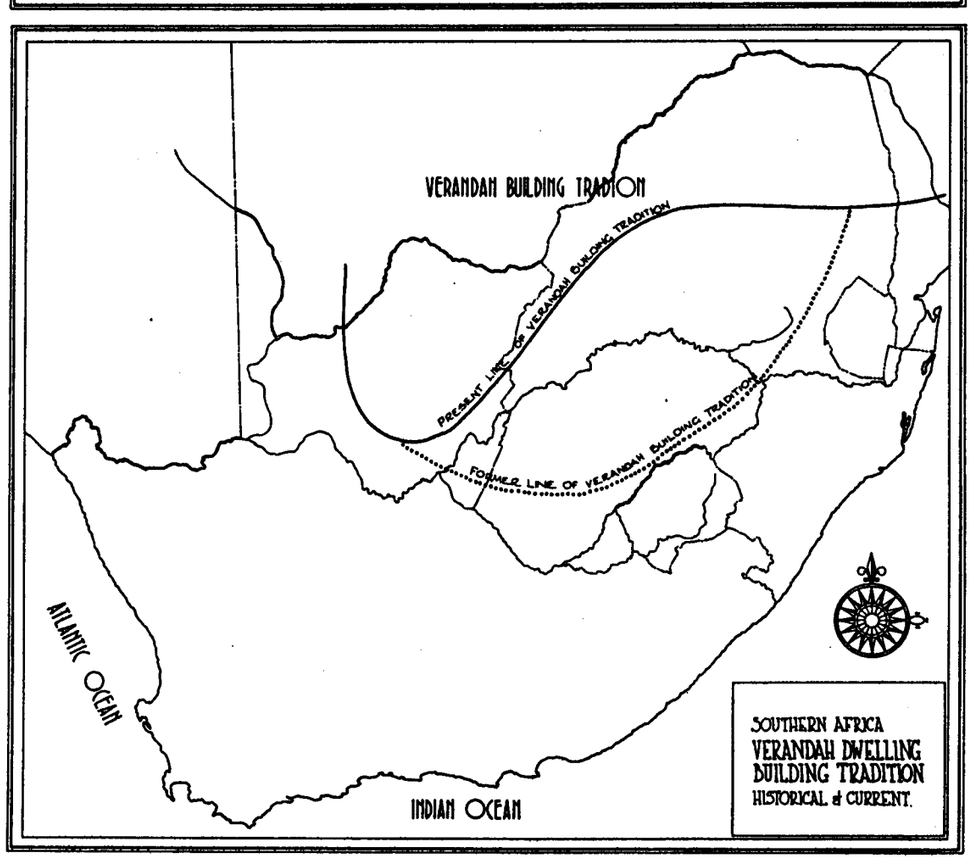
b. Climate

Low, unreliable rainfalls concentrated in the summer season; great extremes of temperature recorded.

c. Vegetation

Kalahari thornveld constituting a more open type of savanna. It consists of





an admixture of tall, tufted and widely spaced grasses together with thorny Acacia trees and bushes. Although the composition tends to vary greatly with increasing aridity to the west, dominant tree species are the Camelthorn (Acacia Giraffae Willd) and the Vaalkameel (Acacia haematoxylon Willd). Grass types include Themeda Triandra, Cymbopogon Plurinodis Stapf, and Eragrostis Superba Payr to the east giving way to various types of Aristida and Eragrostis spp. with increasing aridity. The nature of the shrub varies greatly but generally speaking is dominated by species of Tarchonanthus.

d. Soils

Generally the soils all have an alkaline reaction, are thin and show no differentiation into horizons. Over much of the area they consist of light brown sandy loams which become denser with depth and are underlain by a hard layer cemented by either calcareous or siliceous material.

e. Technology

This is a region which is typified by the construction of circular verandah dwellings as well as cone on cylinder forms. These however, do not comprise one uniform building technology but appear to fall into three subregions : the hotter north-east, the west and the arid south.

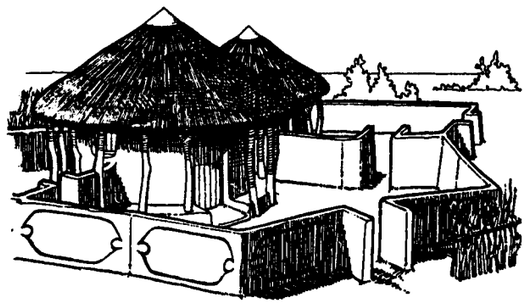
In the case of the first, dwellings are possessed of wide, shade-giving eaves; the roof is carried by a central drum as well as, where relevant, by a set of perimeter verandah posts; drum walls usually consist of a series of timber posts set in close order, strengthened horizontally and coated over, internally and externally, with termite soil daka; courtyard walls are usually built from sun-dried clay bricks or reed screens; timber structures were traditionally timber-intensive (3) but have undergone considerable rationalisation in more recent times; thatching is done in a predominantly traditional style involving the specialised treatment of both roof apex and eaves details.

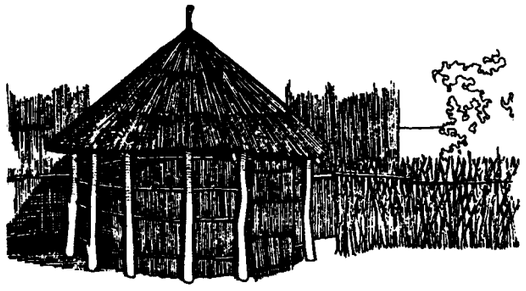
In the west roof eaves remain wide but the roof load is carried by the perimeter verandah posts only; the inner drum wall, built from sun-dried clay bricks or more simply moulded directly in clay, is not load-bearing; it is also not allowed to touch either perimeter posts or roof structure in order to prevent termitic infestation, thereby creating a ventilation gap; thatching is still predominantly traditional with good apex detailing in common use but an increase in the incidence of smooth or "boer"-style thatching has been noticed in more recent times.

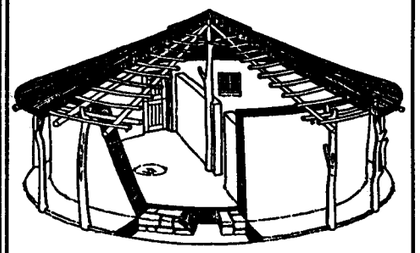
In the southern sub-region roof eaves become generally smaller; the inner drum wall is not load-bearing and, as in the west, the roof load is carried by the perimeter posts; the quality of roof-timbers available is generally poor and a centre post is often introduced to take up some of the load at the apex; thatching grasses are generally scarce and of poor quality, thatching is seldom traditional and often little attention is paid to the roof apex detail, leaving it open to the sky.

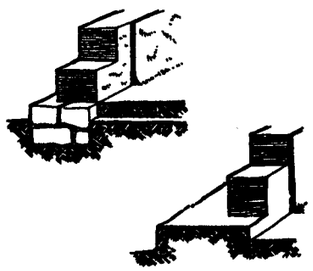
The relationship between physical environment and dwelling form is underlined by a number of design features unique to the architecture of this region. As one moves from the hotter and relatively wetter north-east to the more arid south and south-west, the roof overhang forming a verandah contracts in size and thermal control is exercised by means of a ventilation gap created at the eaves. Similarly the thatching technology decreases in efficiency as on the one hand the quality and length of thatching grass is affected and, on the other, such water-sensitive details as the apex are treated in an increasingly nominal manner. The failure to complete the roof apex in fact tends to improve the thermal performance of the dwelling, increasing its ventilation and smoke dispersal abilities while retaining

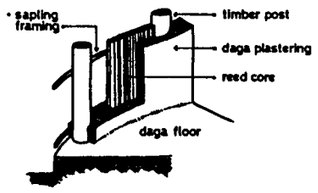
SEMI-ARID REGION : SURVEY OF DWELLING FORMS AND BUILDING METHODS

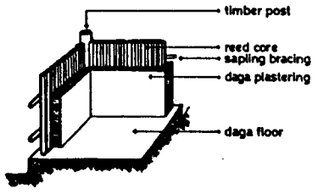


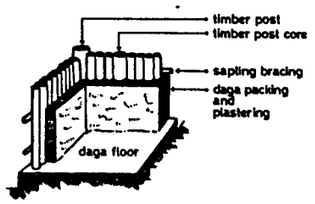


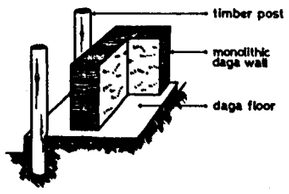












its water exclusion properties under all but the most extreme of conditions, rare in this region. The quantity of timber available is also a factor. Whereas the architecture of the north-east is traditionally timber-intensive, to the south timbers suitable for spanning large distances become scarcer and the timber framework is usually more economical and rationalised.

2. Highveld Technology

a. Distribution

This region includes most of the southern Transvaal and the Orange Free State. Although it is known to have supported a large and flourishing indigenous rural community before the years of the Difaqane, it was seriously depopulated during that time. Today most of this land is under the control of a white, predominantly rural, community and its indigenous inhabitants are, in the main, migrant farm workers with little rights to land occupation and tenure.

b. Climate

Warm, rainy summers and cool, dry winters. Abundant sunshine, great diurnal changes of temperature and frequent winter frosts.

c. Vegetation

The climatic conditions of marked drought, severe night frosts and considerable diurnal variations of temperature in winter are inimical to tree growth. Thus the natural climax vegetation can be described as true grassland. Two main types are recognized: the short grassveld or sweetveld in the east and the mixed grassveld towards the drier west. Major grass types include redgrass (Themeda Triandra) and Cymbopogon Plurinodis, predominant in country between 1500m and 1800m in height, and species of Eragrostis and Setaria.

The natural vegetation of the region has been upset and largely supplanted by urbanization to the north and large scale farming to the south.

d. Soils

Generally termed Highveld Prairie Soils, they are brown in colour and consist mainly of fine sandy loams overlying a B horizon of clay. The A horizon has been leached of the more soluble minerals but the soils nevertheless contain moderate amounts of potash, soda and phosphoric oxide. In the north-western Orange Free State, the soils are transitional in character between the Kalahari sand on limestone and the Highveld Prairie type.

e. Technology

With the exception of the Lesotho lowlands and the Thaba'Nchu enclave, few if any traditional building skills are still practised in this region today. Historically this area has always been poor of timbers suitable for building. Therefore the presence to the north of an urban industrialised economy, together with its technology and availability of commercial materials, has exerted a strong influence upon the aesthetics of the local indigenous architecture. The nature of the 'found' material has also had to undergo a process of redefinition (4) which, in its turn, has forced the local builder to make allowances in order to accommodate modern industrial materials within the framework of traditional construction. The dwellings built by farm workers generally reflect the insecurity of their land and job tenure and usually follow the 'highveld house' pattern, involving the use of sun-dried clay or turf blocks, set with clay mortar into monolithic load-bearing walls, usually roofed over with corrugated iron sheeting. As the roofing material, as well as the doors and windows, are conventional money-intensive items, we find that in recent times the rural inhabitant has evolved a new value-system regarding his shelter. Whereas before a family forced to relocate themselves might simply

have abandoned their traditionally-built dwelling to a process of natural decomposition, today the structure would be stripped of any materials of value which could prove useful at their new site.

3. Bushveld Technology

a. Distribution

Covers the major part of the central and northern Transvaal, between Pretoria in the south, the Soutpansberg to the north and the Lowveld to the east.

b. Climate

This is essentially a highveld climate but it enjoys higher temperatures throughout the year and is free from severe frosts.

c. Vegetation

Described as savanna of the Bushveld basin, it generally features deciduous trees of medium size with the grass layer being fairly high and having a continuous sward, including such grass species as Setaria, Themeda, Digitaria and Panicum. The poorer areas are dominated by the Wild Sering (Burkea Africana Hook), the Vaalboom (Terminalia Servicea Burch) and almost impenetrable shrub, while the slightly wetter but less fertile mountains of the Bushveld and the Waterberg carry an open savanna vegetation in which tall Boekenhout (Faurea Saligna Hart) trees are scattered in a tall, wiry, sour grassveld.

d. Soils

The nature of the soil in this region varies greatly but can probably be grouped under four major types.

The first consists of the Waterberg and Soutpansberg light brown sandy soils and the Waterberg sandstone, which are poor, deficient in plant nutrients and incapable of holding moisture.

Sub-tropical Black Clays occur where norite or Stormberg basalt underlie the surface in the Transvaal Bushveld. They comprise heavy black clays which become extremely sticky when wet but on drying contract into columns which break up into clods near the surface. The top layer contains abundant grass roots and a few carbonate of lime nodules which increase with depth. They have a high content of lime, magnesia, soda and potash.

Grey Ferruginous lateritic souls have formed over the Red Granite of the Bushveld and the Old Granite of the Pietersburg plateau. They are generally sandy and deficient in plant nutrients and while they absorb water readily, their moisture-retaining capacity is low and they become waterlogged after rain.

Towards the west and the north of this region, the soil begins to give way to the beginnings of desert soils previously described.

e. Technology

By comparison with the timber-impoverished semi-arid and highveld technologies, this region begins to reflect an increased availability of wood for construction, although not to such a degree as that found in the lowveld. Walls are usually timber framed, using a variety of materials such as scrub, rubble or clay infills before being plastered over with daka. The roof-load is taken up, in the main, by the drum wall although in the case of verandah dwellings this is also shared by the outer perimeter of timber posts. It was noted that, in the case of the latter, very little advantage was being taken of a possible ventilation gap between wall and roof such as that found in regions further west. Instead thermal control was exercised by means of verandahs or wide eaves. Grass thatch-work was generally found to be proficient although in most cases the smooth "boer" technique had supplanted traditional methods. This may account for the widespread use of galvanised iron metal cappings in some parts of the region in order to resolve such water-sensitive areas as the apex of the conical roof, a detail normally well handled in traditional thatching technology.

In more recent times much of the traditional indigenous architecture of the southern region is being supplanted by flat roofed highveld-type structures, probably as a reflection of its proximity to the Witwatersrand industrial region and the changing economic status of its inhabitants.

4. Lowveld Technology

a. Distribution

The region runs the length of the eastern Transvaal from the Limpopo to the north to the Pongola in the south.

b. Climate

The Lowveld is characterised by very hot rainy summers and warm dry winters.

c. Vegetation

Knoppiesdoring (Acacia Nigrescens Oliver) and maroela (Sclerocarya Caffra Sond.) trees dot a grassveld dominated by redgrass (Themeda Triandra), which is sweet on the heavier soils derived from volcanic material but tends to be sour on the sandy soils, especially those derived from granite. Towards the east, where the rainfall drops below 50mm, the finger grasses (Digitaria spp.) replace Themeda spp. and the Acacias increase in number and are joined by a species of Combretum, arborescent Euphorbias and an occasional mopani tree which, in favoured frost-free localities, may attain a stature of 5 to 8m. Towards the low-lying hot Limpopo valley, which receives less than 40mm of rain per annum, the mopani veld is fully developed. It is characterized by short, dense growth of shrubby Copaifera Mopane J. Kirk., seldom attaining more than 3 m and more usually only 1,2 m, associated with an occasional water-storing baobab (Adansonia Digitata Linn.,) and sparse tufted grasses.

By contrast the moister country of the southern Soutpansberg, where the yearly rainfall exceeds 75mm, carries a varied assemblage of temperate and tropical trees of both hygrophyllous and sclerophyllous form, some with rounded, some with flat crowns, and shows a remarkable emulsion of forest and parkland according to aspect. Water courses are revealed by corridors of trees, mostly consisting of fever trees (Acacia Xanthophloea Benth.), the sausage tree (Kigelia Pinnata D.C.) and the Cape mahogany (Trichilia Emetica Vahl.) linked by a growth of lianas.

d. Soils

Generally speaking this region may be divided into three major soil distribution areas.

Subtropical Brown Forest types are found in the lowveld region east of the Drakensberg. They owe their characteristic features to soil forming processes governed by the prevailing climatic conditions - notably the high temperatures throughout the year and the erratic incidence of rainfall which comes in torrential downpours in summer separated by long dry periods. The soils have suffered little leaching at their base and their reaction is only slightly acid at the surface and becomes neutral to alkaline with depth. They are usually shallow, of a skeletal nature and have a low humus content.

Grey ferruginous Lateritic soils occur in a narrow and often broken strip west of the unleached subtropical soils and are similar to those found in the Bushveld. They are generally sandy and deficient in plant nutrients and while they absorb water readily, their moisture-retaining capacity is low and they become waterlogged after rain.

Lateritic Red Earths are found over the high rolling and mountainous dolomitic country of the Drakensberg mist belt. These soils have a high clay content and are rich in iron oxides, which under dehydrated winter conditions give them their characteristic red colour. The soils are generally deep, particularly on the middle slopes. Towards the lower slopes of the escarpment where there is a lower rainfall and the parent rock contains higher proportions of quartz, the soils are more sandy and less leached.

e. Technology

The constructional methods employed by the builders of this region are by no means universal throughout it and may, in fact, be considered to fall into three distinct sub-regions. All three however are linked by virtue of the fact they are timber-intensive and employ a well-developed thatching technology reflecting the ready availability of timber and grasses suitable for building purposes.

Generally speaking, walls in this region are traditionally built with an almost solid timber core, posts being set into the ground vertically and in close order. Daka packing and plastering is then applied both internally and externally. The drum wall takes up the full roof load except in the case of circular verandah dwellings where this is assisted by a series of perimeter posts. Up to a few generations ago roof structures in the northern and central sub-regions would be built up into an almost solid timber cone but this practice appears to have fallen into disuse in more recent times when a threatened shortage of suitable timbers forced the rationalization of the roof frame and the more efficient use of existing resources.

The circular verandah dwelling form used to be predominant in the northern and central parts of this region and although many such examples may still be commonly found today, the cone on cylinder form now also enjoys widespread popularity. Similar developments have occurred in the southern areas where the beehive dwelling was once common but now appears to have given way entirely to the cone on cylinder.

In the northern and central areas buildings tend to have low, wide overhangs which may or may not extend into verandahs. Although some attempts to create a ventilation gap at the eaves were noted, particularly in the central region, no efforts appeared to be made at separating the wall drum from the roof structure. We may thus conclude that unlike the semi-arid region, wood-attacking termites are not considered to be a local domestic problem. The thatching practices of both sub-regions were predominantly traditional and of consistently high quality, the detailing of the apex, eaves and low door-surrounds being dealt with in a proficient manner. The southern region on the other hand does not appear to build circular verandah dwellings although the cone on cylinder form is usually endowed with wide eaves, if perhaps not as generously as its northern neighbours. Local thatchers appeared to use the smooth "boer" style, this perhaps being indicative of the sub-region's former beehive tradition, but detailing of such areas as the apex seems to have been derived from the north. Also the roof-frames were found to be less timber-intensive than the rest of the region.

A number of other distinctions have arisen between the three sub-regions in more recent times, mostly concerning changes in their local wall-building technology. Whilst the far north has, in many cases, managed to maintain its links with traditional construction, a shortage of timber in the rest of the wetter, more fertile and hence more populated northern sub-region has forced local builders to turn to sun-dried or kiln-baked bricks bonded with clay into monolithic load-bearing walls. The southern sub-region on the other hand has evolved a system of construction based upon timber framing with horizontal timbers spanning from post to post. The cavity thus created could be filled with rubble, clay, stone or timber and the wall finally packed with clay and plastered with daka. Both novel northern and southern technologies have managed to spill over into the central sub-region, thus creating an area of indeterminate wall construction, it being possible to find examples of both within a short distance of each other.

It ought to be mentioned that although it has not been possible to date to conduct research in the Ingwavuma area southernmost to this region, the thatching technology there has been reported to be based upon the extensive use of palm-leaves, a practice known to have occurred further north in Mocambique up to the early 1900s.(5)

5. Eastern Littoral Technology

a. Distribution

It encompasses a broad belt of terrain between the Indian Ocean to the east and the foothills of the Kahlamba in the west, and runs from Swaziland to the north through to the Great Kei river in the south.

b. Climate

Falls into two broad sub-regions : the plateau slopes of Natal and the Eastern Cape which receive some rainfall at all seasons but are liable to very low temperatures and frost in winter; and the sub-tropical coastlands of Natal and the Transkei where summer rainfalls predominate.

c. Vegetation

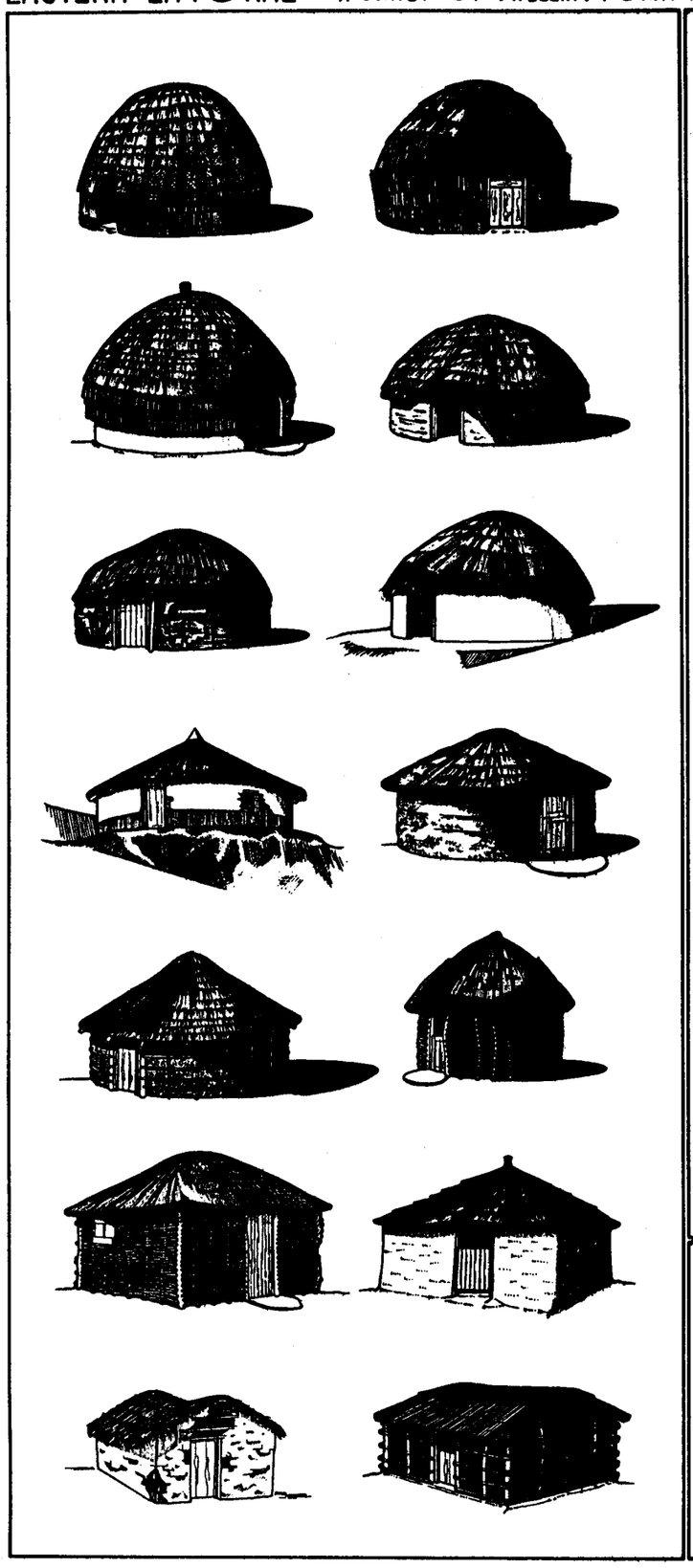
The region may be divided into three areas of vegetation which, however, do not form convenient belts but are fragmented and interspersed. Sour grassveld covers the flat-topped plateau spurs, thornveld occupies the flat-floored and enclosed river basins and forest is restricted to the sloping ground, particularly the escarpments and valley sides. The level surfaces are characterised by poor drainage and soils with a ferruginous hard pan. Such conditions are unfavourable for forest trees but tolerable for savanna trees and grasses.

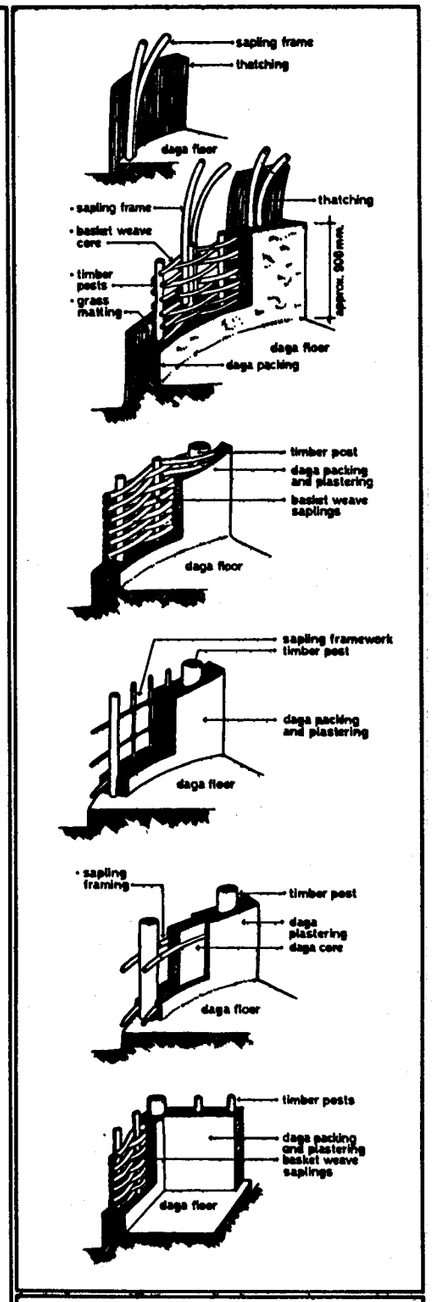
In the foothills and lower reaches of the Kahlamba, where rainfall exceeds 90mm p.a., the dominant grasses are Tristachya Hispida K. Schum and Themeda Triandra which grow to over 900mm in height, affording only sour grazing. Outliers of this sourveld type occur at the 1,200m to 1,675m contours on the Cedarville Flats and on the sandy country around Mount Fletcher, Matatiele and Kokstad.

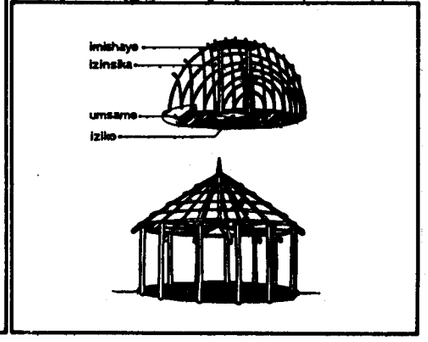
The Tropical Bush and Savanna of the coastal belt carries a parkland type of vegetation in which the upper stratum consists of typically umbrella-shaped trees of low stature and the undergrowth is dominated by tall grasses which die down and become dormant in winter. Both evergreen and deciduous trees occur; most have a single trunk bare of branches for some height above the ground and are characterised by such devices for combating the strong insolation and drought as mobile pinnate leaves, the reduction of leaves to thorns, deep rooting habits and water-storing organs. Above the 1,375m contour, the frequency of frost brings about the change from savanna to grassveld.

Tropical forest areas are found along the eastern sea board only in scattered

EASTERN LITTORAL : A SURVEY OF DWELLING FORMS AND BUILDING METHODS







patches where the winter drought is either alleviated by close proximity to the sea or at high altitudes where mist is frequent. The yearly rainfall of these areas is between 90mm and 150mm.

d. Soils

Like the vegetation, the soils of this region do not fall into convenient belts and vary greatly in their nature from the unleached subtropical soils of the north to the gley-like podsolic soils of the south and the lateritic soils of the Natal midlands.

The eastern littoral light brown sandy soils of the Ingwavuma area of northern KwaZulu vary greatly in their nature. In places the troughs between the coastal dunes are occupied by fine sands; elsewhere they form marshy tracts where the surface sands are underlain by impervious clays at shallow depths. Inland the plain is covered with deep sand and the soils are excessively porous and, in spite of a dense bush cover, deficient in organic matter; the watercourses are in places paralleled by brackish black clays which are dry in winter but become sticky after summer rains. and elsewhere by coarse sandy alluvium.

Unleached sub-tropical soils are found in the Swaziland-northern KwaZulu area where the climatic conditions resemble those of the lowveld and similar soils have developed, mainly chocolate stony loams.

Gley-like Podsolic soils of the eastern coastal and semi-coastal belts are more sandy and poorer in plant nutrients than those of the Highveld while iron concretions are more abundant in the B horizon, particulary in the coastal lowland. This is probably the result of higher temperatures and heavier rainfalls which promote greater leaching and accelerate the formation of iron concretions. Under cultivation these soils are susceptible to erosion unless special precautionary measures are adopted.

Over the eastern slopes of the Drakensberg, heavy precipitation, high temperatures and efficient surface and internal drainage resulting from the generally undulating to hilly relief, favour laterization processes. Laterites show no differentiation into horizons and consist throughout very largely of clay containing oxides of aluminium and iron, the latter giving it a characteristic yellow to red colour. The bases of lime, magnesium, soda and potash are lacking and there is practically no humus. Lateritic earths are found in this region of technology, beginning with the true laterites of the dolomitic country of the Drakensberg mist belt, changing in character to Lateritic Red Earths as we move eastward to the lower slopes of the Escarpment and to Lateritic Yellow Earths occurring in the Natal Midlands. Despite their high clay content the lateritic soils possess an excellent crumb structure with good water absorbing and water retaining properties. This is largely due to the free alumina and the iron oxides which cement the material into aggregates which are not easily puddled. Under cultivated conditions the sub-soil is easily compacted and erosion naturally follows.

e. Technology

Although documentary evidence seems to point to the fact that beehive-type structures were being built for various reasons throughout most of southern Africa before the Difaqane, with a few notable exceptions these appear to have fallen into general disuse in the country's hinterland by the end of the last century. This however was not to be the case with the eastern littoral which, over the years, has become noted for its historical attachment to the beehive dwelling form and its grass-orientated building technology. Although much of the region has long since given way to the cone on cylinder as well as other dwelling forms, beehive and beehive-derived domestic structures are still being built as part of

the daily practice of local architecture. Also, because much of this area coincides with the general boundaries of settlement of Nguni-speaking peoples, this is a dwelling form which has become strongly identified in the public mind, both black and white, with Nguni or, more specifically, amaZulu cultural identity.

However, speaking with the hindsight provided by current field research, it is probable that this region could in the past have supported equally a cone on cylinder as well as a beehive constructing technology, as is the case today. It is also important to consider both dwelling forms because the former, being universal to southern Africa, can provide a useful base line against which to evaluate the data of other cone on cylinder-building areas.

(i) Beehive Building Technology

This region is typified by its richness and variety of grasses as well as its higher rainfalls relative to the rest of the country. Thus it may be argued that, on the one hand, the prevailing climate lent itself to the development of a building form which did not make extensive use of large exposed clay wall surfaces while, on the other, a plentiful supply of varied natural resources were available for experimentation by local builders.

Although early travellers generally appear to have paid scant attention to the building technology of the region, pictorial and other evidence seems to point to the existence of three beehive technologies. The first predominated in the drier south and involved the construction of a wattle framework which was then thatched with grass and plastered over to varying degrees both internally and externally with clay or probably daka.(6) It is not possible to ascertain whether these were true beehive structures or a variant of the beehive dome raised on a drum, of the kind still found, if rarely, in this area today.

The other two forms were scattered widely throughout this region as a whole and, unlike the first, do not appear to have been limited to any one particular zone. Their construction consisted of a sapling framework which was then thatched over with either grass or grass and mats used in a variety of combinations. No application of daka was ever made to or over the dome. The first beehive type does not appear to have survived to the present day whilst the second can be found currently in the central and northern areas, albeit often in a much amended form.

(ii) Cone on Cylinder Building Technology

In current terms this region can probably be said to be the home of a true wattle and daub construction. Numerous wall building technologies based upon this principle have arisen in this area since the middle of the last century and although in some cases generalised statements can be made regarding their individual predominance in some localities, it is often possible to find a number of these being practised side by side within the same community or even the same settlement. Wall construction usually consists of a series of larger perimeter posts which often take up the full load of the roof structure without necessarily having the assistance of the larger wall area. Saplings are usually run horizontally from post to post both internally and externally thus creating a cavity which could be filled with a variety of materials including brush, reeds, timber posts, rubble, clay, stone, slate or even as in one case, empty beer cartons.(7) Inside and outside wall surfaces are then packed with clay and plastered with daka. Because this dwelling form and hence technology is of comparatively recent development in this region, it is not possible to describe its thatching techniques as being "traditional". In the main these favour the smooth style but in some remote areas a hang-over (or is it perhaps an evolution?) of the old beehive thatching tradition is currently being applied to the cone on cylinder. Roof eaves throughout this region are generally small.

In very general terms it is possible to consider this region in three parts. The first is the Transkei area where the wall infill is largely clay although examples of both rubble and a form of interwoven sapling "basket" have been recorded. In the northern districts of this subregion clay or sod brick construction have both been recorded. This area is notable for the probable missionary influence upon the construction of the timber roof structure which does not bring all its roof beams into one central apex point, but rationalises them into secondary and tertiary beams, also called "Jack rafters". This point is illustrated further in Appendix A. Thatching is in the smooth or "boer" style and the apex is usually crowned with a clay or a commercially available galvanised iron capping piece.

The central subregion covers the area between the Transkei and Zululand and includes the urban and highly industrial Natal midland region. Wall construction is usually in either clay brick or the more conventional timber frame described above. Although grass thatching is still predominant, many examples of adapted metal coverings have also been recorded, largely in the proximity of the urban areas.

The northern subregion includes Zululand, parts of southern Swaziland and the Ingwavuma districts. The last surviving enclaves of beehive huts may still be found here from Bergville in the south to Swaziland in the north. Not unnaturally therefore this is also the area where traditional beehive thatching technology has been adapted to suit the needs of the conical roof and vestigial remnants of the old methods may still be found in the way of good detailing of the apex or the holding down of the thatch by means of grass ropes. Wall construction is timber framed using a large variety of infills which vary from area to area. In the northern reaches however a form of interwoven sapling basketwork, similar to that found in northern Transkei but more efficient, tends to predominate.

Generally speaking it would appear that the soils of the Transkei seem to lend themselves more readily to the construction of exposed walls which require less maintenance than do their counterparts further north in Zululand and Swaziland, which are somewhat wetter. On the other hand we should also consider that the Transkei has been building in wattle and daub since the 1850s and probably earlier, if we are to believe the accounts of some early visitors to the area. By the 1920s this technology had become dominant (8) and thus this subregion has had four to five generations to perfect its skills in this medium. On the other hand equivalent developments in Zululand only appear to have begun in many areas within this last generation or two.

6. Sourveld Technology

a. Distribution

This is a relatively small strip of land falling between the Great Fish and the Great Kei rivers east of the Katberg.

b. Climate

Like the previous technological region, this too falls into two broad areas :

the plateau slopes of the Eastern Cape which receive some rainfall at all seasons but are liable to very low temperatures and frost in winter; and the subtropical coastland where summer rainfalls predominate.

c. Vegetation

The coastal belt of this region is considered to be predominantly tropical bush and savanna with sour grassveld covering flat-topped plateau spurs and thornveld occupying the flat-floored and enclosed river basins. Forest is restricted to the sloping ground, particularly escarpments and valley sides.

The major part of this region however is given over to a form of succulent bush made up very largely of Euphorbia spp., Aloe spp. and Portulacaria spp. which can attain a height of up to 1,8 to 2,4 m. It is possible that these represent either the outliers of the Karoo vegetation or are members of the tropical flora which have become adapted to the area's arid conditions.

d. Soils

The major part of the country is dominated by gley-like Podsolic soils where soil-forming processes are governed by a combination of warm days and cold nights in winter and consistently high temperatures and thunderstorm rains in summer. The surface is generally uniform and covered with a grassland vegetation but in the coastal strip it becomes hilly and is clothed with deciduous and evergreen forest. A characteristic soil profile comprises an A horizon of sandy loam poor in humus and leached of the more soluble mineral constituents overlying a B horizon of impervious mottled clay in the upper portion of which are ferruginous concretions. As we move from west to east, however, the character of the soil tends to change under the influence of increasing rainfall and higher temperatures in the coastal belt.

e. Technology

The builder of this region employs wall building technologies which differ little from those of the eastern littoral to the north. They tend to fall into two major sub regions : the coastal belt where walls are timber-framed, consisting of large posts linked horizontally with saplings, the cavity thus formed being filled with brushwood, packed with clay and plastered over with daka; and the hinterland where 'green' or sun-dried bricks predominate.

What distinguishes the architecture of this region is the frequent use made of such materials as corrugated and flat iron sheeting in its roofing technology. This in itself is not remarkable for similar developments have occurred on the highveld. Unlike that area however relatively few dwellings are built here in the highveld pattern, most following the cone on cylinder dwelling form or one of its derivations. The reasons for the introduction of such materials are largely self-evident. Although some areas of this region seem to be endowed with sufficient grasses to permit the thatching of roofs as a general practice, these tend to become scarce as one moves further inland and encounters the increasing encroachment of Karoo-type vegetation. This is in the main a succulent bush quite unsuitable for the purpose of thatching, although employed in some areas, such as Committee's Drift, as an underlay to a sparse grass cover. The grass impoverishment of these areas is aggravated by the density of settlement encountered in midregion where the local inhabitants appear to have gone to extraordinary lengths to retain the form of their circular-plan dwellings and furnish them with conical roofs.

Another important factor is the climate of the region which, with the exception of the Kahlamba mountain technology area, is potentially the coolest amongst the southern African subregions being discussed here. Thus, although the thatching methods used in the Ciskei appear to be coping adequately with the problem of weather exclusion, in many instances in areas of winter rainfall a kind of moss was recorded as growing on the grass cover. This was particularly noticeable on south-facing roof pitches where the low-strength winter sun was unlikely to reach the thatch and dry it regularly. It has not been possible to date to determine if and how such growths affect the performance of thatch roofs in this region.

Finally we should also consider the proximity of the region to the urban and industrialised areas of East London, Port Elizabeth and Uitenhage which, like the Witwatersrand to the north, are exerting a powerful social and economic influence upon the rural areas about them. As in other instances where local population densities have created a shortage of natural building resources, the rural inhabitant tends to turn to new sources of found materials. This has been especially true in this particular case where a large proportion of the male population has entered the local industrial cash-based economy as migrant labourers. This has facilitated the acquisition by rural dwellers of money-intensive materials which have been percolating back into the rural building cycle for a number of years.

It is interesting to note that whilst other areas, such as the highveld, have adapted their dwelling forms and hence their lifestyles to conform to an architecture dictated by their new roofing medium, this kind of compromise is seldom found in this region. Here the local builders have stuck tenaciously to the older and more familiar circular plan despite the difficulties this may have created in the marriage of tradition to modern industrial materials. This has meant that materials essentially intended to roof over flat surfaces based upon a right angle technology have had to be adapted, cut, pounded and bent to conform with the format of the cone on cylinder dwelling. Needless to say this has given rise to several interesting resolutions of this problem, particularly in the handling of the apex. Eaves overhangs in this region are consistently narrow.

The only compromise recorded is in the introduction of hexagonal or octagonal plan dwellings, but as these also occur under thatch, such changes should be seen as a means of accommodating furniture and artifacts rather than a giving way to a new roof technology.

7. Mountain Technology

a. Distribution

This stretches from the districts of Whittlesea and Lady Frere in the south through to the Nqutu area of Zululand in the north. It also includes Lesotho, the Herschel/Lady Grey area and the Kahlamba reaches of northern Zululand and the north-eastern Orange Free State.

b. Climate

Technically speaking this region falls within the bounds of a Highveld climate having relatively cool summers and very cold winters with frequent frosts. However it will be found that the high mountainous conditions of some parts of Lesotho tend to aggravate the winter conditions and frequent snow precipitations occur in those parts.

c. Vegetation

At high altitudes along the Great Escarpment low winter temperatures are responsible for the occurrence of Alpine Veld. This has a remarkably uniform composition although differences in local rainfalls may cause some variations. The black turfy soils of the Drakensberg basaltic plateau, at over 1825 m of elevation, carry a short dense alpine grassveld varying from sweet to mixed and dominated by Themeda Triandra. A number of low-growing tussock grasses, particularly Festuca spp., are also present as well as Danthonia Disticha Nees, which is particularly

common on shallow soils, and plants belonging to the fynbos - Passerina Montana Thoday, several species of Erica and Cliffortia - and Karroid false fynbos, most prominent among them being Chrysocoma and Helichrysum. Wherever the veld has been disturbed by overgrazing or has suffered erosion Danthonia Disticha and the fynbos and karroid elements increase.

d. Soils

The basaltic lava of the Lesotho mountains has given rise to black clays, resembling those derived from the dolerite on the Highveld.

e. Technology

Historically this is a region which is known to have achieved a high degree of proficiency in the past in its construction of the beehive dwelling. Unlike its Nguni counterpart which was built in the form of a hemispherical dome, the local beehive dwelling was developed into a more conical, pointed shape with the internal sapling framework rising to a central peaked apex.(9) The local doorway also differed from the coastal example in that it was extended forward into a snout-like tunnel and not built flush with the external surface of the structure.

It would not be difficult in this particular case to give way to temptation and follow the work of others in this field (10) and by accepting such differences in what are essentially similar dwelling forms, create architectural stereotypes for the two regions as a whole. However a general comparison of their respective climates tends to present a different picture. The mountain region is relatively cooler, often has little rain for months on end, is liable to heavy snowfalls and is often swept by bitterly cold winds during the winter months. The coastal region on the other hand at worst has to cope with intense summer heat and heavy thunderstorms. In these terms the extended doorway and central pointed apex can be seen to be specialised detail features of the dwelling aimed at keeping out cold draughts and shedding off any snow accumulations which may occur. To a great extent both of these have been retained in the local building vocabulary of today and although the cone on cylinder has largely replaced the beehive dome, the extended doorway has found translation in the later dwelling's technology.

One element of environmental adaptation which the local beehive is thought to have undergone was recorded by Walton during the course of his field research in the 1940s and early 1950s.(11) It consisted of the addition of a low external stone wall built about the perimeter of the dwelling. The gap between the beehive structure and stone wall was filled with brush and the thatch cover carried over the wall. This had the effect of creating an air layer which served to insulate the interior space thus improving the dwelling's thermal performance under winter conditions.

Currently the predominant wall building technology of this region appears to concentrate upon the use of load-bearing stone, which is either rubble, or dressed and laid in clay. Thatching is mostly in the smooth style and eaves overhangs are small.

Some General Notes

a. Aspect and Orientation

An important consideration in the establishment of any rural settlement in southern Africa is the facing and positioning of the habitat. Traditionally when homesteads tended towards a circular pattern (12), the orientation of the individual dwelling depended very much upon the status of its resident within the larger family or group hierarchy. It was generally considered that a good site should be located on a gentle eastern or north-eastern slope, but other factors such as the availability of natural resources, the proximity of other homesteads and a defensive overview of the immediate countryside could influence the final choice. In principle however the dwellings of the senior wives and the head of the family were usually given prime position in the higher part of the homestead. In more recent times however we have seen the development of a greater pragmatism in rural settlement as on the one hand homesteads have diminished in size and, on the other, rural overpopulation has limited the number of choice sites available.

In general terms most rural settlements today tend to conform to a linear pattern which follows the lines of contour. Orientation falls into three major regions :

The eastern littoral, from the Great Fish river in the south to the Transvaal Lowveld in the north and east of the Kahlamba, where dwellings are usually faced to the east or north-east.

The highveld hinterland stretching from the Kahlamba to the east to the northern Cape in the north-west and from the Gariep to the south up to the Magaliesberg in the north. Here orientation tends to vary from location to location but in a large proportion of cases it was noted that dwellings faced to the north to shelter their fore-areas from the occasional but bitterly cold winter winds which sweep in from the south and the south-east. Towards the northern part of this region an eastern to north-eastern orientation tended to re-establish itself.

The northern Transvaal-Botswana bushveld including the eastern Transvaal Lowveld and all areas north of this broad line. This region has infrequent frosts and because of its warm to hot average temperatures orientation tends to be largely ignored although the traditional eastern to north-eastern facing gentle slope is still preferred.

b. Sun-dried, 'Green' or 'Kimberley' bricks

The growth of population densities in many rural areas has resulted not only in increased competition for local natural building resources but has also brought many acres of previously fallow grassland under the plough of the subsistence farmer, thereby reducing the stock of traditional construction materials. This has forced the rural builder into seeking or even creating new resources in order to meet his traditional housing needs. The introduction of corrugated iron sheeting into the rural areas is a manifestation of such a shortage. Another is the adoption of new wall building methods based upon the use of a locally manufactured sun-dried or, to use the correct western technical term, green bricks. These appear to have been introduced into the architecture of the sub-continent through three possible sources :

(i) The influx of missionaries and traders into the southern African hinterland from the 1820s onwards.
(ii) The diamond diggings of Griqualand West and the northern Cape from 1856 onwards.
(iii) The employment of young Black men as labourers on newly established white farming communities in the Orange Free State and the Transvaal.

The history and the mechanics of the spread of green brick construction in southern Africa will be dealt with more comprehensively during the course of a subsequent chapter.

The occurrence of green brick construction cannot be assigned any definite location on a regional basis with the exception perhaps of the timber-impoverished highveld areas. Its distribution appears to be a factor of population densities and whilst it may be found to predominate in large settlements such as the Bushbuckridge-

Acornhoek complex or Thaba'Nchu, it may also occur as an isolated example in timber-endowed regions.

One wall building technology which has received scant mention thus far has been sod brick construction. Whilst its origins are undoubtedly European, its occurrence is scattered and limited to isolated and apparently unrelated homesteads. It has been recorded in the main on white controlled farmlands on the north-eastern Orange Free State and south-eastern Transvaal although other examples have also been seen in the north-eastern Transkei region.

c. Thatching Influences

The predominant traditional thatching technology practised throughout the country is based upon the simple principle of holding down the grass cover by means of a series of grass or bark fibre ropes laid to form an overlay. It is possible that this may or may not be an indication of a link to an earlier beehive technology which employed a similar thatching system.(13) However examples of such an older tradition are being rapidly supplanted by the smooth or so-called "boer" style which gives a neater finish and secures the grass cover to the timber frame more securely. Apart from its locally applied name, further indication that this technology was gained from Dutch farmers immigrant to the region lies in the almost universal adoption of the Dutch word "dekspan" or "roof-comb" for the leggett used to dress the grass wadds or bundles during the thatching process.

d. Water Collection Systems

It is important to note that whilst the adoption by the rural builder of corrugated iron sheeting as a medium of roof construction is undoubtedly linked to a scarcity of natural resources in some areas, it has in most cases also become an important aid to the rural inhabitant in the collection and storage of rain water, particularly in those areas which are susceptible to periodic drought conditions. It is therefore important not to dismiss the element of free choice available to the indigenous population in the construction of their dwellings, not only in this particular case but also in other examples. The rural builder is not necessarily a prisoner of his environment but in many ways shapes it to his own liking.

Conclusions

It has been stated previously that the arbitrary creation of regions of technology such as those formulated during the course of this chapter can at best give a general picture of what has been recorded to have taken place up to recent times. It cannot take into account the vagaries of individual choice nor the existence of isolated pockets, where the availability of a particular natural resource makes the architecture of one particular group stand apart from that of their surrounding area. Similarly no natural region can be said to have sharply defined bounds and, as shown on the accompanying maps, a large degree of overlap can be seen to exist. It would also be wrong to accept these lines as being finite in a historical sense. The environment of man changes constantly both on a macro and micro scale and there is no doubt that as the economic status of rural man is transformed in the future, his dwellings can only follow suit.

NOTES AND BIBLIOGRAPHY

1. Dennis Radford : Pers. Comm. 1982. It is proposed to debate this point more fully elsewhere in this document.

2. Readers of this section are referred to the following references:
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"Veld Types of South Africa". 1975.
FRESCURA, Franco
"Rural Shelter". Johannesburg : Ravan Press, 1981.

3. VAN DER WAAL, Cornelis Seakle.
"Die Woning en Woonwyse onder die Venda". Unpublished M.A. Dissertation, University of Pretoria, 1977.

4. FRESCURA, Franco
"A Review of Southern African Squatter Settlements in the Late 1970s". Congress paper published in "Architecture, Man, Environment". Durban, 1982.

5. Barrie Biermann : Pers. Comm. 1983.

6. BONATZ, A.
"Shiloh Journal". Periodical Accounts ... United Brethren. London, 1831. 12.340 and others.

7. FRESCURA, Franco. Op. Cit. 1982.

8. Duggan-Cronin, who visited the Transkeian region in the mid-1920s and 1930s, photographed what was obviously a pair of initiation huts or lodges which even then were described by local people as examples of old-fashioned architecture. (Duggan-Cronin, A.M. Vol. III Sect. V.1954).

9. This is a distinction which was made originally by Walton ("African Village", 1956) but which has been confirmed by recent field research. According to Backhouse (1844) these were also plastered over with clay, like their Cape Nguni counterparts. This however was recorded among the Barolong, who were newly arrived to the area, and could therefore have been a temporary stopgap measure until a full adjustment to the technology of the region had been made.

10. Casalis (1861), Burrow, who wrote his diary in 1836, (1971) and later Walton (1956) made such generalisations for the baSotho while Mackenzie (1871) and various other tried to do the same in other parts of the country.

11. WALTON, James. Op. Cit., 1956.

12. With the exception of the vhaVenda. See the section on settlement patterns at the end of this volume.

13. An adaptation of beehive thatching technology was observed both in Zululand and the southern Ciskei regions on the roofs of what are quite clearly beehive roof forms which have mutated into cone on cylinders. The use of and the patterns formed by the rope overlay resembled quite closely those found in other parts of the country which still practised what was claimed by the inhabitants to be an older and more traditional cone on cylinder thatching technology. Whether this represents an indication of a historical link between the two dwelling forms is something that will need to be clarified at a future date by more intensive field investigations.

INTERLUDE THE FIRST

One of the difficulties often encountered in the publication of research data is the inevitable hiatus between the acts of formulation and dissemination. It means that virtually any manuscript which aims to find its way into cold print will, by definition, be out of date before it is made available to the general public. This is especially true in the case of ongoing projects such as this where the researcher is usually left in some quandary as to the correct timing for the circulation of his findings; for to publish prematurely means courting academic disaster; to publish too late means ignoring the valuable comments and suggestions which may be made by fellow workers in the same or allied fields of activity. Ultimately the author has to become reconciled to the fact that any manuscript produced at best represents the summation of his knowledge and his perception in the subject at that particular moment in time. As such it is valid for not only does it set down the state of the research at that point, but it also acts as a milestone against which the progress of previous and subsequent research can be measured.

The reasons which tend to stimulate publication may be varied. Academic theses and dissertations can often act as convenient if artificial crisis points in the precipitation of ideas, but often the simple need to coordinate one's data and thinking on the subject in order to defend a viewpoint or build up an argument may be sufficient reason to promote the birth of an article. Such an attitude must also be accompanied by the concomitant understanding that not all printed word is necessarily correct only because it is printed and that, once published, all ideas are open for public scrutiny, interpretation and comment. The researcher who fears controversy fears his own research and has no place in the seeking out of human knowledge.

The case of this research project has been no exception. Its progress has been marked by a number of publications which have been designed to promote discussion and uncover new data in this field of study. Some have gone unremarked but others have encouraged a fair measure of debate, most particularly among architects, anthropologists and archaeologists. In the process a number of shortcomings in the original lines of argument have been shown to exist either through exposure to multidisciplinary debate or in the light of new research and fresh perceptions. As such therefore, it may be a worthwhile exercise to retrace some steps in the earlier history of this project and re-examine some of the theories put forward during the course of previous research.

In a very general sense it may be stated that the earliest stages of this research programme centred upon an analysis and discovery of the indigenous builder's range of dwelling forms - almost, one could say, his architectural vocabulary. This involved three distinct stages of research (1) :

a. The definition and nomenclature of the region's dwelling forms based upon their basic geometry, plan and roof types.
b. The formulation of a hypothesis which explained the transformation of the dwelling form in terms of its socio-economic, environmental and technological backgrounds.
c. A theory was also put forward which attempted to explain the apparent cross-pollination which was thought to have occurred along regional and "cultural" lines involving the transmission and dissemination of certain indigenous architectural forms through the agency of missionaries and other white immigrants to the region.

The major part of the work was based upon data obtained during the course of current field research. A measure of historical perspective was given through reference to the publications of such early authors as Backhouse (1844), Arbousset and Daumas (1846), Burchell (1822), Daniell (1820) and others as well as such current archaeological researchers as Maggs (1976) and Taylor (1979). This section was neither extensive nor definitive, yet as such it drew very little in the way of criticism; nor for that matter did the even more tentative assertions of white/black cross-pollination arouse much attention, despite its potential for being a more politically sensitive subject.

Most discussion to date ("controversy" is perhaps too strong a word) has centred upon the hypothesis of an evolving dwelling form which assumed that as the social and economic circumstances of the rural dweller underwent a measure of change so then his dwellings and constructional techniques responded to these new pressures and assumed new forms based upon new ground plans. Change was neither immediate nor radical and in many ways was regulated by the roofing technology which exercised a restraining influence upon other developments. As a study it was taxonomic in nature (2), a philosophy which is certainly not new to architecture, having been employed in the past by such authors as Bannister Fletcher (3), Brunskill (4) and Riserbero (5) and, nearer to home, Kearney (6), Lewcock (7) and Radford (8) to name but a few. The creation of such a sequence is one of the acknowledged analytical tools of the architectural historian and experience has shown it to be valid in the context of other vernacular architectures and not only in the southern African example.

Generally speaking, colleagues in other disciplines have attempted to read all manner of social and historical meaning into a structuring which was intended primarily to clarify a series of architectural relationships. They point out, with some validity, that such a theory implies that older dwelling forms were supplanted by subsequent and more recent ones and that it therefore fails to explain not only the former's continued construction up to present times, but also their co-existence alongside forms of a more modern vintage, often within the same homestead. Whilst it is accepted that a measure of fault can be found with the graphic representations which accompanied the theoretical discussion, such critiques in the main have also tended to ignore the concept of archaic dwelling forms, structures which are acknowledged by the residents themselves to have been built in an older and more dated style. In many cases such units are no longer built as part of the general housing activities of a region except perhaps as initiation lodges where a sense of tradition and history play a strong role in their proceedings. Usually archaic forms can be shown to be survivors from the housing practices of an earlier generation and in some cases their construction was thought to be archaic even in their own time. Modern attempts at the reconstruction of archaic structures usually shows that their technology is subject to a great deal of local discussion and interpretation indicating that this is a knowledge which is in the process of passing from rural man's general architectural awareness. It was also found that, in some parts of the country, the memory of some forms known to have been built, in the past, as part of initiation proceedings, have now been supplanted by others of a demonstrably more recent dating. Often, because of the temporary nature of initiation lodges, little care is bestowed upon their construction. This means that once a structure has reached the point in its history where it is considered to be archaic and hence only suitable for such functions as initiation lodges, its technological roots will be rapidly lost and all that will remain in the public mind will be an imperfect memory of its most general form.

It is also necessary to point out that, today, one of the generally accepted truisms of life is that changes which occur in the state of society are seldom of a cataclismic and revolutionary nature but are rather part of a slow and evolutionary historical process involving a large degree of overlap and even co-existence between the old and new order of things. It is therefore facile to use the shortcomings of a graphic rendition to detract from the larger hypothesis. However, in view of the multi-disciplinary implications of this work, it becomes necessary and even desirable to create larger areas of common ground between architecture and other disciplines.(9) This may be done in three ways.

The first is to create a true typology, a graphic which will bring together, into approximate groupings, the full range of dwelling types known to have been built, past and present, in the southern African region as a whole. This is no more than a simple enumeration of the domestic structures which comprise the local building vocabulary, part, as it were, of rural man's architectural literacy, known to him and available for use in whatever manner may be most appropriate in any one particular context. This means that whilst certain forms may have "preferred" status in fulfilling certain functions or even as part of a region's "cultural" identity, this does not mean that the indigenous builder has no knowledge of other dwelling types, merely that he has exercised an element of free choice which is available to him within the limitations of material availability and physical environment. Such an approach lacks historical perspective and generally tends to ignore the fact that certain dwelling forms are known, in the past, to have fallen into disuse or perhaps disfavour and that the method of their construction in many areas is no longer common knowledge. However it avoids the creation of stereotypes for it acknowledges that it is possible for the inhabitants of any particular region to have the choice of a number of dwelling forms available to them. This means that whilst a concept of "regional architecture" based upon pragmatic and functional considerations may be valid in the general study of rural architecture, an element of free choice based upon cultural as well as other considerations cannot be ruled out, where a region is known to have the ability to support more than one technology, say a grass beehive as well as a wattle and daub construction.

A second way would involve the creation of another graphic which this time would not only reflect the historical nature of the development of the dwelling form, but also resolve the apparent anachronism of several domestic types of differing known vintages coexisting within the same village or even homestead. This has been done by means of giving each dwelling type its own bar graph which not only gives an idea of the time-span of its construction but also creates an awareness of exactly how its existence coincided and overlapped with other types. Although for the purposes of this interlude a graph is given for the southern African sub-continent as a whole, similar more comprehensive and more detailed graphs will be included for each technological region in the chapter that follows.

Finally, the original graphic could be retained, in an amended and updated format, as a supplement to the taxonomic aspect of the research. It would be understood however, that the relationships this depicts are purely of an architectural and structural nature and although elements of historic and economic development are hinted at, these are secondary to the architectural needs of the study.

This is a point which is most aptly illustrated by Backhouse, who, in 1840, described how at Groene Kloof Mission Station "(Khoikhoi) and other coloured people" went through various stages of construction.(10)

> "Their first habitations were usually of rushes; they next built hartebeest houses of better quality; and many had superseded these by neat, comfortable cottages, well built and thatched".

In this instance Backhouse points the way to a solution. The forms of the dwellings

TYPOLOGY OF SOUTHERN AFRICAN DWELLING FORMS

HUNTER-GATHERERS AND MIGRANT PASTORALISTS

TEMPORARY SHELTER
NATURAL STRUCTURES
INDIGENOUS

TRANSPORTABLE HABITAT
MATTING STRUCTURES
INDIGENOUS

SEDENTARY PASTORALIST - AGRICULTURALISTS

TRANSITIONAL HABITAT
EXPENDABLE STRUCTURES
INDIGENOUS

TRANSITIONAL HABITAT
STILT DWELLINGS
INDIGENOUS

TRANSITIONAL HABITAT
'A'-FRAME STRUCTURES
PROBABLE IMMIGRANT SOURCE

TRANSITIONAL HABITAT
SPECIAL FUNCTIONS
INDIGENOUS

PERMANENT HABITAT
ADAPTED NATURAL SHELTERS
INDIGENOUS

PERMANENT HABITAT
CONICAL DWELLINGS
INDIGENOUS: SOURCE UNCONFIRMED

PERMANENT HABITAT
BEEHIVE CONE
INDIGENOUS

PERMANENT HABITAT
BEEHIVE CONE, EXTENDED DOOR
INDIGENOUS

PERMANENT HABITAT
BEEHIVE DOME
INDIGENOUS

PERMANENT HABITAT
BEEHIVE DOME, EXTENDED DOOR
INDIGENOUS

TYPOLOGY OF SOUTHERN AFRICAN DWELLING FORMS

SEDENTARY PASTORALIST - AGRICULTURALISTS

PERMANENT HABITAT
CONE ON CYLINDER
INDIGENOUS

PERMANENT HABITAT
POLYGONAL PLAN
INDIGENOUS

PERMANENT HABITAT
EXTENDED DOORWAY
INDIGENOUS

PERMANENT HABITAT
VERANDAH DWELLING, BEEHIVE CHAMBER
INDIGENOUS

PERMANENT HABITAT
VERANDAH CONE ON CYLINDER
INDIGENOUS

PERMANENT HABITAT
CONE ON CUBE
INDIGENOUS

PERMANENT HABITAT
VERANDAH CONE ON CUBE
INDIGENOUS

IMMIGRANT BUILDING TECHNOLOGIES

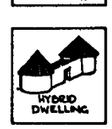
PERMANENT HABITAT
HIPPED ROOF
IMMIGRANT SOURCE

PERMANENT HABITAT
VERANDAH HIPPED ROOF
IMMIGRANT SOURCE

PERMANENT HABITAT
GABLED ROOF
IMMIGRANT SOURCE

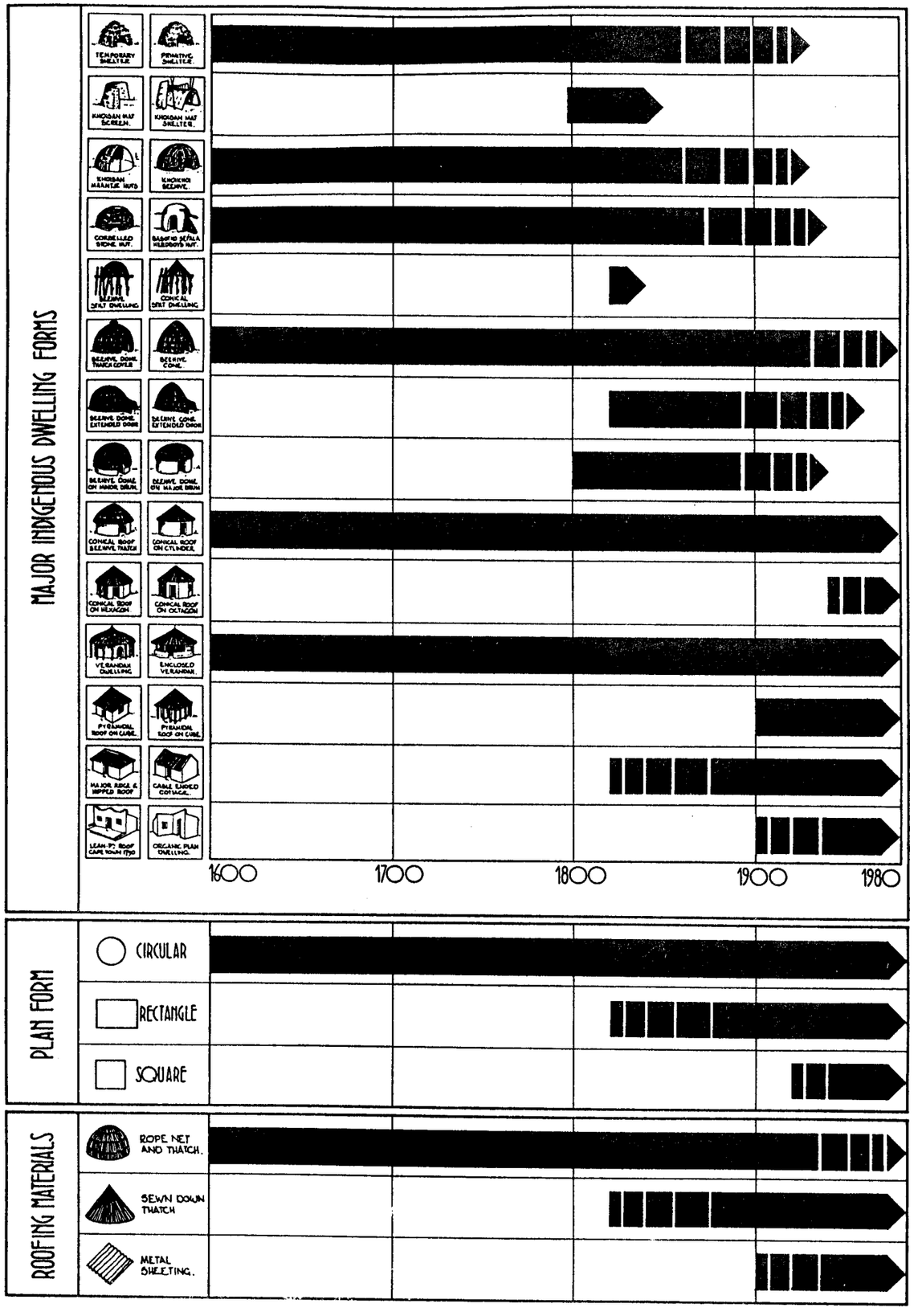
PERMANENT HABITAT
LEAN-TO ROOF
IMMIGRANT SOURCE

PERMANENT HABITAT
HYBRID STRUCTURES
MIXED SOURCES



PERMANENT HABITAT
MULTI-ROOMED DWELLINGS
URBAN SOURCES

CHRONOLOGICAL CHART : GENERAL SOUTHERN AFRICAN REGION



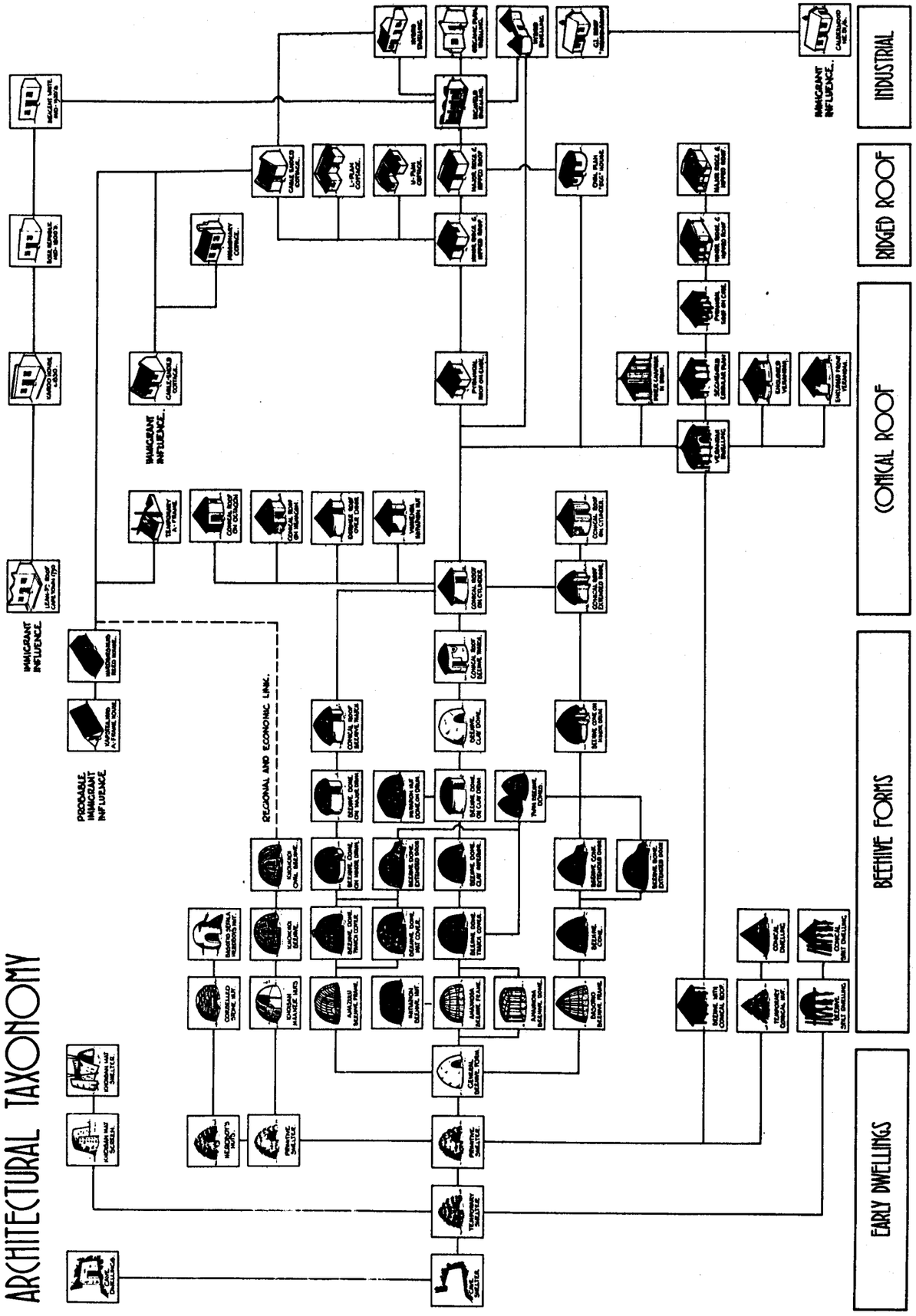
he described at Groene Kloof (later to be known as Mamre) cannot be seen to have any but the vaguest of architectural connections to each other. Yet they are all clearly linked by the changing economic circumstances of their residents and the growing permanence of their tenure upon the land. If we were to place these dwellings on the larger chart of the architecture of the region their positions would be totally unrelated to those they truly occupy in the real socio-historical picture of southern Africa. Such a chart therefore could only be read in the context of architectural thought and theory. Any relationships it reflects are purely those perceived to exist between a number of architectural forms and structures. A chart reflecting socio-economic concerns will not only reflect different dwelling form relationships but will have to find other graphic means to present them.

Backhouse also highlights the fact that differing and, to some people, apparently anachronistic dwelling forms may be found side by side in the same location, something which has not changed to the present day. The interpretation is clear : the indigenous rural dweller has at hand a number of different dwelling forms and is able to apply each to a particular function according to his individual context and needs. In white western society all domestic structures are perceived to fall into the same value structure (hence the western confusion between "house", "hut" and "dwelling unit" which will be discussed at a later stage) whereas the southern African rural builder clearly erects certain structures to fulfil one set of needs and others to fulfil another.

A relevant point which has also emerged in more recent times has focused upon the use of the word "evolution" in describing such developments in the architecture of the sub-continent.(11) This is felt to create a value system which, in its turn, tends to reflect adversely upon those dwelling forms which appear in the earlier part of the hierarchy and which employ indigenous building technologies and materials. These may be perceived by some people, quite erroneously, to lead up to buildings of a more recent creation which make use of square plans and modern industrial roofing materials, thus implying that somehow the latter are superior to older and more traditional building forms. Maggs has suggested the alternative phrase "changing architectural styles" (12) which, apart from being architecturally incorrect, is no more than a palatable dressing for the same bitter facts : that no matter how attached we may have become to the rustic aesthetics and textures of the local vernacular, there is no doubt that much of this rich architectural heritage is being supplanted daily by an anonymous immigrant architecture. Despite the fact that these dwellings are in many instances, demonstrably inferior, economically and environmentally, to indigenous dwelling types, their popularity is nonetheless on the increase, being perhaps today a manifestation of a people's social and political aspirations rather than a reflection of their traditional cultural values. In many ways this supports the later findings of this study which point out that whilst dwelling form is subject to pragmatic manipulation it is the settlement form which, being subject to strong social patterns, emerges as being the more powerful cultural element of the two.

It therefore becomes difficult, when dealing with dwelling form, not to talk of an "evolution", if not architectural, then economic. Maggs' point however is well taken and perhaps the term "transformation" may be offered as a compromise. The intent is the same but, hopefully, the implication of a value judgement has now been removed.

Two concepts which were put forward in earlier publications but which have since undergone critical re-examination in the light of subsequent research also require to be corrected at this point. The first dealt with the reconstruction of a hut uncovered by Mike Taylor during the course of his researches at Buffelshoek 471 IQ near Parys. Preliminary structural data known at that time seemed to



suggest that although a verandah dwelling had been involved, its internal drum form was not entirely clear. A type of verandah beehive was proposed despite the fact that such a structure was both highly problematic and its form totally unknown outside the Botshabelo Open Air Museum near Middelburg.(13) Subsequent data (14) has, however, shown conclusively that this could only have been a circular verandah dwelling of the type also illustrated by Maggs.(15)

Secondly the question of a presupposed white/black cross-cultural pollination has also had to be re-examined. Initially, it appeared that the cone on cylinder dwelling form had, up to 1837, been associated with the interior regions of southern Africa, the rest of the country being the preserve of beehive and beehive-type structures. Then, following the movement of the baRolong, a baTswana cone on cylinder-building group from the northern Cape to the Thaba 'Nchu district in 1833, missionaries came into greater contact with this dwelling form and realising its potential, promoted its spread both by example and proselytising into Lesotho, the eastern Province and Transkei and later, into Zululand.

As theories go, it was quite plausible. Not only did it appear to explain why the cone on cylinder had supplanted the beehive in the Transkei by the 1920s whilst making only limited inroads in the housing customs of the amaZulu during that same time, but it was also supported by a degree of circumstantial historical, social and pictorial evidence. The mechanics of such diffusion were never fully accounted for but it is plausible to ascribe this to missionary activity in the region.

However, once the historical component of this research programme was completed, it was realised that this, in fact, could not have been the case. For one thing the extent of the spread of the beehive form into the southern African interior had not been fully realised. For another white missionaries into the region had indeed proselytised about architecture but it was not the dwelling form they had been concerned with so much as its plan, desiring the indigenous inhabitants to build square and not round-walled structures. Both these points as well as the larger question of white immigrant influence upon the local building vernacular will be more fully discussed in subsequent chapters.

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2. Van Schaik (Architecture SA, May/June 1983, pp. 35-38) begs to differ. He groups "Rural Shelter" with the work of Susan Denyer and Leon Krier and views it as a typology which is "clever, reductive and sterile". Even allowing for his personal prejudices, in this case such a label is unfair and misleading. Not only does he ignore the ongoing nature of this research, but also the fact that it is the first of its kind to be published about indigenous architecture in Southern Africa. Perhaps the misunderstanding is the direct result of his own acknowledged lack of field experience.

3. FLETCHER, Bannister
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4. BRUNSKILL, R.W.
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5. RISERBERO, Bill
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6. KEARNEY, Brian
"Architecture in Natal". Cape Town : A.A. Balkema, 1973 and various other es articles published subsequently.

7. LEWCOCK, Ronald
"Early Nineteenth Century Architecture in South Africa". Cape Town : A A Balkema, 1963.

8. RADFORD, Dennis
"The Architecture of the Western Cape, 1838-1901". Unpublished Ph.D. dissertation, Faculty of Architecture, University of the Witwatersrand, 1980.

9. In this regard I would like to acknowledge the constructive discussion held with colleagues and friends such as Tom Huffman, Tim Maggs, Mike Taylor, Barrie Biermann, Rob Rawlinson and Dana Anderson as well as many other fellow researchers in allied disciplines who were interested enough to forward their comments and thoughts to me.

10. BACKHOUSE, James
"A Narrative of a Visit ... etc." London : Hamilton, Adams, 1844.

11. In all fairness it must be pointed out that although the word "evolution" is sometimes used in the text of "Rural Shelter", this is usually as an alternative to the preferred term "development",which however, I will agree, could also be said to carry the same implication of a value judgement.

12. Tim Maggs, per. comm. 1984.

13. Some very strange and interesting domestic structures have been built there as a result of Chris van Vuuren's research among the South amaNdebele. I look forward to examining the evidence for these reconstructions, as and when it is published.

14. TAYLOR, Michael O.V.
"Late Iron Age Settlements on the Northern Edge of the Vredefort Dome". Unpublished M.A. dissertation, Faculty of Arts, University of the Witwatersrand, Johannesburg, 1979.

15. MAGGS, Tim O'C.
"Iron Age Communities of the Southern Highveld". Council of the Natal Museum : Pietermaritzburg, 1976.

BOOK TWO : DOMUS

"... we arrived about noon at the city of Leetakoo, not a little astonished to find, in this part of the world, a large and populous city."

DUNDAS, 1801, quoted in John Barrow's "An Account of Travels in the Interior of Southern Africa". London : Cadell & Davies, 1804.

"... part of the Town of Litákun now appeared before me. As we advanced nearer, and gained higher ground, the multitude of houses which continued rising into view as far as I could see, excited astonishment; while their novel form and character seized my whole attention, ..."

BURCHELL, William J. "Travels in the Interior of Southern Africa". London : The Batchworth Press, 1824.

The creation of a historical model describing the development of an indigenous architecture for the southern African sub-continent can present a number of problems. Because of the complex and sometimes sensitive nature of the subject matter involved it is not easy to impose a framework which will be both accurate and free from value judgements. Criteria such as culture, group affiliation and language were all tested and, at one time or another, found to be wanting. The difficulty here lay in two main areas. Firstly, criteria based upon social structures and cultural values are in themselves variable and open to interpretation. Secondly they are also liable to evolution and change over relatively brief periods of time and as such they fail to offer a constant continuum which will allow historical study of a comparative nature to take place.

By comparison it was found that criteria of a geographical and environmental nature were relatively more permanent and, barring any radical changes in the prevailing climate of a region, tended to provide a more reliable if, at times overlapping, set of parameters within which the study of human activities could take place. This was made all the more desirable by the close relationship which is perceived to exist between vernacular architecture and its physical surrounds.

Architecture of the Prehistoric Era

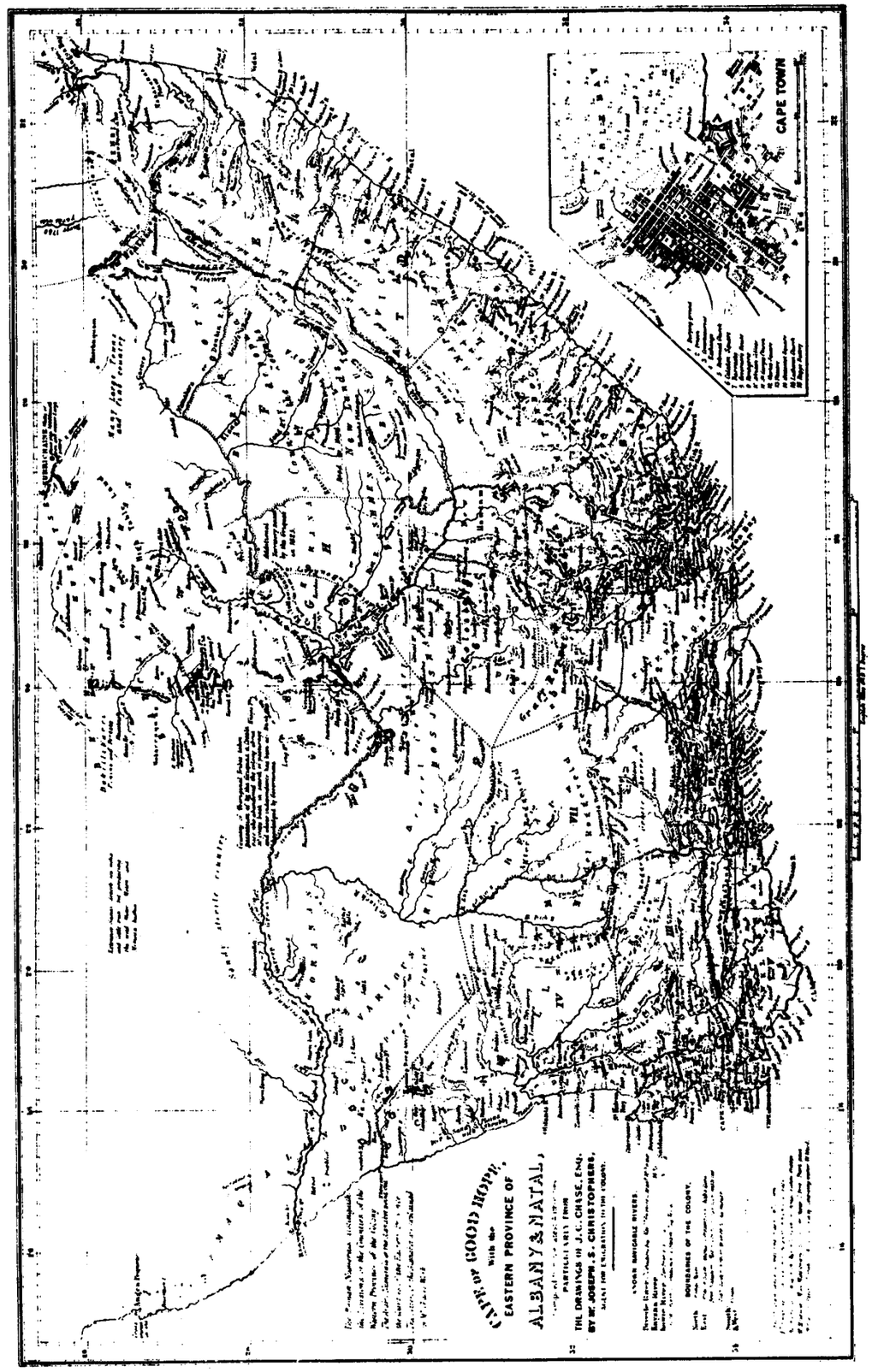
As previously mentioned, a number of theories have been formulated to explain the presence, in southern Africa, of the region's indigenous inhabitants. For our purposes these can be reduced to two mutually exclusive philosophies :

a. that the people concerned migrated into the region before establishing themselves in sedentary communities, and
b. that they have resided here all along.

Little factual evidence seems to have been uncovered to date to suggest the mechanics of a migratory theory. Movement may have taken place according to three major processes :

(i) A natural population growth which would cause each succeeding generation to leap-frog over existing settlement boundaries and expand beyond their borders thus opening up new lands for agricultural activity.(1) The architecture resulting from such events would differ little if at all from the kind of structures which a supposedly more sedentary group might erect. In fact it is arguable that such a group might never have been aware of being part of a migratory process.

(ii) The precipitous and sudden flight of the population of an entire region,



probably as the result of warfare, the destruction of staple crops and famine. Precedent for such a migration process is not unknown in African history : a great "Abambo" horde is recorded by Portuguese travellers to have rampaged into the Zambesi valley in about 1570 (2) whilst, closer to home, the events of the Difaqane between 1822 and 1837 in the central-southern highveld must have presented an equivalent picture. It is difficult to propound the nature of the architecture that such events might give rise to, this being largely due to the rate of travel achieved by a horde of people. If however they performed anything like the baHurutse war party which was accompanied by Campbell in 1820 (3), their structures must have been extremely flimsy and their effect upon the countryside something akin to a swarm of locusts.

(iii) The gradual and planned emigration of a people from one region to the next, probably brought about by increasing population pressures and/or a gradual impoverishment of land resources. Such a movement would have been well organised with both travel stages, interim stops and final destination being considered and even prearranged. Again precedent for this may be found both in the events of the Difaqane (4) and in the Griqua migration into Griqualand East which began in 1861.(5) The quality and nature of architecture which may be achieved under such circumstances is difficult to assess. In the case of the Griqua, they still possessed the knowledge of a dismountable and easily portable migrant pastoralist's dwelling and no doubt made good use of it during their move eastward - but the position of Khoikhoi architecture in the southern African region is unique. Certainly the concept of a "travelling hut" is not thought to have existed among other southern African indigenous residents of that time, with the obvious exception of the San. While it is probable that such shelters as may have been built would have differed little in substance from those described in (ii) above, it is also necessary to consider that, under prolonged and unforced travel conditions, longer stops may have been made, possibly in order to plant and harvest a crop, before moving on. In such an event, it is likely that a more substantial architecture would have resulted, as in the case of Mzilikazi's progress over the highveld between 1823 and 1832, when he made three distinct moves before his final migration northwards in 1837, during which period his villages are known to have achieved a large measure of permanence.(6)

The second hypothesis, that southern Africa's indigenous groups have resided here since time immemorial would seem to imply that an element of permanence has been an integral part of their architecture all along. However local experience has shown that, in fact, the opposite is true and that, forced migrations aside, moves for political or economic reasons were not uncommon in the life of a rural homestead prior to the 1900s. Thus, without wishing to impugn the integrity of such a theory, its relevance to the architecture of the subcontinent does not appear to be high.

Indigenous Architecture Before the Difaqane

The piecing together of a general picture of the architecture of southern Africa before the Difaqane is not an easy one to achieve. Because of the nature of the structures concerned, very little direct knowledge of indigenous architectural forms and building technologies has come down to the present day and much of what we do know is the direct result of archaeological research and interpretation. Unlike the historian, the architect is unable to draw upon the richness of local oral traditions to any great extent and thus much of the information at hand is open to many interpretations, some of these being conflicting. The major sources

SOME EARLY FABLES

1.

From the sixteenth century onwards a number of misconceptions were popularly entertained by Europeans with regard to the people, the flora and the fauna of southern Africa. These included intestine-eating cannibals, armour plated rhinoceroses and elephants with full sets of dentures to mention but a few.

1. DE HOUTMAN, 1598. Portion of title page, showing some Cape Khoikhoi on the left-hand side.
2. ANONYMOUS, 1595. A Wild Man on the Caep de Bona Speranza.
3. KOLBE, 1727. Rhinoceros.
4. KOLBE, 1727. Elephant.

2.

3.

RHINOCEROS zoo ALS DIE MEEST AFGEBEELDT WORDEN.

4.

OLYFANT.

of information available to us may be summed up as follows :

a. Archaeological reconstruction - this source tends to be somewhat limited not only because much of the architecture involved is impermanent and, by nature of the materials used, leaves little in the way of interpretable evidence behind, but also because most archaeological research is not geared to the collection of architectural data.(7)

b. The accounts of shipwreck survivors on the south-eastern African coastline - these generally tend to be flimsy and, understandably, too concerned with personal day-to-day hardships to spend much time recording the architecture and building methods of the peoples they encountered. Also survivors seldom ventured far inland and thus we are left with descriptions of a coastal region which was relatively underpopulated.(8)

c. The accounts of travellers into the region, which began to find publication in Europe during the first part of the eighteenth century and were to continue until the 1880s when Holub's efforts (9) virtually marked the end of this literary genre. Some of these authors such as Tachard, Merklin and Valentyn were found wanting quite early on and Barrow, writing some eighty years after, stated that Kolbe :

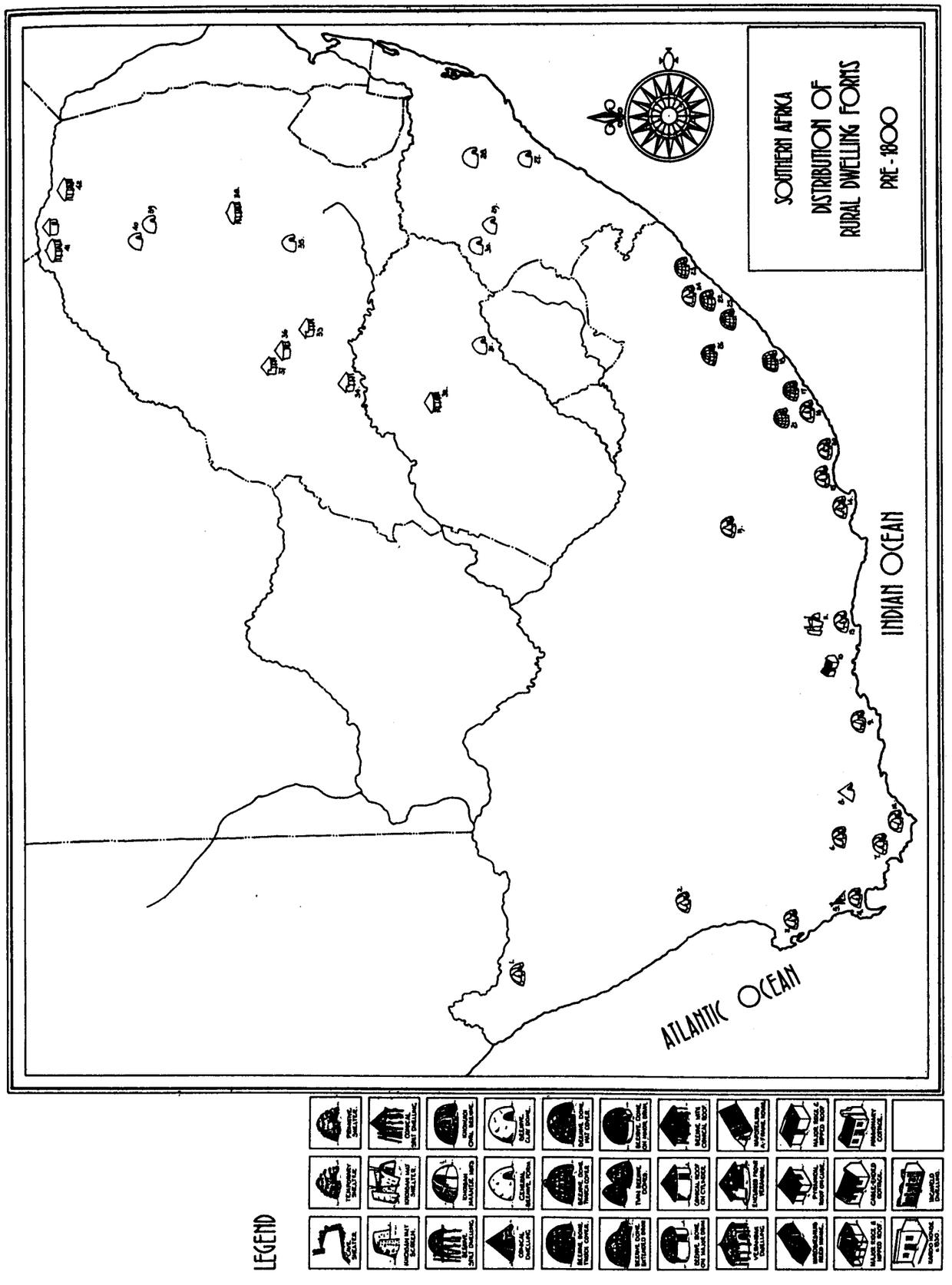
> "... has described subjects that he never saw; retailed idle stories of the peasantry that betray his great credulity and imbecility of mind; ..." (10)

The works of others who followed later, such as Anderson (11), were perpetuated well into this century (12) and have only been discounted in comparatively recent times.(13) The picture they presented of the architecture of the region however was generally accurate if, at times, laden with value judgements. Regrettably some of these descriptions are frustratingly lacking in the finer details of construction, and thus, in many ways, our knowledge of early local architectural heritage is all the poorer.

d. A seemingly unlikely source of data that should not be easily discounted is that provided by current research. Despite the fact that, stone buildings aside, very few indigenous structures have been found which were said to be older than two generations, physical conditions in the field are not thought to have changed radically in southern Africa over the last millenium. Thus, if the physical environment could be taken as a constant, then it may also be assumed that the building technology of a particular region would have remained the same for any one particular dwelling form. This means that, armed with the historical knowledge that a structure of a certain type was being built in an area three centuries ago and that ones of a similar form are being built there today, a study of their current constructional technology would allow for the plausible if not entirely accurate reconstruction of the historic example.

Ideally, the piecing together of a historical picture such as this should draw upon all three research components, archaeological, historical and current, in order to achieve greatest accuracy. This however has not always been possible in the case of this project and, unfortunately, a measure of interpolation has been unavoidable. It is hoped however that a framework for further research has been established in the process and that, with time, the whole pattern will be further clarified.

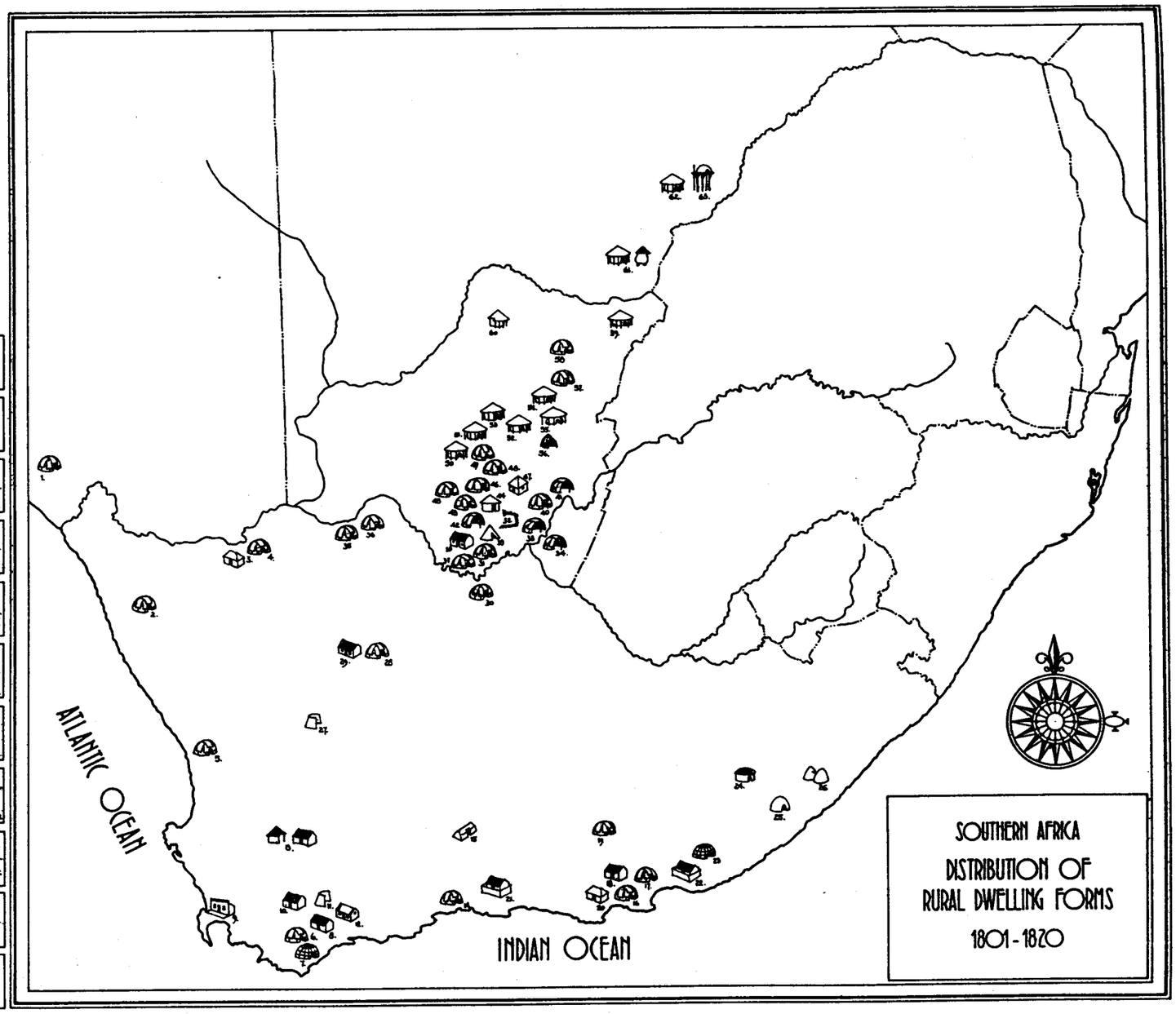
A wide range of dwelling forms is known to have been built in southern Africa before the years of Difaqane. For our purposes these may be divided into three



DISTRIBUTION OF SOUTHERN AFRICAN RURAL DWELLING FORMS : PRE - 1800

1. LE VAILLANT, 1781. Khoikhoi.
2. UNKNOWN, c 1798. Khoikhoi.
3. JOURDAIN, 1608. COPLAND, 1612. ROE, 1615. Khoikhoi.
4. MIDDLETON, 1604. FARewELL, 1614. VAN RECHTEREN, 1629. VON MANDELSLO, 1639. KOLBE, 1713.
5. DE VEAULIEU, 1620. San, in Table Bay.
6. BARROW, 1797. Dutch pastoralists.
7. SPARRMAN, 1775. Khoikhoi.
8. SPARRMAN, 1775. Khoikhoi headman's hut.
9. LE VAILLANT, 1781. Khoikhoi.
10. SPARRMAN, 1775. Khoikhoi.
11. BARROW, 1797. San.
12. SURVIVORS of the Joanna, 1682. Khoikhoi.
13. SURVIVORS of the Sao Goncalo, 1630. Khoikhoi.
14. LE VAILLANT, 1781. Khoikhoi.
15. SPARRMAN, 1775. Khoikhoi.
16. LE VAILLANT, 1781. Khoikhoi.
17. LE VAILLANT, 1781. AmaXhosa.
18. SURVIVORS of Sao Joao Baptista, 1622. Probable amaXhosa.
19. BARROW, 1797. White pastoralists.
20. SURVIVORS of Santo Alberto, 1593. Probable Khoikhoi.
21. BARROW, c 1797. AmaXhosa.
22. SURVIVORS of Sao Bento, 1554. AmaXhosa.
23. PERESTRELLO, 1554. AmaXhosa or Khoikhoi.
24. SURVIVORS of Santo Alberto, 1593. AmaXhosa or Khoikhoi.
25. SURVIVORS of Sao Joao Baptiste, 1622. AmaXhosa.
26. HOLTSHAUSEN'S PARTY, c 1790. Possibly AbaThembu.
27. DAVIES, 1000-1100 AD. Early Nguni.
28. MAGGS AND HALL, before 1820. Pre-Shakan Nguni.
29. MAGGS, 600 AD.
30. MAGGS, 1700-1850. Pre-Shakan Nguni.
31. MAGGS, c 1850.
32. MAGGS, c 1550. Early baTswana.
33. TAYLOR, c 1700. BaTswana.
34. TAYLOR, c 1700. BaTswana.
35. VAN WARMELO, c 1670. South amaNdebele.
36. MASON, 450 AD.
37. MASON, c 1600.
38. EVERS, c 1700.
39. LAUBSER, 800-1100 AD.
40. LAUBSER, 1700. North amaNdebele.
41. HANISCH, 840 AD.
42. GARDNER AND FOUCHE, 1100-1240 AD.

LEGEND



DISTRIBUTION OF SOUTHERN AFRICAN RURAL DWELLING FORMS : 1801 - 1820

1. CAMPBELL, 1813. Damara Khoikhoi.
2. CAMPBELL, 1813. Namaqua Khoikhoi. Chief's hut was larger than usual.
3. CAMPBELL, 1813. Pella M.S. Missionary cottage.
4. CAMPBELL, 1813. Pella M.S. Khoikhoi.
5. CAMPBELL, 1813. Khoikhoi.
6. CAMPBELL, 1813. Groenekloof M.S. Khoikhoi.
7. CAMPBELL, 1313. Groenekloof M.S. Nguni, probably amaXhosa.
8. CAMPBELL, 1813. Groenekloof M.S. Khoikhoi converts.
9. KLEIN, 1804. Cape Town.
10. BURCHELL, 1811. Genadendal M.S. Khoikhoi converts. Good matting reeds available in this locality.
11. CAMPBELL, 1813. Khoikhoi camping at roadside.
12. BEHR, 1808. Swellendam. Dutch farmers.
13. BURCHELL, 1811. Dutch farmer.
14. CAMPBELL, 1813. Pacaltsdorp.
15. LICHTENSTEIN, 1805. Dutch pastoralists.
16. LICHTENSTEIN, 1805. CAMPBELL, 1813. Bethelsdorp M.S. Khoikhoi.
17. LICHTENSTEIN, 1805. Bethelsdorp M.S. Khoikhoi converts.
18. LICHTENSTEIN, 1805. Bethelsdorp M.S. Khoikhoi converts.
19. LICHTENSTEIN, 1805. Khoikhoi.
20. CAMPBELL, 1813. Bethelsdorp M.S.
21. LICHTENSTEIN, 1805. Outeniqua Mountains. Fortified farmhouses.
22. LICHTENSTEIN, 1805. Algoa Bay. Fortified farmhouses.
23. CAMPBELL, 1813. AmaXhosa.
24. LICHTENSTEIN, 1805. AmaXhosa.
25. ALBERTI, 1803. AmaXhosa.
26. ALBERTI, 1803. LICHTENSTEIN, 1805. AmaXhosa.
27. BURCHELL, 1811. Khoikhoi. Good matting reeds available in this locality.
28. LICHTENSTEIN, 1805. Sak River M.S. Khoikhoi. BURCHELL, 1811, notes the presence of matting reeds but no trees suitable for building.
29. LICHTENSTEIN, 1805. Sak River M.S. Missionary cottage.
30. BURCHELL, 1811. Khoikhoi.
31. BURCHELL, 1811. Korah Khoikhoi.
32. BURCHELL, 1811. San in cave shelter.
33. BURCHELL, 1811. San open beehive.
34. BURCHELL, 1811. San open beehive.
35. CAMPBELL, 1813. Philips Town. Khoikhoi
36. CAMPBELL, 1813. Human's Kraal. Khoikhoi.
37. CAMPBELL, 1813. Hardcastle. Khoikhoi.
38. CAMPBELL, 1813. Hardcastle. Missionary cottage.
39. CAMPBELL, 1813. Hardcastle. Conical produce shed.
40. CAMPBELL, 1813. San, possibly Masarwa.
41. CAMPBELL, 1813. San open beehive.
42. CAMPBELL, 1813. Near Klaarwater. Korah Khoikhoi.
43. CAMPBELL, 1813. Near Klaarwater. Reportedly San but possibly baTswana.
44. CAMPBELL, 1820. Griquatown. Khoikhoi.
45. BURCHELL, 1811. Near Klaarwater. Adam Kok's Khoikhoi.
46. BURCHELL, 1812. Khoikhoi.
47. CAMPBELL, 1820. Griquatown. Khoikhoi.
48. BURCHELL, 1811. Korah Khoikhoi.
49. CAMPBELL, 1820. Town of "Chapo". Korah Khoikhoi.
50. CAMPBELL, 1820. Town of "Chapo". BaTswana.
51. DUNDAS, 1801. LICHTENSTEIN, 1805. CAMPBELL, 1320. BaTswana.
52. CAMPBELL, 1813. Dithakong. BaTswana baTlaping.
53. LICHTENSTEIN, 1805. BaTswana.
54. BURCHELL, 1812. Dithakong. BaTswana baTlaping.
55. DANIELL, 1804. BaTswana.
56. BURCHELL, 1812. BaTswana temporary huts.
57. CAMPBELL, 1813. BaTswana baKwena.
58. CAMPBELL, 1820. Maribogo. "Tammaha".
59. CAMPBELL, 1813. BaTswana baRolong.
60. CAMPBELL, 1820. BaTswana.
61. CAMPBELL, 1813. BaTswana baNgwaketse. Note use of large grain bins.
62. CAMPBELL, 1820. Kaditshwene. BaTswana baHurutse.
63. CAMPBELL, 1820. Kaditshwene. BaTswana baHurutse stilt dwellings.

major regions which, despite being possessed of quite distinctive architectures, cannot be said to have been limited to definite boundaries. In fact a large measure of overlap is thought to have existed between them.

Although it is probable that a beehive hut building technology existed alongside that of the cone on cylinder in large parts of the southern African interior, it is necessary to differentiate between those areas where this form predominated as a dwelling unit in its own right and where it merely supplemented a more generally used cone on cylinder domestic structure. It will be seen therefore that although the beehive form as such is thought to have been known throughout most of the subcontinent, the actual areas where it was predominant are in fact considerably smaller. It also seems that its technology was not homogeneous but, rather, that numerous beehive building techniques existed contemporaneously in this region.

The Migrant Pastoralist Beehive Region

In architectural terms this may be something of a misnomer, for although it is undoubtedly an area where beehive structures were once built and were probably, at one time, the predominant domestic form, the emphasis lay not so much upon the architecture of the region as upon its inhabitants' economic system. Thus we find that although a small number of different dwelling types are known to have existed here they all have in common the fact that they were either impermanent or transportable. There does not appear to have been any definite pattern to their distribution nor, for that matter, the existence of any clear-cut cultural stereotypes associated with the two predominant social groups in the region, the Khoikhoi and the San. This is not for want of trying on the part of various travellers who usually associated the beehive form with the migrant pastoralist Khoikhoi (14) whilst the mat shelter was attributed to the hunter-gatherer San. (15) Difficulty however arose when pastoralist San or hunter-gatherer Khoikhoi were encountered. Spærman (16), for example, attributed both to the Khoikhoi whilst Burchell (17) ascribed a Khoi-like structure to the San.

The indigenous dwellings of the region may be described under the following headings :

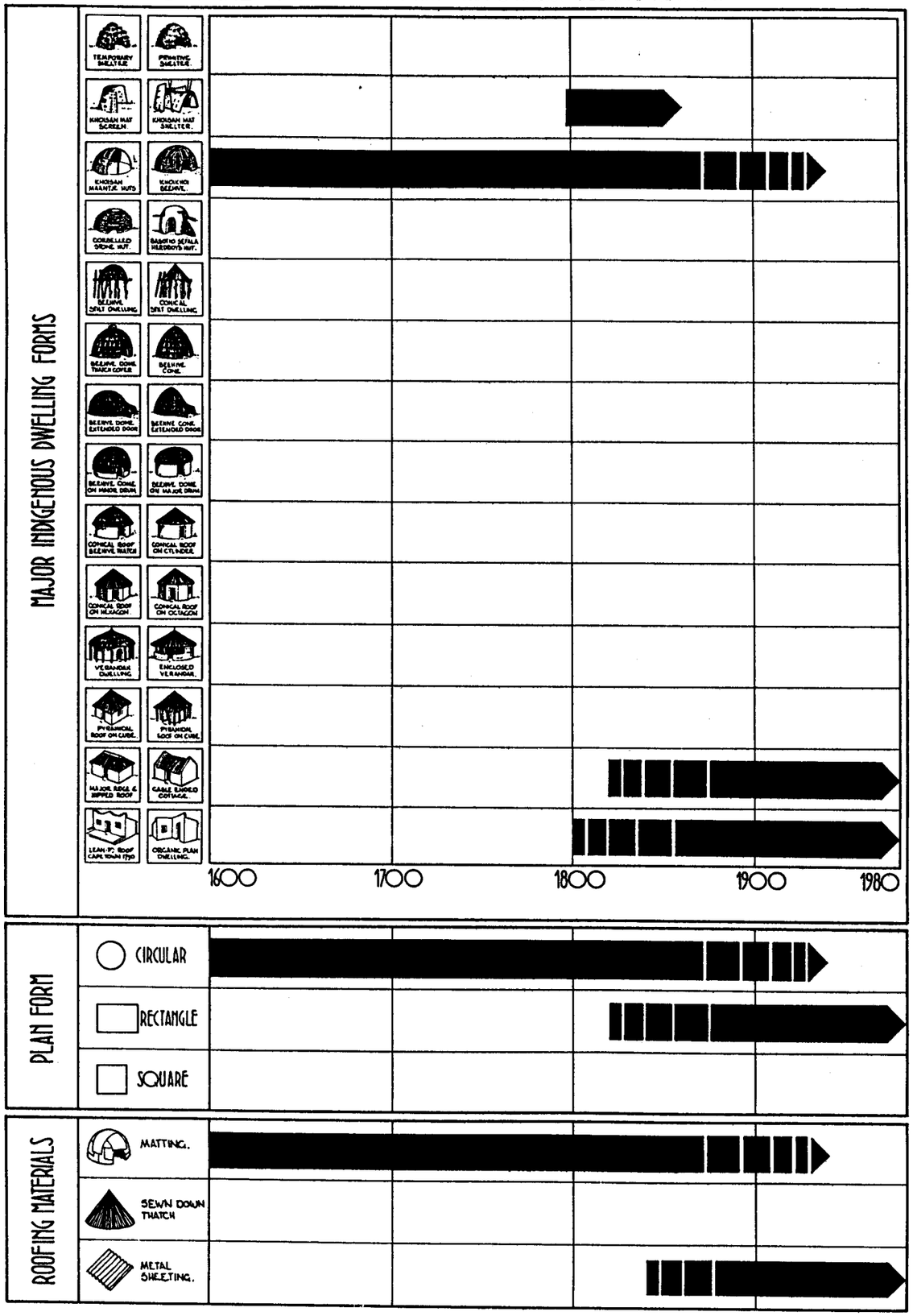
a. Temporary or primitive shelter. This could take the form of an unmodified cave or rock overhand (18), or a series of bushes in their natural state, their boughs bent inward and tied at a common apex, described by Lichtenstein as "... an immense bird's nest."(19) Another method which was probably used was the cutting down of branches which were then interwoven with reeds and grasses to form a substantial overnight shelter (20), but no description of this process for this region has been discovered to date. Such dwellings have generally been ascribed to San hunter-gatherers.

b. Transportable matting shelter. This was described by Barrow in c 1797 as :

> "... a small grass-mat bent into a semicircle, and fastened down between two sticks; open before, but closed behind with a second mat. They were about three feet high and four feet wide and the ground in the middle was dug out like the nest of an ostrich ... One of these miserable huts served for a whole family." (21)

The painting by Daniell of a similar structure in c 1804 (22) shows that the second mat Barrow refers to did not so much close the tunnel as create a wind shelter at the back for the residents. The work of other authors reveals that both the vaulted mat (23) and the rear wind-break (24) could be used independently of the other. The whole structure could be disassembled and taken to the site of the group's next settlement. Although the San

CHRONOLOGICAL CHART : MIGRANT PASTORALIST BEEHIVE REGION



TEMPORARY AND PRIMITIVE SHELTER

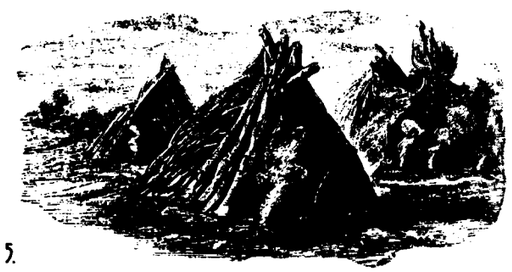
1.

2.

3.

1. HOLUB, 1881. Deserted baRolong hunting camp.
2. HOLUB, 1881. Porter camp.
3. HOLUB, 1881. San rock shelter.
4. MACKENZIE, 1869. San grass shelter.
5. BAINES, 1876. "Desert" San shelter.

4.



5.

KHOISAN MATTING SHELTER

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1. DANIELL, 1820. San matting shelters.
2. WANGEMANN, 1871. San matting shelters.
3. BACKHOUSE, 1839. San settlement.
4. BURCHELL, 1811. Khoikhoi matting screen.
5. BURCHELL, 1811. San open beehive shelter.

PRIMITIVE DWELLINGS

1.

2.

1. HOLUB, 1881. Masarwa San settlement, Botswana.
2. HOLUB, 1890. Masarwa San dance, Botswana.
3. BURROW, 1835. San dwelling, northern Cape.

3.

are normally associated with this type of shelter, Khoikhoi are also known to have built similar if not identical structures.(25)

c. Transportable beehive huts. A sapling structure was planted into the ground in a circle or oval of 3 - 4m in diameter and covered over with reed matting tied down with grass ropes. Although animal skins could also be used instead of mats, these were normally reserved for the lower skirt of the hut where this more flexible material was better able to seal off the hard edge with the ground.(26) In some structures the position of the doorway could be moved by the simple expedient of repositioning the matting. Although the height of the average beehive dome does not appear to have exceeded 1,2 - 1,5m (27), the interior head-height was improved, in some cases, by the hut floor being slightly excavated.(28) Although most subsequent travellers agree on the fact that the structure consisted of saplings arranged in a circle and brought radially to the centre, Kolbe also shows an example where the saplings are arranged from front to back like segments of an orange.(29) It is probable that this was an example seen by others in the eastern Cape and reported at second or third hand by the author.

Judging from a description given by Campbell (30) in 1813, it appears that under certain circumstances only some parts of a beehive hut might have been used to provide the equivalent of a dismountable matting shelter (described previously). It might seem therefore that these two types of hut may have been interchangeable or even designed to be part of one and the same system. Although the beehive form was generally associated, in the white mind, with the Khoikhoi, a similar structure was also built by the San, who, however, appear to have covered only half of the hemisphere with matting.(31)

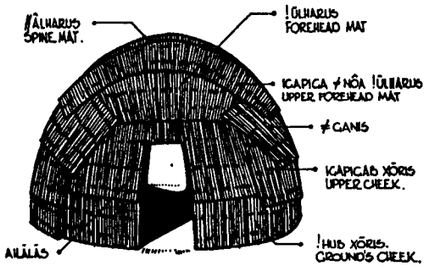
Datings for this hut form vary considerably, most having been made along the coastal regions of the Cape. The earliest record of these was that made by the survivors of the Santo Alberto, a Portuguese slaver which was wrecked on the southern African east coast somewhere between Algoa Bay and the Buffalo river in 1593. Soon after the survivors began their journey north they encountered a group of agrarian pastoralists who were obviously Bantu speakers, possibly amaXhosa, but whose huts were round and low and covered with reed mats which were not proof against the rain, a description which matches that of the architecture of the Khoikhoi.(32) Although this may well be viewed as the documentation of an early case of Xhosa-Khoi cross-cultural pollination, it is far more likely to illustrate the large degree of overlap and even interchangeability which is thought to have existed between the migrant pastoralist and agrarian pastoralist economies (33) of that region. Certainly the survivors of the Sao Bento (34) described meeting a group of hunter gatherers on the Pondoland coast in 1554, thirty-nine years earlier, indicating that the people of the eastern sea-board did not uniformly practise an agrarian pastoralist economy at that time. It could also be postulated that the existence of a grass mat beehive technology so deep into what was previously thought to be an area of grass thatch beehive technology is proof of an interchangeability of hut forms within this region, thereby breaking down some of the previously-held stereotypes of Khoikhoi and Nguni domestic architecture. It is also possible, if somewhat far-fetched at this stage of our knowledge, to consider that the use of matting, a common feature of all southern African beehive technology on the eastern seaboard, is indicative of a common root for this dwelling form as a whole. Material evidence in this regard is however extremely scanty and unlikely to find support through archaeological research.

Other early sightings of the mat beehive were made by Middleton in Table Bay

KHOIKHOI MAT BEEHIVE DWELLING : CONSTRUCTION

1. HOE DE HOTTENTOTTEN HAAR HUYSEN BOUWEN.

2. HOE DE HOTTENTOTTEN HUNNE WONINGEN VERANDEREN.



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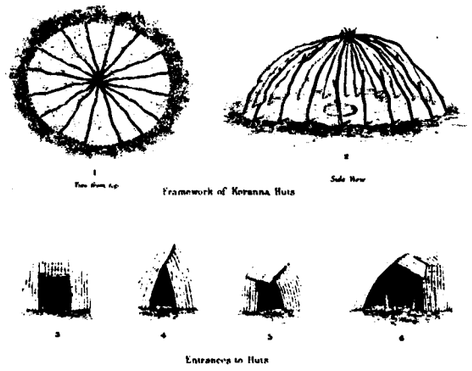
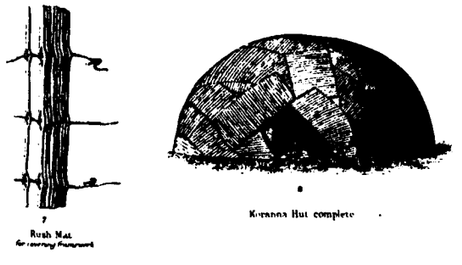


1. KOLBE, 1727. Khoi village and dwelling construction.
2. KOLBE, 1727. Khoi burial, village in background.

The Schapera model of a typical Khoi village is not in agreement with Kolbe's illustrations made two centuries earlier. The latter shows Khoi settlements to have but a single entrance and a structure of unspecified function located in the centre of the cattle area.



4.

THE MIGRANT PASTORALIST BEEHIVE REGION : PRE-1800

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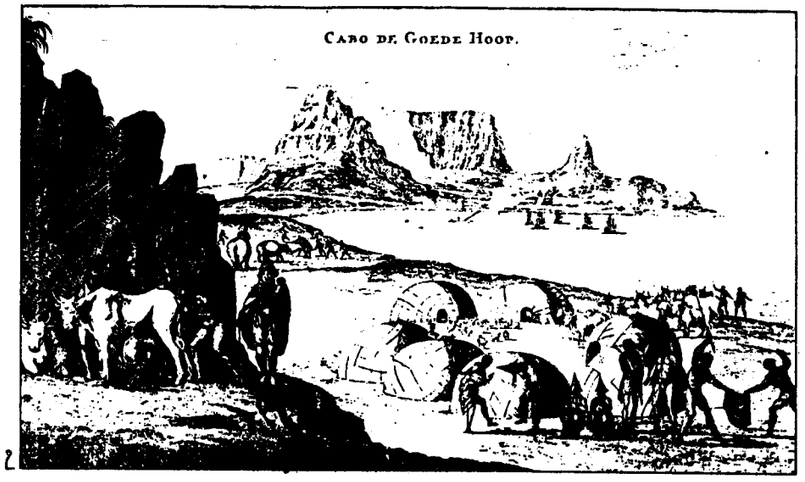

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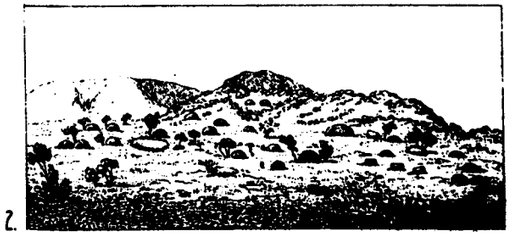
1. UNKNOWN, c 1510. The massacre of d'Almeida's party. A Khoikhoi village is in the background but the pyramidal structure is patently absurd.
2. UNKNOWN, early 1700s. Khoikhoi village in Table Bay.
3. LE VAILLANT, 1781. Khoikhoi dwellings at Pampoen Kraal.

THE MIGRANT PASTORALIST BEEHIVE REGION : 1801-1820

1.



2.

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6.

1. LICHTENSTEIN, 1805. Sak River M.S.
2. CAMPBELL, 1813. Human's Kraal. Korah.
3. CAMPBELL, 1813. Philip's Kraal. Korah.
4. CAMPBELL, 1813. Korah building a settlement.
5. CAMPBELL, 1813. Pella M.S.
6. BURCHELL, 1811. Kloof Village. Khoikhoi.

in 1604, Jourdain at St Helena Bay in 1608 (35) and by the survivors of the Sao Goncalo shipwreck in Plettenberg's Bay in 1630.(36) Thereafter reports of this dwelling form become more common as travellers into the region begin to make ever deeper forays, at first keeping to the coastal belts but later penetrating the more arid interior.

d. Various other structures of a domestic nature are also known to have been built in the region during this time. De Beaulieu recorded in 1620 that some of the indigenous inhabitants of Table Bay

> "... had no shelter other than bushes and some skins stretched on two crossed sticks, with another in the middle to thrust in to the ground like a parasol, ..." (37)

Sparrman in 1775 visited the homestead of the Khoi headman Rundganger in the Riet Valley whose hut was built

> "... so that altogether it had the shape of a cone."(38)

The structure was

> "... three or four times larger than common, ..."

and in view of the fact that Rundganger is known to have visited the southern African interior on numerous occasions previously, we need look no further for his probable source of inspiration. Of somewhat greater importance is the Khoi settlement also visited by Sparrman that same year in the Outeniquas. There he noted that, apart from the usual dwellings associated with this group, others

> "... were built of straw in square form, with shelving roofs, like the cottages of the slaves."(39)

Although it is likely that this dwelling form was no stranger to Cape Town and its surrounds, its adoption further afield does not appear to have been widespread at that time and this is possibly one of the earliest references to its use in a Khoi homestead. Reports of such dwellings in an indigenous context become more common after 1800. Most coincide with the establishment of mission stations (40) and thus the link between house form, religious proselytising and security of land tenure cannot be ignored. As will be shown during the course of subsequent chapters, the question of white-black cross-cultural influences in the field of architecture has to be considered in social and economic as well as cultural and aesthetic terms.

Of importance also is the mention that Lichtenstein makes in 1805 of a "hartebeesthuisje" at Rietfontein.(41) Although it is probable that this and the somewhat similar "kapsteilhuis" (42) had been built in the vicinity of Cape Town for quite some time (43), this is an early reference to a dwelling form which was to become increasingly associated with, at first, Karoo Dutch pastoralists and, later, as this group migrated into the hinterland, the Trekboers.(44)

The picture that emerges for the region during this period is therefore not a difficult one to describe, with the Khoikhoi beehive being almost universally built throughout it from the 1550s through to the end of the eighteenth century. Although this dwelling form was to remain dominant here for yet another generation or two, by the end of that period the process of alienation of the Khoikhoi from their traditional grazing lands and hence their means of subsistence, was well advanced. By the 1820s numerous and widespread Khoi homesteads were beginning to build substantial square plan dwellings in addition to their more traditional beehives, a process which appears to have been assisted by a parallel increase in missionary activity in the region. With time, beehive building, largely associated with a migrant pastoralist economy, began to be restricted to three main areas, Namaqualand, the northern Cape and the eastern Cape, all on the fringes of the Colony's farming region. At the same time there was an increase in the number of square plan dwellings being built by Khoikhoi resident within the Cape, as they moved from their more traditional beehive huts into hartebeesthuise and, later, into gabled cottages. Because of the migratory and temporary nature of housing in this region up to the turn of the eighteenth century, it is unlikely that such events can ever be substantiated either by archaeological or current research. Thus we are forced to fall back almost entirely upon the accounts of travellers into the region for evidence of indigenous architectural activity during this period.

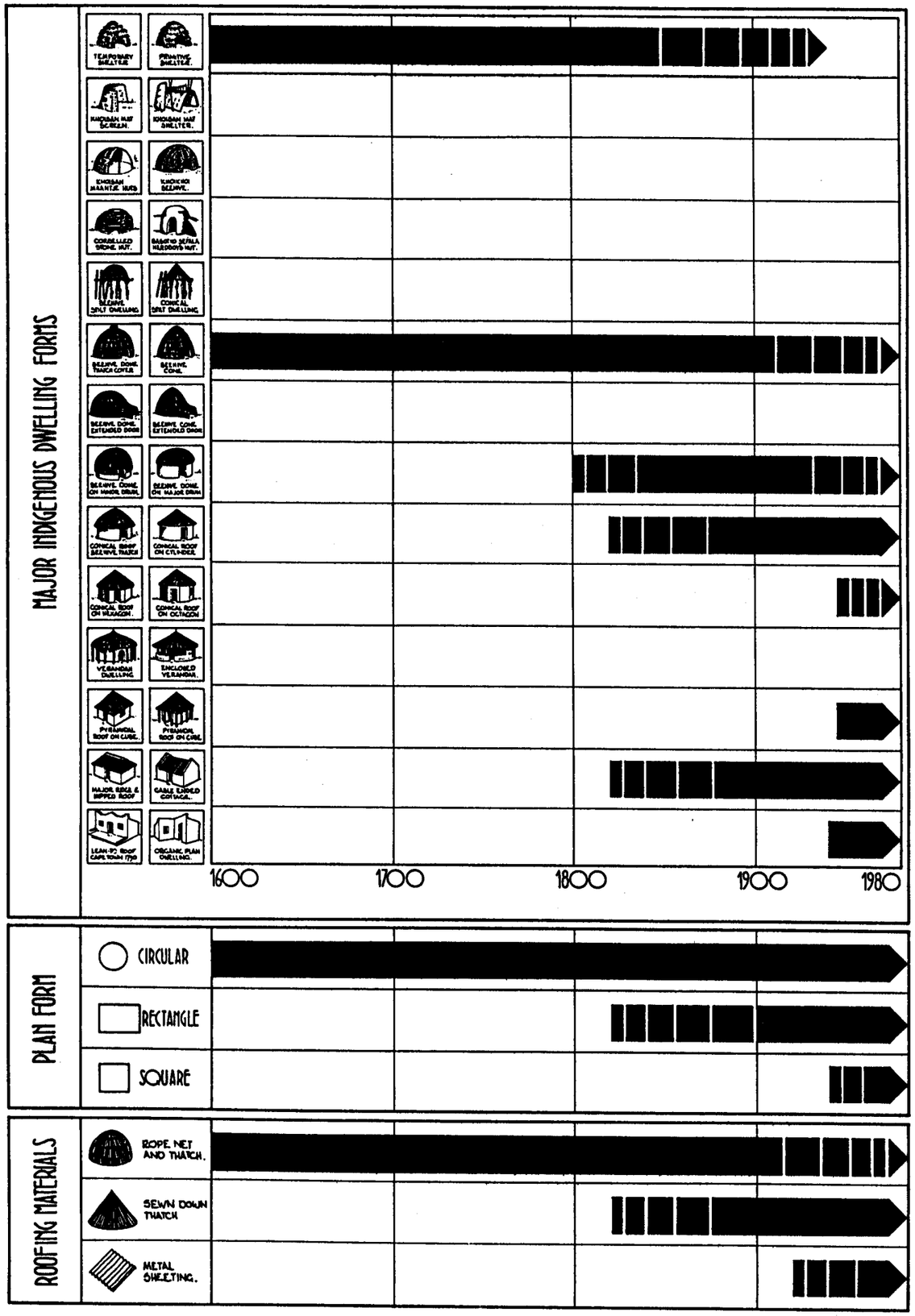
<u>The Eastern Littoral Beehive Region</u>

This region is fairly widespread, running the full length of the southern African eastern littoral from Swaziland in the north to the Great Fish river in the south, although it is possible that it may have stretched as far as Algoa Bay at some remote time.(45)

Although the architecture of this region was overwhelmingly orientated towards the beehive form, even up to comparatively recent times, its technology was by no means homogenous. Indeed, a number of interesting variants on the theme of the basic dwelling are thought to have developed. Unfortunately a scarcity of historical data makes it difficult to determine with any certainty whether these were examples of a typical regional stereotype, whether they were associated with some kind of group identity or whether they were unique unto themselves. It is however important to differentiate between these variants, the grass-covered beehives of this region and the mat-covered types found further south and west. The latter were temporary shelters, easily dismountable and transportable, more in the nature of tents than dwellings and born to serve the shelter needs of a migrant society following a pastoralist economy. The former were permanent and of substantial construction, designed to last for a number of years and although theoretically portable, seldom moved over any considerable distances. The people who built them were agrarian pastoralists with strong ties to their planting lands and although the removal of a household from one location to the next was by no means unknown, their settlements were of a generally more permanent nature. The implications of this are most important from a historical point of view : migrant settlement, by its very nature, has tended to leave behind few interpretable traces of its architecture; early agrarian settlement on the other hand tends to etch its presence somewhat more markedly upon the land it covers, although often even such evidence is too scanty to be conclusive.

The earliest evidence of beehive building in this region which has been found to date is probably that uncovered by Maggs in the Tukela basin (46) where huts are thought to have consisted of a framework of saplings partly plastered over with clay. A carbon-dating analysis of their remains has set their date at about 600 AD which makes them roughly contemporary with those discovered by Mason at Broederstroom, to be discussed at a subsequent stage. Later settlements have been researched by Davies whose excavations at Blackburn, in Natal (47), have revealed beehive-type dwellings some 5,5m in diameter and with centre posts,

CHRONOLOGICAL CHART : EASTERN LITTORAL



thus indicating a probable hemispherical dome structure similar to those found in the region up to modern times. These have been dated at between 1000 AD and 1100 AD and their construction has been attributed to a proto-Nguni group. Further south, structures of beehive form but unknown technology were reported by the survivors of the Sao Bento in 1554 near the mouth of the Mtamvuma river and by those of the Sao Joao Baptista in 1622, who encountered what must have been a Nguni settlement on the banks of the Bashee river.(48)

Thereafter reports of beehive dwellings in the region become more common. Maggs' site at Mgoduyanuka, in the upper Tukela (49), has yielded beehive huts with paved floors some 3 - 4m in diameter, dated mid-eighteenth century. It is also interesting to note that the community concerned built stone walled byres with entrances facing uphill, presumably towards a Great Hut, a feature of pre-Chakan settlement in Zululand which was to be reversed by these same people a few generations later.

In the southern part of this region beehive huts were recorded by Le Vaillant in 1781 (50), by Holtshausen's party searching for survivors of the Grosvenor in 1790 (51), by Barrow in 1797 (52) and by Campbell in 1813.(53) These are generally assumed to have been thatched in the more conventional grass technology but other building methods are also thought to have been in use at that time. Alberti writing in 1803 described the construction of an amaXhosa hut as follows :

> "..., thin poles of a pliable wood are stuck in the ground along the planned circumference at a distance of sixteen inches (400mm) from one another. These are bent together and joined in the middle to form a framework, which is then covered with reed, and finally faced with a mixture of clay and cowdung on both the inside and outside."

He further tells us that :

> "In the area which is further removed from the borders of the Colony, and where the tribes less often leave or change their abodes, these habitations are usually double in such a way that two huts stand opposite each other and enclose an intermediate space, apart from the inner chamber, which then serves as a sleeping place for the children as well as a storage place for many other requirements." (54)

This account was confirmed by Lichtenstein (55) who travelled through this part of the country in the same party as Alberti in 1803.(56) Thus the two men not only knew of each other's work and probably discussed it but also saw and wrote about the same places on the eastern Cape frontier. This would explain the close parallels found in some of their descriptions as well as their shared use of illustrative material in their own books. However, despite the fact that both authors considered this type of beehive to be common further north, no other collaboratory accounts of such a dwelling have been found to date. Fortunately its feasibility and probable existence in the past was confirmed recently through the discovery by Robert Rawlinson of a historic photograph of a similar structure. (57) The hut, which is thought to have been photographed in Zululand, probably during the latter part of the last century, is unfortunately obscured in part by a group of men standing before it, therefore making it difficult to determine its full structure and form. It may be concluded that although such dwellings may not have been as common as either Alberti or Lichtenstein may have wished us to believe, they do however appear to have been part of the region's general architectural literacy.

Lichtenstein's account of the architecture of the amaXhosa also differs from Alberti's in one important respect : unlike the latter's description which made it appear that the inside and outside surfaces of beehive huts were totally coated over with daka, he stated that (58) :

"The spaces between the poles are filled up with twigs, or rather faggots and then the whole is covered over to a certain height with a mixture of clay and cow-dung, the remainder being thatched with rushes."

Judging from their respective accounts, both men were quite obviously describing the same kind of building technology, yet the resultant forms are quite different. Alberti's would have presented a smooth hemispherical shape which, although feasible, would not have been too practical in terms of rainwater exclusion and internal smoke ventilation. Despite their probable structural shortcomings however, such huts must have quite obviously existed in this region at that time. Alberti's description was supported by the accounts of both von Winkelman in 1788 (59) and Phillips in 1825 (60), the latter claiming that the abaThembu covered their huts with "mud and manure" in order to prevent their cattle from consuming the thatch. On the other hand, other authors writing in the same period, such as van der Kemp in 1800 and Smith in 1824 (61), are in agreement that it was only the inside surface of the dome which was coated with daka, the outside being thatched with grass.

Lichtenstein, in his turn, described a hut whose structure was substantially the same as those presented above but whose final form would have been somewhat different - possibly something like a squat mushroom. This was to be confirmed by Bonatz (62), who, writing in 1834, provided a description of abaThembu and amaMbo dwellings of a similar nature. After the 1850s, pictorial evidence of such huts becomes more readily available and continues through well into this century.

Although it is clear that all of the above cases are but variants of the same basic framework and employ the same technology of construction, Lichtenstein's example becomes important in the light of subsequent historical events. It represents a dwelling form which, although clearly based upon a hemispherical beehive structure, was taxonomically linked to the cone on cylinder dwelling found in the southern African interior. This link was reinforced when, during the course of current field work, it was shown to be part of a historic transformation of the rural domestic structure, beginning with the beehive of two centuries ago and concluding during the 1920s with the spread of the cone on cylinder. Thus it may be concluded that although the coastal belt was indeed a region where the beehive dwelling predominated, it could also support a proto-cone on cylinder technology and, as demonstrated above, did so on a fairly widespread basis. It is of course difficult to prove whether the transition from proto-cone on cylinder to full cone on cylinder would ever have occurred of its own volition and without the stimulus of an immigrant white culture competing for land in the same region. If the answer is negative then one must assume that a beehive-building tradition is more or less static and possessed of only a limited number of variants on the same basic theme. This however does not appear to be the case and therefore one may extend this argument to the southern African interior where beehives of a different form are also known to have been in use. Thus, if it may be shown that an evolving beehive building tradition in one region led to the local development of cone on cylinder structures, may it not therefore be logically asked whether the existing cone on cylinder structures of a neighbouring region may not be linked to an earlier beehive building tradition, particularly if beehive structures were also known to be in use there at an earlier time? Such a question is of course, at this stage, speculative and is likely to remain so until more complete archaeological data becomes available to the modern researcher, when it may be answered more conclusively one way or another.

The Central Hinterland Region

This is an area which spans from the northern and central highveld in the south through to the Limpopo in the north and from the eastern Lowveld through to the less arid stretches of Botswana and the northern Cape in the west. Its vegetation is predominantly a treeless grassland turning in parts to a savannah with trees large enough to support building activity, scarce in the south and west but increasing in frequency to the north and east. Because of its remoteness from the coastal regions, being cut off by the arid Karoo to the south and the Kahlamba mountain range to the east, this region was not penetrated by white travellers to any great extent until the last years of the eighteenth century. Thus the student of architectural history has had to rely to a greater degree than is usual upon the availability of archaeological data in order to build up a picture of the early architecture of the region.

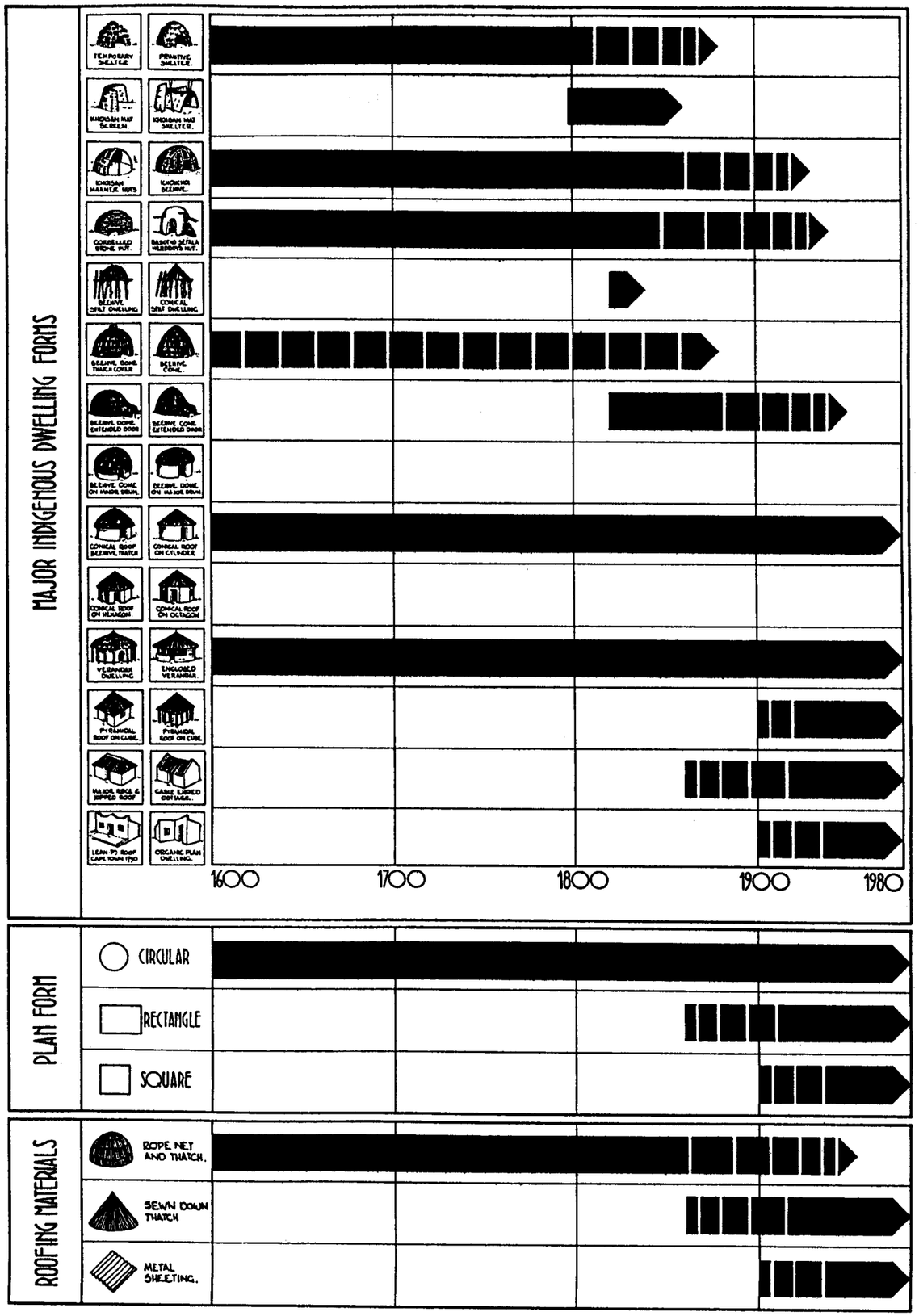
As one would expect from so large an area, its spread of dwelling forms was by no means homogenous, and if present-day evidence is anything to go by, it probably supported a number of different building technologies. Unfortunately archaeological evidence is seldom of such a nature as to give any but the most general of ideas as to dwelling form and constructional methods employed. Thus much of what follows is the result of conjecture supported by more recent historical accounts and current architectural study.

The architectural picture which is presented by the archaeology of the region is incomplete and, in some aspects, inconclusive. On the one hand most evidence seems to indicate that the predominant dwelling form was the cone on cylinder, often with a circular verandah running about its external perimeter. On the other there is sufficient data to show that the beehive was not unknown in these areas. Laubser, for example, has excavated beehive huts at Eiland which have been dated at 800-1100 AD (63) whilst Maggs' research has shown that such structures could have been built at Makgwareng during the early seventeenth century and possibly a little before that.(64) Unfortunately these samples are too few and too scattered to allow a meaningful pattern to emerge. The use of beehive type structures for domestic as well as certain temporary and specialised functions is well documented in this region from c 1800 onwards. However the fact that they were a commonplace occurrence here before that time is a supposition which still requires extensive archaeological support before it may be assumed to be correct.

A brief mention should also be made at this point regarding the interpretation of some archaeological data. It is always difficult to make direct assumptions about the form of a demolished dwelling when all the architectural information available is concentrated in its foundations. However in the case of a verandah surrounding the perimeter of a circular hut, the nature of the structure and the distribution of the roof load forces makes it difficult for it to be anything other than a conical roof supported by a circular drum. Similarly, if we can accept that a verandah framework is no more than a half-completed drum wall, then it is conceivable that a group which is perceived to have built verandah dwellings can also be thought to have built plain cone on cylinder structures. For the purposes of this project therefore, the presence of a circular verandah, either partial or total, has been accepted to be characteristic of a more general cone on cylinder-building culture.

The earliest evidence found to date of an architecture in this region is that uncovered by Mason at his Broederstroom site. There he excavated hut floors some 3m in diameter which have been dated at c 450 AD.(65) As at most other

CHRONOLOGICAL CHART : CENTRAL HINTERLAND



archaeological sites in this region, the dwellings are thought to have had verandahs running about their perimeter although their extent has not been fully established. More conclusive, if later, data of cone on cylinder and full verandah structures have been found by Huffman at Shabani, Zimbabwe, dated at 690 AD (66); by Hanish in the Shashi Valley of the northern Transvaal, dated at 840 AD (67); by Gardner and Fouche at the K2 and Mapungubwe sites, dated at 1000 AD and 1100-1240 AD respectively (68); and by Evers at Lydenburg, dated at c 1700 AD.(69)

Partial or front verandah cone on cylinder dwellings have been documented by Maggs in the northern Orange Free State, dated at 1550 AD (70); by Mason at Olifantspoort, dated at 1600 AD (71); and by Taylor on two separate sites, at Buffelshoek near Parys and at Suikerbosrand near Heidelberg, both being dated at c 1700 AD.(72) Despite the apparent difference in verandah building methods between the northern and southern parts of this region, this is relatively minor and probably attributable to variable climatic and environmental factors between the two areas rather than to conscious stylistic changes.

Although much of the data for this region seems to indicate that its architecture was dominated by cone on cylinder dwellings, a number of interesting exceptions to this norm have also been recorded. The first came to light as the result of Loubser's archaeological excavations near Pietersburg where he uncovered the remains of beehive-type structures dating back to c 1650 AD.(73) These belong to settlements whose origins have been attributed to an influx of a number of different peoples into this area more than three centuries ago. It is thought that, with time, they merged into a larger group who have subsequently become known to anthropologists under the more general name of the "north amaNdebele". His researches in the same area however, also show that by c 1850 this same group had conformed to the prevailing building technology of the region and had switched over to cone on cylinder dwelling forms.

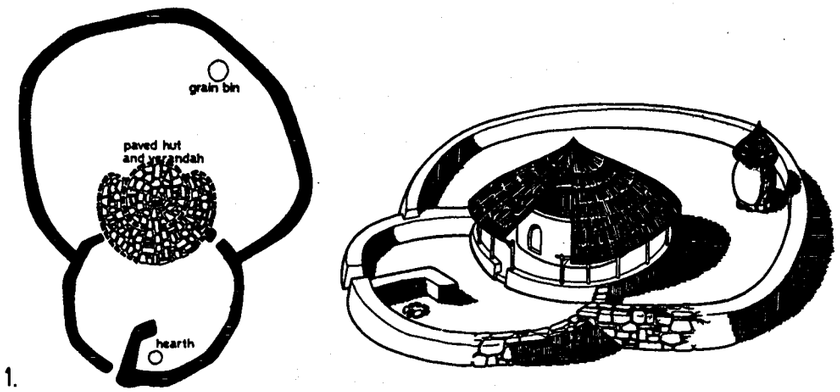
Loubser's excavations are interesting for a number of different reasons. He points out that :

> "Both Group II (Ndebele and Koni, c 1650) and Group III (Ndebele, Koni and Shangaan, c 1850-1900) sites contain similar LIA pottery belonging to two different styles : one associated with Sotho/Tswana (Moloko) and one associated with Lowveld Phalaborwa (Letaba) ... The absence of Nguni ceramics is an enigma which perhaps points to a Sotho rather than Nguni origin of the Ndebele." (74)

This is an important statement for it stands in direct contradiction of two long-held anthropological assumptions made by van Warmelo as far back as 1930 : that both northern and southern amaNdebele groups were part of the same migration from the eastern Nguni region, and that all Transvaal amaNdebele originally came from Nguni stock.(75) Van Warmelo did not attempt to explain the mechanics of such a migration or the subsequent schism he perceived to have occurred between the two groups. He did however acknowledge that linguistic differences existed and that "... nothing but pure Sotho is spoken nowadays" among the north amaNdebele whilst the southern amaNdebele "... have retained the customs and language of their (Nguni) ancestors to a remarkable extent." (76)

Had Loubser been able to show that the North amaNdebele were indeed the descendants of an original Nguni migration, then his revelation that this group had built and lived in beehive-shaped dwellings would not have been difficult to assimilate. That, after all, is the popular stereotype of what an Nguni hut should look like, and what would be easier than to be able to assume that a group of beehive builders, migrating northward, would have brought with them, as part of their cultural impedimenta, an attachment to a dwelling form they built back home. But his

THE CENTRAL HINTERLAND REGION : PRE-1800



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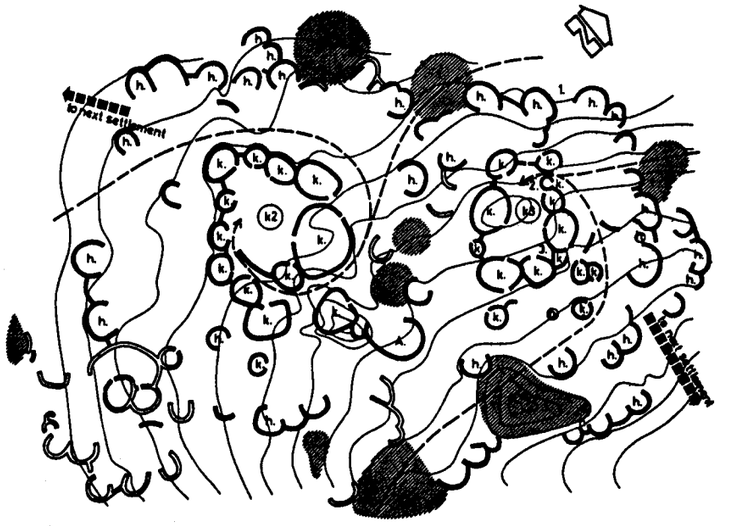

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1. MAGGS, 1974. Excavated plan and reconstruction of baTswana bilobial homestead, c 1750.
2. Interpretation of Sotho/Tswana settlement, c 1750 on farm Buffelshoek 471 IQ near Parys. After excavation by Mike Taylor, 1979.
3. BAINES, 1876. Herdboy's corbelled stone hut.

researches have shown precisely the opposite : that the North amaNdebele are the product of a number of separate population movements, none of which are recognisably Nguni.

This means that many of the morphocentrically orientated concepts and cultural stereotypes which have grown up about southern African rural and indigenous architecture will, of necessity, need to be re-examined and revised.(77) One of these is that the Nguni build in grass, the Sotho/Tswana in clay. But, according to this research, it now appears that not only did the Sotho/Tswana also build in grass, but did so some two centuries before travellers like Backhouse (78) and missionaries like Arbousset and Daumas (79) recorded similar building technologies among baSotho groups further south.

It is possible to postulate, using an architectural argument, that in the case of the baSotho of Lesotho, as well as the Nguni groups of the eastern littoral, development in beehive construction was ultimately to lead to the emergence of a cone on cylinder tradition. No such structural links have been found to date in the architecture of the southern African interior and probably never will be owing to a lack of conclusive historical evidence. However the existence of an indigenous beehive building tradition on the highveld will now need to be recognised, not only in the way of impermanent shelters, but as part of a wider local architectural tradition and language.

A second exception to the region's norm of cone on cylinder construction is thought to have occurred amongst the South amaNdebele, an Nguni group who, according to their own oral history, moved into the Transvaal in about 1630-1670.(80) Unfortunately comparatively little is known of their architecture before the turn of this century primarily because, to date, no major archaeological research has been undertaken on their early settlement sites.(81) However one important account of early hut building has come down to us through van Warmelo's researches in amaNdebele oral history.(82) During the course of his interviews one informant described the construction of what was obviously a beehive structure and claimed that this type of dwelling had been common among his people before the 1883 conflict between the amaNdzundza and the ZAR. If this was indeed the case then it would not be too unreasonable to assume that this group could have built this type of structure before the 1883 era and perhaps as far back as the late seventeenth century.

This meagre store of archaeological data is supplemented to a certain degree by the accounts of travellers into this region from 1801 onwards. It is true that, unlike in the rest of the country, the architectural historian has not had the benefit of any written accounts of this area before the nineteenth century to turn to for reference. However what these belated visitors lost in terms of time they soon made up for with a wealth of architectural and constructional data and today the architecture of this region at this period of time is probably the best documented of the sub-continent.

Although visitors to the region between 1801 and 1820 limited their travels to the more populated areas of the northern Cape, eastern Botswana and the western Transvaal, the picture they presented did not differ too radically from that described by archaeologists. Dundas in 1801 (83), Lichtenstein in 1805 (84), Burchell in 1812 (85) and Campbell in 1813 and subsequently in 1820 (86), all uniformly described the baTswana of the region to be residing in cone on cylinder dwellings, surrounded by circular verandahs which at times were quite substantial, and may or may not have been partly enclosed to give a number of storage or sleeping chambers about a central drum. Most homesteads appeared to follow a bilobial

layout which is thought by archaeologists to have been in existence since about 1550.(87) This is a settlement pattern which has now become identified with the architecture of the Sotho/Tswana on the highveld (88) and which, in a slightly modified form, has been transmitted through to the present day. In many cases valuable comments were also made about the local building technology and wall decorations. Lichtenstein, writing in 1805 (89), told us that the drum wall was stopped short of the timber roof structure, a detail which we now know to be a measure against termite spread into the thatch. Burchell, writing in 1812 (90) described hut wall decorations among the baTlaping of "Littakoo" (Dithakong), something that was confirmed by Campbell in 1820 (91) among the baHurutse of "Kurreechane" (Kaditshwene).

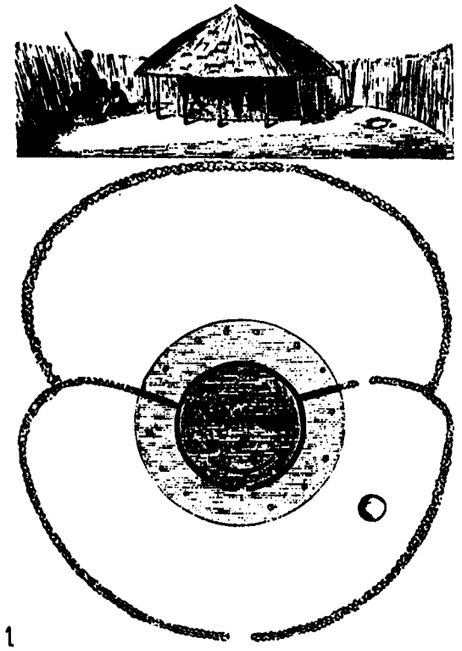
These travellers also gave details of other types of structures found in this region which, because of the nature of their technology, are not likely to have left many traces behind for modern-day archaeologists to excavate. The residents of Dithakong, for example, were recorded by Burchell in 1812 to have built temporary huts at a few days' travel from their town to serve as a winter cattle grazing station.(92) Campbell, in 1820, noted the use of huts raised on stilts as well as the more conventional verandah cone on cylinder dwellings among the baHurutse of Kaditshwene, in present-day western Transvaal near Zeerust. That same year he also visited Meribohwhey (Maribogo), in the northern Cape, where the Tammaha (baThamaga), a baKgalagadi and hence predominantly baTswana group, were building beehive-type structures, covered with matting in the Khoikhoi style but using some kind of extended entrance.(93)

One structure which has gone unremarked until comparatively recent times, but which may provide a valuable insight into the processes of baTswana architecture during the early nineteenth century, was depicted by Daniell in or near Dithakong in c 1801. It is entitled "A Boosh-Wannah Hut" and shows what can be positively identified as a beehive structure surmounted by a conical roof carried by a series of verandah posts.(94) The verandah superstructure is generally unremarkable, being no different from those built in this region for the past couple of centuries. The beehive below however is of some considerable interest. We know from Lichtenstein in 1805 as well as from current field work that the inner drum of the dwelling in this area need not necessarily bear any of the roof load.(95) Therefore technically, it could take up any form, including that of a beehive. We also know from recent research that the two architectural elements, the roof and the inner drum, could and often are built independently of each other.(96) But, if all the other dwelling units recorded in this region from 1801 onwards, without exception, show a cylindrical inner drum, the question must be asked as to why this particular dwelling is so different from the norm.

It could, of course, be suggested that Daniell, like so many others before him, returned to Europe with an imperfect memory of this dwelling form and there executed his painting. True, but his pictures of south African indigenous fauna are generally acknowledged to be true to life and if his accuracy can be recognised for the one, then why not also for the other? Fortunately, however, Daniell also made copious sketches, one of which, judging by the arrangement of household utensils in the background, could have been done within the very homestead under discussion. Although the subject of this drawing is primarily a young moTswana man, the shape of the inner chamber below the roof of the structure beyond is undoubtedly that of a beehive structure.(97) Besides all this, other sketches by Daniell show that he was no stranger to the standard circular drum and that therefore this strange hybrid is not the figment of his imagination.

If we may therefore accept the accuracy of Daniell's draughtsmanship, then only

THE CENTRAL HINTERLAND REGION : 1801 - 1820



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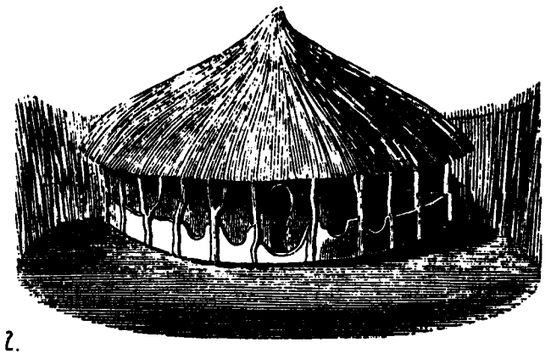

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1. BURCHELL, 1812. Dwelling of Moleni, Dithakong.
2. BURCHELL, 1812. Dwelling of Kramori, Dithakong.
3. BURCHELL, 1812. Dwellings at Dithakong.
4. CAMPBELL, 1813. View of Dithakong.
5. CAMPBELL, 1813. Chief's Kgotla at Dithakong.
6. CAMPBELL, 1813. Homestead of Matibe, Dithakong.

two alternatives can be entertained. The first one recognises that the baTswana built beehive shelters, but not necessarily dwellings, in their own right. This means that this unit was built as part of a staged process of construction, something still practised in indigenous architecture to this present day, and that the beehive structure below was erected as an interim measure, the intention being to replace it with a more substantial and conventional cylindrical drum at a subsequent stage. The temporary nature of this type of structure would explain the lack of archaeological evidence supporting its existence.

The second alternative suggests that the baTswana built substantial and permanent beehive structures as well as the more generally recorded cone on cylinder dwellings. This means that, in the case of the Daniell drawing, the beehive form was chosen as a viable alternative to the use of a cylindrical inner drum below the conical roof. Although the structural sense of such an arrangement is difficult to gauge all doubts on this point should be dispelled by Sanderson who, writing in 1858-9, described a dwelling of similar construction among the baPugeni, in the Magaliesberg. He said that :

> "Every hut or house is divided from the others by a fence or wall, and is surrounded by a broad eave or veranda. The hut itself is circular, built of stone plastered over with clay, and in the better class polished inside and out with beeswax. The roof is thatched with straw or reeds, conical, and 20 or 30 feet in height. The courtyards surrounding the huts are plastered, and kept scrupulously clean. The front half of the veranda is usually enclosed with a dwarf wall, and the semicircular doorway, 18 or 20 inches in height, closed by a board sliding behind a couple of pilasters forming a frame. Opposite the door inside, and extending a third of the way round, is a platform or dais raised about 6 inches, in which are sometimes planted the stems of one or two small trees, the branches of which serve to hang articles upon. The inside of the hut is in the middle, about 6 feet high, oval in section, and without light or ventilation, except from the doorway." (98)

If this was indeed the case, then it is obvious that this kind of structure does not represent a transitional stage in the construction of the cone on cylinder, but is a distinct dwelling type in its own right. Its position in the architecture of the region must therefore remain unresolved pending its confirmation through archaeological research.

A further group of indigenous structures whose status is the subject of some debate are the corbelled stone huts found in the northern Orange Free State and some parts of the southern Transvaal. These shelters are a feature of early iron age settlements whose construction was originally attributed, up to comparatively recent times, to an indigenous group called the "Lekoya" or "Ghoya".(99) Their existence was signalled by early white travellers to the region who found them mostly uninhabited as a result of the Difaqane. Smith commented in 1835 that :

> "The slopes of the hills and knolls were densely covered with the ruins of large stone kraals which at the time they were occupied must have contained a great number of inhabitants ..." (100)

whilst Arbousset and Daumas were also struck by the desolation that they encountered in the northern Orange Free State in 1836, stating that :

> "The huts have been burned, the gardens destroyed; and nothing remains but the circular walls of stone, standing about four feet in height." (101)

Forty years later Lord and Baines described their construction :

> "A circle of blocks is laid on the ground, then another on them, with the edges projecting a little inward, so that the circumference of each

THE CENTRAL HINTERLAND : THE VERANDAH BEEHIVE HYBRID DWELLING

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1. DANIELL, 1805. BaTlhaping homestead.
2-3. DANIELL, 1805. Pencil studies for (1) above. The beehive form of the dwelling below the verandah roof is clearly evident.
4. WANGEMANN, 1873. BaTswana smith. The roof structure stands independent of any drum walls.

course is less than that of the one immediately beneath it; a large slab covers the top and finishes the building." (102)

Recent archaeological research has attributed their construction to either the baTaung or the baKubung, both being baSotho groups who inhabited this region up to the time of Difaqane. Maggs has linked their building to that of both his type V and, on a few occasions, type Z settlements, thus dating them to the early sixteenth century.(103) Corbelled stone structures were generally built to such a small scale that it is difficult to conceive of them as adults' dwellings. This, and the fact that such shelters were usually associated with the walling of cattle byres leads us to the conclusion that their function was to act as herdboys' huts. This supposition is supported by Walton, whose photographs of herdboys' huts in Lesotho show structures very similar in nature and intent to the corbelled stone beehives of the highveld.(104)

Finally, some mention should also be made of the building of granaries in this region. Despite the many references made in local archaeological literature to the presence of flat stones which could have supported a grain storage facility, little is known of their construction or form outside the accounts of early travellers. Early baTswana granaries were recorded in c 1801 by Daniell who gave an excellent pictorial rendition of both their building technology and final form (105), and by Campbell who, in 1812, told of the baNgwaketse building large "store-houses for containing provisions".(106) This, of course, refers only to those structures specially designed and built to serve the function of granaries and not to the existence, in some areas, of an old hut which had been relegated to this function and which would be outwardly indistinguishable from its surrounding dwellings.

The importance of granaries to a study of this nature should not be underestimated. Current field work has shown that such structures, despite their humbler and apparently more expendable nature, tend to reflect, on a smaller scale, the local form and building technology of their larger and more permanent residential s. counterparts. In many cases it was found that their construction, particularly in those areas where beehive dwellings were formerly built, reflected the building modes and forms of these (locally) archaic structures. If this could be accepted as a guideline, it could then also be argued that if granaries are indeed a scaled-down version of a dwelling unit, past or present, then, judging from Daniell's evidence, the baTswana have not built permanent beehive-type residential units in their immediate and traceable past.

Conclusions

The overall picture of the architecture of the southern African subcontinent before the Difaqane is clearly incomplete. Not only is there an obvious shortage of conclusive archaeological data for the region as a whole, but large areas of the Transvaal and Mocambique are unaccounted for in the writings of travellers of more recent times. Hopefully, as research in these parts progresses, the generalised picture which has been presented here will come into greater focus and more detail will be revealed.

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3. CAMPBELL, John
"Travels in South Africa ... Being a Narrative of a Second Journey". London : Francis Westley, 1822. Vol. 1, p.206, May 1820. BaHurutse war-party temporary shelters :

> "The Marootzees had erected very comfortable temporary dwellings, with roofs made from large branches of the mimosa. Their thick ends were stuck into the ground, and those on both sides bent until they met and formed a roof. The tops were tied together by the bark of trees, and the smaller branches were twisted into each other. They were well-formed arches, closed at one end but open at the other, and thatched with reeds on the windward side. All this trouble was taken only for one night's accommodation. They had also formed an enclosure of large branches for securing their pack-oxen from wandering, and to protect them from the attacks of lions."

4. OMER-COOPER, J.D.
"The Zulu Aftermath - A Nineteenth Century Revolution in Bantu Africa". London : Longman, 1978.

5. DOWER, William
"The Early Annals of Kokstad and Griqualand East". Port Elizabeth : Jas Kemsley and Co., 1902.

6. ARBOUSSET, T. and DAUMAS, F.
"Narrative of an Exploratory Tour ... etc." Cape Town : A S Robertson, 1846. p.186. They tell how, in 1827 or 1828, baPedi captives erected for Mzilikazi a palisade about his wives' quarters :

> "This enclosure, made almost entirely of mimosa stakes, has been described to us as upwards of half a mile in circumference, about six feet thick, and the same in height. The king of the Zulas used to take a singular delight in walking on the top of this terrace, whence he could command the whole town."

For later descriptions of Matabele towns see also :

BURROW, John
"Travels in the Wilds of Africa 1834-1836". Cape Town : Balkema, 1971.

7. Architectural historians would be well advised to adopt a cautious attitude towards many existing archaeological reconstructions of early southern African dwelling forms. Despite the fact that valuable work has been done in this field by researchers such as Maggs, Taylor, Mason and Huffman, in many other cases dwelling forms and building technologies are propounded on the flimsiest of empirical data, often the result of a single trench dug through a hut floor.

8. This was largely due to the fact that the grazing in the belt immediately alongside the sea-board is held by the indigenous inhabitants to be too "sour" for their cattle and consequently settlement further inland was generally preferred.

9. HOLUB, Emil
"Seven Years in South Africa". London : Sampson Low, Marston, Searle and Rivington, 1881.

10. BARROW, John
"An Account of Travels ... etc." London : T. Cadell Jun., and W. Davies, 1801 and 1804.

11. ANDERSON, Andrew A.
"Twentyfive Years in a Wagon". London : Chapman and Hall, 1888.

12. Anderson's lithocentric attitudes (Maggs 1976) held that the stone-built structures found on the southern African sub-continent, including Zimbabwe, must have been the product of some long-lost white civilization, for the indigenous residents were thought to be incapable of constructing in stone. This attitude, ludicrous as it may seem, was still being propounded by white Rhodesians up to the 1970s who, contrary to all empirical evidence, maintained that :

> "... the already ruined civilization, which foreigners noted in the sixteenth century, could not have been the product of the (maShona) then, or at an earlier period. They had not yet arrived at such a state of evolution of society which made it possible for them to be architects and organisers of such immense public works."

GAYRE, Lord of Gayre and Nigg.
"The Origins of the Zimbabwe Civilization". Rhodesia : Galaxie Press, 1972.

13. MAGGS, Tim M. O'C.
"Iron Age Communities of the Southern Highveld". Pietermaritzburg : Council of the Natal Museum, 1976.

14. BARROW, John Op. Cit. and others.

15. Ibid.

16. SPARRMAN, Anders
"A Voyage Towards the Cape of Good Hope ... etc." Cape Town : Van Riebeeck Society, 1975.

17. BURCHELL, William J.
"Travels in the Interior of Southern Africa". London : Batchworth Press, 1953.

To compound the confusion, Holub (Journal of the Anthropological Institute of Great Britain and Ireland, Vol 10, 1881) ascribed a very similar structure to the Korah, a Khoikhoi group.

18. BURCHELL, William J Op. Cit. and others.

19. LICHTENSTEIN, Henry
"Travels in Southern Africa ... etc." London : Henry Colburn, 1812 and 1815.

20. CAMPBELL, John
"Travels in South Africa". London : Black and Perry, 1815.

21. BARROW, John Op. Cit.

22. DANIELL, Samuel
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23. SPARRMAN, Anders Op. Cit.

24. BURCHELL, William J. Op. Cit.

BACKHOUSE, James
"A Narrative of a Visit ... etc." London : Hamilton, Adams, 1844.

25. SPARRMAN, Anders Op. Cit.; CAMPBELL, John. Op. Cit. 1822, and others.

26. KOLBE, Peter
"Beschryving van de Kaap de Goede Hoop". Amsterdam : Balthazar Hakeman, 1727 and others subsequently. The idea that some Khoi huts may have been oblong originates from Sparrman but is confirmed by a later picture postcard entitled "Typical (Khoi) Hut in the (Black) Location, Kimberley". c 1900-1910 (author's private collection).

27. It may appear that the hut of the headman or chief was the exception to this rule. Campbell recorded in 1813 that Cornelius Kok's huts at Silverfountain, Namaqualand were "... much larger, so that a person can walk about in them." (Campbell, Op. Cit. 1815).

28. CAMPBELL, John Op. Cit. 1815.

29. KOLBE, Peter Op. Cit.

30. CAMPBELL, John Op. Cit. 1815.

31. BURCHELL, William J. Op. Cit.

32. THEAL, George McCall Op. Cit.

33. This point was argued more fully in an earlier chapter.

34. THEAL, George McCall Op. Cit.

35. RAVEN-HART, R.
"Before van Riebeeck". Cape Town : C. Struik, 1967.

36. THEAL, George McCall Op. Cit.

37. RAVEN-HART, R. Op. Cit.

38. SPARRMAN, Anders Op. Cit.

39. Ibid.

40. The mission stations being referred to are Genadendal (Burchell, 1811), Bethelsdorp and Sak River (Lichtenstein, 1805) and Pella, Hardcastle and Griquatown (Campbell, 1813). The attitudes adopted and roles played by missionaries in regard to indigenous housing will be discussed during the course of a later chapter.

41. LICHTENSTEIN, Henry Op. Cit.

42. This is not a statement which can be either proved or disproved with any kind of ease. Despite the many references made in travellers' accounts to both dwellings after 1805, none give a detailed description of the construction of the "hartebeesthuisje" whilst, on the other hand, the "kapsteilhuis" is relatively well documented (Walton, 1952). In view of their similarity in both form and function, for the purposes of this research programme and until further evidence to the contrary is discovered, the hartebeesthuis is being assumed to be a variant of the kapsteilhuis.

43. Hugh Fitchett, Pers. Comm.

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"Homesteads and Villages of South Africa". Pretoria : van Schaik, 1952.

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"Msuluzi Confluence : a Seventy Century Early Iron Age Site on the Tugela River". Annals of the Natal Museum, Vol. 24 (1) pp. 111-145. Pietermaritzburg : November 1980.

47. DAVIES, Oliver
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48. THEAL, George McCall Op. Cit.

49. MAGGS, Tim M. O'C.
"Mgoduyanuka : Terminal Iron Age Settlement in the Natal Grasslands". Annals of the Natal Museum, Vol. 25 No 1 pp. 83-113. Pietermaritzburg, October 1982.

50. LE VAILLANT, Francis
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52. BARROW, John Op. Cit.

53. CAMPBELL, John Op. Cit. 1815.

54. ALBERTI, Ludwig
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55. LICHTENSTEIN, Henry Op. Cit.

56. STANDARD ENCYCLOPAEDIA OF SOUTHERN AFRICA. Cape Town : NASOU Ltd., 1970.

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60. Ibid.

61. Ibid.

62. Ibid.

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64. MAGGS, Tim M. O'C. Op. Cit. 1976.
Beehive architecture, through its very nature, is difficult to reconstruct on an archaeological basis. Maggs highlighted this problem when, in discussing the architecture of his OUZ site, he stated that :

> "They were probably hemispherical rather than cone-on-cylinder in shape, as there is no evidence of thick daga walls or wooden roof timbers, but this is not certain."

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78. BACKHOUSE, James Op. Cit.

79. ARBOUSSET, T. and DAUMAS, F. Op. Cit.

80. VAN WARMELO, N.J. Op. Cit.

81. Mason has done some research in and about Namashaxelo, the legendary "Mapogstad", prior to 1962 (Mason "Prehistory of the Transvaal" 1962). More recently groups of archaeologists based at Pretoria University have been excavating in the same region. Neither lot is known to have published anything of major import on the subject to date.

82. VAN WARMELO, N.J. Op. Cit.

83. BARROW, John Op. Cit.

84. LICHTENSTEIN, Henry Op. Cit.

85. BURCHELL, William J. Op. Cit.

86. CAMPBELL, John Op. Cit. 1815 and Op. Cit. 1820 and 1822.

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CHAPTER 8 : HISTORY OF THE SOUTHERN AFRICAN RURAL DWELLING : THE YEARS OF THE DIFAQANE

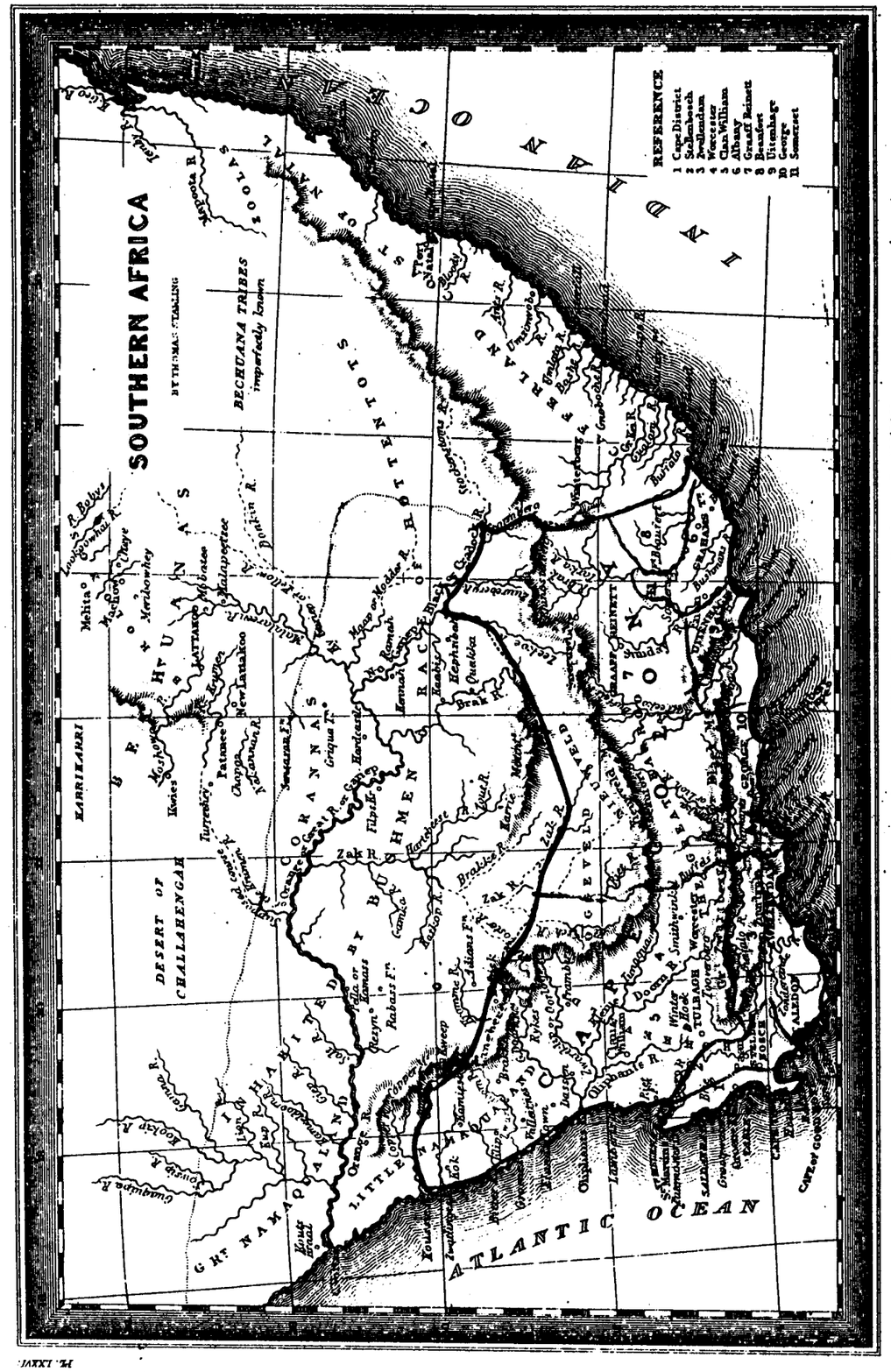
"That which struck us most particularly on arriving was the solitary and desolate aspect of the country. Vainly did our eyes wander in search of the hamlets, the groups of labourers, so naturally associated in the mind with the idea of a fertile and variegated soil. Human bones, whitening in the sun and rain, appeared on all sides; and more than once we were obliged to turn out of our way in order that the wheels of our wagon might not pass over these sad remains. When we asked our guides where the proprietors of this country lived, they pointed to a few miserable huts at the top of some of the steepest mountains."

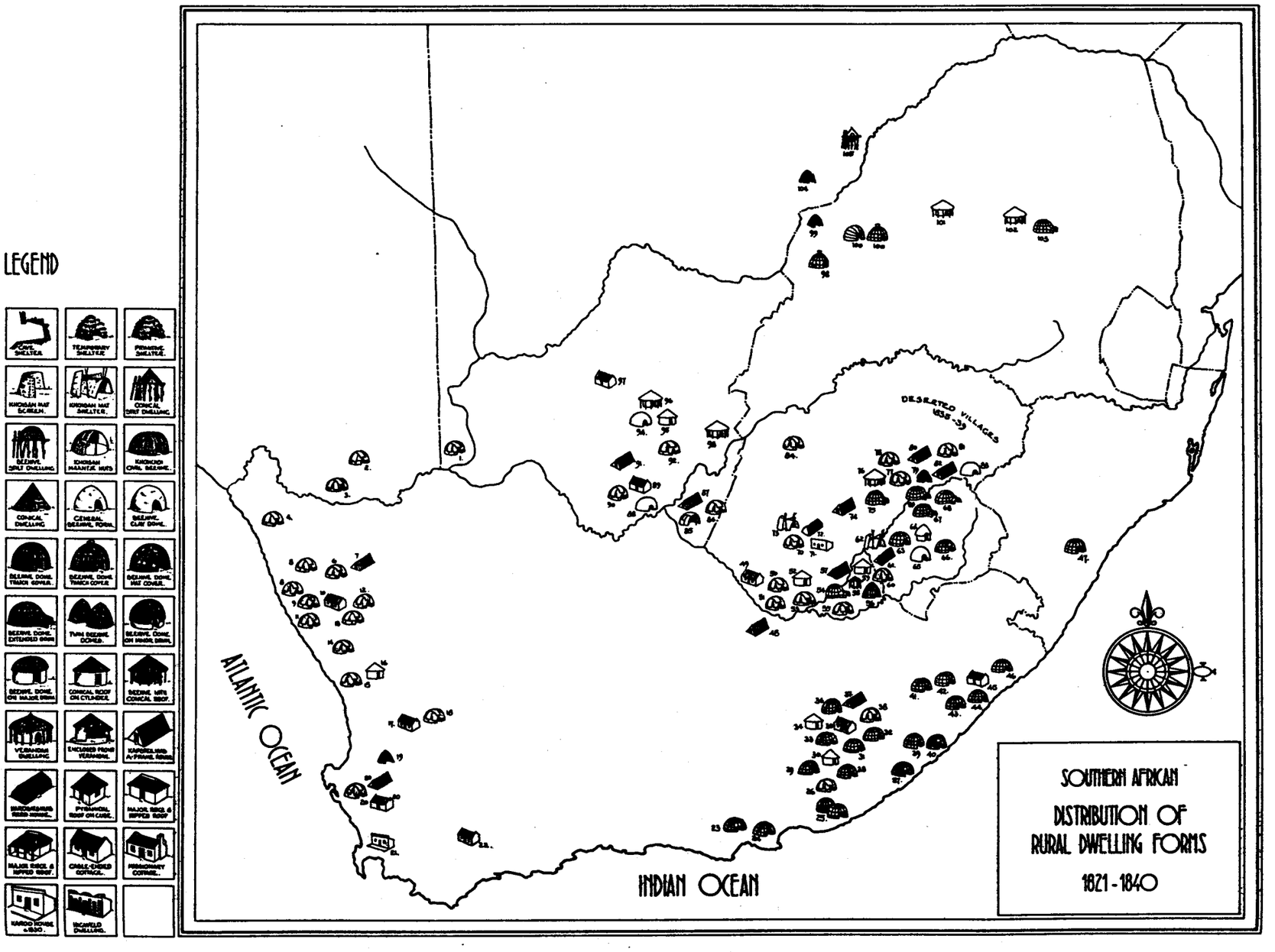
CASALIS, Eugene. "The Basutos". London : James Nisbet and Co., 1861.

The process of historical reconstruction which has taken place thus far has relied upon three major sources for its information : the research of modern archaeologists, the tales of shipwreck survivors and the accounts of early visitors to these shores. However, as it moves closer to modern times, the nature of this data begins to change. Archaeology, for example, is understandably more concerned with the piecing together of stone and early iron age cultures than with events of recent chronology. Its input therefore becomes of correspondingly less import. Similarly, by the 1820s, most of the southern African eastern littoral had been reached by white travellers. Thus, although shipwrecks were to remain a commonplace occurrence, their survivors generally had little of value to add to what was already known through other and more reliable sources. This means that from this period henceforth, this project must rely increasingly upon the data provided by the eyewitness accounts of visitors to the region.

Fortunately there was no shortage of these during the two decades which encompass the events of the Difaqane. Not all of them shared the same interests in the region however, a factor which, in many cases, was to colour the accounts they produced for local and European literary consumption. Thus they may be said to fall into three distinct groupings : explorers, missionaries and settlers. The first was a small but distinguished group, often being men of letters and of means who came in the quest of knowledge and driven by a curiosity for new discoveries. Although their work of exploration overlapped and eventually merged with that of the missionaries, unlike them they came, saw, wrote, sketched and then returned to Europe. Missionary workers however came with the intent of establishing a permanent proselytising presence in the region and what began as a small trickle at the turn of the last century was to become a veritable flood by the 1840s. The era of Difaqane therefore coincided with the period of preparation which made the subsequent evangelical infiltration of the rural areas possible. This occurred most specifically in the eastern Cape and southern Transkei, Lesotho and the central highveld as well as the northern Cape and southern Botswana. Both these groups, explorers and missionaries alike, were generally well educated and highly eloquent, a fact testified to by the plethora of travel accounts and holy tomes which was subsequently to issue from their pens. It is largely to them that we owe our present knowledge of the architecture of the region at this time.

The third group was part of a process of white alienation of black rural land which had been carried on since the establishment of a Dutch victualling station at Table Bay a century and a half previously. During this period it took the form of two distinct stages of migration; one, originating from Britain, moved into the eastern Cape and the second, consisting largely of disaffected Dutch





DISTRIBUTION OF SOUTHERN AFRICAN RURAL DWELLING FORMS : 1821 - 1840

1. BACKHOUSE, 1839. Afrikaner's Kraal M.S. Namaqua Khoikhoi.
2. BACKHOUSE, 1839. Nisbett Bad M.S. Namaqua Khoikhoi.
3. ALEXANDER, 1839. Aris. Namaqua Khoikhoi.
4. BACKHOUSE, 1839. Dutch/Khoi family.
5. BACKHOUSE, 1839. Komaggas M.S. Khoikhoi.
6. BACKHOUSE, 1839. Springfontein M.S. Khoikhoi.
7. BACKHOUSE, 1839. Springfontein M.S. White settlers.
8. BACKHOUSE, 1839. White missionary travelling with his Khoi congregation.
9. BACKHOUSE, 1839. Kok Fountain M.S. Khoikhoi and Missionaries.
10. BACKHOUSE, 1839. Kok Fountain M.S. Missionaries.
11. BACKHOUSE, 1839. Kok Fountain M.S. White/Khoi family.
12. BACKHOUSE, 1839. Lilyfontein M.S. Khoikhoi.
13. BACKHOUSE, 1839. White settlers awaiting to build permanent structure.
14. BACKHOUSE, 1849. Khoikhoi. Polygamous homestead.
15. BACKHOUSE, 1839. Ebenezer M.S. Khoikhoi.
16. BACKHOUSE, 1839. Ebenezer M.S. Possibly Khoikhoi.
17. BACKHOUSE, 1839. Wupperthal M.S. Mission cottage.
18. BACKHOUSE, 1839. Wupperthal M.S. Khoikhoi.
19. BACKHOUSE, 1839. BaTswana temporary shelter at roadside.
20. BACKHOUSE, 1839. Groenekloof (Mamre) Khoikhoi.
21. VARIOUS, 1820's. Cape Town.
22. CASALIS, 1836. Zuurbraak M.S. Khoikhoi.
23. BACKHOUSE, 1839. Hankey M.S. AmaMfengu.
24. BACKHOUSE, 1839. Port Elizabeth. AmaXhosa and amaMfengu.
25. BACKHOUSE, 1839. Theopolis M.S. AmaMfengu and baSotho.
26. BACKHOUSE, 1839. Philippi M.S. Khoikhoi beehives and "hovels".
27. BACKHOUSE, 1839. Berlin M.S. AmaXhosa.
28. BACKHOUSE, 1839. Igqibigha M.S. AmaXhosa. Mission chapel temporarily housed in a large beehive structure.
29. BACKHOUSE, 1839. Grahamstown amaMfengu village.
30. BACKHOUSE, 1839. Blinkwater M.S. Possible cone on cylinder dwelling.
31. BACKHOUSE, 1839. Pirie M.S. AmaXhosa.
32. BACKHOUSE, 1839. Burnshill M.S. AmaXhosa.
33. BACKHOUSE, 1839. Kat River Settlement. AmaMfengu.
34. BUTLER, 1838. Kat River Settlement. Khoikhoi.
35. BUTLER, 1838. BACKHOUSE, 1839. Kat River Settlement. Khoikhoi.
36. BACKHOUSE, 1839. Shiloh M.S. AmaMfengu.
37. BACKHOUSE, 1839. Shiloh M.S. Khoikhoi hardbieshuis plastered with clay.
38. BACKHOUSE, 1839. Shiloh M.S. Khoikhoi.
39. BACKHOUSE, 1839. Itemba M.S. Temporary dwelling for a white missionary.
40. BACKHOUSE, 1839. Butterworth M.S. AmaXhosa.
41. BACKHOUSE, 1839. Clarkebury M.S. AbaThembu.
42. BACKHOUSE, 1839. Clarkebury-Morley road. Abandoned huts.
43. BACKHOUSE, 1839. Morley M.S. Missionary school.
44. BACKHOUSE, 1839. Morley M.S. AbaThembu.
45. BACKHOUSE, 1839. Morley M.S. AbaThembu.
46. BACKHOUSE, 1839. Buntingvale M.S. Indigenous.
47. CHAMPION, 1835-39. AmaZulu.
48. SMITH, 1834. Colesberg. Dutch farmer's nachtmaal residence.
49. SMITH, 1835. BACKHOUSE, 1839. Philippolis M.S. Griqua Khoikhoi.
50. BACKHOUSE, 1839. Philippolis M.S. Griqua Khoikhoi.
51. BACKHOUSE, 1839. Near Philippolis. Khoikhoi.
52. SMITH, 1834. Bethulie M.S. BaTswana.
53. BACKHOUSE, 1839. Bethulie M.S. Khoikhoi.
54. BACKHOUSE, 1839. Bethulia M.S. BaSotho.
55. BACKHOUSE, 1839. Near Bethulia M.S. BaSotho in Khoi mat huts.
56. CASALIS, 1835. Bethulia M.S. BaSotho.
57. BACKHOUSE, 1835. White/baSotho family.
58. BACKHOUSE, 1839. Beersheba M.S. Granaries, possibly baSotho.
59. BACKHOUSE, 1839. Beersheba M.S. Possibly families of mixed descent.
60. BACKHOUSE, 1839. Beersheba M.S. Khoikhoi.
61. BACKHOUSE, 1839. Beersheba M.S. Khoikhoi.
62. ARBOUSSET AND DAUMAS, 1836. Thaba Patsoa. San.
63. CASALIS, 1836. Makossane.
64. CASALIS, 1836. Makassane.
65. BACKHOUSE, 1839. Morija M.S.
66. BACKHOUSE, 1839. Morija M.S.
67. BACKHOUSE, 1839. Thaba Bosigo M.S.
68. BURROW, 1834. Thaba Bosigo M.S.
69. BACKHOUSE, 1839. Makwatling.
70. BACKHOUSE, 1839. Bethany M.S. Korah Khoikhoi.
71. BACKHOUSE, 1839. Bethany M.S. Chapel and mission house.
72. BACKHOUSE, 1839. Bethany M.S. Original mission dwellings.
73. BACKHOUSE, 1839. Near Bethany M.S. San settlement.
74. BACKHOUSE, 1839. Griqua Khoikhoi.
75. SMITH, 1834. BaRolong.
76. CASALIS, 1835. BaRolong. Verandah dwellings with centre post.
77. BACKHOUSE, 1839. Near Makwatling. Khoikhoi village.
78. BACKHOUSE, 1839. Mirametsu M.S. Khoikhoi.
79. BACKHOUSE, 1839. Near Makwatling. San village. Deserted villages nearby.
80. BACKHOUSE, 1839. Lishuani M.S. Chapel.
81. BACKHOUSE, 1839. Lishuani M.S. Griqua Khoikhoi.
82. BACKHOUSE, 1839. Plaatberg M.S. Possibly Khoikhoi.
83. BACKHOUSE, 1839. Emparani M.S.
84. SMITH, 1834. Modder river. Korah Khoikhoi.
85. BACKHOUSE, 1839. San settlement.
86. BACKHOUSE, 1839. Griqua Khoikhoi.
87. BACKHOUSE, 1839. Griqua Khoikhoi.
88. BURROW, 1835. KiGariep River. BaTswana.
89. SMITH, 1834. BACKHOUSE, 1839. Griquatown. Few mat beehives left by 1839. Khoikhoi.
90. BACKHOUSE, 1839. Griquatown. Khoikhoi.
91. UNKNOWN, 1830's. Khoikhoi.
92. BACKHOUSE, 1839. Daniel's Kuil. Khoikhoi.
93. SMITH, 1835. Mothibi's village. BaTlaping.
94. BURROW, 1835. Motito. BaTswana beehive huts.
95. BURROW, 1835. Dithakong. BaTswana.
96. SMITH, 1835. BACKHOUSE, 1839. Motito. BaTswana.
97. SMITH, 1835. Near Kuruman. Griqua Khoikhoi.
98. BURROW, 1835. Matabele.
99. SMITH, 1835. BaKwena refugees.
100. SMITH, 1835. Matabele. Two types of thatching but structure beneath is same as that used by the amaZulu.
101. SMITH, 1835. BaPedi.
102. ARBOUSSET AND DAUMAS, 1836. BaPedi.
103. ARBOUSSET AND DAUMAS, 1836. BaPedi, probably hearsay.
104. BURROW, 1835. San.
105. BURROW, 1835. BaHurutse stilt dwellings.

farmers from the Cape, migrated northwards into the highveld from about 1836 onwards. The former were settled on their lands by a colonial government attempting to bring stability to a sensitive region. Many of them were literate and some made small references to the architecture of the eastern Cape of their time, complementing what was already being written by missionaries.

The itinerant Dutch or "trekboers", as they became known, were on the other hand motivated by a quest for greater farming space and cheap indigenous labour. They were men of the land who, apart from their leadership, did not include many educated people among their numbers. Thus, even though some of their parties are known to have penetrated far into the northern Transvaal as early as 1836 (1), very few accounts of the indigenous architecture they encountered were ever committed to paper.

The descriptions which have come down to us through these early journals and various publications essentially differ little from what we already know of southern Africa. Many of the patterns which have been outlined in the foregoing chapter are now confirmed and the overall picture is brought into greater focus by the inclusion of data from Namaqualand, Lesotho and the Transkei which had previously been untravelled. The first reports of an indigenous architectural tradition in the Transvaal are now also being made. For the purposes of continuity the regional divisions created during the course of the previous chapter are maintained in this one with the exception of an area of mountain technology which now emerges in and about Lesotho. The first signs of an infiltration by "foreign" dwelling forms and building technologies have now become obvious and it becomes possible to make prognostications about their future spread.

The Migrant Pastoralist Beehive Region

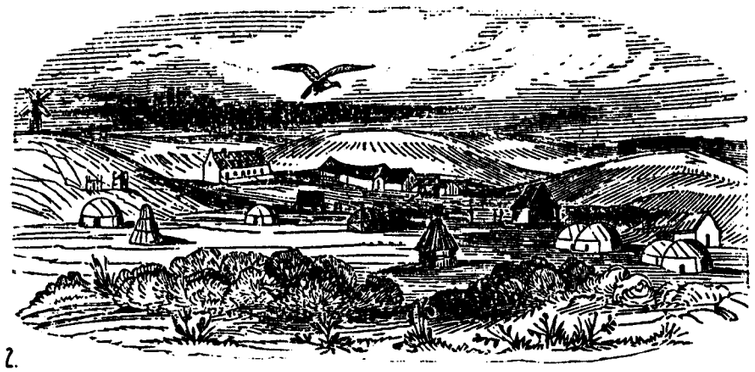
By the time of the Difaqane, the name of this region had become something of a dated misnomer. Not only had the process of land alienation proceeded so far as to drive the last of the migrant pastoralists to its more arid and uninhabitable fringes, but many of the Khoi who remained within the boundaries of the Cape no longer built beehive huts as of old. In many such cases they had followed the examples of local farmers and of missionaries and had begun building **kapsteilhuise**, hardbieshuise and square plan cottages as part of an established economic cycle.(2) Such examples were recorded at Groene Kloof (Mamre) (3), Wupperthal (4), Zuurbraak (5), Shiloh (6), the Kat River settlement area (7), Bethany (OFS) (8) and Griquatown (9) to name but a few. It is also worthwhile noting that all of the above places were also mission stations. The correlation in this case between dwelling form and missionary activity is therefore unmistakeable.

The mat-covered beehive hut was, by now, firmly established in the public mind as a Khoikhoi architectural stereotype.(10) This is faintly ironic for although this type of structure was still commonly built in some areas, these were mostly on the fringes of the Cape Colony, and in spite of the fact that Backhouse stated in 1840 that some could still be found as close to Cape Town as Mamre (11), most of the other reports concerned settlements further afield. These included Philippi and Shiloh in the eastern Cape (12), Lishuani, Mirametsu (13) and Modder River (14) in the northern OFS and Griquatown, Daniels Kuil and Afrikaners Kraal (15) in the northern Cape. The only area where the mat beehive appears to have survived to any great extent was in Namaqualand and southern Namibia.(16)

One deviation from the region's dwelling-related norms was recorded by Backhouse in 1839, near Bethulia (Bethulie) mission station, on the Zwarte river in the southern OFS, where :

THE MIGRANT PASTORALIST BEEHIVE REGION : 1821 - 1840

1.



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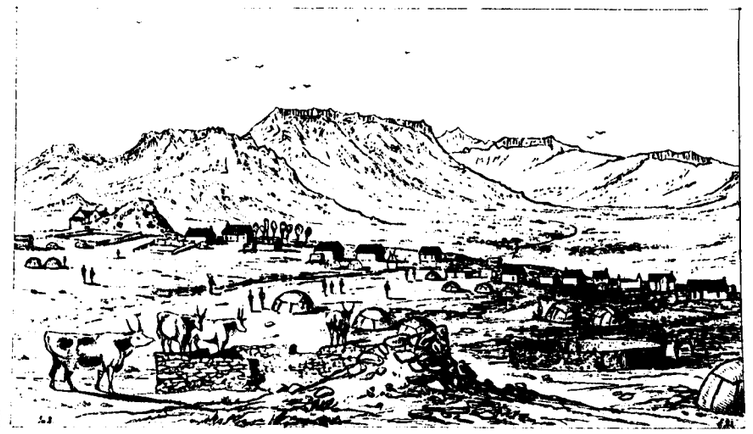
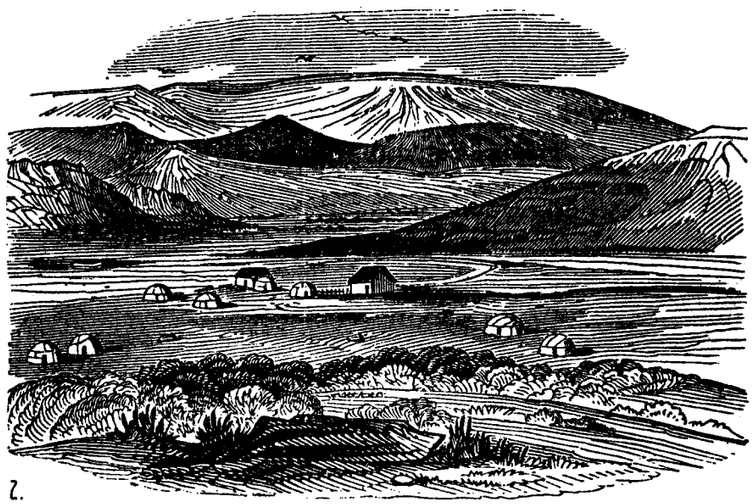


3.

1. BACKHOUSE, 1840. Nisbett Bath M.S.
2. BACKHOUSE, 1840. Ebenezer M.S.
3. BACKHOUSE, 1839. Phillipolis M.S.

THE MIGRANT PASTORALIST BEEHIVE REGION : 1821 - 1840

1.



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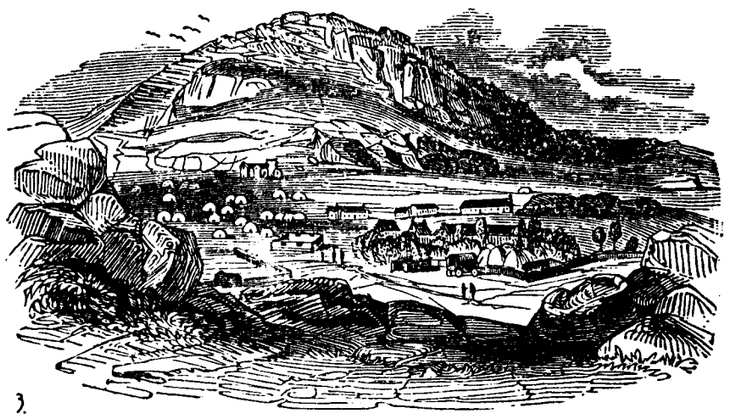


3.

1. BACKHOUSE, 1839. Mirametsu M.S.
2. BACKHOUSE, 1840. Kok Fountain M.S.
3. BACKHOUSE, 1840. Lily Fountain M.S.

> "... we noticed several little kraals of mat, or rush-huts, at a short distance from the road.: the latter, we understood, belong to some Bechuanas." (17)

This obviously poses a number of questions which Backhouse did not seek to answer - always assuming, of course that the people concerned were indeed of Sotho/Tswana stock. At face value it may be accepted that this is evidence of baSotho or seSotho-speakers who had built their dwellings in the style and technology of neighbouring, non-baSotho, groups. But the same author tells us that other baSotho families settled nearby had built huts which :

> "... were circular, and had upright sides plastered with clay, and thatched tops; they were surrounded by a fence of dry sticks. Some of the others were conical, and others were hemispherical, with a protruding neck. Both of the latter were plastered over with clay, ..." (18)

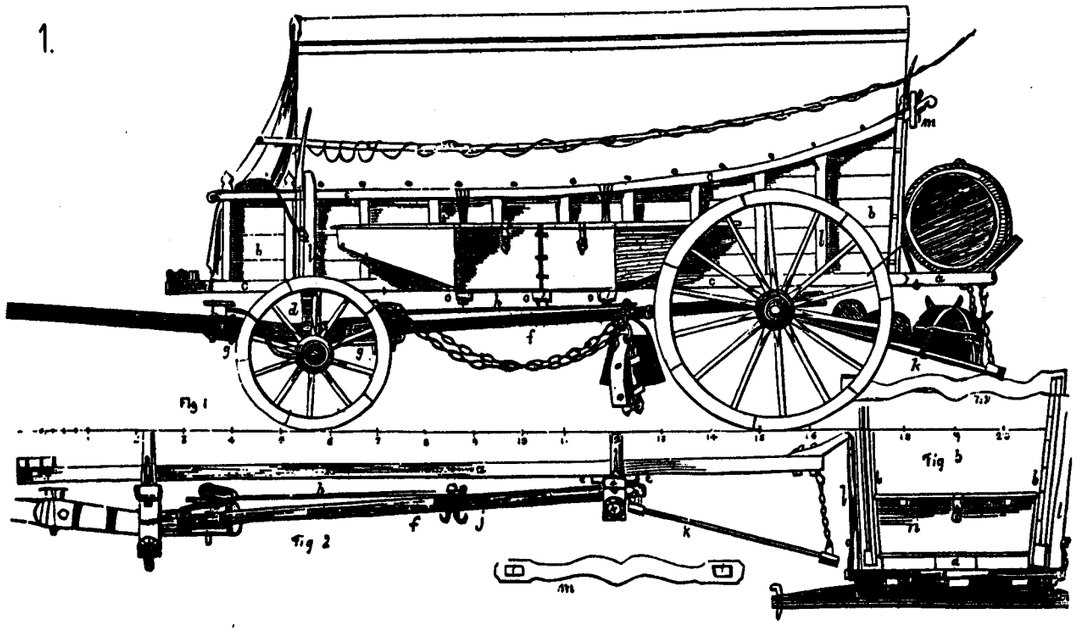
The southern OFS is an area where, according to our previous extrapolations, a degree of overlap could have occurred between the regions of mat beehive and grass beehive construction. It is therefore an area which could have supported both technologies and hence it is feasible that baSotho groups inhabiting it may have had the choice of building their dwellings in either style.

This is an important lesson. For one thing it warns against creating hard and fast cultural labels, certainly where a built environment is concerned. For another it argues against one of the tenets of culturally-orientated architecture (19) which holds that where a group has the technological choice between one dwelling form or another, it will tend to choose the one closest to its historical stereotype. In this particular example the opposite is perceived to have occurred. Backhouse's report per se does not prove anything; it is not supported either by further observations of his own or by those of other travellers into the region known of to date. It does however stress the point that, where vernacular architecture is concerned, a culturally predeterministic approach is valid only insofar as it applies to the general rule. The danger arises where the individual example is held out to be the norm.

Although little is known of the San and their movements during this time, matting shelters associated with this group were recorded near Bethanie in the central OFS (20) and at Thaba Patsoa in 1836 (21); half-mat beehives near the confluence of the Gariep and Ki Gariep in the northern Cape (22); and roughly thatched temporary shelters near Makwatling in the northern OFS.(23)

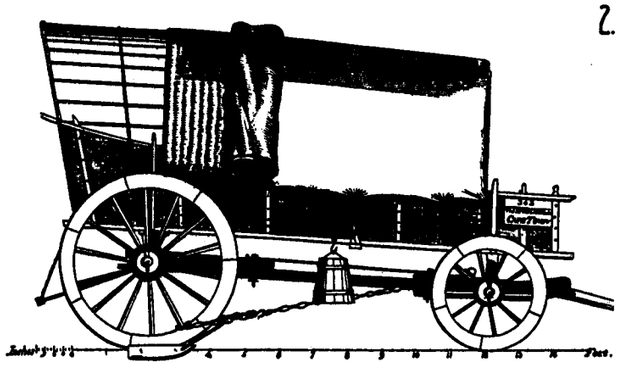
One final point which needs to be made about this region relates to its arid hinterland and Karoo areas. When Burchell made his outward journey from Cape Town in 1811, he chose to follow the more direct north-easterly route to the northern Cape. Despite having Khoi guides in his employ, his party nonetheless suffered from a severe lack of water on numerous occasions. Many of the springs he visited were often so silted over with sand as to be unrecognisable to someone unfamiliar with local conditions. On his return leg however, he chose to go southward and in the process opened up for white travellers the less arduous but longer path via Graaff-Reinet, Algoa Bay and the coastal road.(24) Subsequent travel through the region was to follow either this route or that opened up by Campbell in 1813 which was probably as long but skirted the Gariep before heading south through Namaqualand and the western Cape.(25) The reason why the more direct route northwards fell into disuse can probably be attributed in some part to the alienation of pastoral land from the KhoiSan and their subsequent movement to the border areas of the Colony. As they moved on, so the local knowledge of underground springs and waterholes went with them, a process which was obviously

1.



1. THOMAS BAINES' WAGON

2.



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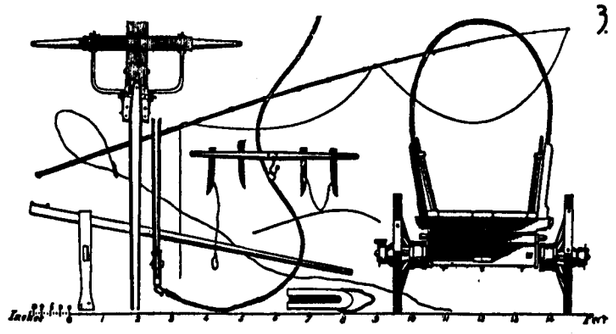

2-3. WILLIAM BURCHELL'S WAGON

1. BURCHELL, 1811. Hut of the Khoi chief at Klaarwater.
2. CASALIS, 1861. Mode of travel in South Africa.
3. UNION OF SOUTH AFRICA. Definitive stamp issue 1927-1954.

1.

3.

2.

As the boundaries of white settlement in the Cape spread ever north and eastwards during the eighteenth and nineteenth centuries, the ox-drawn wagon emerged as the primary means of transport and travel in the Colony. It also became particularly identified with the migrant Dutch pastoralists, or "trekboers" as they were known, whose presence was supplanting that of the KhoiSan in the region. Thus, although the Cape wagon was not necessarily designed or intended to act as a movable dwelling form, the economic activities of its users made it so. Hence, in some ways, it may be regarded as having been the white equivalent of the indigenous dismountable matting hut, the architecture most readily identified with the migrant pastoralist region. When the Dutch migrated into the southern African interior from 1836 onwards, the Cape or ox-wagon, as it was known by then, became identified with the political ideals of that movement and those of the Boer republics which were subsequently established. The symbol of the ox-wagon has appeared repeatedly since then on southern African heraldry, coinage and stamps and more recently has become associated with reactionary and right wing white political movements.

The Cape wagon had a nomenclature peculiar to itself. In 1876 Thomas Baines drew his wagon in detail and described its construction as follows :

> "...the buik plank, or floor (a) will sometimes be 17 ft. or more in length. The sides are generally of yellowood (b) secured to a substantial ladder-like frame, the longer pieces of which (c) are called 'leer boomen', or ladder trees. The sides and bottom are not fastened together, nor are they fastened to the understell or carriage, but the bottom plank is simply laid upon the schammels (d) and secured from moving by cleats (e) which grip the after one. The fore and hinder axels are connected by a stout beam, called the 'lang wagen' (f), working freely on a pivot passing through the aftermast jaws of the fore tong (g), and strengthened by a bar of iron (h) called the iron 'lang wagen'".

He also named other parts including the ring-bolt (i), the after tongs (j), the "trap" (k), the stancheons (l), the bar (m) and the chest (n) as well as the drag chains, "reim schoene", tar bucket, "dissel-boom" and "kapel" or bed.

well advanced by Burchell's time. The large gap in our knowledge of the architecture of these areas, therefore, should not be taken to mean that they were uninhabited but rather that visitors there were few and far between.

The Eastern Littoral Beehive Region

The extent of this region during the period of Difaqane is particularly difficult to assess. Not only were there a number of indigent Nguni, and hence presumably beehive building groups moving about on the highveld during this time, but there is every indication that a number of Sotho/Tswana tribes, displaced by these events, had also turned to beehive construction. Permanent boundaries essentially differed little from those established before 1800 but a number of changes internal to the region appear to have been wrought.

In the south increasing white settlement and an ensuing series of border clashes had the effect of forcing the amaXhosa off what were essentially their winter grazing lands and pushing them back over the Great Fish River.

Scattered beehive construction appears to have continued in this area, particularly in the vicinity of mission stations and newly established centres of urban growth. (26) In the central region, the southern incursions of amaZulu regiments had had the effect of creating a depopulated no-mans land. This, however, was to be a temporary condition as an influx of amaQwabe from the north and, subsequently, of Griquas from the east soon repopulated these districts.(27) Perhaps the greatest changes to the delimitations of this region occurred in its west, most particularly in the foothills of the Kahlamba and Maluti mountains of Lesotho. There groups of both Sotho/Tswana and Nguni refugees from the Difaqane had gathered under the protection and leadership of Moshweshwe. The diversity of their backgrounds was underlined by the large variety of shelters they are known to have built during their first generation as settlers in this area. The dwellings were predominantly of the grass beehive type but numbers of mat beehives, cone on cylinders, circular verandahs, kapsteilhuise and hardbieshuise are also known to have been built. It would be relevant to note that, within a generation or two of the Difaqane, this area had settled down, architecturally, and that most of its population were erecting either beehive or cone on cylinder type residences.

It might appear therefore that the southeastern OFS-western Lesotho area should be considered to be a region of technological overlap. Unlike the northern and eastern Cape however, where the carryover was a fairly simple one between two architectural technologies, during this period this location probably encompassed three and is consequently all the more complex to explain. The composite picture presented by Backhouse (28), Arbousset (29), Daumas (30), Burrow (31) and Smith (32) indicates that it was not uncommon to find settlements of mat beehive, grass beehive and cone on cylinder structures within close proximity of each other or even within the same village. San shelters, both mat screens and temporary grass huts, were also recorded here as far north as Makwatling.(33)

Although it would be correct to state that the beehive was the predominant dwelling form of this area during this period of time, some difficulty may be experienced in grouping it into the larger beehive-building region of the eastern littoral. The reason for this lies not so much in its constructional technology, which does not appear to be too different from those in use along the coastal belt, but in the form that many of the actual beehive structures are known to have taken. Backhouse described them in 1839 during a visit to Moshweshwe's villages near Thaba Bosiu where :

> "... we visited several of their (baSotho) huts, which are universally of grass and in form something like sections of sparrow pots. The entrances are only about a foot and a half high and wide and arched with clay. The floors are of mud, and are smooth. Several stout sticks assist in supporting the huts inside; ..." (34)

Casalis, writing three years earlier, wrote that :

> "The Basutos, who inhabit a mountainous country, endeavour to shut out the cold and wet. Their huts are in the form of a large oval oven, and are entered by creeping along a very narrow passage, which serves to prevent the wind from reaching the interior. The walls are perfectly well plastered, and often decorated with ingenious designs." (35)

It is true that this type of beehive was recorded by other chroniclers, before this time (36) and subsequent to it (37), in regions other than this one.(38) Its form therefore was not unknown outside this area but can probably be considered to be part of the southern African subcontinent's general architectural language. However it should also be considered that the building of beehives with extended doorways was and has been concentrated in this area even up to recent times; that subsequent cone on cylinder construction here also evolved an extended doorway as part of its form; and that current research has shown this area to be a separate architectural region in its own right possessed of a distinct and identifiable "mountain" technology.(39)

Bearing in mind Casalis' comment about the extended doorway and its function in draught exclusion, two possible conclusions offer themselves :

a. that a region of mountain technology has always existed in this area as part of southern Africa's vernacular architectural make-up and that evidence of its existence only came to light during this period as a result of increased penetration on the part of white chroniclers, or

b. that this period saw the earliest manifestations of what was to become identified in future times as a mountain building tradition in local indigenous architecture.

Again these are not questions which can easily be answered by an architectural historian but which may be resolved at some future date through archaeological research in these areas.

The Central Hinterland Region

The bounds of this region have remained essentially unchanged from those of earlier times, with the possible exception of its south-eastern reaches which have now been extended into the southern OFS and western Lesotho, probably as a result of the migrations of the Difaqane. Smith wrote of baTswana cone on cylinder dwellings at Bethulie in 1834 (40), a report which was confirmed by Backhouse five years later (41); and Casalis recorded structures of an apparently similar nature in 1836 at Makossane.(42)

It is probable that during this period the region's historic style of dwelling construction was maintained unaltered, reports of such structures being made by Burrow at Dithakong (43), Backhouse at Motito in 1839 (44) and Smith at Motito and Mothibi in 1835 (45), all of the above being located in the northern Cape. The first observations concerning the baPedi of the central-northern Transvaal were also made at this time by Smith in 1835 (46) and Arbousset and Daumas in c 1836 (47). Both recorded the use of circular plan verandah dwellings, thus confirming the archaeological evidence of previous eras. In the latter's case,

THE CENTRAL HINTERLAND : THE SOTHO/TSWANA BEEHIVE TRADITION, 1801 - 1840

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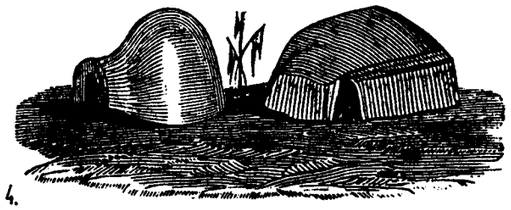

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5.

1. BURROW, 1835. BaTswana beehive structure.
2. CASALIS, c 1833. BaSotho hut, "like an inverted sparrow pot".
3. MAEDER, c 1839. Beehive hut in Moshweshwe's homestead.
4. BACKHOUSE, 1839. BaSotho beehive hut (left), probably drawn from Bell, four years earlier.
5. CASALIS, c 1833. BaSotho village.
6. ARBOUSSET & DAUMAS, c 1836. Makosane village, Lesotho.

6.

THE CENTRAL HINTERLAND REGION : 1821 - 1840

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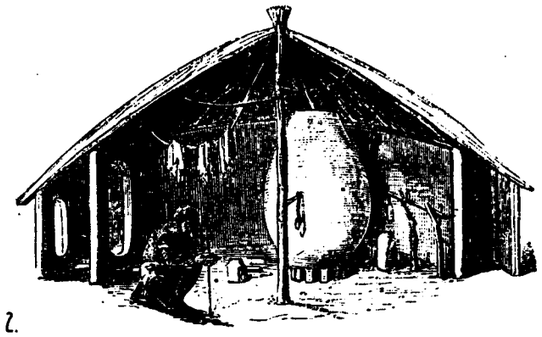

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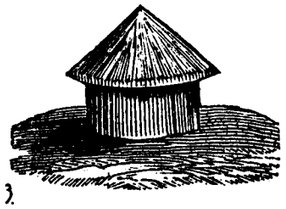

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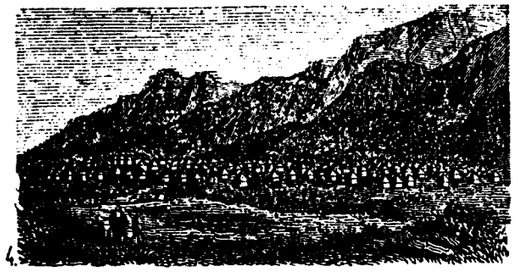

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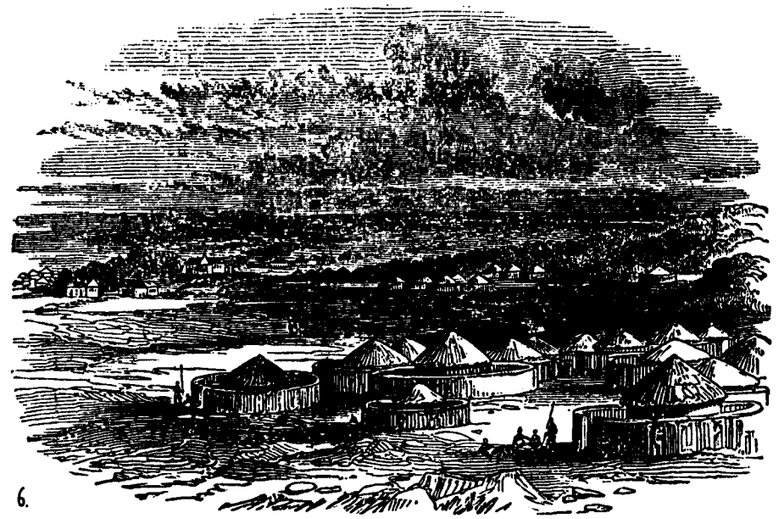

6.

1. BURROW, 1835. BaTswana homestead, Dithakong.
2. CASALIS, c 1833. Section through a baRolong baTswana dwelling.
3. BACKHOUSE, 1839. BaRolong dwelling.
4. WANGEMANN, 1871. BaTswana village, possibly Thaba 'Nchu, probably copied from Backhouse, 1839.
5. CASALIS, c 1833. BaRolong village.
6. BACKHOUSE, 1839. Motito M.S., in the northern Cape.

however, they are not known to have visited this area and it is probable therefore that they were only relaying the accounts of other travellers.

Although the cone on cylinder form is thought to have been the dwelling norm of the region during the Difaqane, a number of exceptions to it are known to have existed. Perhaps the most notable of these was that of Mzilikazi's Matabele whose migration into the Transvaal was discussed during the course of an earlier chapter. When they were visited by Smith in 1835 (48) in the Marico valley, thirteen years after their migration from Zululand, they had already undergone three separate relocations - with a fourth one still to come two years hence. Despite these upheavals, the dwelling forms and building methods they adopted throughout this period and well into the 1890s differed little from those in contemporary use in Zululand.(49)

This is significant, not only because they had ceased to be of a predominantly Nguni composition by that time, having assimilated large numbers of highveld baSotho and baTswana into their polity (50), but also because their wanderings had taken them through a number of different vegetation and climatic regions. Yet, despite the cultural and material considerations which must have been brought to bear upon their building traditions as a matter of course over nearly four generations, they steadfastly maintained their attachment to a northern Nguni dwelling form without appearing to have made any significant technological or stylistic adaptations to it. This would seem to run counter to both the regional as well as the cultural housing hypothesis put forward thus far in this document.

An ethnocentric, culturally orientated theory, for example, might attempt to explain that this is a group whose cultural attachment to their historical dwelling forms was so strong that they carried it with them through any number of environments, no matter how impractical this may appear to have been. This might well have been correct - if the Matabele had indeed been a culturally homogenous and predominantly Nguni group. But they were not. It may, of course, also be argued that the beehive dwelling form was not unknown to the baSotho and that some beehive-building baSotho groups are known to have existed.(51) Thus it would have been a simple matter for these newly-incorporated "Matabele" to have made a small cultural adjustment to the Nguni beehive. This however ignores the very real factors of environment and materials. It is proposed to discuss the apparent contradictions posed by the Matabele example at greater length during the course of a subsequent chapter.

The second area of beehive technology which is thought to have occurred in this region was probably found among the South amaNdebele of the south-central Transvaal, discussed during the course of the previous chapter. Although no first hand reports of this group during this period have been uncovered to date, the oral evidence collected by van Warmelo in 1930 (52) indicates that they were building this type of dwelling form up to the 1880s. It would be quite safe therefore to assume that such structures were also erected by them over the time of Difaqane, fifty years earlier.

Brief mention should also be made of the North amaNdebele, whose example has already been discussed. Loubser indicated in his work that although this group is thought to have erected beehive-type structures up to this time, it was during this period that they were also building cone on cylinder verandah dwellings.(53) It might appear therefore that the mid-nineteenth century represents a period of architectural transition for this area which, regretfully, cannot be discussed at greater length for want of more detailed archaeological or historical data.

THE ARCHITECTURE OF THE MATABELE c.1835

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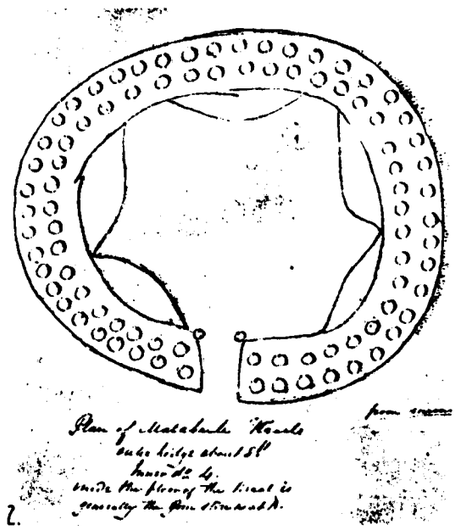

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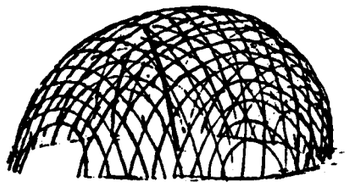

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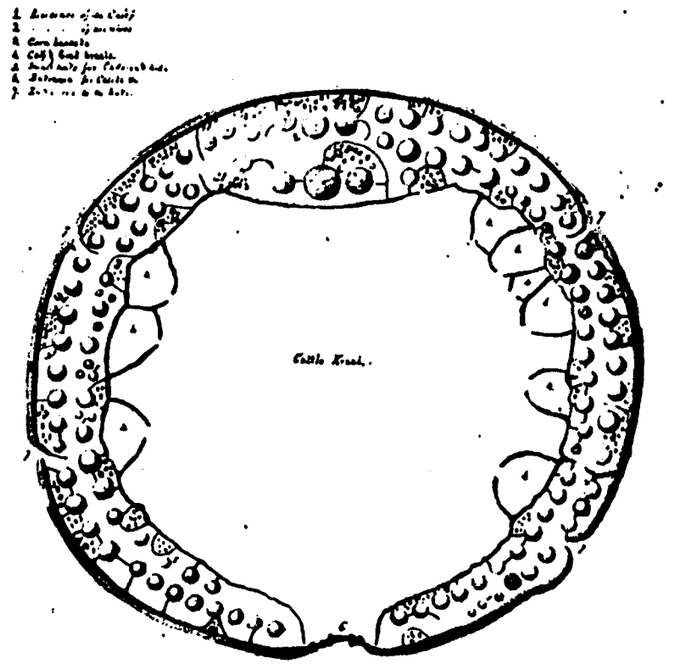

4.

1. BURROW, 1835. Matabele warriors.
2. BURROW, 1835. Plan of Matabele village.
3. BELL, 1835. Structural framework of Matabele beehive dwelling.
4. BELL, 1835. Plan of Royal town.

Another building tradition which appears to have existed in this region during this time was that of the baHurutse of the western Transvaal who raised their dwellings above ground level by means of a series of stilts. This practice was first reported by Campbell in 1820 (54) and confirmed subsequently in 1835 by both Burrow (55) and Smith (56) who located the baHurutse in the "Kashane" or Magaliesberg mountains. A structure having similar intent but of a somewhat different form was recorded by the traders Schoon and M'Luckie in 1829 near Kaditshwene in Botswana. They claimed to have found :

> "... a large tree containing seventeen conical huts. These are used as dormitories, being beyond the reach of the lions, which, ... have become very numerous in the neighbourhood and destructive to human life. The branches of these trees are supported by forked sticks or poles, and there are three tiers or platforms on which the huts are constructed. The lowest is nine feet from the ground, and holds ten huts, the second about eight feet high, has three huts, and the upper storey, if it may be so called, contains four. The ascent to these is made by notches cut in the supporting poles, and the huts are built with twigs thatched with straw, and will contain two persons conveniently." (57)

The common sense of such structures is difficult to establish. Stilt architecture elsewhere in the world has usually been associated in the past with low-lying marshy lands, a condition which can hardly be said to have prevailed in the semi-arid regions inhabited by the baHurutse. All of the travellers quoted above were in agreement that such architecture was the direct result of lions hunting in these parts, terrorising the local population. However these predators do not seem to have presented undue terrors for the baHurutse's neighbours nor, for that matter, for the rest of southern Africa. Hence the existence of such a building tradition must be regarded as a curious enigma in the history of indigenous architecture.

Conclusions

Although the architectural make-up of the sub-continent during the Difaqane has managed to remain essentially unchanged from that of previous eras, many trends of future development are beginning to become apparent. The region of mat beehive construction has become sharply reduced in size and the technology is now being increasingly associated with indigent border farmers. Large tracts of land in the northern OFS (58) and central Transkei districts (59) are reported to have been devastated by events of the Difaqane and their populations have either fled or fear to show themselves to white travellers. The western OFS-eastern Lesotho region has become a veritable pot-pourri of architectural styles as a number of groups, refugees from the "scattering", seek the safety of Moshweshwe's newly formed mountain kingdom. The picture of the architectures of the eastern littoral and the central Transvaal is gaining in focus as more and more of the detail is beginning to be filled in. Finally the presence of missionaries and other white settlers is starting to be felt, initially in the Cape region but spreading into the southern OFS and other areas.

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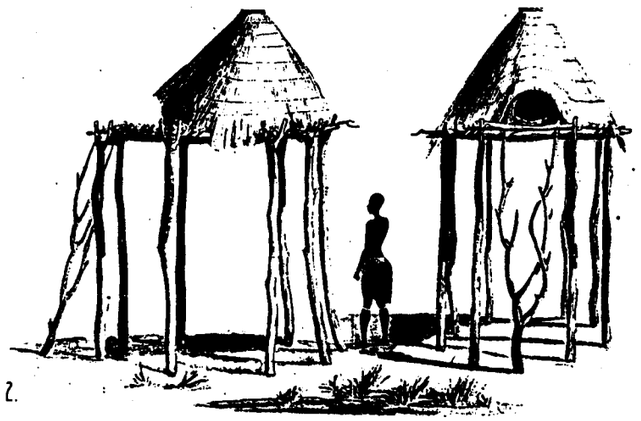
2. BACKHOUSE, James
"A Narrative of a Visit ... etc." London : Hamilton, Adams, 1844. This

3. Ibid.

4. Ibid.

THE CENTRAL HINTERLAND : THE STILT DWELLING TRADITION

1.



2.

3.

1. STEEDMAN, 1835. "The Inhabited Tree" allegedly located near Kaditshwene, Botswana.
2. SMITH, 1835. "Houses where lions abound".
3. BURROW, 1835. Stilt dwelling village in the Kashoon (Magaliesberg) Mountains.

5. CASALIS, Eugene
"The Basutos". Cape Town. London : James Nisbet and Co., 1861. Reprint Edition, Struik, 1965.

6. BACKHOUSE, James. Op. Cit.

7. Ibid.

8. Ibid.

9. Ibid.

10. Backhouse (1839), MacKenzie (1859), Holub (1876) and others.

11. BACKHOUSE, James. Op. Cit.

12. Ibid.

13. Ibid.

14. SMITH, Andrew
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16. Ibid and ALEXANDER, James Edward
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17. BACKHOUSE, James. Op. Cit.

18. Ibid.

19. MACKENZIE, John
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HOLUB, Emil
"Seven Years in South Africa". London : Sampson Low, Marston, Searle and Rivington, 1881.
WALTON, James
"African Village". Pretoria : van Schaik, 1956, and others.

20. BACKHOUSE, James. Op. Cit.

21. ARBOUSSET, T. and DAUMAS, F. Op. Cit.

22. BACKHOUSE, James. Op. Cit.

23. Ibid.

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32. SMITH, Andrew Op. Cit.

33. BACKHOUSE, James Op. Cit.

34. Ibid.

35. CASALIS, Eugene
"The Basutos". London : James Nisbet and Co., 1861.

36. In the previous chapter some time was devoted to the discussion of "twin beehive" huts, recorded by both Alberti and Lichtenstein in the eastern Cape. These structures could well be analysed as being no more than two beehives with extended doorways brought together into one unit.

37. Postcard, entitled "Native Wedding Dance", c 1900-1910, set in Zululand, possibly in the upper Tukela region (personal collection).

38. Arbousset and Daumas (Op. Cit.) attributed a similar beehive dwelling form to the baPedi whose huts they described as being :

> "... low and circular in shape; and in structure similar to those of the Basutos; their caverns are made of a kind of bamboo carpentry or of laths covered with dry grass. They resemble in form a baker's oven, but they have an oblong, and very low entrance, so that they cannot be entered but by crawling on the belly, and a man can scarcely stand upright when once he is in."

This report is probably the result of hearsay. Nonetheless the existence of this form among the baPedi was confirmed by Merensky (1875) whose graphic rendition shows a beehive cone raised on a small drum, with a small extended doorway. This however does not look anything like the "section of a sparrowpot" mentioned by Backhouse.

39. The characteristics and distribution of a modern day southern African mountain technology were discussed during the course of an earlier chapter.

40. SMITH, Andrew Op. Cit.

41. BACKHOUSE, James Op. Cit.

42. CASALIS, Eugene Op. Cit. 1861.

43. BURROW, John Op. Cit.

44. BACKHOUSE, James Op. Cit.

45. SMITH, Andrew Op. Cit.

46. Ibid.

47. ARBOUSSET, T. and DAUMAS, F. Op. Cit.

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51. As witnessed by those who fled to the Lesotho region, or by the North amaNdebele groups researched by Loubser (1981).

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59. BACKHOUSE, James Op. Cit.

CHAPTER 9 : HISTORY OF THE SOUTHERN AFRICAN RURAL DWELLING : THE COLONIAL PERIOD UP TO 1925

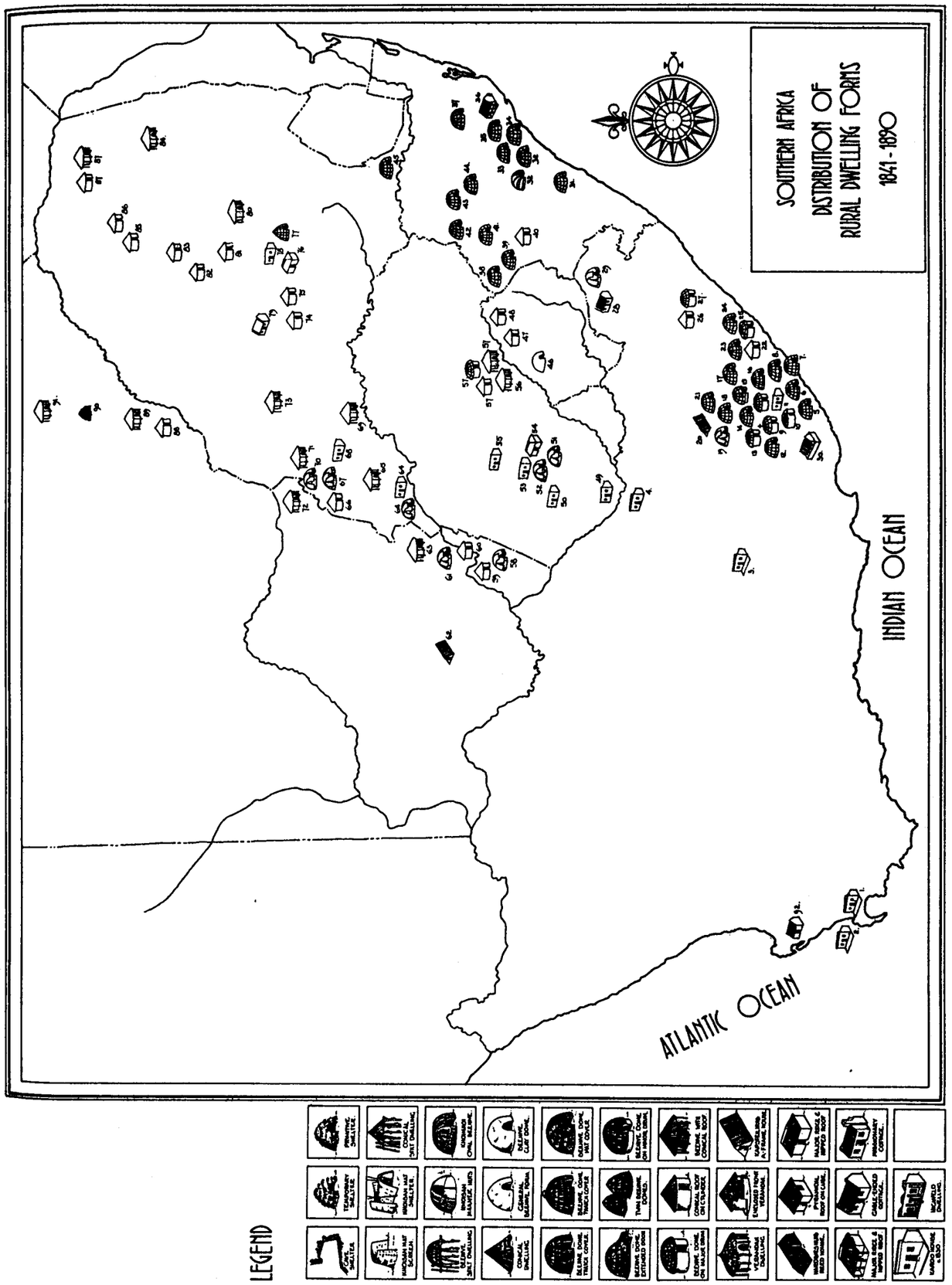
Despite the fact that this period covers some four generations, the general patterns of architecture which emerge during this time differ little from those of preceding eras. Following upon the years of Difaqane hardship, the southern African sub-continent was adjusting to its new population distributions. Although in a number of cases a preference for dwelling forms of an archaic nature was still evident, the various geographical regions were slowly settling down to their more pragmatic norms. The influx of white immigrants into the interior continued unabated and as the process of alienation of black-owned land progressed, so the settlement options open to the indigenous inhabitants decreased accordingly. Ultimately, by the end of this period, the implementation of a number of parliamentary acts was to draw the boundaries of future black residence. To all intents and purposes this placed a virtual brake upon the possibility of any large scale rural migrations and was to encourage a more sedentary attitude towards indigenous settlement and hence dwelling forms.

The nature of the information available also changes very little. Travellers such as Baines and Holub, missionaries such as Mackenzie, Wangemann and Merensky and missionary travellers such as Livingstone still provide the bulk of our data. Increasing reference is now also being made to Governmental reports and other official sources. Very few of the above however went into great detail regarding local building technologies and settlement hierarchies and thus, although we know much of the general picture, our knowledge of some of the social and architectural mechanics remain unclear. After 1900 some serious attempts were made at the description of local indigenous societies. Most however were largely concerned with social processes, and aspects relating to the built environment were either ignored or seen to be separate issues. This was not fully remedied until after this period when the first major anthropological studies began to be published.

The Migrant Pastoralist Beehive Region

By this time, to all intents and purposes, this region had all but disappeared. Scattered examples of mat huts or "maantje huise" as they were now called (1) were still being built, but these do not appear to have been as frequent as before. In the eastern Cape, Baines reported that some could be found at Seymour in 1848 (2) whilst Dower stated that Griqua immigrants into the Mount Currie area were using them there as late as 1869.(3) In the OFS the Khoi huts recorded at the Bethany mission station by Baines in 1850 (4) were still there when Wangemann visited the place in 1867.(5) Holub visited the northern Cape and the western Transvaal between 1873-77 and reported Korah settlements in these areas, mostly at Kimberley, Klipdrift and Christiana as well as a mixed baRolong/Korah village further north at Mamusa where dwellings in both the Khoi and baTswana style were being built.(6) In the general area of Namaqualand and southern Namibia the mat hut is known to have been built as recently as the 1930s (7) and probably even later, but few specific references have been found to support this supposition.

Hardbieshuise and kapsteilhuise were both still being built by some Khoi during this period. Baines recorded a number at Shiloh mission station in 1848 (8) while Mackenzie noted others in the northern Cape eleven years later.(9) It is not known exactly when these dwelling forms began to be regarded as archaic and ceased to be built by the indigenous inhabitants of this region, but no further mention of them has been found to date.



DISTRIBUTION OF SOUTHERN AFRICAN RURAL DWELLING FORMS : 1841 - 1890

1. MACKENZIE, 1859. Illustrated London News (ILN) 1867. Cape Town.
2. WANGEMANN, 1873. Robben Island.
3. I.L.N., 1857. Graaff-Reinet.
4. BAINES, 1848. Colesberg.
5. I.L.N., 1851. AmaXhosa.
6. I.L.N., 1851. AmaXhosa.
7. I.L.N., 1851. Waterloo Bay. AmaXhosa.
8. I.L.N., 1878. Fort Fordyce. AmaMfengu.
9. WANGEMANN, 1873. Emdizeni M.S. Mission chapel.
10. WANGEMANN, 1873. Emdizeni M.S. AmaXhosa.
11. WANGEMANN, 1873. Emdizeni M.S. Mission houses.
12. BAINES, 1848. Fort Beaufort. AmaMfengu.
13. SA ILLUSTRATED NEWS, c 1877. Ibeka Fort, military hut.
14. WANGEMANN, 1873. Petersberg M.S.
15. WANGEMANN, 1873. Petersberg M.S.
16. BAINES, 1849. Sandile's homestead on the Keiskamma River. AmaXhosa.
17. BAINES, 1848. White Kei River. Trader Harris' hut.
18. BAINES, 1848. Seymour (Elands Drift). AmaMfengu.
19. BAINES, 1848. Seymour. Khoikhoi.
20. BAINES, 1848. Shiloh M.S. Khoikhoi.
21. BAINES, 1848. Shiloh M.S. AmaMfengu and abaThembu.
22. BAINES, 1851. Butterworth.
23. BAINES, 1851. Butterworth.
24. I.L.N., 1877. Kreli's homestead.
25. I.L.N., 1878. Gonubie.
26. CENTENARY BROCHURE, c 1862. Umtata military camp.
27. CENTENARY BROCHURE, c 1862. Umtata military camp.
28. DOWER, 1869. Mount Currie. Griqua Khoikhoi.
29. DOWER, 1869. Mount Currie. Griqua Khoikhoi.
30. I.L.N., 1878. Near Grahamstown. Fortified farmhouse.
31. WANGEMANN, 1875. Stendal M.S.
32. ANGAS, 1849. Thukela River. AmaZulu, two types of thatching.
33. DELEGORGUE, 1847. AmaZulu.
34. ANGAS, 1849. Mlazi River. AmaZulu.
35. I.L.N., 1879. Ulundi. AmaZulu.
36. I.L.N., 1879. Ulundi. AmaZulu. Dwelling built by Dunn for King Chetswayo.
37. I.L.N., 1879. Ndaza, Black Mfolozi. AmaZulu.
38. WANGEMANN, 1875. Sikali's homestead.
39. WANGEMANN, 1875. Emmaus M.S.
40. WANGEMANN, 1875. Emangweni M.S.
41. WANGEMANN, 1875. Stendal M.S. AmaZulu.
42. MCCARTER, 1869. Biggarsberg M.S.
43. I.L.N., 1879. Dundee. AmaZulu, stone byres.
44. I.L.N., 1879. Near Rorke's Drift. AmaZulu, stone byres.
45. WANGEMANN, 1867. Pniel M.S.
46. ARBOUSSET AND DAUMAS, 1846.
47. WIDDICOMBE, 1877. Thlotse Heights M.S. Mission buildings.
48. WIDDICOMBE, 1877. Sekubu M.S.
49. I.L.N., 1864. HOLUB, 1872. Philippolis.
50. HOLUB, 1872. Fauresmith.
51. BAINES, 1850. Bethany M.S. Khoikhoi.
52. WANGEMANN, 1867. Bethany M.S. Khoikhoi.
53. WANGEMANN, 1867. Bethany M.S. Mission buildings.
54. WANGEMANN, 1867. Bethany M.S. Mission buildings.
55. BAINES, 1850. Bloemfontein.
56. BAINES, 1850. Thaba 'Nchu.
57. WANGEMANN, 1867. Thaba 'Nchu.
58. HOLUB, 1873. Kimberley. Korah Khoikhoi.
59. HOLUB, 1873. Kimberley. BaTswana.
60. I.L.N., 1883. White miner dwelling, Diamond Fields.
61. HOLUB, 1873. Klipdrift. Korah Khoikhoi,
62. MACKENZIE, 1859. Khoikhoi.
63. HOLUB, 1873. Likatlong. BaTswana.
64. HOLUB, 1873. Christiana.
65. HOLUB, 1873. BaTlaping.
66. HOLUB, 1873. Mixed BaRolong/Khoi Settlement. BaRolong.
67. HOLUB, 1873. Mixed BaRolong/Khoi Settlement. Korah Khoikhoi.
68. WANGEMANN, 1877. Potchefstroom.
69. BAINES, 1850. KiGariep River. Probable baTswana. Decoration on walls.
70. HOLUB, 1876. Mamusa. Korah Khoikhoi.
71. HOLUB, 1873. Mamusa. Probable baTswana.
72. I.L.N., 1887. Mafikeng.
73. MERENSKY, 1875. BaTswana.
74. WANGEMANN, 1867. Pretoria M.S.
75. WANGEMANN, 1877. Wallmannsthal M.S.
76. MERENSKY, 1889. Botshabelo M.S. Mission church.
77. MERENSKY, 1889. Botshabelo M.S. Possible baPedi.
78. MERENSKY, 1889. Botshabelo M.S.
79. GEORGE, 1870. Transvaal farmhouse.
80. MERENSKY, 1882. Sekhukhune's residence. BaPedi.
81. WANGEMANN, 1877. Malokung M.S.
82. WANGEMANN, 1877. Makopane M.S.
83. WANGEMANN, 1877. GaLekalekale M.S.
84. WANGEMANN, 1877. VhaLovedu.
85. WANGEMANN, 1877. Makchabeng M.S.
86. WANGEMANN, 1877. Blouberg M.S.
87. WANGEMANN, 1877. VhaVenda.
88. HOLUB, 1874. Linokana. BaHurutse.
89. HOLUB, 1873. Molepolole.
90. HOLUB, 1873. Road to Shoshong. Masarwa huts.
91. HOLUB, 1873. Serowe (Shoshong). BaMangwato.
92. POORTERMAN, 1848. Saldanha Bay.

THE MIGRANT PASTORALIST REGION : THE END OF A BEEHIVE TRADITION

1.

2.

3.

1. HOLUB, 1881. Korah Khoikhoi huts in the Harts river valley.
2. PIOLET, 1902. Khoikhoi hut.
3. BAINES, 1876. Interior of Namaqua Khoikhoi hut.

Little is also known of the architecture of hunter-gatherer groups during this time. Holub found some roughly built temporary huts belonging to Masarwa, near Shoshong, in 1873 (10), but this is the only sighting of this type of shelter recorded for this period. Generally it may be assumed that the San continued their progress into the more arid and less densely inhabited areas of southern Africa and thus move out of the concern of the architectural history of this region.

The Eastern Littoral Beehive Region

During the period of Difaqane, this region saw a large influx of missionaries and travellers who, during the course of their journeys, were able to document the local architecture in some detail. As a result it became possible to identify three separate areas where the built environment was undergoing a measure of change and transition.

a. The southern OFS-western Lesotho area which was perceived to be a region of overlap between the mat beehive, the grass beehive and the highveld cone on cylinder traditions. This picture was complicated further by the influx of white immigrant farmers from the Cape.

b. The greater Lesotho and Herschel district which emerged as a region of mountain technology in its own right.

c. The southern Transkei-Ciskei region which was also an area of mixed beehive technologies.

The architecture of the Transkeian and Zululand districts further to the north appears to have been relatively untouched by the events of Difaqane and up to that time white infiltration into these areas had been of a minor nature. The more traditional building technologies and dwelling forms had therefore survived here virtually unaffected by outside influences.

Subsequent to the Difaqane these evolutionary patterns were to continue as, on the one hand, the region settled down to its new population distributions and tribal mixes, and, on the other, contact with missionaries and other white settlers continued on an increasing basis. The picture was simplified to some degree by the disappearance of the mat beehive tradition from here, thus removing the previous areas of overlap with grass beehive construction in the eastern Cape and southern OFS.

The Transkei and Eastern Cape

Although this region as a whole was to remain the undisputed preserve of the beehive dwelling form up to the turn of the century, areas of change were already becoming evident in the 1840s and possibly even earlier. Perhaps the major of these was located in the Transkei and eastern Cape where, over the next four generations, the whole face of the built environment underwent a total transformation as the beehive gave way to the cone on cylinder.

It is difficult to determine today exactly what the mechanics of such change could have been. Certainly there is some evidence to show that the cone on cylinder was being used by both missionaries and military personnel in this region long before it was to become widely associated with local indigenous architecture. It is possible that missionaries at the Blinkwater station had built such dwellings as early as 1839 (11); and the military establishment at Umtata in c 1862 had

EASTERN LITTORAL CAPE BEEHIVE TRADITION

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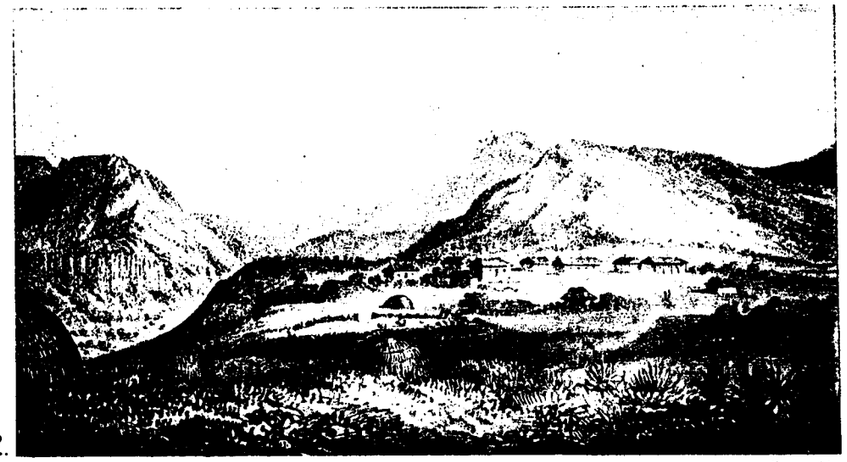

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1. ROBINSON, c 1840. AmaMfengu settlement.
2. BAINES, c 1850. Bunting M.S.
3. WANGEMANN, 1871. AmaXhosa and amaMfengu suburb of Port Elizabeth.

EASTERN LITTORAL CAPE BEEHIVE TRADITION

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The grass beehive, whether sited on the ground or raised upon a drum, is considered by its builders to be one and the same structure. During the 1860s however, the latter became the more prevalent of the two up to the 1920s when in its turn it also began to be supplanted by the cone on cylinder.

1. WANGEMANN, 1873. Petersburg M.S.
2. WANGEMANN, 1873. Emdiseni M.S.
3. WANGEMANN, 1873. Eluxolweni M.S.

included one within its fortified earthworks whilst an entire village of them could be found outside it.(12) But this in itself is not conclusive evidence. We know that both the military and missionaries had a habit of borrowing existing indigenous forms and technologies to suit their own short-term ends (13), and it is therefore not impossible that this was precisely the case in the examples given above. When Baines visited Butterworth in 1851 he recorded that it consisted :

> "..., besides the chapel and mission premises, of three or four thatched houses, a considerable number of huts - and rondheuvels, a kind of dwelling scarcely superior - and an immense kraal ..." (14)

It is therefore probable from this description that the cone on cylinder (or rondawel form was by that time already an integral part of the local vocabulary of architecture.

The claim that the cone on cylinder is the indigenous product of this region is further supported by other sources. The hut form described by Lichtenstein in the southern Transkei in 1805, discussed more fully during the course of a previous chapter, could best be described as a dome raised on a drum or cylinder. (15) According to him, this type of dwelling was widespread further north (16), but this claim was not substantiated in other records until after the 1860s. These included reports from Wartburg in 1867 (17), Ibeka Fort c 1877 (18) and Gonubie in 1878 (19) as well as an illustrated envelope which underwent postal usage in 1876.(20) Thereafter its documentation becomes relatively plentiful until the 1940s when its construction begins to be less common.

The importance of the dome on cylinder to this argument is twofold. Firstly its outward appearance and aesthetics are very similar to those of the cone on cylinder. Indeed the two may often only be distinguished apart after an internal inspection of the roof structure has been made. As most, if not all, of the historical reports discovered to date dealt primarily with the external aspects of this dwelling form and tended to ignore its roof technology, a degree of error in these accounts cannot be ruled out.

Secondly a study undertaken of dome on cylinder dwellings being built currently in Zululand has indicated that, unlike the average local beehive or cone on cylinder, there is little consistency in their construction. The major variables were found to lie in the number and use of central roof supports, the nature of roof structures and the thatching methods used. This lack of consistency was present not only between one area or region and the next, but also within the same village or even homestead. Often, when questioned, local residents identified certain and more recent variations as being an improvement upon older and less efficient structures.

When this data was analysed on a comparative basis, two conclusions were arrived at : that the dome on cylinder is inherently an unstable architectural form, easily influenced by any number of factors; and that it represents a transitionary stage between the more conventionally-built beehive dome and the cone on cylinder. The amaXhosa indigenous builders have recognised this and have given it a special name - the "inqugwala".(21) Informants in the field claimed this to signify "promise", referring to promises of "improvement", of "better things to come", of "the future" or just a "homeful of promise". Most, however, were in agreement in describing it as the fore-runner to the cone on cylinder.

Having used this data to build up an evolutionary hypothesis, this model was then tested in the context of the southern Transkei-eastern Cape districts, where the dome on cylinder had been in everyday use until some two generations ago.

Although by no means common today, small pockets of this form were discovered at Breakfast Vlei (22), Committee's Drift and near Cathcart, as well as near Elliotdale where it was used as an initiation shelter, thus confirming its historical and archaic links. Despite their relative scarcity, enough examples were available for study to justify the belief that a development, parallel to that documented in present-day Zululand, had occurred in this area from about the 1860s onwards.

The 1840 to 1925 era can therefore be seen to represent a period of decline and, ultimately, extinction in the existence of Transkeian beehive dwellings. While their presence was reported on a regular basis by travellers from 1840 to 1860, by the 1880s very few of these huts appear to have been built. By the time Duggan-Cronin visited these districts in the late 1920s the "pure" beehive form had quite clearly been transposed by the local mind into the realm of the archaic and its construction associated with the practice of initiation rites.(23) On the other hand the building of cone on cylinder structures appears to have begun at about the turn of the century and to have been well established by 1925. From the 1940s onwards the Transkeian districts, which a century earlier had been a stronghold of grass beehive technology, crossed over to the cone on cylinder dwelling, a tradition which has been sustained through to the present day.

Lesotho

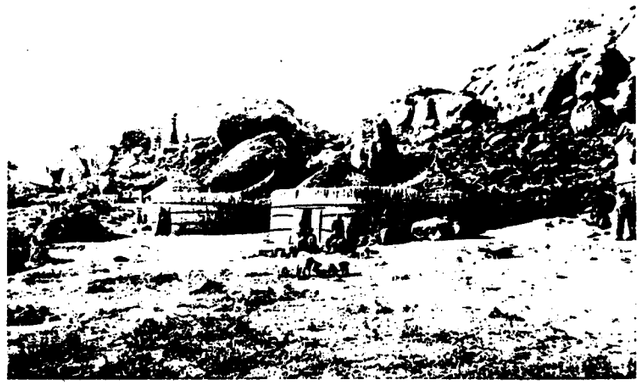
Another sector of this region which is thought to have undergone some major changes in its architectural make-up during this period centred upon the Kingdom of Lesotho and its surrounding districts. This is an area which, during the preceding era of Difaqane, began to emerge as a separate region of building technology in its own right. This was supported by a wealth of historical evidence from the pens of travellers, missionaries and other settlers. Despite this early activity however the impetus was not kept up in subsequent years and the documentation of local indigenous architecture thereafter is scattered and prone to the imposition of generalised stereotypes.

It can be safely assumed that the construction of beehive dwellings, with and without extended doorways, continued uninterruptedly throughout this period. Little is known however of either their distribution or popularity. It almost seems that after the early literary efforts of the likes of Casalis and Backhouse, subsequent authors deemed the local built environment to have been too well covered to warrant further re-description. Thus, apart from the accounts of Arbousset and Daumas published in 1846 (24), little else is heard of this dwelling type for the next sixty years. The emergence of the Edwardian picture post-card as a popular art form at the turn of the century begins to fill in some of this missing detail (25) but it was left for Duggan-Cronin (26) and Walton (27) in the 1930s and 1940s to provide the definitive descriptions and photographs of more recent baSotho beehive huts.

Walton's research, published in 1956, also provides us with an interesting insight into the building of these dwellings. He states that :

> "Originally the mohlongoa-fatše (beehive) was thatched completely to the ground and protected around the base by a ring of stones ... Later, almost vertical mud or stone walls were built around the beehive framework to a height of five or six feet. In such cases the outer walling is often separated from the stakes by a layer of brushwood and the thatch projects beyond the wall." (28)

THE CENTRAL HINTERLAND AFTER 1840 : THE LESOTHO REGION



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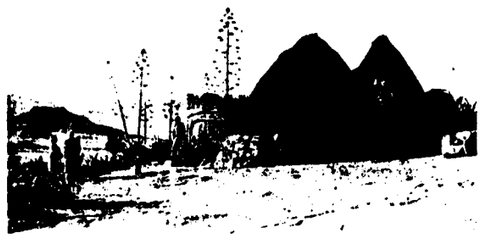

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1. BASUTO MISSION, c 1913. BaSotho village.
2. HERTIG, c 1920. BaSotho beehive dwellings.
3. HERTIG, c 1920. BaSotho cone on cylinder dwellings.
4. UNKNOWN, c 1900. BaSotho village.

The outward appearance of such a hut would be indistinguishable from that of a cone on cylinder. This, it will be remembered, was also one of the features of the Transkeian dome on cylinder. It may therefore be postulated that the baSotho beehive hut, as its Zululand counterpart is known to have done, and as its Transkeian counterpart is thought to have done, could also have undergone a process of development, leading to its transformation into a cone on cylinder form.

The cone on cylinder itself is however thought to have been part of the architecture of this area from comparatively early times. Apart from its obvious and copiously documented presence among the baRolong of Thaba 'Nchu from the 1830s (29), it is also known to have been built at Thlotse Heights and Sekubu mission stations in 1877 (30) as well as many other unknown locations in c 1910. By the time of Duggan-Cronin and Walton it appears to have become the predominant dwelling form for this area.

The picture which emerges for this district during this time is quite obviously inadequate. Despite its well documented beginnings, the years between 1840 and 1940 are only sporadically covered and then only in a most general sense. There is a need not only for further archival work but also for field research which will cover in greater detail the findings of James Walton who, nearly thirty years after the publication of "African Village", still remains the only authority on baSotho architecture.

Zululand

Unlike the southern and western parts of this region which during this period underwent extensive transformation, the architectural character of the northern reaches remained relatively unaffected by events about them. The establishment, in both Zululand and Swaziland, of political systems which used the military as a strong unifying social force, and vested executive power in the hands of a centralised kingship, can be seen to have had twin effects upon their local architecture. In the first place it gave rise to larger regional identities which sought to undermine clan loyalties and replace these with a wider amaZulu or amaSwazi nationalism, as the case may be. Part of the creation of such identities was the wilful adoption and maintenance of a style of housing which, with time, became recognised as belonging to that particular group. The success of such a policy can best be attested to by the fact that today the beehive hut form is still widely associated in the public mind - both black and white - with the amaZulu or the amaSwazi. Further evidence is also provided by Maggs and Hall (31), whose archaeological researches have shown that pre-Shakan cattle byres had their entrances facing uphill towards the Great Hut whilst in post-Shakan times these were faced downhill towards the settlement entrance. The former can be associated with pastoral custom and the nightly inspection of the family's wealth; the latter with ceremonial and military parades.(32)

Secondly, a centralised leadership would have led to the implementation of a uniform foreign policy towards the Cape Colony and regulated the influx of white immigrants into these areas. The amaSwazi, for example, were antagonistic to white settlement right up to the 1880s, and an early attempt by Merensky to establish a mission station there in the 1840s failed dismally.(33) The amaZulu, on the other hand, adopted a broad range of policies in their dealings with whites. They were openly antagonistic to the itinerant Dutch, whilst seeking an alliance with the British; traders were accorded many favours, were allowed to travel freely and to establish a settlement at Port Natal (later Durban), and were dealt with as independent chiefs and allies (34); missionaries however were, in the

EASTERN LITTORAL ZULULAND BEEHIVE TRADITION

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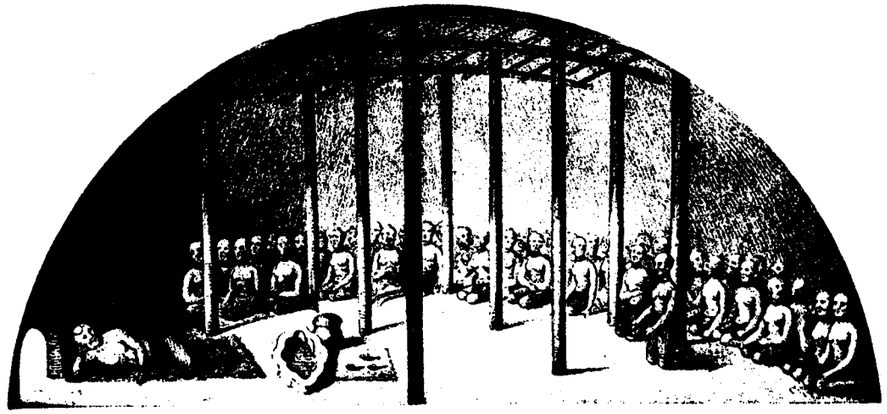

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1. UNKNOWN, c 1836. Interior of Dingaan's royal audience chamber.
2. BAINES, c 1850. The royal town of Congella.
3. WANGEMANN, 1875. Sikhali's homestead in the Kahlamba mountains.

EASTERN LITTORAL ZULULAND BEEHIVE TRADITION

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1. THE GRAPHIC, 1879. AmaZulu homestead with central cattle byre.
2. UNKNOWN, c 1900. Interior of amaZulu beehive dwelling.
3. CATHOLIC MISSION, c 1930. Beehive dwellings near Hlatikulu, Swaziland.

main, only allowed to settle on the coastal belt of Natal (35) and were seen to be a potential threat to the authority of the King. This means that whilst the one group totally excluded whites, the other controlled their influx,and settlers into the interior, such as trader Dunn, largely conformed to local norms. (36) In both cases the cultural impact upon local architecture would have been minimised until well into the 1880s, if not later.

Thus we find that the beehive tradition of earlier times for this region is now confirmed by Delegorgue in 1847 (37), Angas in 1849 (38), Wangemann in 1873-77 (39) and, in more recent times, by Duggan-Cronin in the 1920s (40), by Krige in 1950 (41) and by Walton in 1956.(42) The fifty year hiatus between the amaZulu war of 1879 and Duggan-Cronin's photographic jaunts are more than adequately filled by a wealth of Edwardian picture postcards (43), few of which however give any exact site locations.

The first cone on cylinder structures for this region were signalled by Wangemann at the Emangweni mission station in 1875.(44) Subsequent pictorial evidence by Duggan-Cronin in the 1920s as well as Walton in the 1940s shows only a limited and scattered influx of this form in both Zululand and Swaziland. It could therefore be concluded that the current predominance of this dwelling type in these areas is of fairly recent development.

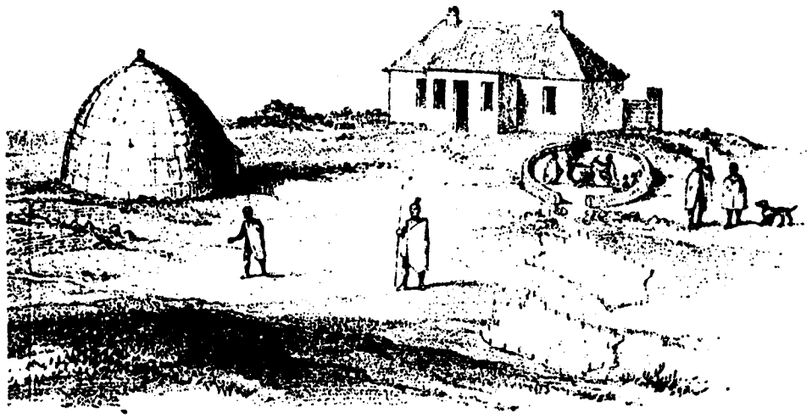
Square plan dwellings in these areas have been mostly identified with either white settlement or with trader or missionary activity. One of the first such structures intended for indigenous occupation was a three roomed rectangulan plan cottage with front and rear verandahs designed and built by John Dunn for Cetshwayo at Ulundi.(45) This was subsequently fired to the ground by British troops during the Anglo-Zulu conflict of 1879.(46) Square plan dwellings recorded during the course of current field work were usually single roomed and generally owed their form to either the circular cone on cylinder or the flat-roofed highveld lean-to house.(47)

The architectural history of the eastern littoral region during this era makes for some interesting comparisons. To the west the newly-born kingdom of Lesotho welcomed white missionaries and allowed them free reign. Although some disapproving remarks were made by the likes of Casalis regarding local architectural practices, changes in the baSotho's housing style do not appear to have been high on the missionary agenda. Therefore we find that a beehive technology was flourishing in this area well into Walton's time and although today the predominant local dwellings are the cone on cylinder and the flat-roofed highveld house, this should be seen as a reflection of its changing economic status and demographic densities.

To the north, the growth of a strongly unifying political system had the effect of establishing a homogeneous cultural identity. This served to maintain its traditional architectural component and allowed it to survive virtually intact from foreign influences and economic variables until comparatively recent times.

The south however had a more fragmented political system in operation. Although the isiXhosa groups could have laid claim to a degree of cultural homogeneity, this was of little assistance in preventing the large scale infiltration of this area by both missionaries and traders. Here they made a point of seeking to bring about changes in the people's architectural styles. Although it is debatable whether they ever succeeded in this self-appointed task, there is no doubt that the presence of traders, the imposition of a hut tax, and the development of

SETTING AN EXAMPLE



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1. MAEDER, c 1839. White architectural aesthetics and technologies were slow to make significant inroads upon the indigenous environment in areas outside an immediate missionary influence. Often it was left up to the traditional leadership to make the first adaptations. Moshweshwe paid David Webber, an English soldier, fortyfive oxen in 1839, to build him a residence.
2. ILLUSTRATED LONDON NEWS, 1879. A similar dwelling but with a front verandah was built for Chetswayo by the trader John Dunn. This was subsequently burnt down by the British following the battle of Ulundi in 1879.

a migrant labour system in later years were all to wreak havoc in the people's traditional economic patterns, thereby paving the way for subsequent changes in their architectural habits.

The whole question of missionary, trader and white influences upon the indigenous architecture of the region shall be discussed more fully during the course of a subsequent chapter.

The Central Hinterland Region

When viewed from an architectural standpoint, the years between 1840 and 1925 were to prove an important period in the history not only of this region but of southern Africa as a whole. It was made notable not so much by any direct developments which may have occurred in this field, as by events of a political and economic nature which, with the passing of time, were to exert an increasingly powerful influence upon local building traditions.

The political stage was set by the defeat and subsequent emigration of the Matabele to Zimbabwe in 1837. This may finally have brought to an end fifteen years of turmoil on the highveld, but it also created a power vacuum which white immigrants were not slow in filling. At first this was limited to migrant Dutch farmers but, with the discoveries of diamonds in the northern Cape in 1866 and of gold in the Transvaal in the 1870s, an international flood of miners, land speculators, fortune seekers and assorted personnel were also to be attracted to the region. The resultant internal tensions between black and white as well as between white and white were to manifest themselves in periods of sporadic violence which had the larger effect of slowly dispossessing more and more indigenous groups of the land they had occupied for centuries.

The establishment of primary industries in the southern African interior was to have some important effects.

a. They created areas of urbanisation which continue to provide, to the present day, opportunities for cross-cultural contact and mixing. The beginnings of the phenomenon of so-called "detribalisation" can be traced back to this period.

b. They created centres of industrial development which were to import into the region new technologies and materials. With time, these were to filter through into the rural areas.

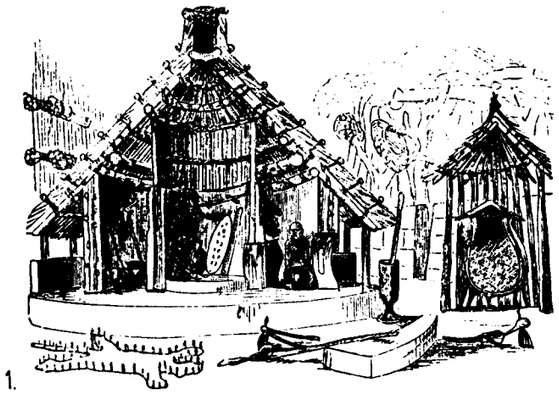
c. They created a demand for labour which, at its onset, was only partly met by local manpower. The political subjugation of black rural groups, the subsequent imposition of hut taxes and the creation of markets for consumer goods in the rural areas were to provide the stimulus which was ultimately to turn rural southern Africa into one vast pool of migrant labour.

d. They created markets for the surplus of rural food production. Initially this was predominantly in the hands of black farmers but, with the imbalanced development of a support infrastructure in white rural areas after 1925, this position was to change considerably. Important factors after this date which should also be considered are the curtailment of black land ownership and the increasing impoverishment of formerly fertile black rural lands through overgrazing, subsistence farming and overpopulation.

It is obvious that this presents only a limited view of early urbanisation on

THE CENTRAL HINTERLAND AFTER 1840 : NORTHERN CAPE AND BOTSWANA

1. BAINES, 1876. Section through a baTswana residence on the KiGariep or Vaal River.
2. HOLUB, 1874. BaMangwato homesteads, Serowe.
3. HOLUB, 1874. BaTlhaping village.



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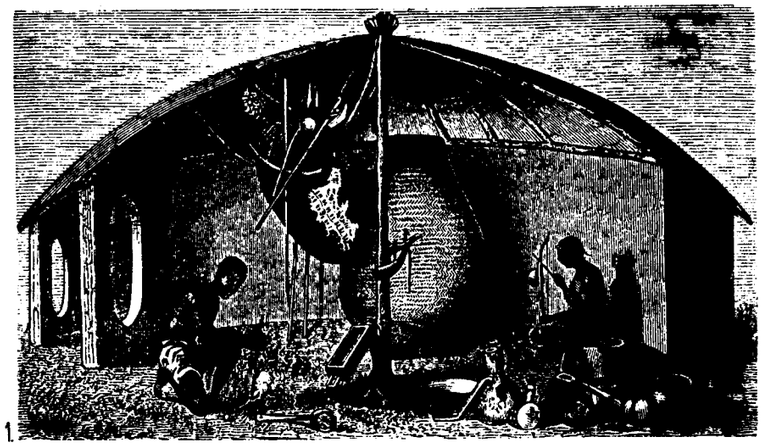
THE CENTRAL HINTERLAND AFTER 1840 : NORTHERN CAPE AND BOTSWANA



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1. WANGEMANN, 1871. Section through baTswana dwelling.
2. HOLUB, 1874. Lonokana, baHurutse village.
3. HOLUB, 1874. Kgotla at Serowe.
4. BaMangwato dwelling at Serowe.

the southern African highveld. Other important elements of a socio-political nature do exist but largely tend to fall outside the scope of an architectural study such as this one.

The influx of white immigrants and other travellers into the region during this time was to produce the first detailed accounts of the architecture of the central and northern Transvaal. Generally these confirm the picture which had been portrayed by archaeologists up to the 1700s, the dominant dwelling form being the cone on cylinder, often surrounded by a circular verandah about its perimeter. Such dwellings were recorded by Baines near the Ki-Gariep in 1850 (48), by Holub in the northern Cape, western Transvaal and eastern Botswana in 1873-77 (49), by Wangemann at Thaba 'Nchu in 1867 and in the vicinity of Venda and among the vaLovedu in 1877 (50), and by Merensky at Sekhukhuni's capital in 1882.(51) Ordinary cone on cylinder structures were also recorded by Holub at Kimberley and among the baRolong in the western Transvaal, both in 1873 (51), by Wangemann at the Galekalekale, Makopane, Malokung, Blouberg, Makchabeng and Wallmannsthal mission stations in c 1877 (53), and as previously mentioned, by Widdicombe in Lesotho in the 1870s.(54)

Little mention was made by travellers of any substantial beehive-building tradition in this region during this time. The Matabele had long gone and with them, apparently, also went the amaZulu style of dwelling construction. The South amaNdebele, as previously discussed (55), could have built beehive dwellings up to the time of the defeat of the Ndzundza by the ZAR in 1883, but no eyewitness records of such structures have been discovered to date. After 1883, they apparently conformed with the region's norm of cone on cylinders, some of which still survive to the present day.(56) The only pictorial record of beehive building found for this region was made by Wangemann at Botshabelo in 1872.(57) These structures would appear to have been built, possibly as temporary dwellings, by baPedi converts seeking missionary protection during Sekhukhuni's leadership struggle with his younger brother Mampuru.(58)

The introduction to this region of the flat-roofed, square plan dwellings, more commonly known today as the highveld house, can probably also be dated to this period. As a subject however, it is part of a larger pattern of development, and as such, shall be discussed separately during the course of a subsequent chapter.

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THE CENTRAL HINTERLAND AFTER 1840 : CENTRAL AND NORTHERN TRANSVAAL

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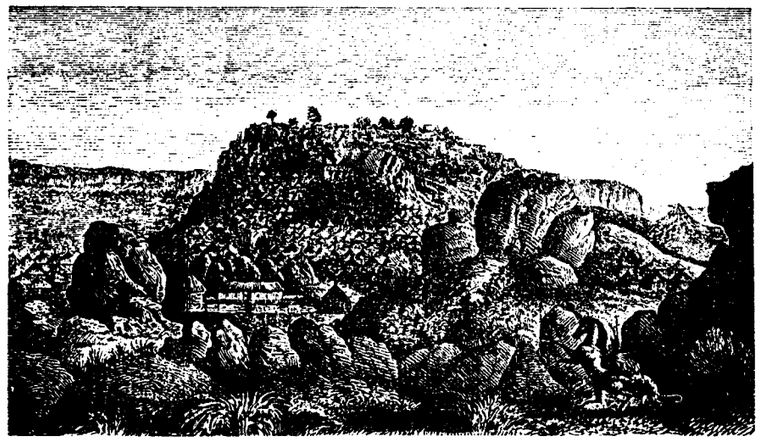
1. WANGEMANN, 1875. Village in northern Transvaal, possibly Venda.
2. WANGEMANN, 1875. Village in northern Transvaal, possibly Venda.
3. WANGEMANN, 1875. M.S., Transvaal. Makapanspoort.



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THE CENTRAL HINTERLAND AFTER 1840 : CENTRAL AND NORTHERN TRANSVAAL

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1. WANGEMANN, 1875. Makchabeng M.S.
2. RITCHIE, c 1895. Dwelling, probably in the north-eastern Transvaal.
3. MERENSKY, c 1889. BaPedi dwelling.
4. WANGEMANN, 1872. View of Botshabelo M.S.

8. BAINES, Thomas. Op. Cit.

9. MACKENZIE, John
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10. HOLUB, Emil. Op. Cit.

11. BACKHOUSE, James
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12. ANONYMOUS
"Umtata's Fiftieth Year as a Local Authority". Umtata (?), 1932. Pamphlet in the Cory Library, Grahamstown. Cat. No. 968.656.

13. Examples of this are too numerous to mention in great detail. The old Residency at Umtata date unknown (Ibid), the huts within Ibeka Fort (South African Illustrated News c 1878), the first Administration Building in Salisbury in 1890 (ANONYMOUS. "Historical Catalogue and Souvenir of Rhodesia 1936-7".), trader Harris' hut on the White Kei in 1848 (BAINES, Thomas. Op. Cit.) and the temporary missionary chapel held in a large beehive hut at Igquibigha in 1839 (BACKHOUSE, James. Op. Cit.) are but a few which spring immediately to mind.

14. BAINES, Thomas. Op. Cit.

15. FRESCURA, Franco
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16. LICHTENSTEIN, Henry
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17. WANGEMANN, Dr. Op. Cit. Illustrations from his books show that dome on major drum dwellings were built at Wartburg in 1867 and Endizeni and Petersburg in 1873.

18. SOUTH AFRICAN ILLUSTRATED NEWS, The. c 1878.

19. ILLUSTRATED LONDON NEWS, The. 12 January 1878 p. 29.

20. Author's private collection.

21. HAMMOND-TOOKE, W.D.
"Bhaca Society". Cape Town : Oxford University Press, 1962 as well as personal research in the region.

22. When I visited the Breakvast Vlei area, near Peddie, in 1982, a local schoolboy, Melikhaya Ntwenka presented me with a short essay written in honour of his grandfather's dwelling, built in 1940. It was not written on my behalf or at my behest and is reproduced below in its original form.

> "Lendhe ayinaso isikhankwane konke. Ngokwesixhosa Linqugwala. Lakhiwe ngezibonda ezizibonda kuthiwa zintsika ngokwesixhosa. Kuze kwafulelwa ngengca laze idonga lona lakhiwa ngezinti. Endaweni yefestile kukho intimjana nje incinane. Ingca le yeana ibotshelelwe ngeninixeba. Lendhu ke ngeka Nosandile Ranuga Kwatyefu. i adress ithi : Lendlu yakhiwa ngowe 1940."
>
> "This house has no nail at all. In Xhosa it is called "inqugwala", a round house with perpendicular sides. It is built with poles, these poles are called "zintsika" supporting the roof pillars in Xhosa. It is then thatched with grass. The wall is made of sticks. Instead of a window there is a tiny hole. The grass is bound firmly with monkey ropes. This house belongs to Nosandile Ranuga at Tyhefu's. The address is : This house was erected in 1940."
>
> Translated through the good offices of Manton Hirst, Anthropological Officer, Kaffrarian Museum, Kingwilliamstown.

It is of course interesting to note that part of the address given is the year of its construction, thereby indicating that its age and form are unique in this area which today is dominated by a cone on cylinder technology.

23. DUGGAN-CRONIN, A.M.
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24. ARBOUSSET, T. and DAUMAS, F.
"Narrative of an Exploratory Tour ... etc." Cape Town : A.S. Robertson, 1846.

25. Most picture postcards of this period are usually entitled "A Village in Basutoland" or "Basutoland Landscape" without giving any indication as to the exact location of the subject matter. Their only value therefore lies in providing the student with a general idea of the architecture of the region. (Author's private collection).

26. DUGGAN-CRONIN, A.M.
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Cambridge : Deighton, Bell and Co. Ltd., 1933.

27. WALTON, James
"African Village". Pretoria : van Schaik, 1956.

28. Ibid.

29. BAINES, Thomas. Op. Cit.
BROADBENT, Samuel
"A Narrative of the First Introduction ... etc." London : Wesleyan Mission House, 1865, and others.

30. WIDDICOMBE, John
"In the Lesuto / A sketch of African Mission Life". London : Society for Promoting Christian Knowledge, 1895. The presence of cone on cylinder dwellings at Bethulie in 1834 (Smith, 1975) and Beersheba in 1839 (Backhouse, 1844), has already been covered during the course of a previous chapter.

31. MAGGS, Tim M. O'C.
"Mgoduyanuka : Terminal Iron Age Settlement in the Natal Grasslands".
Annals of the Natal Museum. Vol. 25 (1) 83-113. Pietermaritzburg, October 1982.
HALL, Martin and MAGGS, Tim M. O'C.
"Nqabeni, a later Iron Age Site in Zululand". South African Archaeological Society, Goodwin Series No. 3, 1979 pp. 159-176.

32. During the course of current field work in the Transkei, informants were also asked the practical reasons for placing the entrance to the cattle byre uphill and facing the Great Hut. One answer, given by Senyuko Mbiko of Madika, Pondoland, typified local attitudes on this point. He exclaimed : "But of course! The father must know what is going on!"

33. MERENSKY, A.
"Beiträge zur kenntnis Süd-Afrikas". Berlin : 1875.

34. WILSON, Monica and THOMPSON, Leonard
"The Oxford History of South Africa : Vol. I - South Africa up to 1870".
London : Oxford University Press, 1975.

35. FRESCURA, Franco
"Index of the Names of Mission Stations ... etc." Johannesburg : Transvaal Vernacular Society, 1982.

36. Before his betrayal of his benefactor Cetshwayo in 1879, Dunn had taken local wives, adopted local customs and architecture and had been elevated to the rank of Chief and advisor to the king. (Guy, 1982).

37. DELEGORGUE, Adulphe
"Voyage dans L'Afrique Australe ... etc." Paris : Dépot de Librairie, c 1847. 2 Vols.

38. ANGAS, George French
"The Kaffirs Illustrated ... etc." London : J. Hogarth, 1849.

39. WANGEMANN, Dr. Op. Cit.

40. DUGGAN-CRONIN, A.M.
"The Bantu Tribes of South Africa : The Nguni". Vol. 3, Sections 3 and 4.
Cambridge : Deighton, Bell and Co. Ltd., 1938 and 1941.

41. KRIGE, Eileen Jensen
"The Social System of the Zulus". Pietermaritzburg : Shuter and Shooter, 1950.

42. WALTON, James. Op. Cit.

43. Author's private collection.

44. WANGEMANN, Dr. Op. Cit.

45. Robert Rawlinson, pers. comm.

46. Illustrated London News. Vol. 75, No. 2097, 23 August 1879.

47. FRESCURA, Franco. Op. Cit. 1981.

48. BAINES, Thomas. Op. Cit. A picture of this settlement has also appeared, independent of its account in Baines' book, in the Illustrated London News of 19 Jan 1867, pp. 57-58.

49. HOLUB, Emil. Op. Cit.

50. WANGEMANN, Dr. Op. Cit.

51. MERENSKY, A. Op. Cit.

52. HOLUB, Emil. Op. Cit.

53. WANGEMANN, Dr. Op. Cit.

54. WIDDICOMBE, John. Op. Cit.

55. VAN WARMELO, N.J.
"Transvaal Ndebele Texts". Pretoria : Government Printer, 1930.

56. FRESCURA, Franco. Op. Cit.

57. WANGEMANN, Dr. Op. Cit.

58. DELIUS, Peter
"The Land Belongs to Us". Johannesburg : Ravan Press, 1983.

CHAPTER 10 : THE BEGINNINGS OF AN IMMIGRANT INFLUENCE

> "The Christians are steadily improving, and, whenever they have the means of doing so, are building themselves neat little square cottages."
>
> British Basutoland Government Agent's office, Maseru, Report to the Hon. Secretary for Native Affairs, 10 February 1875. CGH Government Publication G21.75.p.4.

When viewed in the context of southern African rural architecture, it is probable that the concept of a white-black cross-cultural pollination found application in two major ways :

a. a process of coercion
b. a process of assimilation.

The first involved the activities of missionaries, white Government officials and possible also of the military, who, with the idea of bringing "civilization" to indigenous society, sought to undermine its age-old economic and cultural patterns (1) and supplant them with new ones more palatable to the European mind. Although it was not necessarily singled out for special attention, the vernacular built environment featured high on the list of colonial concerns. The missionary John Mackenzie wrote between 1859 and 1869 that :

> "The reeking offensive hovels which you fear may contaminate your neighbourhood, call forth from the Saviour only the same compassion which He entertains for the rude skin-clad Pagan in his circular hut." (2)

This had not necessarily always been the attitude of other white travellers. Burchell, who is probably one of the more objective and sympathetic observers to visit these shores, was moved to tears when he visited a San settlement in the northern Cape in March 1812. He tells that :

> "... we found half a dozen wretched weather-worn huts, having only one-third of the circumference enclosed, and utterly incapable of protecting their inhabitants from the inclemency of wind or rain ...
>
> ... 'Here,' said they, as they pointed to the huts, 'this is our home'." (3)

Campbell too, was somewhat more generous in his descriptions of indigenous architecture. In May 1820 he visited "Kurreechane" (Kaditshwene), in the northern Cape, where :

> "... we visited several other houses; I admired the cleanness and flatness of all their yards." (4)

whilst Lichtenstein remarked at Dithakong in c 1805 that :

> "The commodiousness and durability of the houses was what struck us most at this first visit." (5)

These contrast sharply with the sanctimonious and subjective tones adopted by later writers like Mackenzie. The change seems to have come about during the decades of the 1830s and 40s and coincides with the latter part of the Difaqane. Before that time the process of alienation of black farming land by immigrant whites had been more or less limited to the Cape Colony, but after 1836 this was extended well into the southern African hinterland. As the competition for land between the two groups increased, so then did the need to give these foreigners a measure of ideological respectability. By the 1870s, when black resistance to the dispossession of their land was manifesting itself in open conflict in regions as diverse as the Transkei, Zululand, Sekhukhuniland, Vendaland, Griqualand West, Lesotho and Botswana, the vitriol of white propagandists was to reach fever-pitch. Holub wrote in c 1878 that :

> "There are certain tribes of South Africa who in their intellectual development and adult powers of comprehension seem to me to be about equal to children of our own of six years of age; ... in spite of anything they may acquire of the mechanical arts of reading and writing, they must be unfit to be admitted as yet to the privileges of a civilized race." (6),

whilst the Right Rev. Dr. Ricards stated in 1879 that :

> "There are other difficulties besides these, many of them truly formidable : (Black) law and custom, the indolence, the sensuality, the foul corruption, the degrading forms of superstition, all so diametrically opposite ... to the stainless purity and exalted perfection preached ... by the missionaries of the Catholic Church." (7)

The upholding of a white, European and Christian ethos and the denigration of the indigenous culture is not an event unique to the history of this region. It can also be seen to have occurred in North America (8) where a similar process of land alienation took place during the nineteenth century. In both instances the white newcomers seemed to share in an ideology which proclaimed the superiority of their culture and saw it as their Christian duty to impose their values and beliefs upon the local populus, thereby "assisting" them to achieve a "higher level of civilisation". (9)

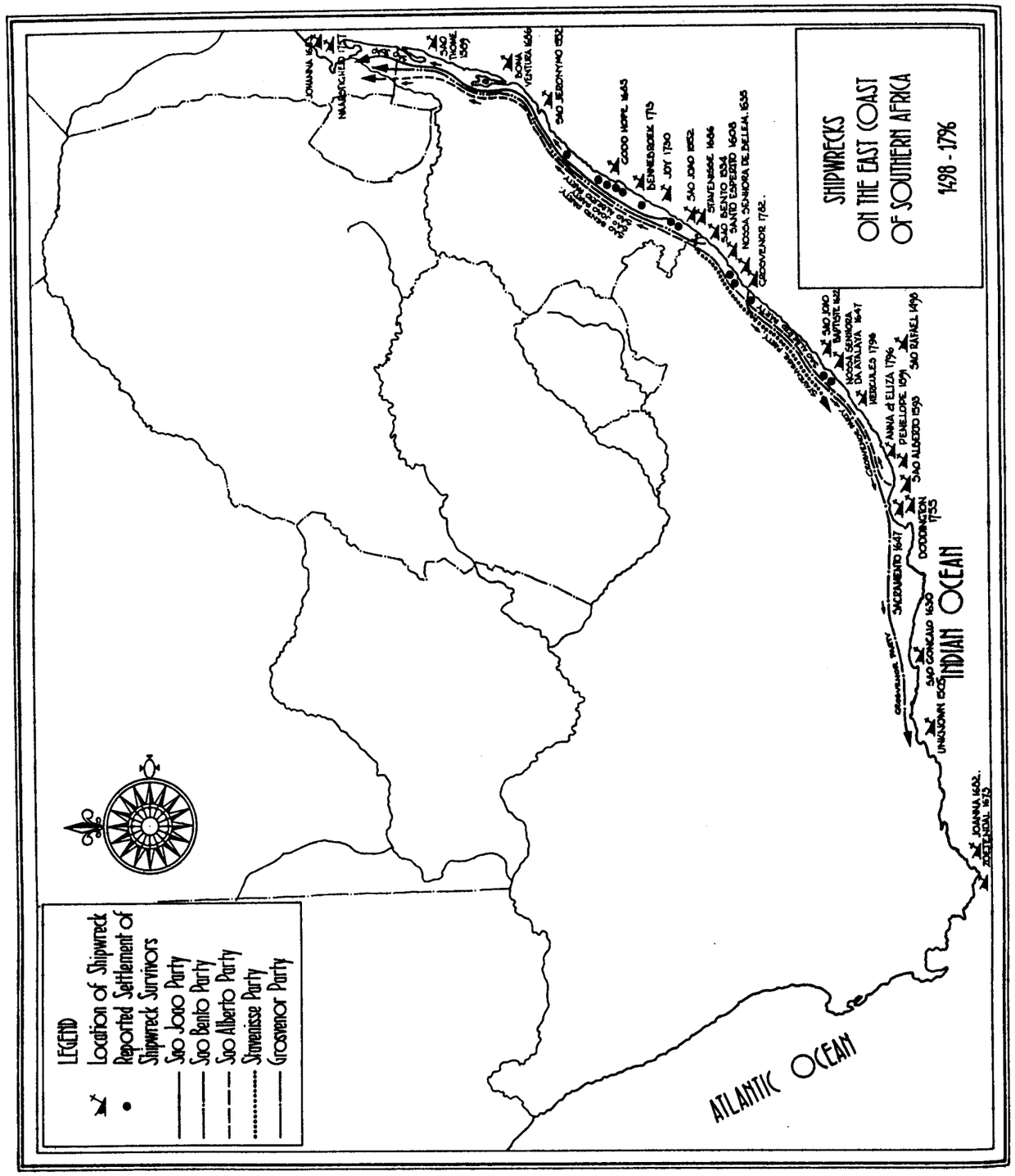
In all fairness it should also be pointed out that although the likes of Holub and Richards seem to have represented the majority white viewpoint, others, like Colenso, saw through the sham and were vocal in their stand.(10) This made them unpopular in the eyes of white settlers leading Merriman to state some years later that :

> "You cannot take up the cause of any oppressed nationalities or of any race that is being, as you think, unjustly treated, without it being said that you are inciting these people to rebellion." (11)

The process of assimilation on the other hand did not seek to impose so much as to influence by example. It lacked the militancy and direction of a coercive policy, and was therefore a much slower movement, subverting where the other tried to impose. The two, however, coercion and assimilation, did not work in isolation from each other but should rather be seen to be part of the same historical process. Missionaries were generally perceived to be performing the "softening-up"-work, thus allowing the trader, settler and government agent to follow.(12) The comparative success of either policy may be best adjudged from the discussion which follows.

The Advent of the abaLungu

The date of the earliest white settlement on the southern African subcontinent is usually given as 1652, when a Dutch party under van Riebeeck established a victualling station at Table Bay. However this ignores the fact that Portuguese ships had been plying the local waters since 1488, and had often landed here in order to obtain supplies of fresh food and water. This has led historians to view them as mere throughfarers rather than as a source of potential settlers. Yet, almost inevitably in those times of perilous travel, a number of shipwrecks occurred on the eastern seaboard and between 1552 and 1647 in excess of 1100



whites and two to three thousand slaves found themselves stranded on this coast. This is more than twelve times the size of van Riebeeck's original Dutch contingent. It is true that most of these survivors attempted to return home either via the Cape or Mocambique, but it should be remembered that a significant proportion chose to remain behind and settle among the local Blacks. An even higher number either perished on their journey overland or were abandoned by their fellows as being too ill to continue and many of these were also taken in by indigenous groups where they recovered their health, intermarried and prospered.(14)

This source of early contact between white and black is attested to by the indigenous word "abaLungu" (pl.) or "umLungu" (sing.), a noun applied to mean "white man" almost universally throughout the eastern coastal region. Its roots are somewhat obscure and it has been variously translated by informers in the field to mean "wise" or "powerful" person. In the southern Transkei-Ciskei area however, it was found that in the local dialect the word "umlungu" was also given to the whitish-yellow scum found floating on the sea after a storm or an unusually heavy tide. It would not be too far fetched therefore to suggest the possibility that, in earlier times, when a storm at sea could flounder a ship, the flotsam and jetsam of the tragedy would be washed ashore in the foam of the surf. The survivors, having the same outward skin colouring as the "umlungu" may therefore have been accorded the same title, meaning "people of the foam". Its usage in reference to white people was recorded as early as 1804 (15) thereby preceding both the coming of the missionaries and the large scale involvement of the military during the border conflicts that were to follow.

The tales of shipwreck survivors remaining behind and intermarrying with the local population are legion.

In 1552 the Portuguese galleons "San Jeronymo" and "Sao Joao" left Cochin carrying cargoes of slaves. The first went down in May on the Zululand coast just north of the Mhlatuzi river, reportedly with all hands and cargo.(16) The second was driven by the same storm further south to be wrecked near present-day Port Edward early in June. The survivors, some 220 Portuguese and 400 slaves, trekked overland to Delagoa Bay losing or abandoning some 400 of their number on the way.(17)

In 1554 the Portuguese slaver the "Sao Bento" was grounded near the Mzikaba river. The survivors, 99 Portuguese and 224 slaves, set off northwards towards Delagoa Bay. At the Mzimkulu river they found a young Bengali man living with the locals. He refused to leave with them but rather persuaded two Portuguese and approximately 30 slaves to settle there instead.(18) At Bay of Natal (present-day Durban) they also came across a Portuguese and two slaves, who had been shipwrecked on the Sao Joao two years earlier and were now living there.(19) The party was subsequently joined by one young Arab and later by another Portuguese, but a young Malabar man they met refused to abandon his new home. The party began to lose members severely from the Tukela onwards and ultimately only 56 Portuguese and six slaves reached Delagoa Bay.(20)

The "Sao Thome" was lost in the Mocambique Channel in 1589 but its survivors, who reached Tongaland by boat, do not appear to have lost any personnel until they reached Delagoa Bay.(21)

In 1593 the Portuguese slaver "Santo Alberto" ran aground on the Cape coast, probably in Algoa Bay. The survivors, 125 whites including two women, and 160 slaves (22) travelled northwards to Delagoa Bay which was reached with a loss, either through death or desertion, of nine Portuguese and 95 slaves.(23)

In 1622 the "São Joao Baptista" was wrecked between the Kei and Fish rivers. The party of 279 Portuguese survivors travelled northwards to Delagoa Bay but by the fifteenth day of their trek began to lose members through exhaustion. At the Mzimvubu they discovered a Portuguese survivor from a previous shipwreck who told them of another white and an Indian also living nearby. Ultimately only 28 persons reached Mocambique, the rest either perishing or being abandoned on the way.(24)

In 1635 the "Nossa Senhora de Belem" was run ashore near the Mzimvubu river, leaving 275 people ashore. There they met a Portuguese man, survivor from the wreck of the "Santo Alberto" 42 years earlier, who was now a man of some substance and local influence. They managed to cannibalize their ship and build two smaller boats therefrom. Both set sail in 1636, one being lost almost immediately, the other eventually reaching the Portuguese colony at Luanda.(25)

In 1647 the Portuguese galleon "Sacramento" and the slaver "Nossa Senhora da Atalaya" were grounded on about 1 July 1647, the first at Algoa Bay and the second between the Fish and Kei rivers. The 72 survivors from the "Sacramento" travelled northwards, passing the remains of the "Atalaya" on their way. Their losses however were heavy and by the time they had reached the Mzimvubu only 10 were left. Nine of these eventually met the survivors from the "Atalaya" near the St. Lucia river. They joined up and eventually reached Delagoa Bay, a total of only 124 Portuguese and three slaves completing the journey.(26) One of the people who dropped out on the way, a Portuguese sailor, was encountered 39 years later by the shipwrecked crew of the "Stavenisse".(27)

In 1685 the English ketch "Good Hope" was wrecked in the Bay of Natal. Of the 24 survivors 14 managed to leave, 5 died and 5 remained behind and settled with local brides.(28)

In 1686 the Dutch East India Company ship "Stavenisse" was grounded some 112 km. south of Bay of Natal. There were 60 survivors. 47 decided to travel overland to the Cape and by the time they were reached by a rescue party from Cape Town in 1688 at the mouth of the Kei, only 22 had come through the journey. Of these, 3 opted to remain behind with local groups. The 13 survivors who had decided to remain at the wreck were joined soon afterwards by 2 Englishmen, survivors from the wreck of the "Good Hope" nine months earlier, who invited them to join their settlement at Bay of Natal. Two of them died on the way but the 11 others managed to complete the journey.(29)

That same year the English ketch "Bona Ventura" was wrecked at St. Lucia Bay. Nine survivors made their way south to Bay of Natal where they swelled the existing white population to 25. By combining their skills and labours they managed to build a small sloop, named the "Centaurus", which they provisioned and manned with twenty of their number, the remaining five choosing to remain behind with their local families. The new ship managed to reach Table Bay safely and proved to be so proficiently made that the Dutch East India Company purchased it and later employed it to rescue the other survivors of the "Stavenisse" at Kei Mouth. (30)

In 1713 the "Bennebroek" was grounded near Port St. Johns. The survivors, 57 whites and 20 slaves made some attempts to move southwards to reach the Cape but failed to make much headway, owing to the rugged nature of the terrain about them. Seven of the whites came across a Frenchman who had been shipwrecked 27 years earlier, and stayed on with him and his family. Four were subsequently rescued but the other three remained behind with their newly established families.(31)

SHIPWRECKS

1. DO COUTO, 1611. Frontispiece from an account of the wreck of the Sao Thomè on the east coast of southern Africa in 1589.
2. BAINES, 1876. "Sending line from wreck to lee shore by means of a kite".

RELACAÕ
DO
NAUFRAGIO
DA
NAO S. THOMÈ
Na Terra dos Fumos, no anno de 1589.
E dos grandes trabalhos que paſſou
D. PAULO DE LIMA
Nas terras da Cafraria athè ſua morte.

ESCRITA POR DIOGO DO COUTO
Guarda mòr da Torre do Tombo.

A rogo da Senhora D. Anna de Lima irmãa do dito D. Paulo de Lima no Anno de 1611.

1. Tom. II. V

2.

In 1736 a hunting party, headed by Hermanus Hubner, journeyed into Natal where they came across three Englishmen living with indigenous groups, each having numerous wives and children. They were thought to have been the survivors of an unnamed shipwreck at the Lwambusu river between 1720 and 1730. Included among these were also thought to have been three very young English girls and several Indian men.(32)

In 1755 the English ship "Doddington" was wrecked on Bird Island in Algoa Bay. The 23 survivors built a small sloop and set sail for Delagoa Bay which they reached safely.(33) Two years later, in 1757, the Dutch ship "Naarstigheid" was grounded in Delagoa Bay after a hurricane. The 59 survivors were subsequently taken off by sea.(34) In 1782 the English ship "Grosvenor" was wrecked near Port St. Johns. The survivors numbered 136 including six women. Two men remained behind whilst the rest moved off south towards Cape Town. Ultimately 17 people were rescued with the rest either being left behind or believed dead. Subsequent to this, persistent reports of marooned survivors and of white women having been taken as wives by local chiefs led to an expedition setting out in 1790 under the leadership of Jan Holtshausen.(35) They found no survivors from the "Grosvenor" but instead came across one old white woman called Bessie who, together with two others, had been living among a clan of mixed race.(36)

In April 1796 the ship "Anne and Eliza" ran aground between the Swartkops and Bosjemans rivers. There were five survivors.(37) In June of that same year the American ship "Hercules" was wrecked at the mouth of the Beka river, after being damaged in a storm at sea. The survivors reached Cape Town claiming to have been given further information by their local guides regarding the fate of the "Grosvenor" women.(38)

Further shipwrecks are also known to have occurred on the eastern littoral during this time. These include the "Penelope", September 1591, in Algoa Bay; the "Santo Esperito", 1608, on the Natal coast; the "Johanna", 1863, in Delagoa Bay; the "Joy", March 1730, some 80 km. south of Bay of Natal; and "La Preneuse", 1799, sunk in battle in Algoa Bay. Regrettably it has not been possible to discover any further data appertaining to them.(39)

The picture which emerges of indigenous-immigrant relations on the eastern coastal belt from 1552 to 1800 can hardly be regarded as having been static. Before 1488 the existence of an outside white culture cannot have been known in this region. After the mix-sixteenth century however the increasing use by European traders and slavers of the round-the-Cape route to the east brought its share of maritime mishaps. As a result, hardly a generation can have passed in the lives of the coastal inhabitants of the Transkei, Zululand and Tongaland without the appearance of one group or another of indigent mariners attempting to make their way home. Contact between these unwilling immigrants and the indigenous people was at first inhibited by suspicion and fear, but by the end of this era survivors were being provided with guides and food was easily available on barter. Barrow wrote in c 1801 that :

> "It is a common idea, industriously kept up in the colony, that the (amaXhosa) are a savage, treacherous, and cruel people; a character as false as it is unmerited. Their moderation towards the colonists, and all white people, has shewn itself on many occasions, ..." (40)

He then goes on to quote as examples, the good treatment received by the survivors of the "Hercules" in 1797 and the honourable manner in which the amaXhosa treated white women and children during the earlier border clashes.

This "moderation towards ... all white people" was to show itself repeatedly during these early years. It is true that large shipwreck parties were often subjected to skirmish attacks, but these were usually no more than harrassment tactics designed to speed them out of the country.(41) Individuals however were taken in and integrated into the local community, in some cases rising to positions of wealth and influence. The assimilation process of shipwreck survivors involved two major groups :

a. those who wisely foresaw the logistical difficulties of moving and feeding such large bodies of people and deliberately opted to remain behind, often near the scene of the tragedy.

b. those who did not last the hardships of the journey and were left for dead by their companions.

In the case of the whites, the first group is well documented and, over the years, does not appear to have made up a large percentage of the total shipwrecked population. The second are not documented at all except perhaps by the chroniclers of their time as being missing, presumed dead. A number of them however are known to have survived. Although the latter are of an unknown quantity, the two groups together represent a potentially sizeable body of men. Theal subsequently commented that :

> "As there must have been a good many white men incorporated in this manner by the southern Bantu clans during the sixteenth and seventeenth centuries, the resemblances to European tales which are observed occasionally in the folklore of these people can easily be accounted for." (42)

It could therefore be hypothesised that despite being relatively small and, geographically as well as historically, scattered, an early white presence in this region could have been influential well beyond the mere cross-cultural spread of folk-tales. We know that in many cases these shipwreck parties included men with craft backgrounds. It is only natural to assume therefore that, should any of these have opted for local residence, they would have had the skills and opportunities to build dwellings in their own imported style. This is, of course, assuming the local availability of suitable materials and the possibility of fashioning the necessary tools.

Despite this potential, no accounts have been discovered to date of these early settlers to the region having built their domestic structures in a European style. It is also not known whether they attempted to bring about any changes to local technology and building traditions, although in retrospect, this kind of adjustment would today be difficult to trace. If they did, it would seem that their influence upon the indigenous built environment of that time must have been negligible. It therefore can be assumed that, in their case, integration into the local community must also have entailed acceptance of its architectural norms, as dictated by both physical conditions and social customs.

This analysis has, thus far, ignored one other very important factor : that in most cases, early shipwrecks involved the presence of black as well as white survivors. Often the former outnumbered the latter by as much as two to one and, as they were usually also slaves, it can be safely assumed that their inducement to desert the company must have been high. The low proportions of slaves known to have come through the various overland journeys attest to this fact.(43)

The geographical background of these slaves was varied. Some are thought to have originated from West Africa, others from Malabar and Bengal and a small minority from China.(44) It may be assumed that most if not all were snatched

from rural backgrounds and must therefore have been well versed in the social and environmental processes of their own vernacular architectures. If therefore we wished to find evidence of an immigrant influence upon the building traditions of this region, then it is sensible that we should first seek it in this direction before looking to European society for it. The potential for these Indian or African slaves to find integration within the local community must have been higher than in the case of the white survivors. On the other hand we should not underestimate the ability of persons of differing cultural and economic backgrounds to find common ground under pressures of physical hardship and survival - nor, for that matter, of local indigenous society to accommodate a variety of people beneath its wider cultural umbrella.

It is probable, despite the dearth of reliable historical material on this subject, that a more intensive programme of archival and field research will make a valuable contribution to our knowledge and understanding of the exact role played by these early settlers to our shores, in the history of the region.

It is perhaps necessary also to point out that the settlement of individual white immigrants elsewhere amongst southern African indigenous groups was to continue well into the nineteenth century. Campbell wrote in 1820 that :

> "Kreega (Kriege?), a boor from the colony, lived among the Griquas about fourteen years ago, when Dr. Cowan and his party were on their journey into the interior ... Kreega left four or five wives behind, and a considerable stock of cattle." (45)

Campbell omits to tell us what Kriege's homestead looked like but it is safe to assume that he and his extended family lived in Khoi mat huts. Backhouse tells of a similar example he came across at Kokfontein in Namaqualand in 1839 where :

> "Near the ford, the family of an aged Boor was residing in mat-huts. We did not visit him, as his wife, who was a (Khoikhoi), said he was so deaf, that we could not make him hear: ..." (46)

The same author wrote earlier that year of another family in the southern OFS where :

> "... a Welshman, who had married a Bechuana woman, was living in a poor, roof-like hut of reeds, near a spring ..." (47)

Backhouse's description leaves us in some doubt as to the real nature of this dwelling. It is unlikely however, that he could have been referring to a conical form. He began his journey into the interior from the eastern Cape and thus would not have come across indigenous cone on cylinder dwellings much before the Thaba 'Nchu area. On the other hand the Kapsteil and hardbieshuise were both "roof-like" and usually covered with reeds. If this was indeed the case, then this example marks one of the earliest recorded cases of a white-black marriage where the family did not build their dwellings in an indigenous style. The hardbieshuis can therefore be seen to be a reasonable compromise between white expectations of dwelling form and the indigenous availability of materials.

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40. BARROW, John
"An Account of Travels ... etc." London : T. Cadell Jun. and W. Davies, 1801 and 1804. pp. 196-197. The full quotation reads as follows :

> "It is a common idea, industriously kept up in the colony, that the (amaXhosa) are a savage, treacherous, and cruel people; a character as false as it is unmerited. Their moderation towards the colonists, and all white people, has shewn itself on many occasions; and if the inhabitants of the bordering parts of the colony had any sense of honor or feelings of gratitude, instead of assisting to propagate, they would endeavour to suppress, such an idea. They know very well that in the height of a war in which this people was iniquitously driven, the lives of all their women and children that fell into the hands of the (amaXhosa) were spared by them, whilst their own fell promiscuously by the hands of the colonists. Another instance of the different manner in which the Dutch and the (amaXhosa) conducted themselves, under the same circumstances, will serve to shew which of the two nations most deserves the character thrown upon the latter.
>
> In the month of February 1796, a vessel from India under Genoese colours was wrecked on the coast of the colony between the Bosjesman and Sunday rivers. The (white) peasantry from various parts of the coast, from Langé-Kloof to Kafferland, flocked down to the wreck, not for the humane purpose of giving assistance to the unfortunate sufferers, but to plunder them of everything that could be got on shore and it is a notorious fact, that the only man who was anxious to secure some property for the captain and officers had his brains dashed out with an iron bolt by one of his neighbours.
>
> In June 1797, the Hercules, an American ship, was stranded between the mouths of the Keiskamma and the Beeka. By the time that the crew, consisting of about sixty persons, had got on shore, they found themselves surrounded by (amaXhosa), and expected immediately to have been put to death by these savages. Instead of which, to their no small degree of joy and surprise, a chief gave orders for an ox to be instantly killed, and the flesh distributed among the unfortunate sufferers."

41. This compares with similar difficulties experienced by indigenous groups moving about on the central Highveld during the era of Difaqane. The early shipwreck parties were therefore not necessarily attacked because they were white, often being predominantly black anyhow, but because their size and constant need for provisions made them a potentially destabilising force in the region. Most local chiefs would obviously have been only too glad to have sped them on their way.

42. THEAL, George McCall. Op. Cit.

43. Ibid. In the case of the "São Bento" in 1554 six slaves out of 224 reached Delagoa Bay as against 56 out of 99 Portuguese. Other shipwreck accounts show similar figures.

44. Pancho Guedes. Pers. Comm.

45. CAMPBELL, John. Op. Cit. 1822.

46. BACKHOUSE, James
"A Narrative of a Visit ... etc." London : Hamilton, Adams, 1844.

47. Ibid.

> "A young lady described the Cape and its inhabitants in very few words. 'The people are all nice and plump; the houses are prettily whitewashed and painted green.'"
>
> BARROW, John. "An Account of Travels ... etc." London : T. Cadell Jun. and W. Davies. 1801 and 1804.

When the first Dutch colonial settlement at the Cape was established in 1652. these immigrants inevitably brought with them the knowledge of their own building technologies and domestic dwelling styles. Although these were quickly tempered by local conditions, their architecture prospered and rapidly developed an identity in its own right. With time white settlement spread into the interior. not only coming into increasing contact with the Khoikhoi. but in the process also displacing these indigenous inhabitants off their old pastoral lands. It was to be a while. however. before this was to result in any noticeable changes in local housing patterns.

The presence of a white architectural influence in rural southern Africa was only to manifest itself in later years with the emergence of a number of new dwelling forms as well as the introduction of new building technologies and materials into the local habitat. In some cases the two were linked. but for the purposes of this discussion it is generally possible to deal with them on an individual basis.

The Meaning of the Square Plan

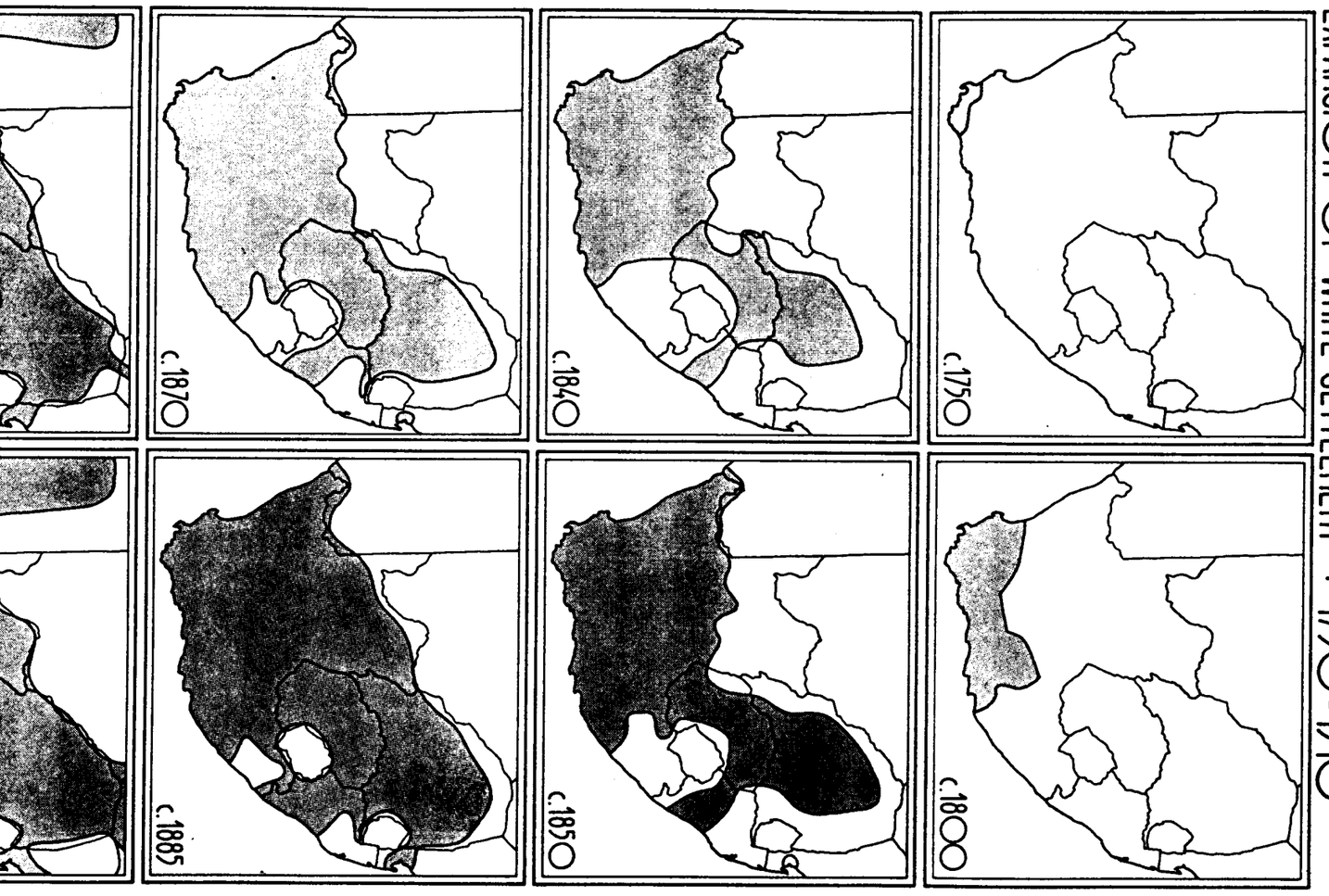
The relationship existing between square or rectangular plan dwellings and the introduction of mass produced artifacts into rural society has been discussed during the course of a previous chapter. Historically however we know that the use of a rectangular plan in indigenous architecture preceded that of the square. Thus, while it is possible to link both to an availability of western furnishings, the timing of the older plan is not consistent with the parallel social and economic changes in rural life which it implies. The conclusion which emerges is that the rectangular plan was a direct borrowing from an outside culture, made out of context of indigenous needs and realities. The square plan, on the other hand,can be seen to be the natural outcome of a local evolutionary process where this form is linked economically and technologically to other indigenous dwelling forms. Perhaps therefore some differentiation ought to be made in this case between the implications of a "direct" and an "indirect" immigrant influence.

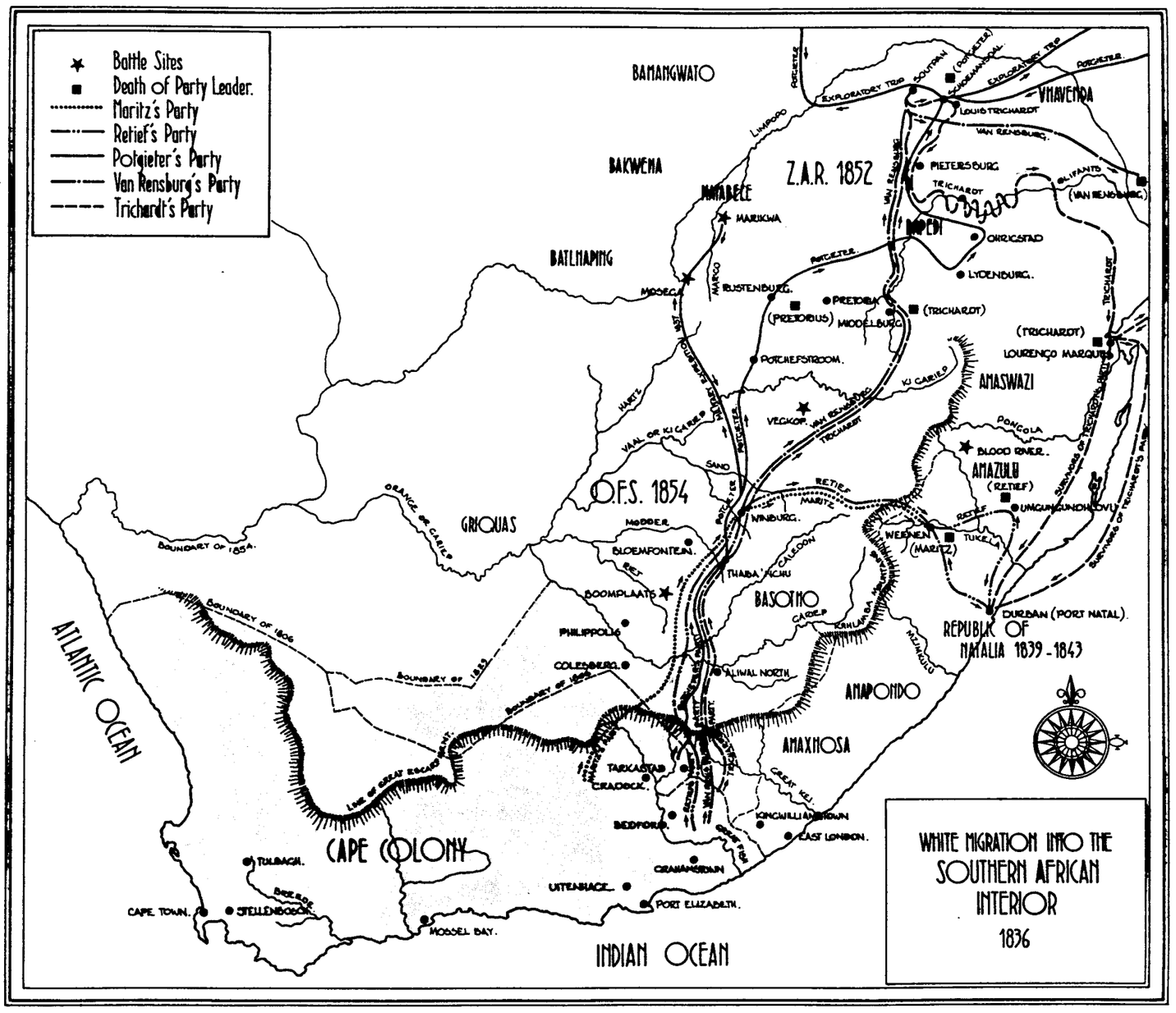
The existence of a direct immigrant influence upon the indigenous built environment becomes evident among the Khoi of the western Cape from about the eighteenth century onwards. This usually involved the construction of rectangular plan structures. either gable or hip roofed. derived directly from the neighbouring Dutch. Sparrman visited a Khoi homestead in the Outeniquas in 1775 and wrote :

> "We then went into their houses without delay or molestation. some of which were built of straw in a square form with shelving roofs. like the cottages of the slaves." (1)

It is not known whether this "borrowing" can be considered to have reflected an element of "status" among the local Khoi. Certainly the constructional technology involved most specifically that of the roof. had no parallels in the

EXPANSION OF WHITE SETTLEMENT : 1750-1910





indigenous architecture of that time, nor is there evidence that the Khoi dwelling form ever underwent a process of gradual development. On the other hand it was round about this time that European artifacts were beginning to percolate through into Khoi society. Sparrman recorded that once he found his servants fast asleep "on a little bench" inside a mat hut, while in 1775 he visited a local Khoi chief in the Riet Valley, where the traditional dwelling was :

> "... so roomy as to allow a bedchamber and wardrobe being parted off from it by means of mats." (2)

Regrettably information on this subject is sparse and it is not known to what degree the above examples comply with the general norm or whether they are merely single instances.

From about 1800 onwards references to the Khoi building rectangular plan dwellings become more frequent. Although some of these are known to have been erected on white controlled farmlands, the majority appear to have been located in the grounds of mission stations such as Genadendal in 1811 (3), Sak River in 1811 (4), Pella in 1813 (5), Hardcastle in 1813 (6) and Klaarwater (Griquatown) in 1834 (7), to mention but a few. The construction of this domestic form should therefore be considered in the context of missionary endeavour in this region.

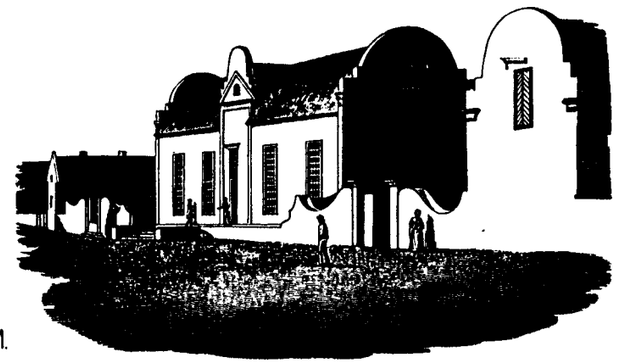
The existence of an indirect immigrant influence can, on the other hand, be perceived to have been part of a much slower and long-term chain of events involving material, technological, social and economic transition in the southern African hinterland. Being an evolutionary process, it did not seek the radical supplant of an existing architectural tradition; it did not directly try to undermine existing social structures; it cannot even be said to have been identified with any conscious movement or motivated by a strong ideology. It took place from the 1820s onwards as part of a wider historical development which derived deeply from its traditional roots, both architectural and social. This means that although the rural builder of today does construct square and rectangular plan dwellings, as well as many other types, he considers these to be part of his wider repertoire of domestic forms, having been derived locally and as the result of internal pressures.(8) The transition from circular to square plan involved various stages of development which, in some areas, took many generations to achieve. Most important however is the fact that such changes were brought about without there having been any consequent devaluation of the social and economic pressures and values inherent in vernacular architecture.

In architectural terms it will be seen that the structure of the circular plan and that of the square plan are closely linked and part of the same technological tradition. The rectangular plan and the resolution of its load distributions, on the other hand, require the use of a totally different roof technology. It could be argued however that in some areas, such as the northern Cape, the development process of indigenous architecture has continued to the point where the rectangular plan has also been incorporated into the indigenous range of dwelling forms.

The manner in which change can be perceived to have occurred in the indigenous architectures of the Cape and the southern African interior respectively therefore stands them in sharp contrast to each other. In the case of the former, we find that Khoi society through the very nature of its traditions, land values and economic make up, was easily dispossessed of its grazing land and forced to accept changes to its building traditions without undergoing a period of adjustment and reorientation. In the latter case however, the people were possessed of a different system of land economy and thus were better equipped to withstand the threat of white colonial expansion. This had the effect of softening to

COLONIAL ARCHITECTURE : CAPE DESIGN TRADITION

1. BURCHELL, 1812. Drostdy at Graaff-Reinet.
2. BURCHELL, 1811. Drostdy at Tulbagh.
3. BURCHELL, 1811. Church at Stellenbeech.
4. BURCHELL, 1811. Village of Tulbagh.



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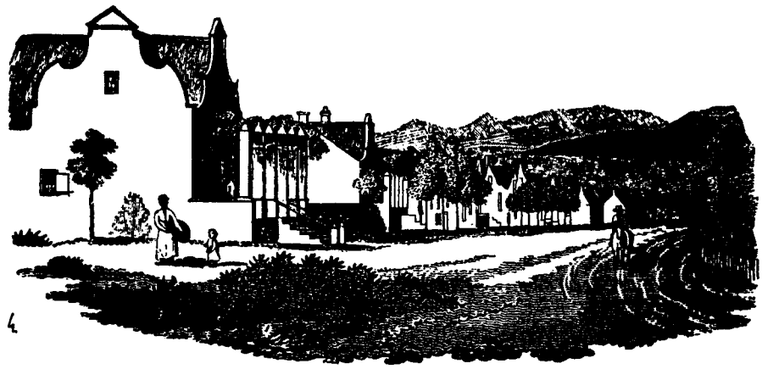

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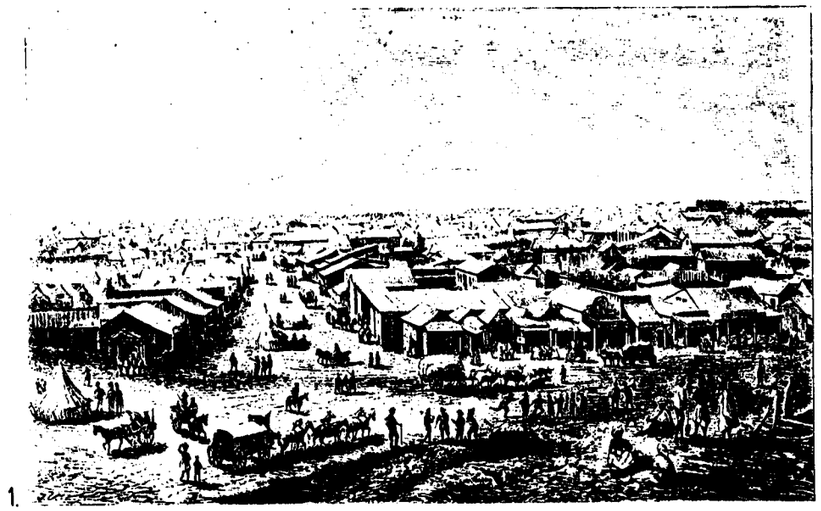
COLONIAL ARCHITECTURE : THE SOUTHERN AFRICAN INTERIOR



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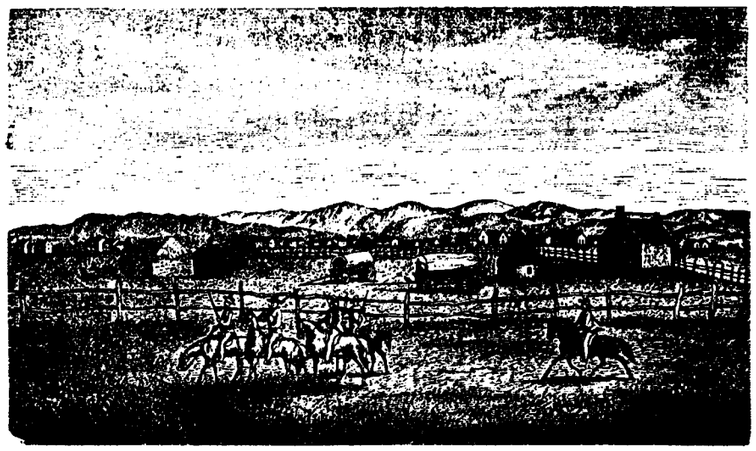

3.

1. HOLUB, 1872. Kimberley.
2. WANGEMANN, 1875. Private house, Potchefstroom.
3. WANGEMANN, 1875. View of Pretoria, 1867.

COLONIAL ARCHITECTURE : THE VERANDAH TRADITION

1.

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1. WANGEMANN, 1873. Stendal M.S.
2. HORNE, 1895. Mission house, Molepolole.
3. WANGEMANN, 1875. Emmaus M.S.
4. WANGEMANN, 1875. Konigsberg M.S.
5. WANGEMANN, 1875. Blouberg.

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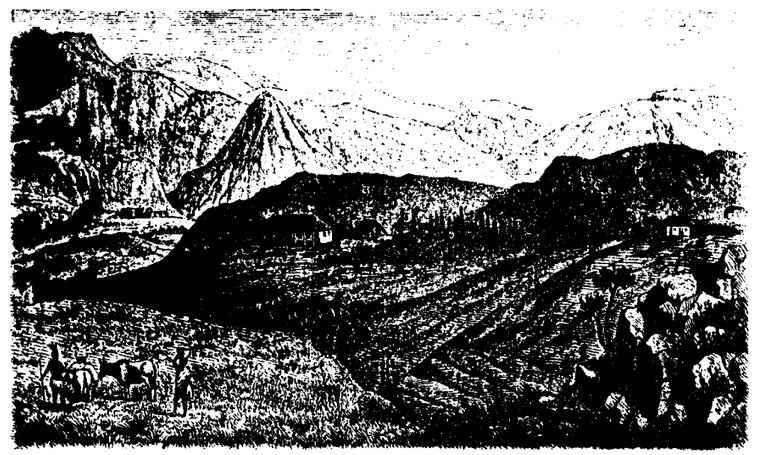

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COLONIAL ARCHITECTURE : FARMHOUSES AND OTHER RURAL STRUCTURES

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1. BURCHELL, 1811. Boer's house in the Roggeveld.
2. WANGEMANN, 1871. Farmhouse in the Cape Colony.
3. HOLUB, 1873. Hotel on the Riet River.
4. HOLUB, 1873. Hallwater Farm, south-western Transvaal.
5. LEYDS. First house in Pretoria.

a large extent the impact of the two cultures coming together. Although changes in the economic and social structuring of indigenous society can ultimately be perceived to have occurred, these were not brought about in rapid order but were part of a slow process of adaptation which is continuing to the present day.

The Kapsteilhuis and the Hardbieshuis

Although architectural historians generally tend to recognise these two as being individual and identifiable dwelling forms in their own right (9), such a distinction is usually made on purely aesthetic grounds. Too little, for example, is known about the construction of the hardbieshuis to support such a separation. On the other hand, their outward resemblance and their obvious Cape origins makes it possible to speculate that the former is but the latter under a different regional name, much like the flat-roofed parapet dwelling of early Cape Town which, over the years, has been variously associated with the Malays, the Karroo Boers, the Griquas and the baSotho. Thus, for the purposes of this discussion, it is proposed to deal with them under the same heading.

Little is known to us today of the exact origins of the Kapsteilhuis, but its presence in the vicinity of Cape Town in c 1680 would seem to confirm its immigrant and Dutch roots.(10) In its earlier years it appears to have been a popular structure among white farmers, probably serving as a temporary dwelling or produce shed.(11) By the 1840s its use had spread to the Khoi on Cape mission stations (12) as well as missionaries and settlers further north in the OFS and the northern Cape.(13) In at least one instance, it was seen by Backhouse to be serving an interim or transitionary function among the Khoi of Groenekloof (Mamre), as they moved from their traditional mat hut to the more conventional cottage dwelling. (14)

The use of this structure however was not limited to the Dutch or the Khoi. Lewcock states that the English settlers of the 1820s employed it as an interim shelter in the eastern Cape in c 1820 (15), while Lord and Baines in 1876 wrote that :

> "The hartebeeste hut ... mostly used by colonial (Khoikhoi), is simple and easy enough to make. It has one straight side, and one lean-to ..." (16)

This description, and the sketch which accompanied it, are somewhat at variance with Walton's representation of the appearance of these huts.(17) He shows them to have been A-frames structures, a fact supported by virtually all early drawings of this form. Thus, either Lord and Baines were wrong in their description, a fact hardly creditable in the light of the latter's reputation as an observer, or we must accept that the term of "hartebeesthuis" was popularly given to all temporary lean-to reed shelters at that time.

This opens the way for further speculation. Lean-to shelters of this nature were not unknown to the Khoi at the Cape before 1652 (18) and the San form of matting shelter was not too dissimilar to the Lord/Baines model.(19) This means that the basic concept of a Kapsteilhuis could have been derived by the immigrant Dutch from indigenous sources and adapted to meet their own local needs. Ironically, this dwelling form returned to the Khoi at a later stage once they began to abandon their hemispherical mat huts.

This interrelationship between the indigenous Khoi and immigrant Dutch farmers is further illustrated by the fact that the hardbieshuis was to become identified with the "trekboer" movement into the OFS and Natal from the 1840s onwards (20) whilst at the same time becoming integrated into the Cape stereotype of Griqua

KAPSTEIL AND HARDBIESHUISE

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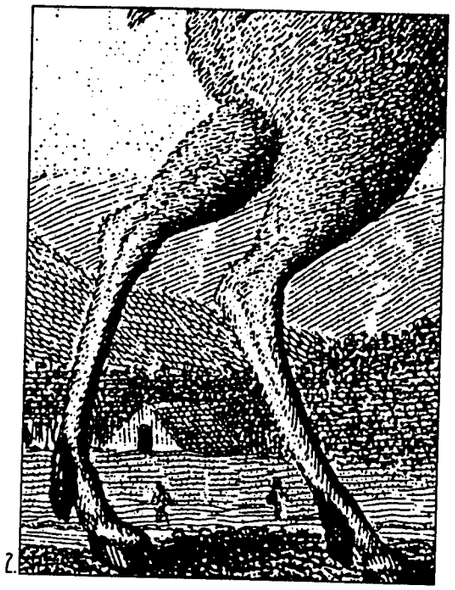

2.

1. LICHTENSTEIN, 1812. Melampus Antelope.
2. LICHTENSTEIN, 1812. Enlargement showing kapsteilhuis in background.
3. BACKHOUSE, 1839. Hardbieshuis.
4. BACKHOUSE, 1839. Bethany M.S. Abandoned hardbieshuise about byre.

3.

4.

and Koranna architecture. They continued to be built by the former well into the 1870s and possibly even later in some isolated instances.(21)

Interestingly enough this dwelling form does not appear to have gained in usage among indigenous groups further north until comparatively recent times when Kapsteil-like structures using corrugated iron sheeting have been recorded in the vicinity of Mafikeng. in the northern Cape, and in some parts of Lesotho.(22)

The Cottage Dwelling

This is a domestic form which was to be associated with white farmer and missionary settlement throughout the nineteenth and early part of the twentieth centuries. Although there are a number of documented cases where the indigenous construction of cottage dwellings took place from as early as 1775 this was usually done at the instigation and under the guidance of missionaries. The structure was usually based upon a rectangular plan, having one or two rooms, and the roof was either hipped or gable ended.

The earliest example known to date of the indigenous occupation of a cottage dwelling, recorded by Sparrman in the Outeniquas in 1775, has already been mentioned earlier in this chapter. Subsequent cases found on mission stations are also quoted by Burchell at Genadendal in 1811 (23); by Campbell at Pella in 1813 (24); by Casalis at Zuurbraak in 1836 (25); and by Backhouse at the Kat River Settlement, at Morley, at Philippolis, at Griquatown and at Groene Kloof (Mamre) all in 1839 (26), to mention but a few.

It appears that this dwelling form had little impact upon the indigenous architecture of the southern African hinterland until well into the twentieth century. Early examples of these structures are recorded as having been built by white traders and soldiers for such local luminaries as Chetswayo in c 1879 (27), Lobengula in c 1880 (28) and Sechele in c 1873.(29) Apart from these however little is known of them until the 1900s, when they began to be built in Lesotho (30) and the northern Cape (31) as well as the Transkei, Zululand and the highveld region.(32) In most cases they appear to have been a rough and immediate translation from the white vernacular but in at least one area, in the northern Cape and southern Botswana, a certain amount of experimentation seems to have taken place with the length of ridge and the building of the trusses.

The Flat Roofed Parapet Dwelling

This is a dwelling form which, over the past two centuries, has been associated with a number of urban as well as rural environments. Its origins may be traced back to Cape Town as early as 1717 (33) but its emergence as a one or two-roomed, single storey cottage associated with the Malay community did not come about until later that century.(34) Originally this consisted of a central doorway giving onto a living/kitchen area with a sleeping room located to one side of it. Windows were set equally about the door opening giving the front facade a symmetry which belied the asymmetrical disposition of the plan beyond it. The door and window reveals were often emphasized with a broad plaster border as were the facade corners. The parapet walls rose on three sides of the low-pitch roof allowing rainwater drainage to occur to the rear and away from the facade. The front parapet was often corniced although in some examples the plaster mouldings were heavily ornamented.(35)

Roof construction often consisted of 25-35 mm yellowood or deal boarding placed on heavy beams. A crushed brick aggregate was next laid and finished with three coats of shell-lime and sea-shells. This method of construction suffered severely

THE KHOI COTTAGE : A CASE OF MISSIONARY SUCCESS

From the early 1800s onwards the Khoikhoi built environment began to undergo extensive changes as the result of missionary influence. The mat beehive began to give way to the kapsteil and hardbieshuise and, later, to gabled cottages.

1. BURCHELL, 1811. Khoi dwellings, Genadendal M.S.
2. CAMPBELL, 1813. Bethelsdorp M.S.
3. BACKHOUSE, 1839. Griqua Town M.S.
4. BACKHOUSE, 1839. Zuurbraak M.S.

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COLONIAL ARCHITECTURE : THE COLONIAL FLAT-ROOF TRADITION

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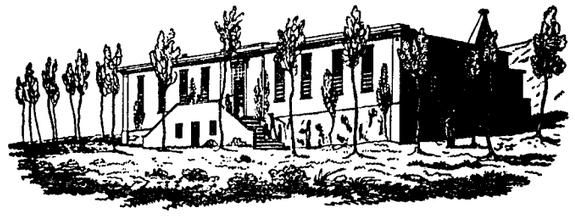

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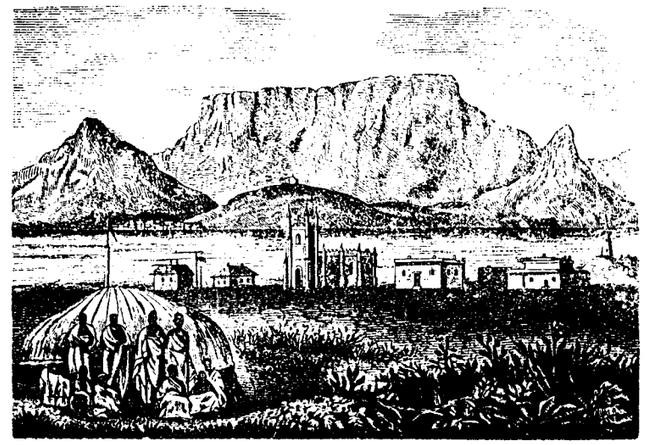

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1. BURCHELL, 1811. View of Cape Town street.
2. BURCHELL, 1811. Bath house at Zwarteberg.
3. WANGEMANN, 1873. View of Cape Town from Robben Island.

from water-exclusion problems (36), most particularly in Cape Town with its wet and cold winters. However as the colony began to spread inland, this dwelling form was found to be ideal for the more arid conditions of the interior and soon began to be identified with the Dutch farmers of the Karoo (37), becoming part of their architectural literacy.

As white immigration continued northwards into the OFS and the Transvaal, knowledge of this dwelling form expanded into these areas. Early flat-roofed structures built by missionaries were recorded by Backhouse in 1839 at Bethany m.s. as well as Beersheba m.s. in the OFS. (38) However, as they were found to be ideally suited to the climate of the highveld their use spread rapidly and soon became its predominant architectural style. Baines recorded flat-roofed dwellings at Colesberg in 1848 and Bloemfontein in 1850 (39), and by 1873 Holub was led to comment that :

> "In its general aspect, Fauresmith is very like the other Towns in the Free State. Although consisting of not more than eighty houses, it nevertheless covered a considerable area, and the clean white-washed residences, flat-roofed as elsewhere, peeping out from the gardens, looked altogether pleasant enough. The town is the residence of a kind of high sheriff, and must certainly be ranked as one of the most considerable in the republic."(40)

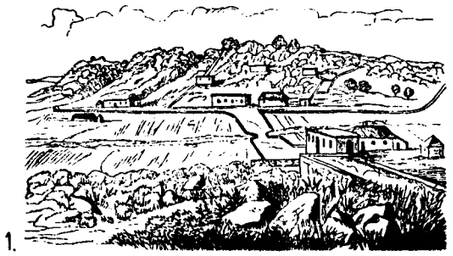
Flat-roofed structures were also recorded in the Transvaal by Holub at Christiana in 1873 (41), by Wangemann at Potchefstroom in c 1875 (42) and by Merensky at Botshabelo mission station in c 1882.(43)

It was at about this time that the social and economic fabric of rural southern Africa was disrupted by a period of prolonged drought, followed successively by plagues of locusts and the rindepest epidemic of 1897. This was aggravated by the Anglo-Boer conflict of 1899-1902 which also resulted in the firing of many Dutch homesteads and their crops. As a result we find that by the 1920s the use of flat-roofed dwellings had become associated with white rural poverty. (44)

The spread of the parapet style during the latter half of the nineteenth century was facilitated to a large extent by the introduction, in the early 1860s, of corrugated iron sheeting imported from Britain.(45) The technical and economic performance of this material soon proved to be vastly superior to that of a number of other waterproofing methods which had been tried previously in the Cape.(46) Although at first its availability was limited to the larger urban areas, by the 1870s and 1880s, following the opening of the Kimberley diamond fields and the Transvaal gold fields, it rapidly spread into the southern African interior. There it found widespread usage in both the domestic and industrial sectors. Inevitably it was only a matter of time before it was to find its way into the hands of rural builders.

The earliest pictorial records found to date of the rural use of corrugated iron on black residential structures are picture postcards of the Edwardian era. The first, entitled "Typical Hut in the (Black) location, Kimberley", shows Khoi-like domed dwellings covered with a variety of materials including some metal sheeting. Their position in the vicinity of an industrial centre and the squatter-like quality of the huts, however, betray the semi-urban nature of the settlement.(47) The second shows the "(Black) location, Bethlehem, O.R.C." where there appears to have been a predominance of gable-ended cottages of a more conventional construction.(48) Scattered among them however were a number of flat roofed structures which, significantly, had their sheeting held down with a variety of stones or other objects, a practice prompted by socio-political considerations which survives to the present day.(49)

COLONIAL ARCHITECTURE : THE LEAN-TO AND PARAPET ROOF TRADITION



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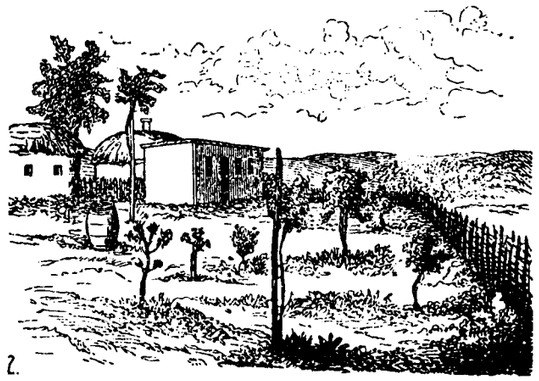

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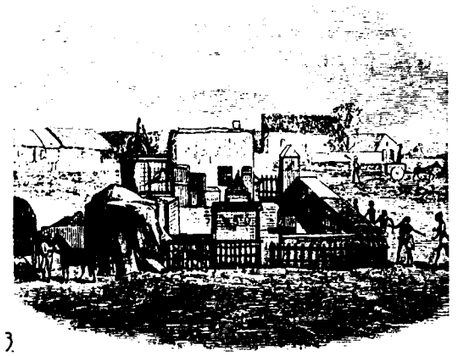

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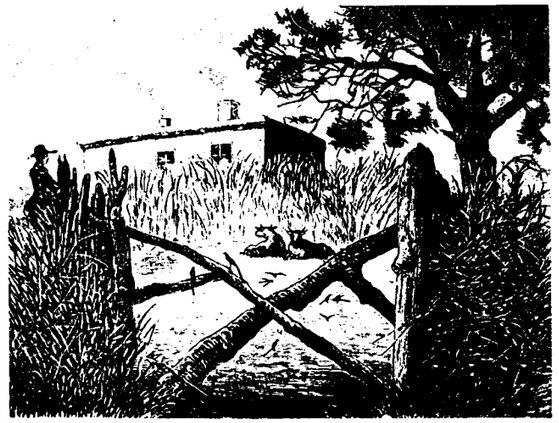

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1. WANGEMANN, 1875. View of Botshabelo M.S.
2. WANGEMANN, 1873. Emdiseni M.S.
3. HOLUB, 1873. Holub's house at Bultfontein.
4. HOLUB, 1890. Boer homestead in the OFS.
5. WANGEMANN, 1873. Bethanien M.S. in 1867.

The adoption of corrugated iron into black rural architecture was to be gradual. Very little of it is evident in the photography of Duggan-Cronin in the 1920s and the 1930s and it only emerges as a force in indigenous building from about the 1940s onwards. At that stage its use predominated on the central highveld region, becoming identified with the housing of farm workers but in more recent times it has begun to spread into the northern Cape, central Transvaal and some parts of Natal and Transkei. Its use in conjunction with a parapet wall however appears to have remained limited to the northern OFS and southern Transvaal areas.

Mention should also be made of the fact that, since the early 1970s, the flat-roofed dwelling has become associated with the emergence of squatter settlements about southern Africa's major urban and industrial areas. The basic lean-to shelter is quick and economical to erect and its modular nature lends itself to the core-house principle.(50)

Wall Building Technology

Perhaps the greatest single contribution to indigenous architecture which was made by white immigrants to southern Africa was in the field of technological innovation. Almost from the very outset, a lack of transport infrastructure and the distance of many settlements from the coastal ports forced new settlers to rely almost totally upon local materials and knowhow for their first dwellings. Livingstone wrote in c 1857 that :

> "The entire absence of shops led us to make everything we needed from the raw materials. You want bricks to build a house, and must forthwith proceed to the field, cut down a tree, and saw it into planks to make the brick-moulds; the materials for doors and windows too, are standing in the forest; ..." (51)

Timber was also a problem in many of these areas. Casalis, writing from Lesotho in 1833, said that :

> "We noticed - and not without anxiety - that most of the trees of this country tend to develop the most fantastic embranchments and protuberances, rather than to adopt the vertical habit. Nevertheless, we managed to find a fair number of the younger trunks to meet our requirements." (52)

This lack of suitable timber was a serious handicap to many of these early settlers. Some opted temporarily for the predominant method of indigenous wall construction : wattle and daub. Others however preferred to experiment in a technology they felt more familiar with, clay or sod bricks. Local conditions were not always favourable, as Germond learned at his own expense at Thabana Morena in 1863, where, because :

> "... the soil was too clayey, the bricks all cracked with the first rays of the sun, ..." (53)

Early disasters were not always so modest. Daumas writing at Mekoatleng in 1838, complained that :

> "The building having collapsed, because of the great rains which we have had since the beginning of the year, I found myself compelled, however reluctantly, to close the school." (54)

Experimentation with sod block construction also produced some anxious moments. Lee tells us that Johnson attempted a variety of methods :

> "Many of his early churches were dug out of the ground in the form of sods of earth with grass attached, which were used as bricks, and laid in rows to form rough walls ... It was a miracle that the churches stood at all." (55)

It is difficult to determine just how influential these early settlers were in bringing about changes to local building traditions. It is true that missionaries regarded themselves as being part of a larger civilizing influence which sought to undermine those facets of indigenous culture which they deemed to be "heathen". This included, by implication, certain aspects of architecture and settlement pattern but does not appear to have involved constructional methods. Also missionaries were but a small, if influential, proportion of the total immigrant population and it is doubtful that other whites saw themselves in a similar role. Therefore technological innovation must have occurred more by a process of employment and practical tuition than through some kind of mysterious cultural osmosis or moral example.

This opinion is reinforced by the 1878 "Guide to the Transvaal" which stated :

> "On all farms, brick clay is found; the farmers make their own bricks, and most of the natives are skilled in this labour." (56)

As by that date the history of any missionary presence in the area could not have exceeded one generation in time, the likelihood that brick-making had permeated into indigenous black society through the former's agency is highly unlikely. On the other hand the Guide also points out that every farmer was allowed to employ up to ten Black labourers free of taxation and that :

> "On large farms it is customary to allow the heads of the (indigenous) families, engaged on the farm, a few acres of ground, to till for their own use, and on a portion of which they erect their cottages ..." (57)

A point which should also be considered is the fact that indigenous terminology for the brick is virtually universal. The Nguni use the word "isitena", the baSotho "ditene", and the baTswana "ditena"; all may be perceived to be derived from the Dutch "baksteen" meaning brick. Similarly the names for the customary wooden, brick-making mould can be seen to be derived from the Dutch. One of the more common, the baTswana "foromo", is an obvious distortion of "form" or mould.

Significantly the baTswana, who are known to have been brick makers in their own right before the 1820s, also use another word, "polwane", in order to signify "bricks". The "polwane" however are different from the "ditena" in that they are smaller, flatter and are made by hand.

Another term which was also encountered from time to time during the course of current field work was "Kimberley brick", sometimes pronounced as "Kimmerli", which was used to denote a clay, sun-dried block, manufactured virtually throughout southern Africa. The implications of the name are interesting. The Kimberley diamond fields were opened in 1866 and attracted a variety of miners, prospectors and fortune-hunters from all over the world. Since these fields were located far inland and lacked a transport infrastructure, building materials would initially have been in short supply, leading immigrants to improvise with local resources. The green or sun-dried clay brick was undoubtedly part of the background of many of these people. It is therefore possible to conclude that local men coming to the mines as migrant workers would have learnt the technology locally and subsequently taken it back to their own areas. It should also be borne in mind, however, that Kimberley lies in a baTswana area, where knowledge of the "polwane" could have been transmitted to other indigenous visitors drawn there by the prospect

of work.

An improvement to green brick technology which is thought to have been implemented by white farmers and missionaries alike during the last century is the process of firing the clay. The "Guide to the Transvaal" of 1878 stated that :

> "The clay, when burned, makes an excellent hard, dark red brick. The clamp of bricks is provided with flues, and chambers having but one small vent at the top. The exterior is coated with clay to keep the heat in. The chambers are packed with wood, which is set fire to, and the whole allowed to burn for several days."(58)

Unlike green brick manufacture, firing does not appear to have found universal application in the rural areas, and during the course of current field research only isolated examples could be discovered. The similarity, however, between the processes and clamp forms used as far apart as Venda and the southern Transkei seems to indicate a common root to the technology.(59)

The question of a wider missionary influence upon the technology of the region, which is also pertinent at this point, will be discussed during the course of the following chapter.

Roofing Technology

One of the more obvious areas where change has been brought about in local building technology, through contact with immigrant whites, has been in the field of roofing. This has involved two distinct factors : method and materials.

Traditionally the indigenous builder could roof his dwelling any one of a number of ways. Generally this involved the use of long grass, gathered into bundles and laid upon a timber framework strong enough to carry the live load of the thatcher. The whole was then held down with a network of ropes made from woven grass or other natural fibres. Water-sensitive areas such as the apex and the eaves were likewise resolved with grass details. Today, in most cases, this technology no longer survives and has been replaced by methods introduced by white immigrants whereby the grass bundles are opened up and sewn down upon the roof frame by means of tarred twine and a wooden needle. Dressing of the thatch into a smooth continuous surface is done with a wooden leggett.(60)

The resultant roof aesthetic is usually known today as the "boer" style thus betraying its Dutch origins. Although the twine, needle and thatcher's stirrup are known locally by various names, the thatcher's paddle or leggett is given almost universally as "idekspan", being derived from the Dutch "dekspan" or "roofing tool".

The scalloped or shingled style of thatching varies little from the above technology, except for the fact that it dispenses with the use of a leggett, and should therefore be considered to be a variant of the "boer" style. Indigenous informants however tended to regard this as an older and hence more traditional thatching system.

The timber roof structure has also been subjected to a measure of change as the result of outside influences. This took place in two major ways :

1. In the Transkei and eastern Cape region the pyramidal framework of the roof spanning over a square-plan dwelling was adapted to meet the needs of the circular plan. This system was probably evolved by local craftsmen trained at missionary trade schools and skilled in European carpentry. The development did not affect the external aesthetics of the indigenous cone on cylinder but it may have resulted in some savings of local timber.

2. In the construction of hipped and gable-ended cottages, both dwellings of white origin, the roof technology demanded the use of a triangular roof truss. These are usually 'A'-sections with the tie-beam being located in the upper third of the roof void. This dwelling form is not limited to any one particular area but may be found generally throughout the southern African region.

The introduction of industrially-manufactured building materials into southern Africa, most particularly galvanised and corrugated iron sheeting, from the 1860s onwards, was to have a profound effect upon the built environment of the sub-continent. The emergence of the flat-roofed dwelling as an indigenous form in its own right is a phenomenon which has already been discussed and thus need not be recapitulated. The penetration of this material into the region, however, was not limited to the square plan cottage but extended, in recent times, into the field of more traditional domestic structures. Being essentially suited to 90^{o} planning, its adoption to conical roofing needs had, in most cases, been a little forced, to say the least. Nonetheless some ingenious solutions have been recorded locally, most particularly in the eastern Cape.(62) The emergence of hexagonal and octagonal plan dwellings should be seen, at least in part, as an effort at creating a compromise between the forms of indigenous architecture and the realities of a new roofing technology.(63)

A Reverse Influence

An important factor which has gone largely unexplored thus far relates to the numerous recorded cases of European families immigrant to the region who adopted indigenous building forms and technologies and made them their own. Unlike those previously discussed, where white men married local women and settled down among indigenous groups, these examples are of people who, as a matter of choice, conformed their dwellings to local architectural norms. Although in many cases these were not permanent but merely aimed at meeting the settlers' short-term needs for shelter, in a small number of instances they were upgraded and became part of their new vocabulary of settlement.

This standpoint was put forward by the Government of Southern Rhodesia which, in 1935, wrote :

> "As a purely temporary dwelling, huts of pole and dagga ... under a thatched roof are satisfactory. These can be either round or square, and separate huts can be used as sleeping and living rooms ... they should be so placed that when the permanent homestead is built they can be used as 'outside' or store rooms."(64)

One of the earliest cases recorded was that of the missionary van der Kemp who not only lived among the Khoi in a traditional mat hut but went so far as to take a local girl to wife. His philosophy was that he could not inspire his "flock" with a love of God unless he was himself willing to share in their privations. Needless to say his methods did not meet with the approval of other whites. Lichtenstein wrote in 1804 that :

> "... he would surely have done much better ... to have inspired them with some sort of taste for the refinements of civilization, rather than to have levelled himself with them, and adopted their habits of negligence and filth. It appears to me that Van der Kemp is of little value as a missionary, ..." (65)

while Campbell commented nine years later that :

> "... had the founder of Bethelsdorp been more aware of the importance of civilization, there might at least have been more external appearance to it than there is now ... The Doctor would appear in public without hat, stockings or shoes, and probably without a coat. I leave it to commentators to determine how far that passage did or did not countenance his practice; ..." (66)

As it turned out, such value judgements were premature, and subsequent missionaries to Bethelsdorp scarcely managed any better with the resources available to them.

Most other instances recorded during this period relate to the dwellings of Dutch pastoralists who, having observed at first hand the advantages of the Khoi lifestyle, adapted to it quite readily. Barrow recorded such an instance in the Khamiesberge in 1797 where :

> "We took shelter in the solitary hovel of a Dutch peasant, that stood on the general summit of the mountain. Cold as it was, the man and his family had no other habitation than a hut made of rush matting, and fashioned after the manner of the Namaquas, ..."(67)

He, like most other town people, looked down upon these graziers, regarding them as :

> "... a class of men ... the least advanced in civilization. Many of them, towards the borders of the settlement, are perfect Nomads, wander about from place to place without any fixed habitation, and live in straw huts similar to those of the (Khoikhoi)." (68)

Within a generation or two of Barrow, however, much of this stigma was to disappear as more and more missionaries found dwellings of local style perfectly adequate to meet their immediate housing needs. Backhouse tells of one case in Namaqualand in 1839 where :

> "Michael Wimmer constantly left Kok Fontein in the winter; he packed up three mat huts, which then served him as a dwelling, a chapel, and a kitchen, and removed with his wagon and cart, to the places where most of the people were sojourning."(69)

Bishop Merriman built a beehive hut after the mFengu model in his own garden in Grahamstown in 1850. He was quite precise in his opinions on housing and wrote in his journal in 1849 that :

> "On riding into Bathurst I visited the (mFengu) settlement near the village where I went to look for a good hut as a pattern of one which I intend to build as a study for myself on the lawn before my house. But there were no very good ones there. In fact the people are, under the persuasion of their teachers and governors, changing their round huts for miserable mud hovels built in European shape. The only advantage they gain by this is the power of dividing the hut into 2 rooms, but as they have no fire places or chimneys I could not see that much was gained by this sort of reform." (70)

while the trader Harris built something very similar for himself near the White Kei in c 1848. Baines described it in his journal :

> "... we halted for a short time opposite the station of an English trader named Harris, who with his wife and family occupied a hut of similar form but of larger dimensions than those usually inhabited by the (amaXhosa). The interior, which formed a room of between twenty and thirty feet in length, was lighted by a single tier of small loopholes; the roof was supported by two or three upright pillars; ..." (71)

Despite the rapid spread of immigrant settlement, and hence infrastructure, into the southern African interior from the 1850s onwards, the white use of indigenous forms continued well into the 1890s and probably even later. Widdicombe built

WHITE ADOPTION OF INDIGENOUS DWELLING FORMS

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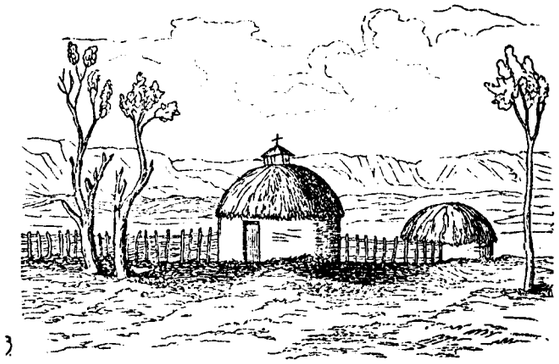

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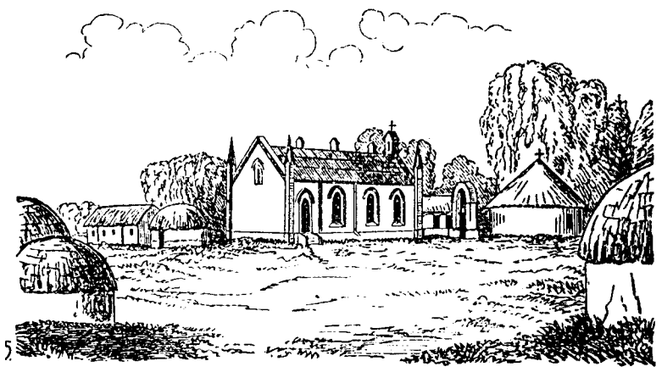

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1. WIDDICOMBE, 1895. First mission premises, Thlotse Heights, Lesotho, in 1876.
2. WANGEMANN, 1875. Malokung M.S.
3. WANGEMANN, 1873. Church at Emdiseni M.S., 1867.
4. WANGEMANN, 1875. Modimulle M.S.
5. WANGEMANN, 1873. Church at Bethel M.S.

a set of quite substantial cone on cylinder structures at Thlotse Heights, Lesotho, in 1877 (72) at a total cost of £60, and these served as mission quarters for nearly a decade. Further inland the first Administrative buildings erected in Salisbury (Harare) in 1890 were maShona cone on cylinder dwellings (73), as was the first church in Bulawayo.(74) Structures of a similar nature were also functional during the early part of the twentieth century on local Swedish (75) and Swiss mission stations (76) but the dates of their construction are not known. Kearney has suggested that white, specifically English, immigrants to southern Africa may have been particularly susceptible to the charms of what he calls the "Bundu Style".(77) He argues that the Picturesque movement was derived from an English fondness for natural scenery; that the indigenous architecture that explorers found in the course of their journeys of discovery during the eighteenth and nineteenth centuries was evocative of a rural charm which their own industrialization had but recently desecrated. Thus it was only natural that once they came into contact with local vernacular styles, they should adopt many of these features and incorporate them into their own colonial dwellings.

It is difficult to debate this standpoint without becoming involved in a functionalist argument. Certainly one can hardly compare Barrow's indigent farmers and their needs for shelter with Merriman's passion for an "indigenous" study. The first were driven by a basic human need for habitat, the second probably took his passion for the "Bundu Style" to a too literal conclusion. The answer possibly lies somewhere between these two extremes : European preconceptions about the "noble savage" were strengthened by their own ideals of the picturesque and thus subsequently paved the way for immigrants to adapt their lifestyles to locally-derived building forms and technologies.

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28. Only one picture has been seen by the author in this regard and regrettably it has not been possible to trace its source. As best as it can be recalled, the building was rectangular in plan with a shallow thatch roof and dove cotes placed at the corners, thus indicating the possible Portuguese origins of its builders.

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32. Regrettably it has not been possible to give cottage dwellings in these areas any positive datings. Current field research seems to indicate that they could be placed between the 1920s and the 1950s but even then informants were still unsure of their facts.

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"Without doubt it is a far more costly thing to kill the (indigenous population) than to Christianise them."

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It will be perceived that European missionaries to southern Africa during the nineteenth and twentieth centuries must have played a strangely ambiguous role in the history and affairs of the region. On the one hand they were driven by a strong desire genuinely to serve humanity and bring about material and social changes which would improve man's quality of life. On the other hand they were possessed of a moral self-righteousness which led them to make hasty and uninformed judgements upon indigenous mores, norms and values they were scarcely equipped to understand. The first manifested itself in an involvement in local agriculture, irrigation and technology which, being environmental and hence independent of larger cultural issues, found a small measure of acceptance in rural society. The second sought to impose an alien morality and work ethos upon the local people without realising that these undermined their most basic social and cultural tenets and were therefore largely resisted. The dichotomy of this approach was not something which found separate expression in different individuals but was often incorporated within the same person. Casalis wrote at Thaba Bosiu, Lesotho, in c 1833, that :

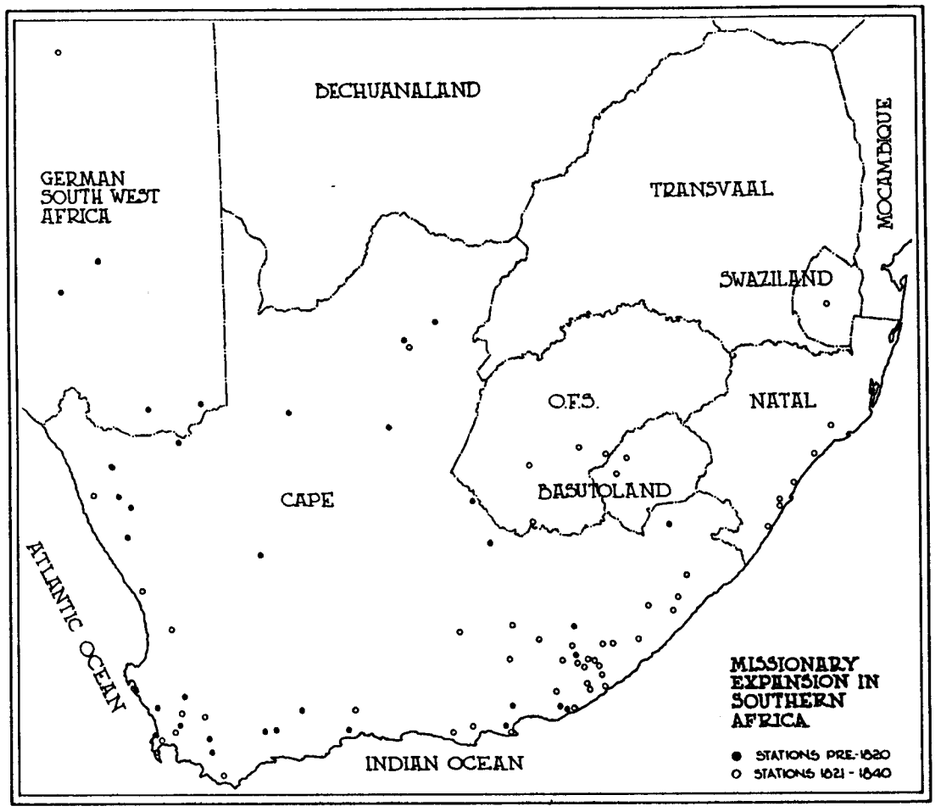
> "... we said that, wishing to provide entirely for our own subsistence, we must have a site where we could build houses and cultivate the ground according to our own ideas and habits. Our buildings and plantations would also serve as a model for the Basutos, whom we regretted to see dwelling in huts, and living in a manner so precarious and so little worthy of the intelligence with which they were gifted." (1)

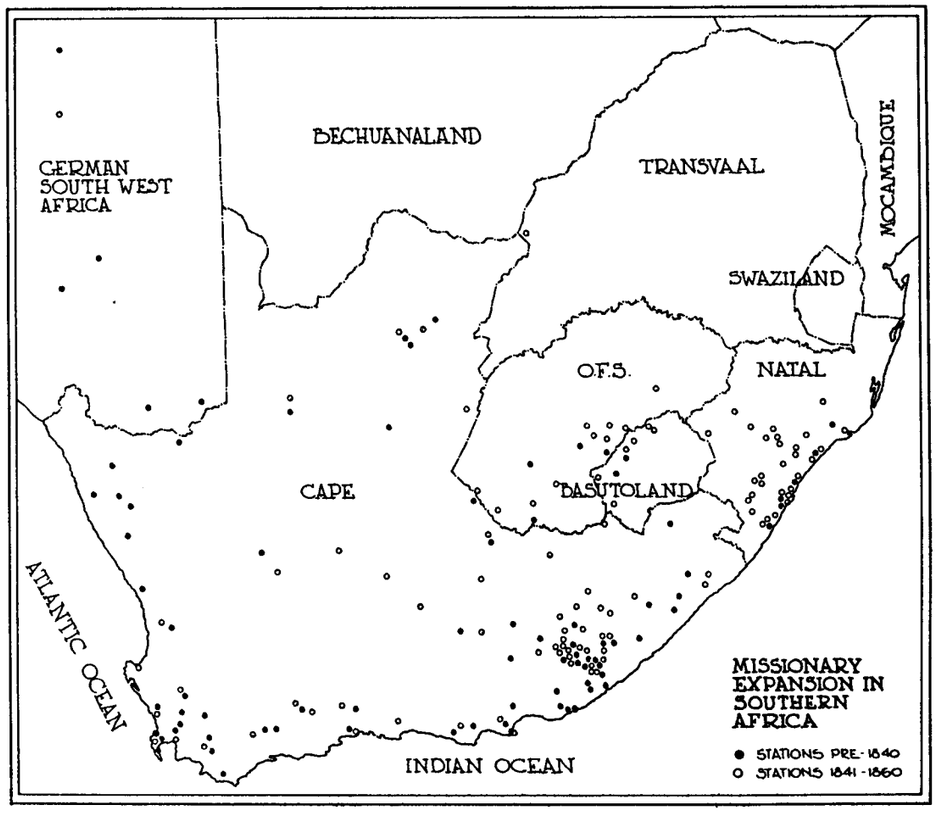
It is not for nothing that the statue of Livingstone in Edinburgh represents the missionary-traveller with a Bible in one hand and the other resting upon an axe.(2) Ironically enough, in the long run it was found that changes wrought by missionaries at a practical and economic level did more to further their spiritual cause than any amount of moralistic sermonising ever did from the pulpit. Local acceptance of early missionaries in the eastern Cape hinged more upon their technological ability to introduce furrow irrigation into an otherwise drought-stricken land than upon their Christian teachings.(3)

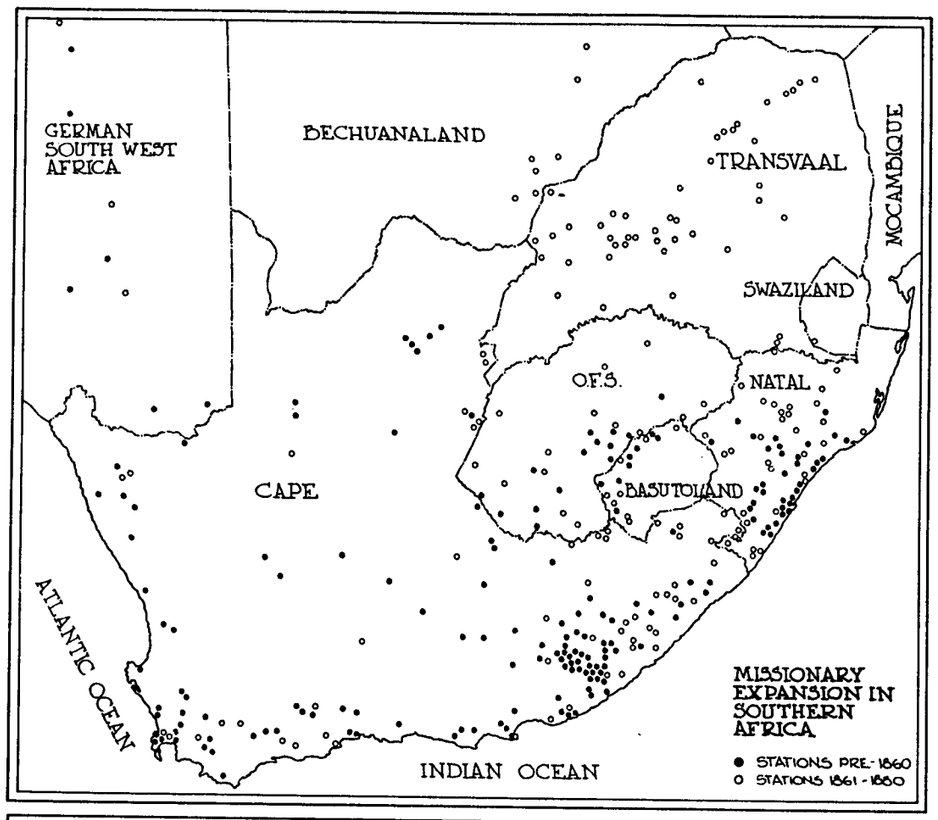
The ability of missionaries to make converts and hold them on their stations also seems to have been somewhat in doubt. Etherington, writing in 1977, stated that only 12% of people on mission settlements were there for "spiritual" reasons. The majority of the others sought either material advantage or psychological security.(4) Also, although some groups such as the baSotho and the baTswana welcomed missionaries, others like the baPedi, the amaZulu and the amaPondo vehemently rejected their presence as a matter of national policy. Despite Campbell's claim that :

> "Missionary stations are surrounded by moral atmospheres, or have a moral and civilizing influence to a considerable distance around, beyond which it is extremely hazardous for white men to go." (5)

they had strong objections to a missionary presence and often took appropriate action. Whole populations moved away from stations; individuals suspected of Christian leanings were administered magic and emetics; and converts were






GERMAN SOUTH WEST AFRICA
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MISSIONARY EXPANSION IN SOUTHERN AFRICA
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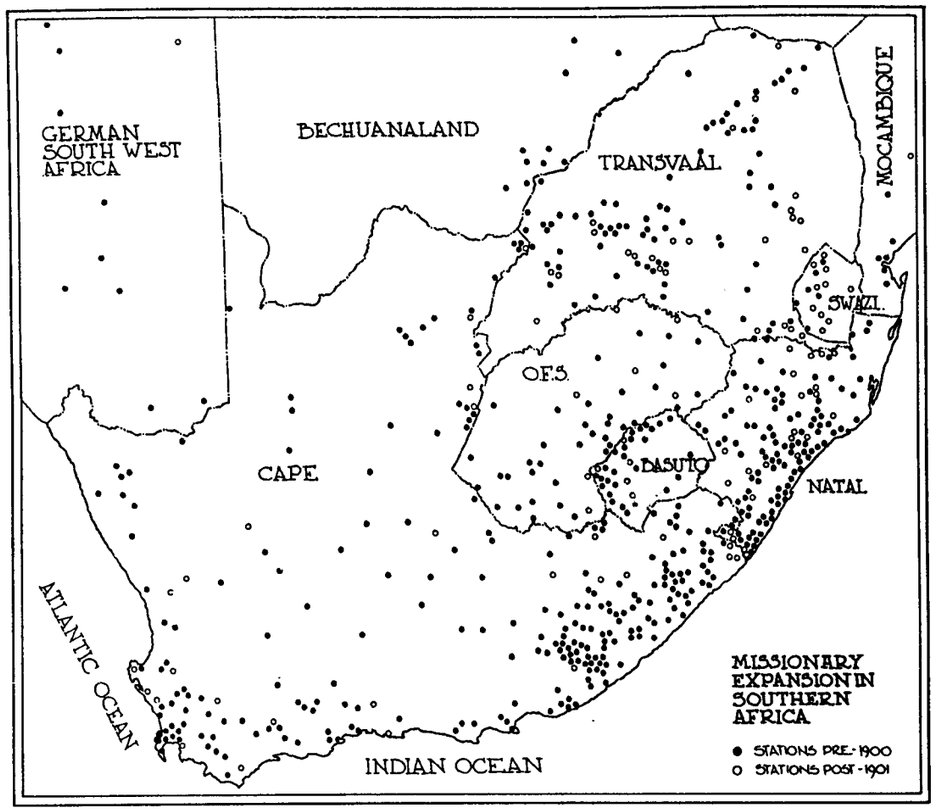
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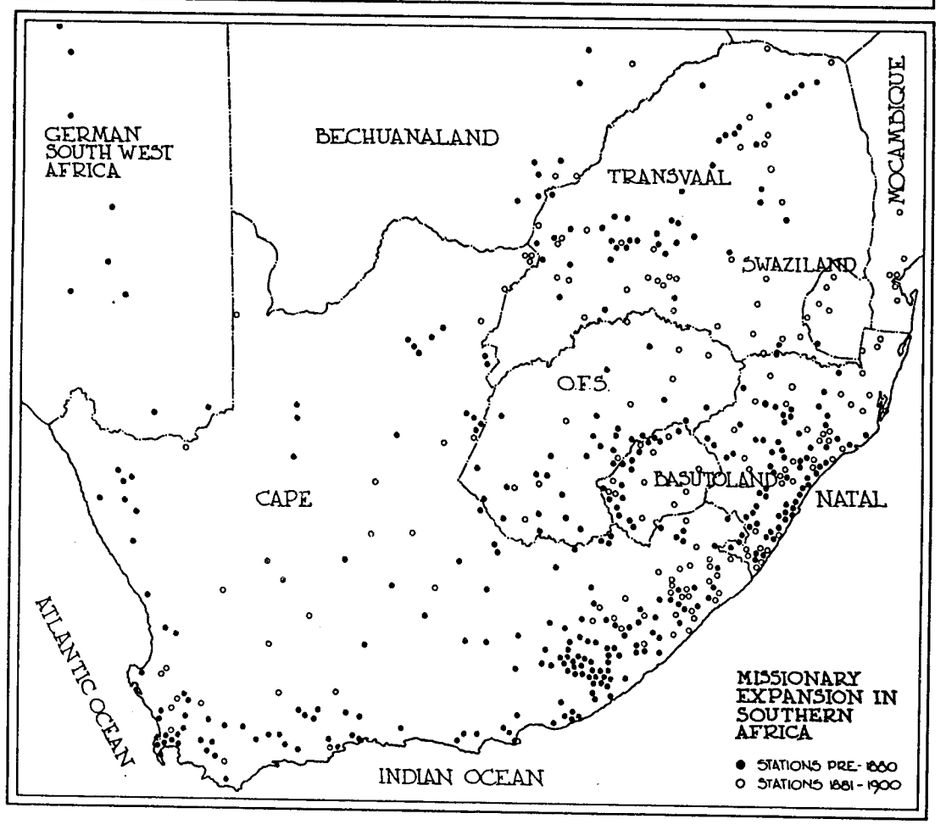
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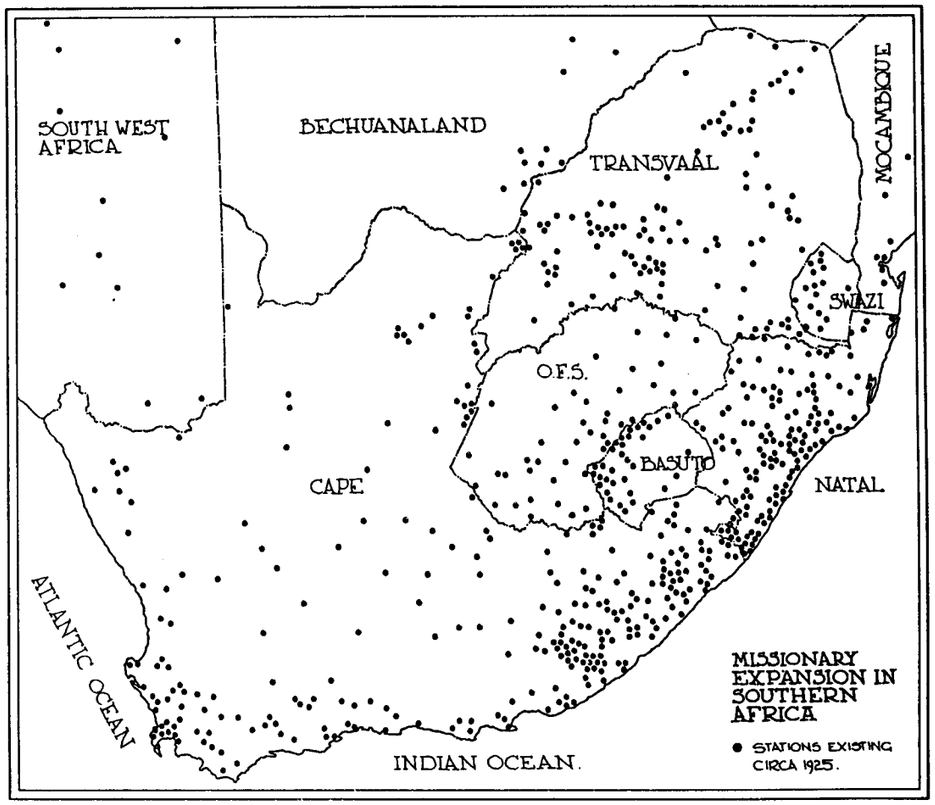
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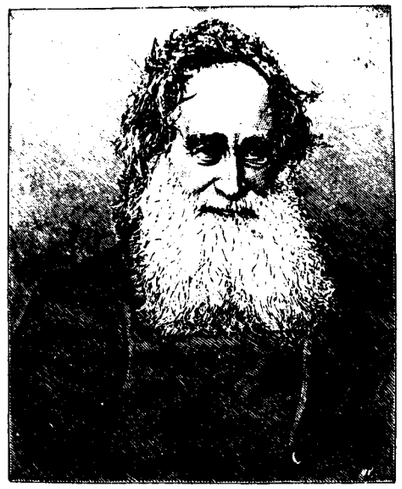
NEW LETTAKOO OR KURUMAN MISSION STATION, CAPE, 1818



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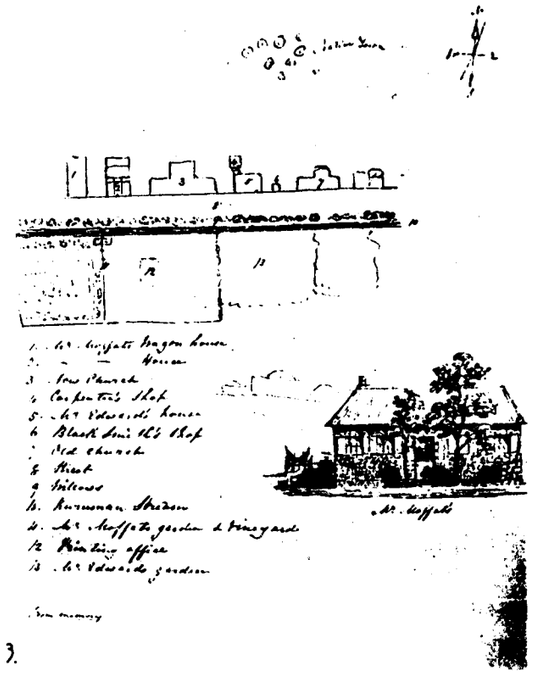

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3. BURROW, 1835. Plan of Moffatt's Mission, 1835.
4. BACKHOUSE, 1839. View of Kuruman M.S.
5. HORNE, 1895. Dr. Moffatt's house and the church at Kuruman.

BOTSHABELO MISSION STATION : TRANSVAAL, 1875

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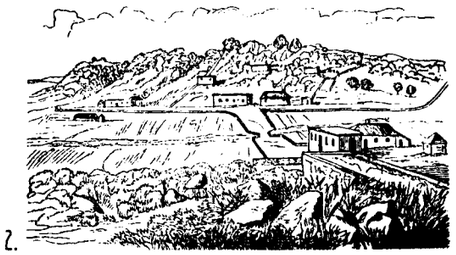

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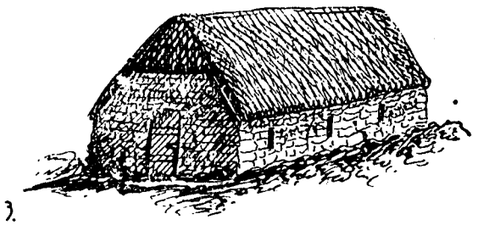

3.

1. Alexander Merensky, of the Berlin Missionary Society.
2. WANGEMANN. Early view of Botshabelo, c 1875.
3. MERENSKY, 1889. First sod church at Botshabelo.
4. MERENSKY, 1889. View of Botshabelo, c 1882.
5. MERENSKY, 1889. Plan of Botshabelo, 1882.

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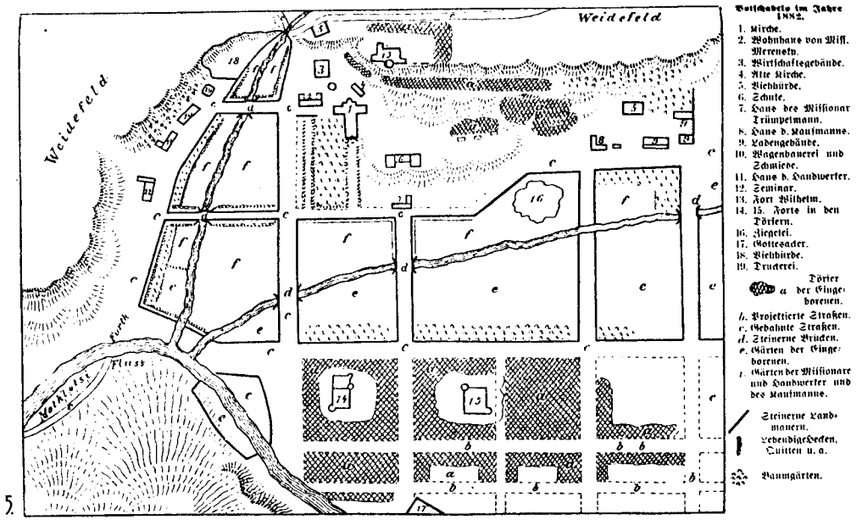

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ostracised and quarantined to missionary settlements, thus being effectively purged from the larger group's identity and its social functions. Despite the continuing spread of a missionary presence into southern Africa, by the time of the Anglo-Zulu conflict of 1879 very few converts had been won over to Christianity.(6)

Success in making converts also seems to have had little to do with the liberality, or otherwise, of missionary methods. Etherington states that :

> "... Colenso advertised his willingness to tolerate polygamy and the exchange of bride wealth but made only a handful of converts during a long missionary career. Americans who took a hard line on these issues did considerably better. Berlin and Hermannsburg missionaries who minimized liturgical spectacles won adherents while the Oblates who staged impressive ceremonies failed utterly. Itinerant preaching proved to be no more effective than sedentary station work." (7)

Ultimately the success of the missionaries in southern Africa appears to have hinged upon their ability to provide viable agricultural land for indigenous settlement at a time when Black-owned land was being increasingly alienated for white usufruct. Residence on mission lands however had its price. Tyler reported in 1891 that the church at Nqumba, Natal, had adopted, among several others, the following rules :

> "1. No polygamist shall be allowed to become a member of this church.
>
> 2. He who sells his daughter or sister treats her like a cow, and cannot be received into this church.
>
> 5. No member of this church shall be permitted to attend a wedding if beer is drunk there, although he may have been invited to it.
>
> 9. No member of this church is allowed to go where there is slaughtering for the departed spirits." (8)

This was more or less in line with the "moral" stances taken by most missionary societies, who generally held that :

> "Their bottomless superstitions, their vile habits and heathen customs - their system of polygamy and witchcraft - their incessant beer-drinks and heathen dances which are attended by unspeakable abominations - these present a terrible barrier to the spread of Christianity and civilization." (9)

The degree to which these "vile habits" had been abolished from local communities was held by missionaries to be a measure of their success in the field. By the 1880s however they could not have countenanced the fruits of their labours with too much joy. The United Missionary Conference reports for 1884 consistently show that all these practices were still prevalent throughout southern Africa despite a missionary presence in some areas of over four generations.(10) After Williams had conducted his research in the 1950s he also wrote that :

> "Of the missionary failure in (the Transkei) there is no doubt. Even today the amaXhosa is not a Christian nation ... The fact that abeKweta (circumcision initiation) ceremonies take place two miles from the University College of Fort Hare in the year 1959 symbolises the missionary failure significantly to influence the way of life of the rank and file of the tribal amaXhosa." (11)

A change of heart appears to have occurred from the 1880s onwards when the initial success of the first trade schools at Morija in 1841 and Lovedale in 1857 spurred others to follow their example. By 1902 fifteen such institutions had opened their doors in southern Africa alone, and fifty six throughout the African continent, all but seven of the latter having been founded after 1880.(12) Livingstone's children had laid aside the Bible and taken up the axe.

MISSIONARY ARCHITECTURE IN OTHER LANDS

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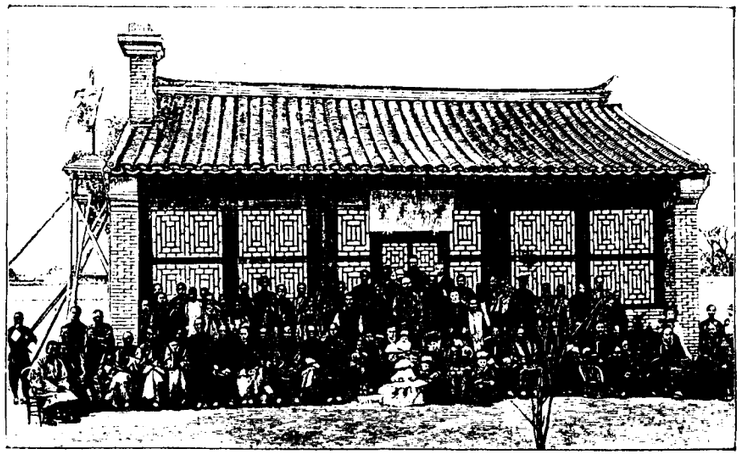

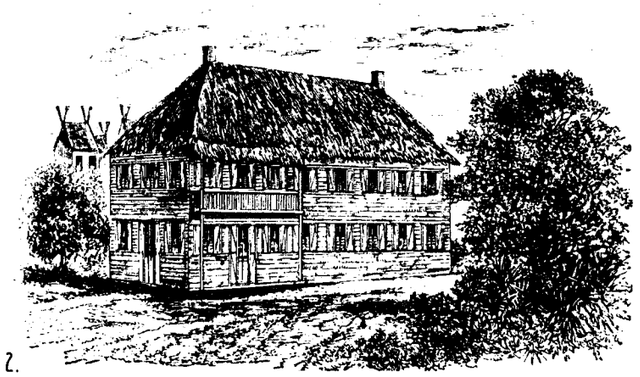

2.

3.

1. HORNE, 1895. LMS Chapel, Peking.
2. HORNE, 1895. First chapel and mission house for the LMS in Antananarivo, Madagascar.
3. HAWKINS, 1914. Kafukula Mission House, Tanzania, which cost £40.

A Direct Architectural Influence

It becomes obvious, from the foregoing, that changes to the indigenous built environment did not rank high on the missionary list of priorities. Yet, despite their preoccupation with "heathen" social practices, their concerns for local architecture were never hidden too far below the surface. The writings of early missionaries such as Campbell, Mackenzie, Casalis, Arbousset and Daumas make frequent references to the dwelling forms and building technologies they encountered. None of them however formulated any kind of philosophical response to vernacular structures, choosing instead to view them as some kind of barometer against which to measure progress of a larger social and cultural nature. Thus we find that Cape Government Reports from about the 1870s onwards begin to equate the use of square-plan dwellings with the degree of civilization achieved in any one particular region. The Magistrate for Gatberg, Griqualand East, reported in 1879 that :

> "I am happy to say that as far as can be seen there is a marked advance in many ways. The square house and substantially walled round hut, is superseding the old grass huts, and the use of European clothing is more generally adopted." (13)

This was echoed by the United Missionary Conference of 1884 which grouped this return for Mount Arthur (Transkei) under the heading of "Moral Statistics" :

> "Mount Arthur gives the fullest report. 306 square houses, 9000 acres cultivated land, 419 ploughs, 2 carts, 160 waggons; £700 taxes, 93 brick makers, 37 carpenters, 41 masons, 25 sewing mistresses." (14)

It was left for an outsider to express local missionary policy on the question of architecture. The German academic and theologian, Gustav Warneck, wrote in 1879 that :

> "It is not only that the requirement of modesty necessitates the providing of some sort of clothing, however simple; but Christian morality desires also a dwelling corresponding to human dignity, decency and purity. Building plays an important part in the mission. First the missionary builds a simple small house for himself, to which he soon adds a school and a church. Generally he must himself superintend this work; often enough, indeed, he must execute it with his own hand, and it stands him in good stead to have been a tradesman at home. But he induces the natives also to help him, and, much patience as it requires on his part, he undertakes to instruct them. Gradually his word and his example produce their effect, and the converts from heathenism begin to build new and more decent dwellings for themselves." (15)

It is doubtful that many of the early missionaries were well if at all prepared for this aspect of their mission. The Glasgow Missionary Society pamphlet of 1796, "Report on the Character of a Missionary, etc." lays considerable stress upon "piety, prudence and aptitude to teach" but not once mentions the need for craft skills.(16) The London Missionary Society was a little more realistic on this point and in 1800 recommended that missionaries :

> "... should carry with them some acquaintance with agriculture or those branches of mechanics which admit of an useful application in uncivilized countries; ..." (17)

It was left for the French to take the initiative in this field. When Casalis and Arbousset were chosen to be sent out to Southern Africa by the Paris Missionary Society, they were given basic training in the skills of drawing, building and architecture. Not only that, they were also joined by Gosselin who, as "missionary artisan", was sent out to assist them erect their first dwellings.(18) Casalis wrote at Moriah in 1833 that :

> "The next day we began to think about constructing some kind of shelter.

MISSIONARY ENDEAVOURS

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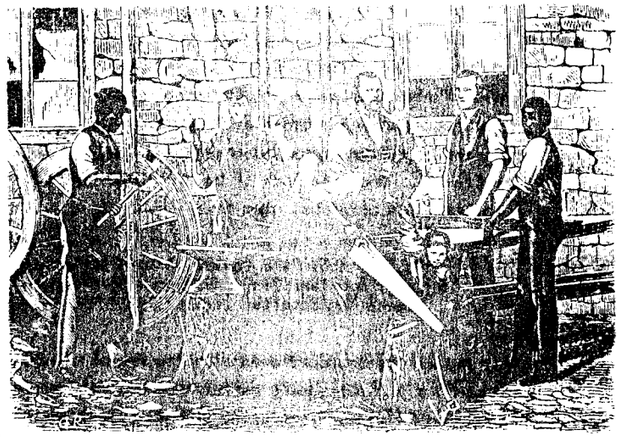

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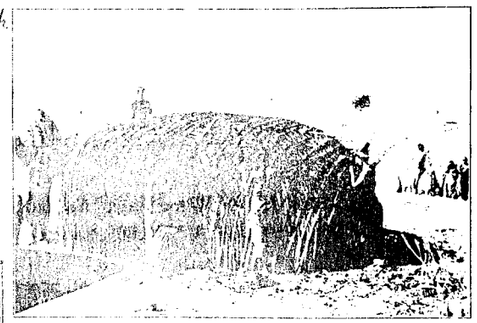
1. VIOLLET-LE-DUC, 1876. The proselytising of "noble savages" rated high on the list of concerns of nineteenth century Europe. Here Viollet-le-Duc's mythical Epergos instructs some rustics on the basics of geometry.
2. MERENSKY, 1875. Wagonshop at Botshabelo.
3. RITCHIE, c 1895. The missionary Schmidt teaching the Khoikhoi how to dig.
4. CATHOLIC MISSION, c 1930. "Building a heathen hut".
5. CATHOLIC MISSION, c 1930. "Building a Christian house".
6. CATHOLIC MISSION, c 1930. "Christian family outside their home".



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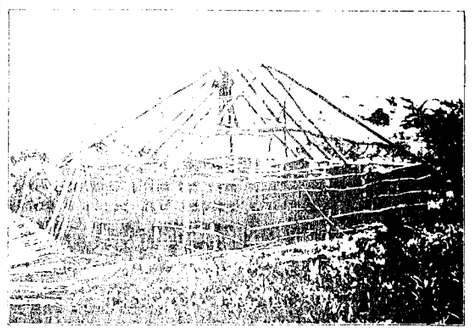

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> The box of tools that we had brought from Europe was opened, and my two fellow-workers and myself took each of us a hatchet and a saw ... Our excellent friend, Mr. Gosselin, who had joined us in the capacity of a missionary artisan, handled with equal skill the hammer of the stone-cutter and the mattock of the husbandman." (19)

The "box of tools" brought from Europe included, among other items, agricultural implements and tools for the trades of stone quarrying and cutting, masonry, carpentry, joinery, coopering, shoe-making and surveying.(20) The attachment of Gosselin to the party was an inspired piece of fore-planning on the part of the French. Once his task of building mission houses for his colleagues was completed, his brief was also :

> "... to train the (baSotho) to erect proper and comfortable homes for their own families, while gaining their affection by teaching them divers handicrafts; ..." (21)

This policy foreshadowed events in the region by nearly half a century and paved the way for the subsequent establishment of Industrial Training Institutions in southern Africa. The first of these was founded, naturally enough, by the Paris Missionary Society at Morija, Lesotho, in 1841, but others soon followed this example. Lovedale in 1857, St Matthews in 1876, Leloaleng in 1879, Amanzimtoti in 1883 and Blythswood in 1884 were but a few.(22) The report for Leloaleng in 1910 stated that :

> "Instruction is given in stone and brick building, carpentry, blacksmith work, wagon repairing, shoe making and saddlery." (23)

while the Lovedale report for 1895 commented that :

> "The work during the year has been the woodwork on one two-storied house; erecting and finishing two new dormitories 117 feet long - joisting of two storied technical workshop now in process of erection; a great variety of alterations on buildings - new bakery, Post Office, and some outhouses." (24)

Sir Bartle Frere, Governor of the Cape Colony, made the official position regarding industrial training clear when, in a message to Parliament in c 1884 he stated that :

> "Nothing can more surely prevent future (border) wars than the multiplication of Institutions like those of Lovedale and Blythswood, especially if they extend their industrial training so as to include agriculture." (25)

Charles Brownlee, Secretary for Native Affairs, issued a circular in 1873, in which he proclaimed that :

> "It is a matter of great importance that the young men brought up at and near Mission Stations should be ... trained to take their proper position in society; ..." (26)

while Matthew Blyth, Chief Magistrate for the Division of Transkei, reported to the Cape Parliament in 1879 that :

> "More large schools with European masters, where trades could be learnt and discipline enforced, are wanted in every district, so that there may be more thoroughness about the education. The expense would be large, but it is a matter of vital importance to the Colony that the young may be so trained that they can take their places worthily as members of a civilized and industrious community." (27)

It is not an easy matter to assess the results of these missionary efforts. We know that in such matters as initiation and teenage sexual morality they had little impact. This however does not appear to have been the case with building technology where some considerable influence seems to have been wielded through the medium of education. In 1879 some 173 "special apprentices" were undergoing training in various industrial institutions in the Cape (28), approximately 60% of whom were engaged in the building trades. Most appear to have originated from the eastern Cape and Transkei region (29), where they also subsequently plied their trades (30), but it is not impossible that, with time, they spread further afield. Certainly the missionaries themselves were not slow in proclaiming the fruits of their labours, as seen from this report from Leloaleng, made in 1910 :

> "Since its foundation the work of the school has had a marked influence in improving the class of (baSotho) houses, as in almost every village of importance are to be found neat stone buildings which reflect great credit on the intelligence and enterprise of their builders." (31)

In the case of some specialised areas of construction such as roof carpentry, stone masonry and brick making, the effects of missionary education are evident to the present day. Despite this obvious element of technological transposition however, the nature of the indigenous rural environment has remained essentially vernacular. Dwelling plans have, in most cases, retained their traditional circular form, materials have remained local and found and the technologies concerned, although new, have been harnessed to fulfill the same social roles as the ones they have replaced. Most important, this missionary input does not appear to have had a direct effect upon the nature and form of indigenous settlement patterns which, as will be shown in subsequent chapters, is a more direct manifestation of local "culture" than the dwelling form itself.

An Indirect Architectural Influence

The work of missionaries during the last century should not be viewed in isolation from the activities of either traders or government officials. In many ways they shared common interests and often what was of benefit to the one group was equally good for the others. They can also be seen to be part of a progression of events which paved the way for the colonialisation of indigenous groups not only in southern Africa, but the world over.(32) Warneck wrote in 1879 that :

> "According to a calculation made by the missionary Whitmee, every missionary sent to the Polynesian islands produces an annual trade-revenue of at least 200,000 marks. 'Of course, the trade is organised by merchants, but the missionary originates it.'" (33)

He saw the missionary as generating a demand for consumer goods while, at the same time, creating conditions which facilitated the establishment of trade links.

> "The mission is in a twofold respect a pioneer for commerce. It creates the needs for a civilized life, and is at the same time a protective power ... which contributes more to the security of commerce than many ships of war." (34)

The impact of trading activity on rural southern Africa is made clear by the various statements to this effect found in Government reports during the 1870s and 1880s. Charles Bell, Resident Magistrate of Berea, Lesotho, said in 1879 that :

> "The demand for European clothing is steadily increasing. At public meetings and other public gatherings, it is considered a sign of inferiority to appear dressed in clothes other than those of European manufacture ... the general tendency of the people being to supplant their own crude and badly made articles by those of European manufacture." (35)

M.W. Liefeldt, Assistant Magistrate for Matatiele, East Griqualand echoed the reports of many of his colleagues when he stated in 1879 that :

> "Trade has increased considerably during the past year. There are now fourteen trading stations in the district. There is a great demand for European clothing, ploughs, blankets, etc. etc." (36)

The larger picture was described by the missionary Duvoisin who, in 1885, wrote from Berea, Lesotho, that :

> "Their first preoccupation was to acquire the arms of the Europeans; after which they have progressively adopted their dress, their agricultural implements, their household utensils. They have gradually begun to replace the native hut with stone or brick cottages, which offer a greater resemblance to European houses; finally they have begun to imitate them in their habits and their mode of life." (37)

The missionary concern for actively promoting consumer goods usually stopped at European clothing and agricultural implements, but it is not impossible that, from time to time, other goods could also have been promoted. Warneck tells that a conference of native pastors, deacons and teachers held at the Pacific island of Rarotonga passed a resolution encouraging :

> "... the people at all the stations not to live in badly built but well built houses, to sleep in beds, and not on a litter of dried grass, ..." (38)

The missionaries' relationship with colonial officials is perhaps not quite as clearcut as in the previous case. Certainly we know that the former performed a number of ad hoc duties on behalf of the Government such as reporting on events in remote areas and fulfilling various diplomatic functions.(39) In some cases there was active collusion between the two parties, to the detriment of indigenous interests.(40) Generally however interaction took place on a more formal level, with missionaries encouraging local people to obey the laws and pay their hut taxes, and occasionally interceding on their behalf with officialdom. Sometimes written recommendations would be submitted to the authorities, such as those made to the Cape Parliament by the Moravian missionary Meyer, stationed at Elukolweni, who in 1875 asked, among other things, that hut tax relief be offered :

> "For the improvement of dwelling houses ... for a certain number of years as reward for the building of a square brick dwelling-house of certain size with glass windows." (41)

It is not thought that the Colonial officials acceded to this request, if for no other reason than the fact that hut-tax had already become an important source of revenue with which to subsidise the administration of the outlying districts.

A Hidden Architectural Influence

A factor which, in the long term, was to have a profound influence upon the social and economic make-up of southern Africa was the creation of a migrant labour system from the 1870s onwards. Provisions for the contractual binding of labourers to employers had already been in force in the Cape since the early years of the nineteenth century (42), but these were largely directed at the Khoi who, even then, did not inhabit the region in sufficient numbers to satisfy the needs of the employment market. With the discovery and subsequent development of the Cape diamond fields from 1866 onwards came the extension of the local infrastructure as well as the rapid growth of such coastal commercial centres as Cape Town, Port Elizabeth and East London. This created a need for large numbers of skilled and unskilled labourers to work on public and private enterprises in the Colony. The resultant shortage of labour caused both private employers and the Cape Government to look further afield for potential sources of manpower, the most obvious being the Transkei and eastern Cape. A newspaper editorial of March 1873, on the subject of local labour, among other things urged missionaries to :

> "... single out all the unemployed young men they know of, at their various stations, and talk over the matter with them individually ... The missionary's work is not done when the work of the pulpit and the duties of religious instruction are over. He must follow these up, by seeing how the young men growing up under his care, set themselves to the first duty of practical Christianity - which is to earn an honest livelihood." (44)

The Secretary for Native Affairs in the Cape administration, Charles Brownlee, also saw the mission stations as a potential source of labour and issued a circular in November of that year where he stated :

> "The great difficulty has been, how to employ the young men who have been brought up at Mission Stations.
>
> Many of them look for employment as teachers, interpreters and constables, but in these lines only a limited number of them can be employed. Now, however, ample employment can be given to all ..." (45)

He then went on to outline a scheme whereby youths from mission stations could be formed into groups of fifty, under the "guidance" of a paid elder, who would see to their "moral" welfare during their sojourn in the Cape as migrant manual labourers.

The Report on Immigration and Labour Supply to the Cape Parliament for the year 1875 reported that some progress had been made in this direction. It stated that :

> "In reviewing the sources from which the Colony is to look for its labour supply, by far the most hopeful is to be found in the large masses of natives within and immediately beyond our colonial borders ... The gradual introduction of individual tenure of land among the natives, in the place of the location system, will, no doubt, deprive numbers of natives of the means of leading a lazy, lounging life ..." (46)

Another powerful inducement for young men to enter the Colony's labour market was the introduction of a hut tax from the 1850s onwards.(47) Although at first this was not applied uniformly in the rural areas, in 1870 it was enacted on a broad basis as an urban and rural house tax which was intended as a straightforward revenue-generating measure.(48) This not only provided a disproportionately large slice of the income necessary to create a system of first tier local administration in the rural areas (49) but it also created the need for local people to go into the town in order to earn the money for its payment. W.G. Cumming, Resident Magistrate of Xalanga, Transkei, commented in 1880 that :

> "In order that money might be obtained to pay the hut-tax, hundreds of young men have been sent into the Colony by their relatives to work in the town and among the farmers. The frequent recurring necessity of having to find the money for their friends, will gradually force the young men out of the groove in which they have been living ... By being brought more immediately in contact with civilisation, an alteration will be wrought in their character; and in process of time, habits which have been fostered by a mode of existence calculated to develop all the evil qualities in a man will, under new conditions of life, be, if not eradicated, at least held in check." (50)

It is probable however that rural man's need to earn wages was considerably sharpened by the availability of consumer goods through local trading stores. Such items as ploughs and blankets would have found ready acceptance in local life without necessarily causing too much cultural upheaval in the process. Later on other articles such as furniture and building materials would have become available

ÜBERSICHTSKARTE
über die
Evangelische Missionsarbeit
in
SÜD-AFRIKA.

Als Beilage zu der Geschichte der evangelischen Innenmission der Berliner Missionen in Süd-Afrika.
Nach älteren und neueren Quellen und eigenen Aufnahmen entworfen und gezeichnet
von
Dr WANGEMANN
Missionsinspektor in Berlin.
Im Auftrage der Missionsanstalt, Berlin Schönhauserstrasse 27 bis.

Maßstab:
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through the same channels.

The effect of a migrant labour system upon the local built environment was threefold :

1. It provided training opportunities in the building industry and other allied crafts over and above those already offered by missionary industrial institutions.

2. It introduced indigenous inhabitants to new building materials.

3. It paid them wages which could then be used to purchase these same materials.

The differences between missionaries and employers are therefore quite evident. The former set standards which they then expected the people themselves to find the means to meet; the latter on the other hand not only trained workers in the technology of European building traditions but also gave them the opportunity of sharing in them by giving them those means. Both were part of the same process of rural alienation, but the missionaries offered ideological comfort, while employers were more material in their rewards. Judging from the evidence gathered during the course of current field research, it was the material benefits which carried the day.

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"Since 1865, when the Emigrant Tembus migrated from the Colony to this part of the country, they had enjoyed exemption from taxation ... and hence Emigrant Tembuland contributed nothing whatever towards defraying the expenses incurred in connection with the government of it. But in September, 1878, it was intimated to the people that it was desirable they should pay hut-tax."

Blue Book on Native Affairs. Ministerial Department of Native Affairs. Cape of Good Hope. Cape Town : Saul Solomon and Co., 1880. Report of W.G. Cumming, Resident Magistrate for the District of Xalanga. pp 134 - 136.

The principle of imposing a taxation upon the rural habitat of southern Africa appears to have been mooted for the first time in either late 1857 or early 1858 by Sir George Grey, Governor of the Cape Colony. The initial intent of this measure was to bring the black inhabitants of the eastern Cape region bordering onto the Transkei under greater control of the colonial administration, at a time when, as a result of the "cattle killing" of 1857 (1), thousands of starving amaXhosa were pouring southwards in a quest for food. In his opening address to the fifth session of the First Parliament of the Cape of Good Hope in 1858, Grey announced that :

"In other districts, where the (amaXhosa) did not kill their cattle, or destroy their means of subsistence, they are living in their own country under European magistrates, and are being placed in villages into which no newcomers are admitted without the consent of the Government previously obtained. In order to obtain the means of properly governing these people for the future, a hut tax, and a tax upon cattle and horses, has been imposed upon them, and they have been so far brought under our control, and the influences of civilization, as to afford fair hopes of their gradually becoming a tractable, money-making people." (2)

The application of this tax in the Cape does not appear to have been either uniform or immediately universal, not having been introduced in some areas, such as Griqualand East, until 1879.(3) Nor, for that matter, do its provisions appear to have been codified until the Cape Parliament promulgated Act No 2 of 1869 (To Make Provisions for the more easy Collection of Hut Tax.)(4) Grey's correspondence to Col. Maclean of Grahamstown between 5th February and 6th March 1858 sets out his intentions quite clearly. In it he states that :

"1. Each magistrate must, with as little delay as possible, select within his location sites for villages on which the (amaXhosa) will thereafter be required to reside.

6. Each hut belonging to a separate family, which does not stand on land held under a grant, or on lease from the Crown, will be subject to an annual tax, to be paid half-yearly, of 10 shillings.

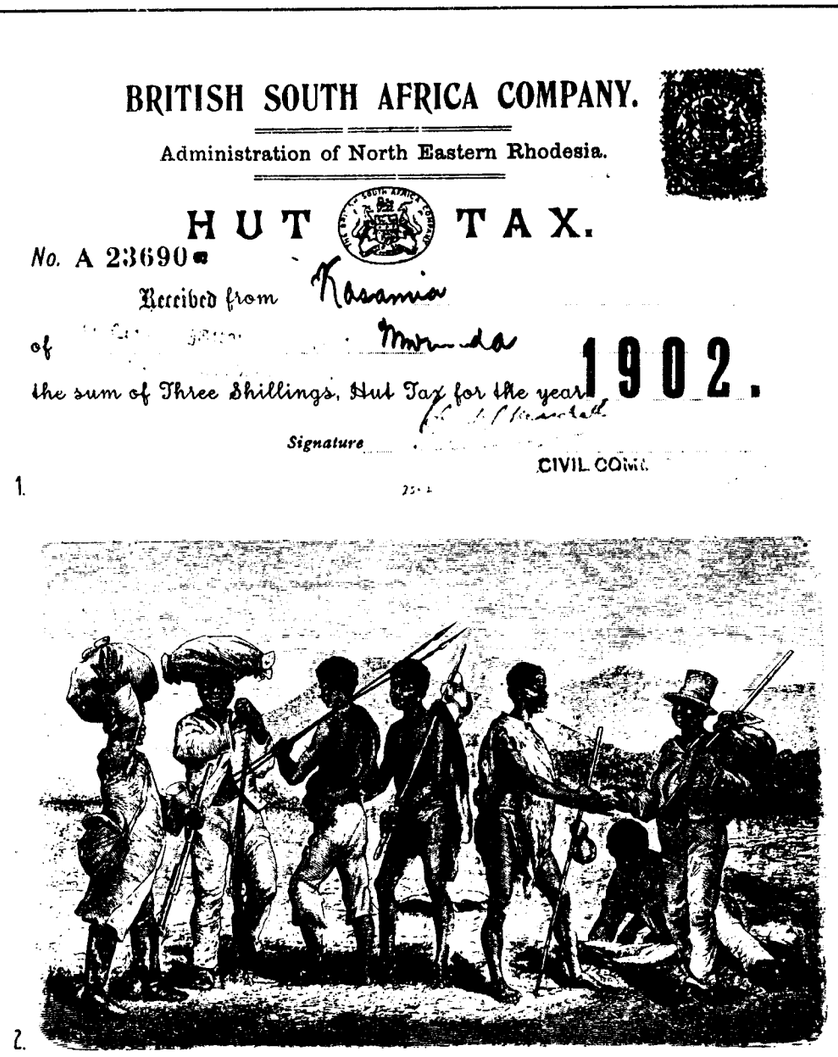
7. If more than one family inhabit any hut a double hut tax will be charged for each additional family. If one family has two or more huts only one of such huts will be liable for the tax.

8. If a European house is erected, capable of containing two or more families, the tax of only one will be levied on such house provided it is not inhabited by a greater number of persons than is allowed by the Magistrate after an inspection of the house." (5)

In a subsequent letter to the same person he states that :

"Each person who pays hut tax within a location will receive a Crown Grant for a garden lot subject to an annual quit rent of 10/ per annum and on the issue of such grant will be freed from further hut tax."(6)

HUT TAX



BRITISH SOUTH AFRICA COMPANY.

Administration of North Eastern Rhodesia.

HUT TAX.

No. A 23690

Received from Kasamia

of Mwanda

the sum of Three Shillings, Hut Tax for the year 1902.

Signature

CIVIL COMR.

1.

2.

3.

4.

1. HUT TAX RECEIPT, 1902 : Administration of North-Eastern Rhodesia. Issued to the London M.S. at Mwanda. Documents similar to this were also issued in southern Africa.
2. HOLUB, 1873. "Meeting between Basutos returning from the Diamond Fields and others going thither". The "civilized" nature of the men going to work is emphasised by the clothes worn by those returning home.
3. SWISS MISSION, c 1925. Industrial work at Lemana M.S. - bricklaying.
4. UNION OF SOUTH AFRICA : Revenue stamp c 1930. The original intent of this tax is revealed by the huts it portrays.

Grey's intentions in this matter are obvious. Not only did the owners of "European" style dwellings receive a definite tax benefit but the linkage between a hut tax and a property tax sought to strike at the very basis of indigenous land ownership concepts. Also the whole question of traditional homesteads was left unresolved, giving rise to a number of queries relating to how concepts such as extended monogamous and polygamous family units were defined in the application of this tax. Judging from other legislation of that era, it is probable that each wife in a polygamous union would have been considered as comprising a separate "family".

In such circumstances therefore, such taxation should also be seen as having been a potentially destabilising factor to rural culture, inhibiting traditional marriage patterns and hence undermining established economic and political patterns of rural life.

The official position was clarified somewhat in 1875 when the Moravian missionary at Elukolweni, H. Meyer, misread the system of taxation and criticised it as being supportive of polygamy. The reply was that :

> "Hut tax is not exactly what Mr. Meyer supposed it to be, a tax on wives or the recognition of Polygamy, but in reality when a hut is erected the proprietor is supposed to have cattle, and pays a tax of 10s. per annum for the garden ground attached to the hut." (7)

Theoretically therefore the Cape Government did not perceive its tax as affecting traditional rural family patterns. In reality however, the amount of planting and grazing land available to each family head was limited as, therefore, was also the space for settlement. A polygamous family unit however required a certain amount of land in order to avoid intermarital friction arising between the wives. Thus, under the new village settlement system, the division of polygamous settlements into separate domestic homesteads became virtually unavoidable, thus proportionally increasing the tax payable by any one family head.

Grey's correspondence from that same period also reveals the wider and long-term revenue generating intentions of these measures. In answer to a question received from the Chief Commissioner at Fort Murray that same year (8), Grey stated that ultimately it was planned to include blacks residing upon mission stations, as well as white settlers, in the same tax system. The success of these provisions in raising funds to subsidise the colonial administration of black areas can best be judged by the official returns of some twenty years later. In East Griqualand in 1879 the money raised by both quit rent and hut tax within its first year of application was 46% of all revenues; in Umzimkulu that same year this was 82% while in the Transkei in 1875 this figure was as high as 94%.(9)

Amazingly enough the imposition of a hut tax at that time did not prove to be an entirely unpopular measure. The Assistant Magistrate at Matatiele, M W Liefeldt, echoed the opinions of many of his colleagues in the colonial administration when he reported in 1879 that :

> "The Hut Tax has been cheerfully paid, and is increasing in amount every year. There are no arrears."(10)

Even the baSotho "Pitso", or Grand National Assembly, which met on 16 October 1880 dismissed the raising of the annual tax from 10 shillings to £1 with a few cursory words, before concentrating upon the potentially more explosive issue of the baSotho being allowed to carry guns.(11)

The administrative confusion was increased by Act No 2 of 1869 designed "To Make Provision for the more easy Collection of Hut Tax."(12) This laid down certain administrative procedures for the recovery of the tax but clarified no issues, and in fact effectively increased the tax to 10s. per hut as against the former 10s. per family.

Fortunately many of these doubts were resolved with the promulgation of Act 9 of 1870 entitled "For Granting to her Majesty in her Colonial Revenue certain Duties on Houses."(13) This had the effect of extending Grey's original concept to all sectors of the Cape community, both black and white. It also clarified many of the previous difficulties of interpretation encountered by previous administrations. All buildings and hence, by implication, huts, within a fortyfive metre (fifty yard) radius of the main building were held to be one dwelling for tax purposes; and kinship units were defined, giving formal recognition to polygamous and extended families but taxing the homesteads of married offspring as separate dwellings.

The Cape Colony was not the only colonial administration to impose a form of taxation upon indigenous settlements. Natal first promulgated such provisions in 1857 (14), the Orange Free State from before 1867 (15) and the Transvaal (ZAR) from 1853 onwards.(16) They all shared in the common aim of generating revenue for administrative purposes and generally differed little in content from the equivalent legislation of the Cape Colony.

It has not been possible to date to correlate the exact influence that the imposition of a hut tax by the colonial administrations could have had upon the rural architecture of southern Africa. It is possible to surmise that such a levy could have inhibited the institution of marital polygamy; that it engendered the spread of square-plan dwellings and "European"-type houses; and that it forced rural families away from traditional settlements and into grid-plan villages. In reality none of these are true. Rural man, although potentially polygamous, very rarely reached that condition of marriage, even before the era of Difaqane (17); circular plan dwellings are to the present day still the single most numerous residential form in use throughout southern Africa (18); and it is only in more recent times that settlement patterns have begun to depart from their older and more traditional historical models. Add to this the fact that the indigenous population offered little resistance tothe imposition of the levy (19) and it may be seen that, despite any colonial wishes to the contrary, hut tax had little direct influence upon the character of southern African vernacular architecture.

If in this case direct influences are difficult to determine, one need not go far in order to find ways in which hut tax may have had an indirect bearing upon the architecture of southern Africa. This probably occurred in two main areas. The first related to the fact that for many years the Cape Colony had complained of a drastic shortage of manual and unskilled labour in its expansion of the road and rail infrastructure. Efforts had been made, largely to no avail, to draw rural dwellers away from their traditional economies and introduce them into the Colony's system of wage earning. The system of taxation however was to break that down and by the 1880s it became common for rural families to send their young men to the cities to earn money to pay for the local hut and livestock levies. In 1879 R J Dick, Special Magistrate for the district of Tamacha, wrote that :

> "Numbers of the Natives have left the district to take employment on the railway and other public works, being urged to do so in order to obtain money to pay their taxes; ..." (20)

In the Cape Colony they would have come into contact with new dwelling forms, building materials and technologies as well as industrially produced artifacts which would ultimately have found their way into the rural areas.

The second factor lay in the Cape Colonial policy of consolidating rural settlements into villages of approximately 200 huts.(21) Although the success of such a policy is debatable, it nonetheless existed and some attempts are known to have been made at its implementation. In such cases the parcels of land were seldom large enough to support traditional agrarian and pastoral patterns, and changes in the rural economy would have been inevitable. Ultimately these would have manifested themselves in such areas as size and composition of the family unit as well as such material factors as the availability of thatching grasses and building timbers, thus affecting the nature of indigenous vernacular architecture.

Conclusions

While it is obvious that a study of the historical forces which have moulded the fate of rural man is important in gaining an idea of how his built environment has been able to respond to them, the picture is by no means yet complete. Despite recent valuable work in this field, the interactions between town and country dwellers, their economies and hence their architecture has yet to be fully recorded and analysed.(22) The migrant worker must have been an important link between the two, yet no research of any magnitude has yet been conducted to determine his role in the transplant of new materials, technologies and dwelling forms from the urban to the rural environment. Until this and other allied work is tackled, preferably by architects, this picture must, of necessity, remain incomplete.

NOTES AND BIBLIOGRAPHY

1. The "cattle killing" of 1857 arose as the result of the utopian visions of a young amaXhosa woman called Nongquase. She predicted that, upon 18 February of that year, the whites would be driven into the sea by a great wind, that dead chiefs would rise, cattle byres become full and grain bins be replenished with new harvests, provided all existing cattle and food stores were destroyed first. The resultant famine is believed to have brought about the death of between half and two thirds of the amaXhosa who at that time were estimated to number 200 000 persons.

2. THE CAPE OF GOOD HOPE GOVERNMENT GAZETTE.
Extraordinary edition. Wednesday, March 10, 1858.

3. BLUE BOOK ON NATIVE AFFAIRS.
Ministerial Department of Native Affairs. Cape of Good Hope. Cape Town : Saul Solomon and Co., 1880.

4. STATUTES OF THE CAPE OF GOOD HOPE.
Passed by the Fourth Parliament during the Sessions 1869-1873. Cape Town : Saul Solomon and Co., 1879.

5. Correspondence files, Cape Archives, Cape Town.

6. Ibid.

7. BLUE BOOK ON NATIVE AFFAIRS. Op. Cit. 1876.

8. Correspondence files, Cape Archives, Cape Town. Letter No. 313, 4th March 1858.

9. BLUE BOOK ON NATIVE AFFAIRS. Op. Cit. 1880.

10. Ibid.

11. GERMOND, Robert C.
"Chronicles of Basutoland". Morija : Morija Sesuto Book Depot, 1967.

12. STATUTES OF THE CAPE OF GOOD HOPE. Op. Cit.

13. Ibid.

14. CADIZ, Charles Fitzwilliam
"Natal Ordinances, Laws and Proclamations". Pietermaritzburg : Vause, Slatter and Co., Government Printers, 1879.

15. ORDONNANITIE-BOEK VAN DEN ORANJEVRIJSTAAT, 1854-1880. Bloemfontein, 1881.

16. JEPPE, Fred
"De Locale Wetten Der Zuid Afrikaansche Republiek, 1849-1885". Pretoria, 1887.

17. BARROW, John
"An Account of Travels into the Interior of Southern Africa". London : T. Cadell Jun. and W. Davies, 1801 and 1804.
LICHTENSTEIN, Henry
"Travels in Southern Africa ... etc." London : Henry Colburn, 1812 and 1815 and others.

18. FRESCURA, Franco
"Rural Shelter in Southern Africa". Johannesburg : Raven Press, 1981.

19. One of the more notable instances where an indigenous group refused to pay their hut taxation to a colonial administration occurred in the Transvaal in 1882. The struggle for the leadership of the baPedi between Sekhukhune and his younger brother Mampuru reached a climax in August of that year when the former was murdered alongside fourteen of his councillors. The ZAR government laid the blame for this deed upon Mampuru and demanded that he be handed over for trial. Mampuru fled and sought refuge among the amaNdzundza, a south amaNdebele group who not only refused to hand him over but also refused to pay their hut tax. It took the ZAR nearly nine months to end the amaNdzundza rebellion.

20. BLUE BOOK ON NATIVE AFFAIRS. Op. Cit. 1880.

21. Correspondence files, Cape Archives, Cape Town.

22. BOZZOLI, Belinda : Editor
"Town and Countryside in the Transvaal". Johannesburg : Raven Press, 1983. It is also worthy of note that a recent symposium held in April 1984 in Cape Town by the Carnegie Foundation, on the subject of "Poverty in South Africa", did not invite a single architect to present a paper. Discussion on housing and related matters was instead led by geographers and political scientists.

CHAPTER 14 : SOME THOUGHTS ON THE PROCESS OF WHITE-BLACK CROSS-CULTURAL FERTILISATION IN SOUTHERN AFRICA

> "The new abode had just been erected by the firm of Messrs. Taylor at a cost of £3000, the money being raised by the sale of ostrich feathers and oxen.
>
> Sechele's establishment is more luxurious than that of any other of the Bechuana sovereigns, and he has quite adopted the European style of living."
>
> Residence of Sechele, Chief of the baKwena, at Molepolole, 1873.
>
> HOLUB, Emil. "Seven Years in South Africa". London : Sampson Low, Marston, Searle and Rivington, 1881. pp 320-321

The European mind has always somehow envisaged the African continent as being a place inhabited by strange peoples, endowed with fabulous treasures and filled with wondrous beasts. Plinius the Elder (c 23-79 AD) is recorded to have exclaimed once that "Ex Africa semper aliquid novi" or, translated, "there is always something new out of Africa", whilst Herodotus, "Father of History", (c 484-425 BC), wrote that :

> "These Garamantes are accustom'd to sit in Chariots, and hunt the Aethiopian Troglodytes; who are reported to be swifter on foot than any other Nation in the World. They feed upon Serpents and Lizards, with many other Kinds of Reptiles; and their Speech resembles the shrieking of a Bat rather than the Language of Man." (1)

Over the centuries the myth of a "dark" continent continued to be fuelled by tales of amazons, women with two heads and eight breasts, the Christian empire of Prester John and the wealth of King Solomon's mines. The exploration of the central and southern regions during the nineteenth century only served to increase speculation, which was maintained well into the 1900s by books with such titles as "Through Lands that were dark" (F.H.Hawkins. 1914). These were supplemented by a whole genre of semi-fictional literature headed by the likes of H. Rider Haggard. In some instances the overlap between historical fact and speculative fiction was conveniently allowed to persist up to the modern era.(2)

At the same time the European mentality, in its vanity, saw the presence of the white man as bringing a "civilizing" and "stabilising" influence upon the continent. The equation made between an industrial economy, a protestant work ethos, Christian morality and a white culture is repeated so often as to be unmistakeable. Harvey Wilkinson, a missionary to the Transkei and a man not untypical of his time, claimed in 1898 that :

> "We are surrounded here by a dark, dense mass of heathenism. Scenes new and strange to us meet our view every day. The country is densely populated, and these Pondos are low down in the scale of civilization." (3)

Today many of these tales, beliefs and prejudices have faded into the larger historical background of the continent, leaving behind them a rich mythological heritage. The idea however that the coming of the white man to southern Africa initiated an era of cross-cultural borrowing which somehow changed the face of indigenous culture and improved the people's lifestyle, is a myth which has still to be comprehensively debunked.(4) This is made all the more difficult by the fact that such claims, when applied to the local built environment and material culture, may be perceived to be outwardly valid. The fact that most rural builders have incorporated some modern industrial materials into their constructional

process, and that some have changed their dwelling forms to adapt to a more "modern" and "urban" aesthetic, is inescapable. What is at issue therefore in this case is the extent of western technological and material spread and whether such cross-borrowings can, in fact, be interpreted to be "cultural".

The hypothesis that the presence of an immigrant white culture could have exerted an influence upon the vernacular architecture of southern Africa will need to include the following factors in its considerations :

a. Material application.
b. Building technology.
c. Dwelling form.
d. Settlement pattern.

It is possible to argue, at this early stage, that the subject of dwelling form, with its attendant considerations of materials and technology, should be differentiated, in the discussion which follows, from that of settlement pattern. The reasons for this are evident. The first can be perceived to be part of a delicate social and environmental balance which links dwelling, materials and technology into an interdependant cycle of existence. In the eventuality of an imbalance being created by the introduction of sudden or radical innovations, they would tend to respond as an interacting whole, compensating for and adjusting to each other's changing status.(5) These factors however, should only be seen as being relevant at the level of the individual dwelling unit : it is seldom that they have any bearing upon the larger structuring of settlement patterns.(6) The latter, on the other hand, are also subject to social and environmental conditions but of a totally different nature. Not only do they act at a larger regional level of concern but are not directly inter-related and hence are less vulnerable to comparatively minor economic and physical fluctuations.

Some thought should also be given to the definition of exactly what constitutes a "foreign influence" and how pervasive it should have to become before it may be seriously considered to have undermined the traditional value systems of indigenous society, and hence its built environment. Vernacular architecture can hardly be described as being "static". Its links to the human and physical environment ensure that it is in a constant state of flux, responding and interacting with it as part of a continuous process of growth and transformation. Because it is a grass-root architecture, its range of dwelling forms, technologies and building materials has the ability to expand to incorporate any amount of innovation. In theory therefore, it would be possible to state that any building which meets with the basic criteria of "found" material and certain production processes could lay claim to the title of "vernacular". On the other hand such a structure would have to conform to other requirements of a historical and aesthetic nature before it could also be considered to be "indigenous". In reality, therefore, the dividing line between the two is not simple to define. The case histories quoted below illustrate this point.

a. The rural builder of today tends to prefer the use, in the thatching process, of an industrial twine over the grass ropes and bark fibres of older times. The former is available, cheaply and easily, from the local trading store. It is also treated with tar and is therefore longer-lasting than the latter which require many man-hours of search and cutting in the woods. Although the specific nature of the material has changed, the function has remained the same and neither the technology nor the style of dwelling have been greatly affected by this switch.(7)

b. In the case of the vhaVenda it was found that, some years previously, the threat of serious deforestation to the country had forced them to abandon their timber-intensive building technology of old and develop a new one based upon green brick construction. This was not devised locally but was the result of white missionary instruction at the nearby stations of Elim and Valdezia. Their traditional dwelling form, the cone on cylinder, sometimes with a verandah surrounding its perimeter, has however remained essentially unaltered. The dwellings are now fenestrated but their general external aesthetic and internal space usages have changed little from those of previous generations.

c. The example of the South amaNdebele of the Middleburg-Groblersdal area is however, somewhat more complex to assess. Their homesteads are located on white-owned farms where they earn wages which are often supplemented from other sources. Living as they do near urban market places, many have accepted the easy availability of industrially-manufactured items and, over the years, have provided their dwellings with beds, cupboards and other artifacts. The difficulty of furnishing the circular plan of their older and more traditional structures with goods based upon right-angled construction has led them slowly to abandon the cone on cylinder in favour of square-plan forms. Although these are often thatched with grass, many are also built in green brick or clay and roofed over with corrugated iron sheeting. Most outside as well as inside wall surfaces are usually painted over with complex and colourful designs, many of which are of obvious urban origins or inspired by such consumer-oriented products as motor-vehicles, trains, peanut commercials, Victorian architecture and many others.(8)

The casual observer would have good reason to believe that here indeed was evidence of an incontrovertible nature to prove the case for cross-cultural impregnation. It is true of course that Western artifacts can be seen to permeate most aspects of local architecture, building technology, decorative motifs and life styles. These facts however ignore the deeper symbolism inherent in both amaNdebele wall decoration and their architecture. The first is an expression of local religion and politics as well as a reflection of the status of women in their society (9) and is practised independently of the dwelling's form. The second requires the observer to abandon western preconceptions of "house" as a single structure and extend this term to cover the homestead as a whole. This includes the concept of inside and outside living areas and views the single dwelling, regardless of its form and technology, as part of a larger hierarchical system of spaces. (This point is discussed more fully during the course of a subsequent chapter). Over the years the amaNdebele pattern of settlement has changed little from that which they practised in pre-industrial times, barring perhaps a degree of simplification brought on by a decrease in polygamous family groups. When viewed in this context therefore, it will be seen that their architecture has retained its essential and traditional character. The more romantic or pedantic may regret the passing of their earlier and "more historically correct" structures, but these have been replaced by an equally rich if more modern ethos. Besides, amaNdebele society, like all human societies, is in a state of continuous flux and transition and it would be unrealistic to expect it to remain locked in some kind of cultural stasis (10) for the sake of emotion.

d. Finally there is the case of an admittedly rising number of urban and semi-urban families who are turning from the more overt manifestations of their rural architectural heritage and demanding a more modern aesthetic of their

dwellings. Such homes are usually flat-roofed and multi-roomed. They are also built in a more conventional industrial technology which immediately removes them from the social processes of indigenous building and places their owners into a consumer-producer economic relationship. It would be wrong even here however, to view such developments in an entirely western light. Current housing experience in such urban areas as the Witwatersrand has shown that black clients consistently show a preference for rear-located kitchens, even when it is impractical to place them there. Similarly, many western-looking residences located in the rural areas will often be found to have indigenous structures annexed to them as kitchens or as additional guest rooms.

These cases have manifold implications. Firstly, the adaptive and highly pragmatic nature of indigenous building has allowed for the inclusion of new materials and technologies into the vocabulary of vernacular construction. In many cases these have been incorporated without necessarily altering the form or the sense of the dwellings or giving up their textural richness.(11)

Secondly, very few dwelling types have been lost to rural architecture as a result of material changes. If anything the range of forms being built has been widened. (12)

Thirdly, where changes have occurred in the traditional dwelling norms of an area, this has happened without there necessarily being parallel or resultant alterations in the structural hierarchy of local settlement patterns or, for that matter, in the usage of the dwelling unit itself.(13)

Finally, even when the concept of a traditional homestead has been translated into a modern, extended plan urban dwelling, certain planning priorities based upon cultural preferences have tended to emerge.

This means that the concept of what can be defined as "traditional" and what cannot should be considered to be extremely flexible. To claim, for example, that no "true" indigenous architecture can exist in southern Africa, outside the bounds of a museum area, on the grounds that it has all been contaminated, to a greater or lesser degree, by white technology, is patently absurd.(14) It would also be equally ridiculous to state that local building traditions have survived unscathed from foreign influence. They clearly have not. What does appear to be true however is that local builders have been pragmatic in their adoption of new technologies and dwelling forms, limiting their options to those elements which have suited their needs and rejecting most others which have not. This approach is compounded by the social mechanics of indigenous dwelling construction which militate against changes which are either too radical or too sudden.

It transpires, therefore, that what changes have occurred to the local built environment as a result of white or western influence have been largely limited to technological innovations or the transformation of the dwelling form. Although it is probable that, in the past, both may have had connotations of tradition and culture attached to them, in many cases these values have been transferred to the new technologies or structures.(15) The settlement pattern, on the other hand, has not been subject to either and has therefore been able to survive largely untouched until comparatively recent times.

The degree to which the indigenous architecture of southern Africa can be seen to have been subjected to change of a white or western origin is therefore largely a matter of personal perception. Most western observers in the past have been

domocentric, that is to say, orientated towards individual dwelling forms and their reports of the local built environment were usually limited to accounts of domestic structures and granaries. Many examples of this have already been quoted during the course of earlier chapters. The more recent approach however has been to view the homestead as a whole (16) and although some changes may be perceived to have occurred even here, this element of the local built environment can generally be considered to have altered very little in most areas up to the 1930s. Thereafter however the rural picture becomes more fluid as a shortage of land and the growth of larger semi-urban concentrations begin to impinge upon an already impoverished rural economy. The subsequent decrease in the number of larger homesteads which occurs after this time can probably be attributed to these factors, although the growth of a missionary influence, leading to a drop in polygamous marriages, cannot be ruled out altogether as a contributary element.

Conclusions

This chapter has attempted to establish some guidelines as to how much innovation of an urban and industrial nature can be said to be assimilated by local vernacular architecture before its indigenous and rural status becomes threatened. What has emerged, in the process, is the fact that change can be perceived to have occurred at a number of levels : material, technological, dwelling form and settlement pattern. It was shown that although in many cases these elements individually could bear a small degree of alteration, when this was exceeded it tended to have a ripple effect into the others as well. Generally however, settlement pattern could be seen to stand apart from those considerations surrounding the individual dwelling unit. The first has its structural principles firmly rooted in social hierarchies, the second in pragmatic decisions of shelter. Therefore the dwelling unit is thought to have been far more vulnerable to change than was the larger settlement form. Whether however such change could be interpreted as being of a "cultural" nature is a question which is still open to individual definition.

With these points in mind, it becomes possible to arrive at certain conclusions of a historical nature. The accounts of early travellers to the region gave little idea of the social structures involved in indigenous settlement patterns. Their descriptions concentrated largely upon the local dwelling form and its construction and little was ever said of hierarchical distributions of huts or the functions of external spaces. However, if we can now accept the fact that changes to the habitat began with the technology of building and the form of the structure and only later spread to the pattern of settlement, then the whole question of white-black cross-cultural pollination begins to fall into its correct perspective. In these terms it may be seen that although in some cases an element of dwelling aesthetic may have been involved in the identification of regional identities, the larger burden for this fell upon the settlement form, it being a more direct reflection of local social hierarchies, kinship and political systems and economic activity. Therefore although the rural dwelling unit can be perceived to have undergone a measure of westernisation, in cultural terms this influence can be considered to be superficial and perhaps even transitionary. The real impact of cross-cultural fertilisation should have manifested itself at the larger level of homestead settlement. As however, current research has shown that many of the traditional values attached to it persist to the present day, this study must come to the conclusion that the rural built environment has succeeded in retaining its essentially indigenous character despite the fact that local culture has been in intermittent contact with immigrant influences for over four hundred years.

NOTES AND BIBLIOGRAPHY

1. HALLETT, Robin
"The Penetration of Africa to 1815". London : Routledge and Kegan Paul, 1965.

2. The former Rhodesian regime of Ian Smith actively promoted the misconception that the ruins of Great Zimbabwe owed their origins to some mythical long-vanished race of people. They also attempted to suppress archaeological data which showed its builders to have been the ancestors of the local maShona. The idea that a "primitive" group of people could be capable of erecting "public works" of such magnitude clearly ran contrary to the white stereotype of the indigenous populace. It also gave credibility to black nationalist claims to the existence of an early and advanced Zimbabwean culture.
FREDERIKSE, Julie
"None but outselves". Johannesburg : Ravan Press, 1982.

3. WILKINSON, Harvey
"From Namaqualand to Pondoland". The Methodist Churchman, Vol. III, No 75, 6 January 1898. p.357.

4. The concepts involved are so widespread that their discreditation in the public mind will require some considerable time to achieve. A lot of material was published by the SPROCAS programme in the 1970s but most was politically orientated and aimed at a relatively small market. Subsequently however, authors such as Jeff Peires (1981), Jeff Guy (1982), Peter Delius (1983) and Phil Bonner (1983) have set about re-writing southern African history from a more objective point of view.

5. There are numerous examples supporting this point of view. The reduced availability of specialised grasses necessary in the construction of the amaZulu beehive hut; the deforestation of southern Vendaland; the introduction of corrugated iron roof sheeting; the use of cement in soil stabilisation; each one of these can be perceived to have had wide repercussions in the practice of southern African vernacular architecture. The interested reader is referred to case studies quoted in the following :
FRESCURA, Franco
"Rural Shelter". Johannesburg : Ravan Press, 1981.
NBRI. "A Survey of Housing Functions in the Ndebele Homeland". Pretoria : NBRI. 1976.
HARDIE, Graham
"Tswana Design of House and Settlement : Continuity and Change in Expressive Space". Unpublished Ph.D. thesis, Boston University Graduate School, 1980, and others.

6. It was found, during the course of current field research, that informants seldom raised the subject of dwelling form in conjunction with that of settlement pattern. The exception occurred when discussion turned to the twin subjects of lightning and fire, where inhabitants of thatched structures have an understandable fear of these phenomena. Holub, writing at New Shesheke in 1875, described how :

> "While I was sitting in my hut writing my journal on the following day, I was startled by the cry of 'molemo, molemo!' (fire, fire!) and immediately I rushed outside: a single hut was in flames but as it was standing in the midst of some hundreds more, the reed-thatch roofs of which were all extra dry from the heat of the weather, there was every reason to fear that others would catch fire, and that the brisk east wind that was blowing would fan the flames into a general conflagration."
>
> HOLUB, Emil. "Seven Years in South Africa". London : Sampson Low, Marston, Searle and Rivington. 1881.

Even then, considerations were usually limited to density of hut building, the nature of roofing materials and the proximity of kitchen areas to the main dwelling unit.

7. Indirectly this is one of the points made by Barrie Biermann in his article "Indlu : the Domed Dwelling of the Zulu" (Paul Oliver, "Shelter in Africa", 1976). He argues that although the amaZulu dwelling is in a state of transition, the value systems of its architecture remain undoubtedly "traditional".

8. FRESCURA, Franco
"Kwa Mapoch - An Ndebele Village". Johannesburg : ISAA, September 1981.
SPENCE, Betty and BIERMANN, Barrie
"M'pogga". The Architectural Review, July 1954, pp. 34-40.
MATTHEWS, Thomas
"Tribal Painting in South Africa, with Particular Reference to Xhosa Painting". Unpublished D.Litt. et Phil., University of South Africa, Pretoria, December 1971.

9. VOGEL, Catherine
"The Traditional Mural Art of the Pedi of Sekhukhuneland". Unpublished MA Dissertation, Faculty of Arts, University of the Witwatersrand, Johannesburg, 1983.

10. RICH, Peter
"The Bantwane Settlement at Kwarrielaagte". Architecture SA, November/December 1982. pp 38-43.

11. FRESCURA, Franco
"Rural Shelter". Johannesburg : Ravan Press, 1981.

12. Ibid.

13. This is perhaps too wide a generalisation to make. Adam Kuper (1980) quotes the example of the Bomvana where the introduction of a hinged swinging door changed the previous ordering of internal spaces between male and female, within the circular dwelling. Current field research has also shown that traditional seating hierarchies based upon a circular hut plan are often, but not always, disrupted by the introduction of square plan structures.

14. This is a claim which has often been made to me, in various forms during the course of my research, by such disparate groups as anthropologists and farmers, academics and laymen. Chris van Vuuren of Pretoria University, for example, did not consider the Msiza amaNdebele settlement at KwaMatabeleng worthy of study on the basis that Meiring had assisted them in obtaining their land, that the Commissioner for the area had kept them supplied with thatching grass and that commercial wire and nails had been used in the construction of local dwellings! Considering that this was primarily intended to be a functional village and that, despite the influx of tourists it suffered between the 1950s and the early 1970s, it continues to be the preferred habitat of its inhabitants up to present times, this point of view can be easily discounted. Besides, the increased interaction between white and black experienced by this group should in itself be a subject for comparative study by students of anthropology and history. The South amaNdebele have never denied the western influences present in their wall decoration - if anything they have adapted and flaunted them and made them their own.

15. When questioned about recent architectural developments in their region, informants often responded by stating that "that is the old way of doing it. This is the local way nowadays." The painting of the north face of the dwelling in the Transkei, for example, is now known locally as the "Xhosa style". Some customs associated with the dwelling which also persist to modern times are the burial of the afterbirth below the hut floor (Transkei); the placing of protective medicine over the hut doorway (various locations); and the building of the "umsamo", a low food shelf, opposite the doorway of the dwelling (Zululand). Interestingly enough, the South amaNdebele who are originally of Nguni stock, still build a shelf at the rear of the hut and call it the "umsamo" but now use it as a seating area. The central hearth in this case has been moved off centre and to the rear to accommodate the umsamo's new function.

16. KUPER, Adam
"Symbolic Dimensions of the Southern Bantu Homestead". Africa. Vol. 50, No. 1. 1980. pp 8-23.

"I was almost exasperated to see these people (the Dutch), who have such plenty of timber at hand, dispose of all they could cut, not building themselves tenable houses, but living in miserable huts, formed of hurdles, covered with earth."

LE VAILLANT, Francis. "Travels from the Cape of Good Hope". London : William Lane, 1790.

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1. The Case of the Woman from Mzimkulu

The northern Cape is a region which is arid and suffers from encroaching desertification. The grasses available do not grow to any great height and tend to be sparse. When collected by the local builders, the grass tufts are not cut but tend to be pulled up, roots and all, in order to keep the strands together. Needless to say such a practice is inimical to the conservation of natural roofing resources and there have already been some moves by local residents to switch over to corrugated iron sheeting as an alternative roofing medium. BaTswana thatchers of this area have also abandoned the older and locally more efficient technology of holding down the short-grass cover with a grass rope overlay in favour of one derived from the Dutch which sews down the thatch and is therefore more suited to a long-grass region. Consequently the thatchwork of local farmers is generally not of a high quality and such details as the apex and the eaves are often left unresolved. It came as a surprise therefore to discover, in 1979, at the village of Genesa, a dwelling whose roof demonstrated not only a high degree of technical proficiency, but sported some innovative additions to the detailing. The grass cover was held down in the older and more traditional baTswana style but the apex had been resolved in a manner which could only have originated from the coastal areas, possibly KwaZulu. The woman of the homestead, as it turned out, had originated from Mzimkulu, a town on the border between KwaZulu and the Transkei. She considered herself to be amaXhosa and had met and married her husband in Johannesburg where they had both worked previously. Coming from a region experienced in the use of grass technology, she had rapidly diagnosed the shortcomings of local thatching practices. Claiming that :

> "This grass is too short; (it is) no good for the way these people thatch"

she had soon learnt and re-established the older and more suitable baTswana style and improved its performance by introducing an apex detail she had known as a girl in the Transkei. She had at first been surprised when I had greeted her in isiZulu, but laughed when she realised how her background had been revealed. In this case, this woman had made a number of decisions based upon pragmatic considerations of materials and technology, bringing together the best possible elements from her personal experience. The fact that one of these elements may have had connotations of culture or architectural stereotype had not occurred to her and it is doubtful whether this element played anything other than an unconscious role in her decision-making process. It is not known how her baTswana neighbours regarded her innovative efforts.

2. The Case of the Woman Who Painted

The vhaVenda are a group who inhabit the northern reaches of the Transvaal, occupying a stretch of land between the Soutpansberge in the south and the Limpopo river to the north. Their homesteads usually consist of a number of dwellings grouped about a series of living and work courtyards which are defined through the medium of low, sculptured walls. The task of building and maintaining these walls normally falls to the women who also use them as a canvas to paint their own decorations. These usually take the stylised form of flower and leaf patterns and, in some instances, also include the symbols of clubs, spades and diamonds borrowed from western society.(1) VhaVenda wall motifs are highly distinctive and easily identifiable from those painted by the women of other southern African rural groups.

In the village of Lupepe, located in northern Venda some twenty kilometres from the Limpopo, lives a woman who is reputed to be the best maize porridge maker in Vendaland. She also runs an excellent and most convivial shebeen.(2) She is an amaXhosa who originally hails from Butterworth, in the southern Transkei, but who met and married her husband, a vhaVenda, some thirty years ago when they were both working in Johannesburg. Having been brought up in the Transkei where homestead spaces are not as strictly defined as those of the vhaVenda, she found that she had to make several cultural adjustments when she joined her husband here. Today, nearly twenty years later, she also builds courtyard walls and, like her neighbours, decorates them with flower motifs. Unlike her neighbours however, her designs have a definite Nguni feel about them, being based upon the simple geometrical patterns reminiscent of their beadwork and love letters. She was unaware of the differences between her designs and those of the vhaVenda until these were pointed out to her during a visit in 1981. Upon a subsequent visit to her homestead six months later, it was noticed that these drawings had been replaced by others with a more obvious vhaVenda flavour. When asked about them she replied that she had commissioned her daughter to repaint them because she wanted them to "look Venda". Upon this and subsequent occasions it was not pointed out to her that, despite their greater vhaVenda input, her designs still incorporated elements of Nguni beadwork origin. In this instance, this woman was living some two thousand kilometres away from her birthplace and had made the deliberate choice of submerging the more obvious elements of her amaXhosa background in an attempt to blend in with her new social environment. This was taken as far as the delimitation of her homestead's outdoor social and economic spaces. When, however, it came to the point of decorating the walls of her residence, she failed to perceive in the patterns any element of group identity. Instead they were read in terms of her own home background where wall decoration is still practised in a much more limited way but ceased to have heraldic connotations several generations ago.(3) She therefore read them purely in aesthetic terms. As such, any designs would have done and thus she drew inspiration for her work from the patterns she had known and remembered as a child. It is also quite probable that, originating from a community who do not define their outdoor activity spaces with hard edges, she also failed to understand the essential nature of wall painting. In some rural societies of the Transvaal women are perceived as being "hot", men as being "cool". The walls, being boundaries and definers of space are also viewed as being potentially "hot", and being the result of women's work they are therefore doubly so and need to be "cooled" down. One of the roles of wall decoration is to "cool" the boundaries of the homestead space and therefore its occupants.(4) The actions of this amaXhosa woman would therefore have been viewed by her neighbours as complying outwardly with local norms and traditions but it is not known whether she herself appreciated the full significance of her art.

3. The Case of the Changing Technologies

In 1913 the Union Parliament passed the "Natives Land Act, No 27 of 1913" which defined areas in South Africa outside which blacks could not own or purchase land. (5) These, originally referred to as "Scheduled Areas", were subsequently consolidated under the "Native Trust and Land Bill of 1936".(6) The principles

behind both laws survive to the present day in the form of the current government's "Homeland" ideology. Their outcome was to deny a growing rural population access to the agricultural land it needed in order for it to continue to feed itself. In architectural terms this was to have two major effects : it forced large numbers of the rural work-force to seek employment in urban areas as migrant workers where they came into contact with new building materials and technologies; and increasing rural population densities created shortages of certain materials, most particularly timber and thatching grass, necessary to the maintenance of a traditional building technology.

In consequence these events may be considered to have had an impact in three main areas of architectural concern :

a. There has been a rapid decline in the use of grass-oriented technologies. This has been particularly noticeable in those parts of southern Africa which, before the turn of the century, were considered to be strongholds of grass beehive architecture. These include the entire eastern littoral region as well as Lesotho and Swaziland where the cone on cylinder structure has now become the single most dominant dwelling form. In most cases the changeover from beehive to cone on cylinder has been of a slow evolutionary nature which, in some areas, is still taking place to date.(7) It was found, during the course of current research, that the beehive is today overwhelmingly identified by rural groups as being part of an amaZulu architectural and cultural stereotype, even in those areas where such structures were being built as recently as two generations ago.(8) On the other hand most other areas which, up to four or five generations ago, were building beehives, still recognise them as part of their building vocabulary. They are however considered to be archaic and are usually reserved for such specialised functions as initiation and courting huts.

The changeover from beehive to cone on cylinder has not, in many cases, been an easy one. The very fact that the transition between the two appears to have involved as many as thirteen different stages may be attributed to both cultural resistance and a measure of inertia in the social processes of rural architecture. In most recorded examples of the early stages of the transitional process, where the beehive dome was raised upon a drum wall between 300 mm and 1,2m in height, the residents themselves were unable to perceive a difference between their own dwellings and the structure in its original and unaltered form. In many cases they shared the same name, such as the isiXhosa term "ingqugwaba".(9) People interviewed would, in the main, state that such changes had been forced upon them by a lack of suitable grass resources, that the older style of building made for low and uncomfortable doorways and that it did not allow for the fenestration of the structure. It was only once the dome was raised upon a drum at least 1,5m to 1,8m in height, that, in some locations, this dwelling form achieved separate aesthetic and structural recognition in its own right.

A shortage of grass resources has also forced, in many cases, a changeover in local roofing technology. This has resulted mainly in the material being replaced by corrugated iron sheeting. In the inland areas of the Transvaal and Orange Free State and where rural settlements are located in the proximity of major industrial areas, such changes have also usually been accompanied by alterations in the dwelling form in order to allow the plan to conform with the nature of the new material. Thus we find that in many such instances, the older and more traditional circular cone on cylinder has been replaced by a square plan lean-to or parapet dwelling.

In two areas however, the Ciskei and parts of southern KwaZulu, this changeover in residential form has been resisted for reasons which can only be attributed to cultural attachment. Here a shortage of natural resources has indeed forced the inhabitants to abandon their thatch technology of old. However, instead of conforming to the structural demands of the new material, they have hammered, chopped, bent and ground the corrugated sheeting until it has come to fit the demands of their cone on cylinder dwellings.(10)

b. There has been a decline in the use of timber-intensive technologies. This is only partly true, for some regions such as the Transvaal and Orange Free State highveld have never been rich in timber resources. On the other hand such areas as southern Venda and Gazankulu, where domestic architecture has traditionally been of a timber-intensive nature, have been particularly affected since the mid 1940s by rising population pressures.

The availability of timber has had particular impact upon the technology of wall construction where, traditionally, the roof load was taken up by a series of wooden posts. Clay was seldom used structurally and its role was usually limited to either the creation of infill panels between posts or as a plaster coat over the timber framework. Since the 1860s however we have seen the introduction in rural southern Africa of green brick, sod and baked brick construction. This has occurred largely as the result of social and economic interaction between the indigenous population and white immigrants to the country. Today we find that a clay brick technology has spread even to areas where timber is still available in sufficient quantities to maintain the older building tradition. However, despite the fact that clay brick construction is essentially suited to the building of square plan dwelling forms, the rural dweller has preferred to transplant this new technology onto his older and more familiar circular plan. Thus even to the present day, and after over four centuries of contact with a west European culture, the southern African rural dweller still chooses the form of the cone on cylinder as his preferred habitat. It is true that block walls have facilitated the introduction of a more efficient fenestration but the dwelling aesthetic has remained essentially unchanged from that of countless previous generations.

c. There has been a broadening in the range of dwelling forms being built in the rural areas. This has been the result of not only the introduction of corrugated iron into the rural habitat or the shortage of thatching resources, both of which have already been discussed, but also the growing availability in the rural economy of commercial artifacts, most particularly furniture. These are based largely upon a 90^{o} geometry which makes circular room spaces particularly difficult to furnish. Thus the growth of a genre of building types in rural architecture based upon a square or rectangular plan should be seen, at least in part, as being a response on behalf of the rural builder to a growing consumerism in his own community.

In some instances however, the attachment to the older and more traditional circular dwelling has not been given up very easily. The development of hexagonal and octagonal plan units, which embody the roof technology of the cone on cylinder with a greater efficiency of internal space usage may be seen to be a conscious effort by some rural dwellers to retain the aesthetics of an older architecture with the functionalism of a new one.(11)

4. <u>The Case of the Ancestral Beehives</u>

An attachment to traditional and older architectural forms should not be seen as the result of a blind conservatism but should rather be viewed in terms of a social, cultural and symbolic value structure. The beehive hut, for example, is viewed in many parts of southern Africa as being of a temporary nature. It is also associated in many ways with youth. Initiation huts, courting huts and herdboys' shelters are all usually built as simple beehive forms. They are also transient, being erected to house temporary activities. But youth itself is also considered to be a temporary condition in the life of rural man; therefore it may be said that, in some cases, the beehive dwelling form is part of a value structure whose architecture proclaims "there are young people who live here". This could explain why some early baSotho groups inhabiting the northern highveld regions built corbelled stone huts in the form of beehive domes. (12) If it can be accepted that such structures were indeed erected for the use of herdboys, then the imposition of a beehive form could have been made through a combination of three factors : the doloritic shale used as primary building material was particularly suitable for this kind of structure; a cultural attachment to an earlier and archaic grass-based architecture, as suggested by Biermann (13); and because the beehive is part of a rural symbological value system which associates this form with the activities of the young.

The conscious use of certain archaic architectural forms in connection with children (14) has also been observed in the custom of circumcision or initiation. This practice not only allows young graduates to take their full place as adults in the social and political activities of the group, including the rites of ancestral worship, but it ensures that should they die, then they too would be entitled to formal burial and to be admitted to the ranks of the ancestors.(15) Initiation also has connotations of ancestral worship. Archaic domestic structures, for example, are perceived to be associated with the ancestors. Thus, when a young person enters the initiation hut, he enters the place of his ancestors and joins them in the nether world for the period of the rite; thereafter he is allowed to return to the world of the living as a full adult.

It will also be seen that initiation is a process during which the young adult-to-be is inducted into the larger polity of his group. The dwelling form chosen as the initiation lodge therefore should also be perceived to have strong connotations of group and hence political identity. The bond of association which is thus forged during the period of initiation between architectural forms, social symbolism, religious belief and political identity is a powerful one which, as this chapter is attempting to show, cannot be broken easily and by mere alterations in environmental conditions. When we read this in conjunction with the social processes which generate rural architecture, it will be seen that changes in the architecture of a people cannot be easily wrought save by overcoming factors of social, political, economic, cultural as well as environment inertia.

5. The Case of the Wandering amaZulu.

As the result of internal political tensions in the amaZulu kingdom, the amaKumalo, a small Nguni clan originating from northern Zululand, migrated into the Transvaal in 1822 under the leadership of their chief, Mzilikazi. Although the group was initially small, numbering an estimated 300 warriors with their families, they were also armed and trained in the new amaZulu manner. They were thus easily able to defeat and absorb a number of smaller clans who barred their march northwards. They quickly earned for themselves a reputation as courageous and skilled fighters as well as the name of "amaNdebele", or "Matabele" as they were to call themselves later on. By the time they had settled in Matabeleland, the western region of present-day Zimbabwe, in 1837, they numbered an estimated 5000 warriors.(16)

During this brief fifteen year period they had moved their capital four times, migrating from a timber-rich lowveld region to the more arid western Transvaal and finally to the mopane veld north of the Limpopo. Throughout this time and right up to 1897, seventy five years later, they continued to build their dwellings in the form of a hemispherical beehive dome, using the same technology, domestic structures and settlement patterns as they had done previously in northern Zululand. It was only once their political ascendancy over the maShona was broken in two successive wars with the British in 1893 and 1896-7, that they appear to have abandoned their attachment to the beehive form in favour of the cone on cylinder indigenous to their region.(17)

The case of the Matabele is interesting for a number of reasons. Firstly, by the time they had reached the Marico river valley of the western Transvaal, in 1832, they had ceased to be predominantly Nguni. It is true that they had been joined from time to time by other Nguni refugees from Zululand, but these groups were generally small and the bulk of their initial numerical expansion was owed to the various baSotho and baTswana tribes they encountered and subjugated in the Transvaal. The position of these recruits was varied. Some enjoyed the status of full allies; others were conquered and their women taken as concubines (18) whilst their young men were eventually incorporated into Matabele regiments as full warriors. Thus a large proportion of the Matabele population in the Transvaal was not of Nguni origin, but, rather, came from rural backgrounds whose domestic architecture did include the knowledge and occasional use of beehive-type structures but was predominantly orientated towards the cone on cylinder. Certainly, none of them are thought to have developed their beehive building technologies to the same level of proficiency as that shown by the coastal Nguni. It is therefore surprising that the beehive dwelling form should have persisted among the Matabele for almost four generations after they had abandoned their original homes in northern Zululand.

Secondly Matabele society underwent four major relocations in the brief space of fifteen years. This is in itself remarkable, for upon each occasion they must have been under considerable stress as the result of pressures brought about by amaZulu, Sotho/Tswana and Dutch belligerence towards them. Yet, throughout this time, they tenaciously managed to retain not only their original Nguni identity, but also the knowledge and technology of their old Nguni dwelling forms. This is made even more remarkable when we consider the findings of modern researchers such as Desmond (19), who have revealed the extent of the trauma currently suffered by rural communities as the result of a single such move in their lifetimes.

Thirdly, the Matabele's fifteen year migration took them through a number of distinct environmental and climatic zones. Originating in 1822 from a grass-rich area of northern Zululand, in 1823 they halted in the bushveld of the upper Oliphants river, bordering upon the timber-rich lowveld; 1825 saw them in the mixed bushveld/grassveld region near present-day Pretoria; in 1832 they settled in the semi-arid bushveld of the Marico valley; and in 1837 they finally made their homes in the mopane veld of western Zimbabwe. It is obvious therefore that the survival of their grass-based technology, particularly from 1832 onwards, must have relied greatly upon the continued importation of building resources from other regions further south and east. When we consider that the construction of their towns, described by Collins in 1831 as :

> "... a large kraal - or rather city, ... a collection of closely built houses two miles in length ...", (20)

must have involved vast amounts of materials, a large proportion of which would

have been carried on foot over some considerable distances, then it will be realised that such an achievement required a large amount of determination and an inordinate attachment to their architectural tradition.

It becomes clear therefore that the Matabele's retention of an architectural style which lasted for nearly seventy-five years runs counter to all the dictates of practicality and common sense and cannot be explained in simple environmental and social terms. The solution, if one is indeed possible, will have to be found elsewhere.

The clue to one such possible answer lies in the fact that the Matabele initially referred to themselves as the abakwaZulu, "the people from Zululand", or the amaKumalo, "the people of Kumalo".(21) Early visitors to the court of Mzilikazi invariably referred to them as being "Zulus" and it was only some time later, certainly after 1835, that they formally adopted the term "Ndebele" in reference to themselves. This was distorted to the maShona usage of "Matabele" much later on, once they had settled north of the Limpopo. The amaZulu had only come to the fore in their own region from c 1816 onwards and Shaka's kingdom can only be considered to have emerged in its fullest sense after 1819.(22) The "people of Kumalo" therefore could not have been part of a larger amaZulu identity for longer than three or four years - hardly enough time, one might think, for them to identify with the political ideal, let alone to want to usurp it later on. We do know, however, that the original schism in the amaZulu state occurred as the result of a personality clash between Mzilikazi and Shaka and that the military struggle between amaZulu and Matabele continued on an almost yearly basis after Shaka's death in 1828 and up to the Matabele's final northward migration in 1837. The enmity between the two groups during the lifetime of Shaka can be understood. Mzilikazi had been, after all, one of Shaka's generals. He had defied the authority of his king and must therefore be punished for it. However for the feud to have continued well into Dingane's reign and after the Matabele had removed themselves beyond the immediate amaZulu sphere of influence, seems to suggest something more than an internecine war to the death.

It might appear, therefore, that between 1822 and 1837 the Matabele deliberately sought to create for themselves an identity based upon the amaZulu model. Their warriors dressed and fought like the amaZulu, isiZulu was their predominant language and their style of architecture, both in settlement form and dwelling type, was identifiably amaZulu. Dress, of course, could be copied; military tactics learnt and emulated; isiZulu is a dialect of Nguni, a language common to the entire eastern littoral; but architecture, particularly settlement pattern, is recognised by rural people to be a reflection of their entire cosmology, their economic system, social structure, inheritance hierarchy and religious practices and is thus their most manifest banner of group identity. It could be for this reason, therefore, that the beehive dwelling form was adopted and clung to so tenaciously for nearly four generations, seemingly against powerful odds.

The reasons why an amaZulu identity should have been so carefully cultivated by the amaKumalo are a little more difficult to determine. At a primary level it could be read to have been no more than a simple psychological device which exploited the fearsome reputation which the amaZulu regiments had gained for themselves under the leadership of Shaka. The expectation therefore might have been that opponents in battle would become paralysed with fear, the morale of their own troops would be boosted and the people themselves, coming as they did from a number of different rural backgrounds, would have a central, powerful and well established identity to rally round. While these are reasonable and probably correct assumptions to make, they also fail to explain one vital historical factor : why was the amaZulu leadership seemingly so concerned with the presence of a second "amaZulu" state on the highveld?

The answer here must lie in the concept of a political identity. It will be remembered that the original amaZulu clan was a small group whose number in 1816 can hardly have exceeded two thousand persons. By 1819 a wider amaZulu identity encompassed most Nguni along the coastal belt from the Pongola in the north to the Tukela to the south. Under these conditions the term "amaZulu" ceased to have connotations of clan and became identified with the political ideal of a larger amaZulu state. Thus when Mzilikazi fell out with Shaka, ostensibly over the question of how to divide the spoils of a military victory, what was at issue in reality was not the future of a herd of cattle but the political leadership of this state. Thus the establishment of an alternative "amaZulu" presence in the southern African interior was not simply the work of a petty chief who had emigrated and was making good elsewhere, but it was perceived to stand as a challenge to the very identify of an "amaZulu" state. It is not known whether the differences between Shaka and Mzilikazi were based on a simple leadership struggle or whether they were of a more fundamental and ideological nature. We do know however that Shaka's amaZulu kingdom was predominantly Nguni and hence of a limited and regional nature. Mzilikazi's domain on the other hand encompassed in its time Nguni, Sotho/Tswana and maShona alike. It is possible to postulate therefore that, of the two men, it was Mzilikazi who was endowed with the wider vision. It is not known whether this encompassed the establishment of a black southern African state but his own power base was established on a broader regional front than Shaka's and must therefore be perceived as a forerunner to such an ideal.

If this interpretation is indeed correct, then it might also explain why the beehive dwelling form, so symbolic of their own group identity, was abandoned after 1897 when Matabele political ascendancy in their region was crushed by the white colonists of what was to become Southern Rhodesia.(23)

6. The Case of the Victorian Facades

The process of wall decoration in southern African indigenous architecture can be said to have two components : the structural, and the manipulative.

Structural decorative patterns arise from the fact that vernacular architecture in general derives much of its stylistic character from its functional use of materials. Thus the naturally derived textures, details and forms which are achieved in the process of construction are important, at a primary level, in determining the aesthetic nature of such buildings. This does not mean to say that structural elements may not, in themselves, be manipulated. It is possible, for example, to achieve, within the bounds of any one particular technology, a number of different resolutions to the same problem. It is often found however, that one particular solution will tend to gain predominance in a geographical location or region and thus, with time, may become identified with the material culture of its builders. It has already been suggested that some such elements belong to a more fundamental system of rural symbology. It is therefore possible to conclude that, where a group living under one set of conditions develops a strong attachment to a particular style of architecture, it will, under different conditions, attempt to reproduce its more obvious and visual components by manipulative and artificial means. This is equally true in those cases where an architecture is not their own but the acquisition of its aesthetics is deemed to be either desirable or advantageous to the group's interests.

In the context of rural architecture, manipulative decoration may be seen to be an imposition of textures, colours and forms upon the built habitat for reasons which bear little functional relationship to its structural performance. The motivation behind such an activity may be of a social, religious, mystical, political or symbolic nature, although it is probable that, in reality, a combination of two or more of these elements will be involved at any one time. Unlike structural decorative patterns which arise as the result of the combined efforts of both men and women, most if not all southern African rural groups consider the application of painted motifs to be the work of women.

The tradition of wall decoration in southern African rural architecture is a long-standing one which probably predates the arrival of a west European influence in the interior of the sub-continent. Despite what has been written in the past by such authors as Walton (24) and Grossert (25), it was not limited to any one particular area but can be considered to have been general practice, in one form or another, among most agricultural pastoralist groups of the region. Burchell visited Dithakong (Lettakoo) in 1812 and recorded that a baTswana woman :

> "... exhibited her paintings in a manner which evinced that she was well satisfied with her own performance. They were the figures of several animals, rudely drawn, with a paint of white earth, against the front-wall of the house." (26)

while Baines wrote of the amaXhosa in 1849 that :

> "In the mud with which the interior of the hut was plastered, pumpkin seeds had been stuck in various patterns, one somewhat resembling a snake, and then picked out, leaving their glossy scale attached to the surface of the wall." (27)

However the observations made by Kropf, between 1846 and 1889, strike a more contemporary note. He stated that, after the amaXhosa husband has built the hut, his wife :

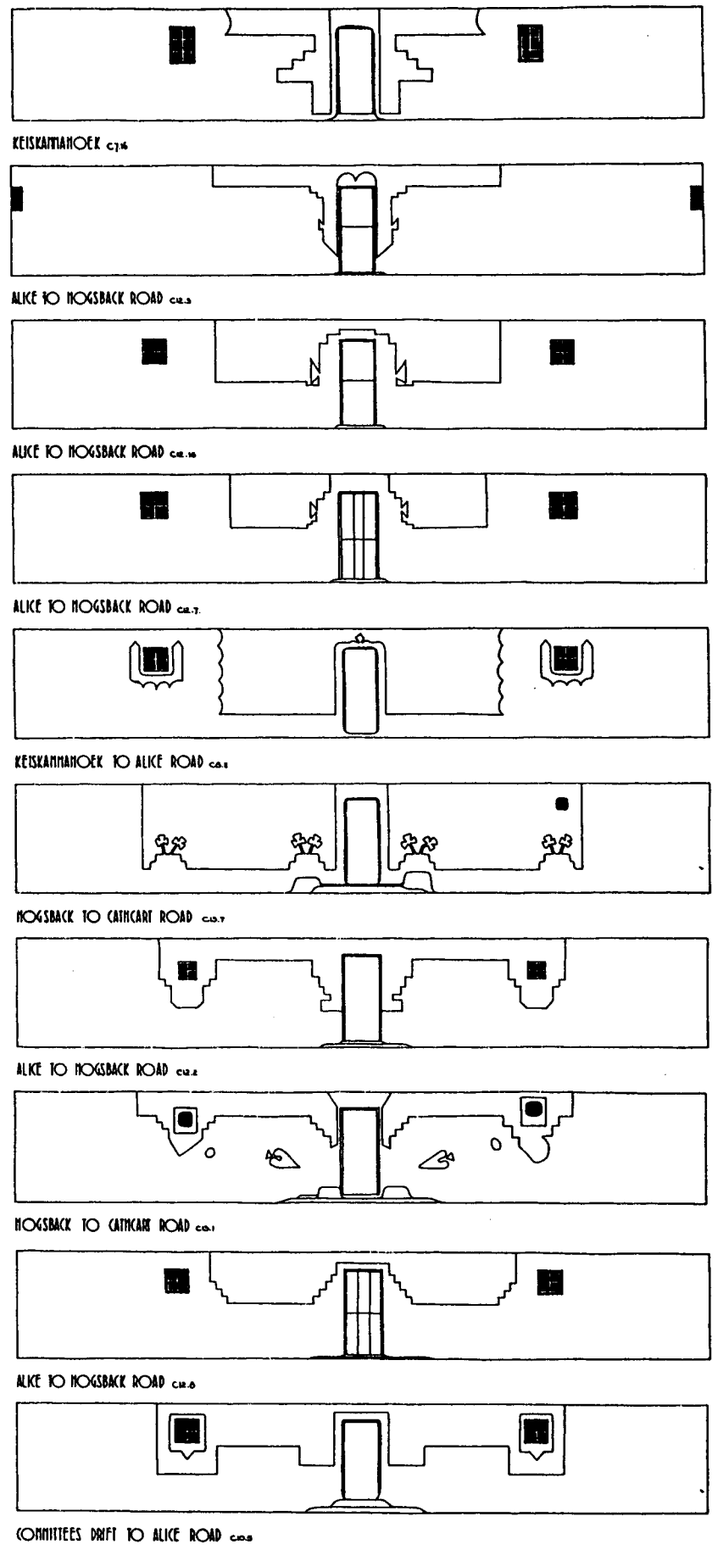
> "... smoothes the walls and paints them with yellow, red or white clay or uses all three colours at the same time and paints designs on them." (28)

It is possible, in theory, for wall decoration to accommodate as many variations, based upon theme and style, as there are artists to paint them. In reality, however, the functions of such art are governed by the same social, economic and environmental processes as those which generate rural architecture. As in the case of the latter, therefore, there are also certain stylistic preferences which, in the past, have become established on a regional or group basis. In each instance a series of broad aesthetic principles have emerged within which the rural artist is able to create her own individual statement in terms of colour and subject matter. For the purposes of this chapter we are only interested in three such regional manifestations in the more recent history of southern Africa.

a. <u>The Case of the "White-Faced" Huts</u>

During the course of an earlier discussion it was firmly established that the Ciskei and Transkei regions of southern Africa have deep historical associations with a grass building technology which has since fallen into disuse. At one time the beehive dwelling was ubiquitous, being built in some parts as recently as three generations ago, but from the 1870s onwards it began to be replaced by other architectural forms. At first the region's builders began to raise the grass dome upon a drum wall but from the 1920s

THE CASE OF THE WHITE - FACED HUTS



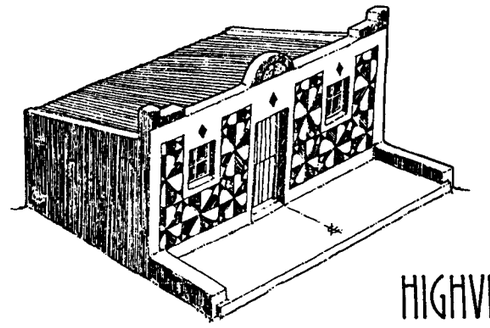
onwards this roof form began to be supplanted by a conical structure. Today the cone on cylinder is the single most popular dwelling form in the Transkei and Ciskei. Its introduction and spread has been attributed by some chroniclers to the work of missionaries among the amaMpondo during the 1850s (29) but this point has not yet been confirmed by current research.

The phenomenon of the so-called "white-faced" huts of the Transkei appears to have its origins in the era prior to the mid-1920s (30) and could have arisen as early as the 1900s.(31) The form taken by this decoration tends to follow a set pattern : the whitewashed panel covers the front third or door facade of the hut circumference; it is seldom taken down to ground level but a 500 mm high splashband is allowed along its base; the surrounds to both door and window openings are expressed; and sometimes a whitewash band is allowed to run the full perimeter of the hut wall, but only to such a depth as may be sheltered by the width of the eaves. Further decorative patterns of an individual nature may be applied to the door and window surrounds and in some recorded examples the rear of the hut is rendered in a darker clay - presumably for reasons of environmental control. This custom is usually associated with the cone on cylinder dwelling form and the pattern may be perceived to bear a close resemblance to the exterior facade treatment of some domestic architecture during the Victorian era. The conclusion that this style of decoration arose as a response on the part of the indigenous population to the influx of missionaries and other white settlers to the region during the last century is therefore inescapable. This is supported by informants in the southern Transkei who have attributed its introduction to the amaMfengu, also nicknamed locally "school people", who, as refugees from the Difaqane, were among the first in the region to gravitate into the social and economic sphere of missionary influence. At one time the use of whitewash was associated with a Christian identity, a supposition supported by the fact that hut painting and renewal takes place shortly before the Christmas festivities. However, for the past three generations the painting of hut walls has become a common place occurrence in the Transkei. Today little popular significance is attached to it other than the fact that both the decoration and the cone on cylinder form have become incorporated into the local architectural stereotype.

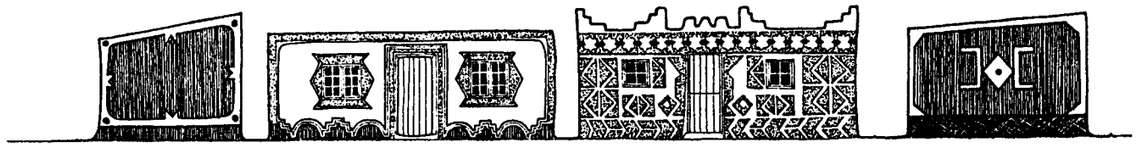
An interesting connection was made, albeit in jest, by an informant in the southern Transkei between the 'white-washing' of hut facades and the fact that it is customary in this region for young mothers to smear white clay on their faces after the birth of their first child. As the title of this section implies, the domestic architecture of these areas has been perceived by some white visitors to have a physiognomy of its own. Obviously this parallel has not escaped the local people either, leading one to wonder whether the two practices are not in fact part of the same process. To put it simply, the young mother smears her face with white clay in order to ward off evil from herself and her baby at a time when they are both vulnerable to such influences. The dwelling is perceived to be the domain of the woman and the task of painting or decorating its walls is also hers. It is conceivable therefore that the twin practices of wall decoration and facial smearing are seen to fulfil the same medical and mystical functions. Further field research will however be necessary before this point can be made conclusively.

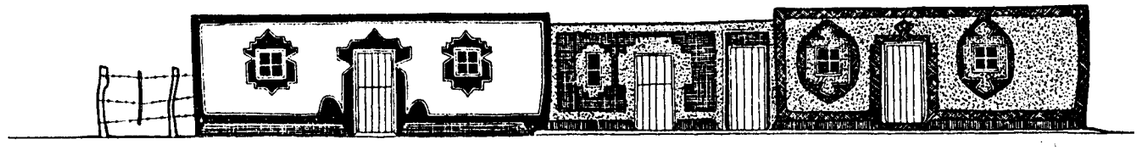
b. <u>The Case of the Baroque baSotho</u>

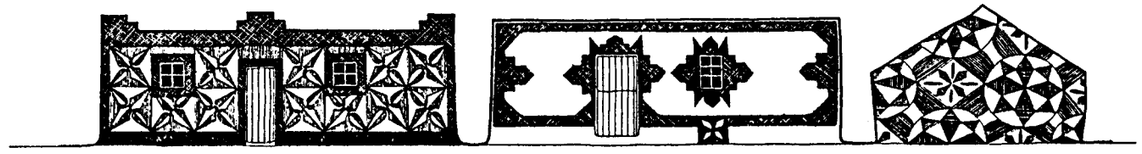
It has previously been described how the flat-roofed parapet house, introduced

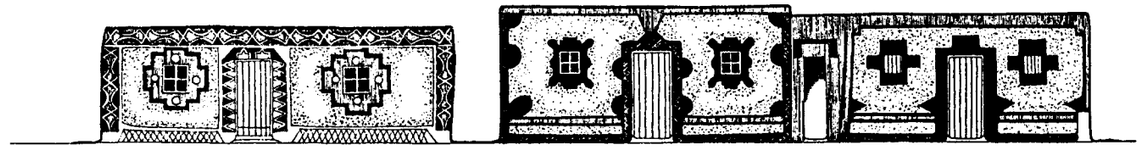


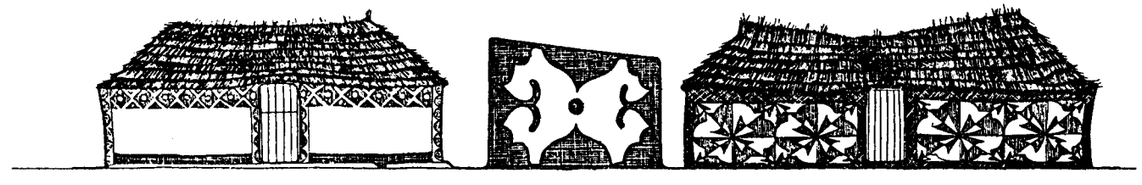
HIGHVELD WALL-PAINTING TRADITION

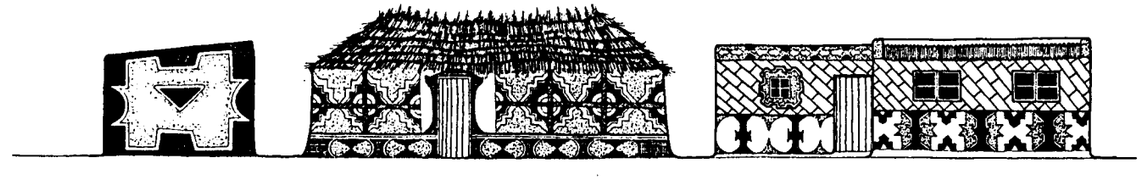












into the Cape by Malay slaves during the latter part of the eighteenth century, spread into the southern African interior during the 1850s, through the medium of Dutch immigrant farmers. It has not been possible to date to discover the exact process whereby it was adopted by the indigenous population. However the transfer is thought to have taken place after the 1920s and possibly as late as the 1940s.(32) Today, with a few exceptions, the highveld house is the predominant rural dwelling form of the region which gives it its name.

The area under discussion is located in the northern and north-eastern Orange Free State which was historically inhabited by baSotho and, to a lesser degree, baTswana groups. During the Difaqane the local population was decimated by both famine and warfare and many survivors sought the refuge of the Lesotho mountains. There, under the leadership of Moshweshwe, they coalesced into the Kingdom of Lesotho, which survives to the present day. Their former home is now part of the Republic of South Africa where it is under the control of a white and predominantly Afrikaner farming community. Some baSotho have since returned to these areas as migrant workers having no legal land ownership rights or tenure. They live with their families on white farms where they are given a small plot of land to plant some crops and build their homes. Their residences are almost invariably built in the form of parapet or highveld dwellings, having an elongated rectangular plan and a flat corrugated iron roof sloping to the rear. Kitchens are usually kept separate and thatched in order to allow the smoke from the cooking fire to percolate through the roof. Door and window openings are located on the front elevation which normally faces to the north or north-east. The door is usually placed slightly off-centre, with a small, square window on either side implying an internal division of space into two rooms. In reality this is seldom the case and the average parapet dwelling is usually single-roomed. The basic pattern is subject to some simple guidelines : the parapet at the top and a low splash board at the base are expressed as long horizontal bands. The two corners on either side are rendered as vertical elements; a broad surround is created about both door and windows and is often allowed to run into the parapet above; the parapet band is often decorated and its top profile sculpted in order to create small pediments and half-pediments over the doorway and the corners respectively. Within this basic framework then the baSotho artist can and often does exercise considerable choice as to colour, graphic pattern and texture.

As in the case of the "white-faced" huts, it will be perceived that the basic elements of this decorative style have strong links with the facade renderings of a late nineteenth century domestic architecture. In the interior too, the women often recreate in clay crockery display shelves which are a stylised rendering of English middle class, turn-of-the-century kitchen furniture, complete down to the presence of a cut-out paper doily trim.(33) The frilliness of the doily is, at times, reflected externally in the rendering on the parapet band, thus emphasising the essentially female nature of dwelling decoration.

It is significant to note that very few examples of such decoration were recorded during the course of present studies within Lesotho itself.

c. <u>The Case of the amaNdebele who Would Not Pay Their Taxes</u>

The South amaNdebele are a Nguni group who migrated into the Transvaal during the fifteenth or early sixteenth centuries.(34) They comprise two major branches, the amaManala and the amaNdzundza. The latter, generally regarded as being the junior of the two, is the subject of this brief study. When the Dutch first encountered them in 1847, they inhabited the area about Namashaxelo, situated near Roossenekal in the south-eastern Transvaal.(35) Today most reside on white-owned farms in the Bronkhorstspruit, Groblersdal and Middelburg districts although more recently the South African government has established a "homeland" on their behalf in the Dennilton area.

On 14 August 1882 the baPedi chief Sekhukhune was murdered alongside fourteen of his advisors. The blame for this deed was laid at the door of Mampuru, Sekhukhune's younger brother.(36) Kruger's South African Republic (ZAR), which at the time had been endeavouring to establish a suzerainty over the baPedi, attempted to arrest Mampuru, who fled to the amaNdzundza. The latter, under the leadership of Nyabele, in their turn not only refused to hand the refugee over, but also declined to pay their hut-tax, thus effectively casting off ZAR overlordship. As a result a Boer commando of between 1000 and 2000 men invested the amaNdzundza's mountain stronghold in October 1882. Nine months later Nyabele capitulated and handed himself and Mampuru over to the Dutch.(37) The amaNdzundza, starved and dynamited into submission, were deprived of their lands, broken up as a group and indentured to the farmers who had fought on the ZAR commando. They were thus effectively scattered and their political power as a group broken.

Up to 1883, the South amaNdebele as a whole are reputed to have built their dwellings in the form of grass beehive domes.(38) Following the defeat of the amaNdzundza at the hands of the ZAR, their architecture underwent a measure of change. The cone on cylinder structure, prevalent among their neighbours, the baPedi, was adopted with a few modifications. These include the retention of the "umsamo" (39) to the rear of the hut, but acting as a seat for the men, and the partial enclosure of the hut's front circumference with a verandah. It is also possible that this was the stage when they adopted the baPedi manner of building courtyard walls and defining homestead perimeters. This new style of dwelling construction however, does not appear to have lasted more than three or four generations for, by the 1940s, the cone on cylinder was already being replaced by flat-roofed parapet or highveld homes.

It was also during this latter period that the South amaNdebele began to paint the walls of their dwellings and courtyards. We should perhaps pause at this point to consider the exact intent of the word "paint". It has already been stated that most southern African rural groups decorate their homesteads in some way or another. Some decorations are of a textural nature; some adopt a simple geometrical motif and repeat it in various ways on a wall; some begin to pick out and highlight various structural elements of the architecture; and some take a familiar object, most often a flower or a tree, and reproduce it in a stylised manner.(40) South amaNdebele architecture does all these things and more. On the one hand it draws deeply from a textural and geometric Sotho/Tswana tradition and, on the other, it gives rise to rules of facade decoration which break down the various structural components of the dwelling in a manner similar to that evolved by the baSotho of the Orange Free State highveld. Most important however, it also develops patterns and images based largely upon the Victorian nature of southern African small-town architecture as well as the graphics of an urban consumer and industrial society further afield. These are then reproduced not only on the courtyard walls and house facade of the homestead but become part of a more complex system of symbology, being tranferred from mother to

daughter in the form of a beaded apron during the course of the marriage ceremony. A graphic language has also been allowed to develop, similar in many ways to the amaZulu bead love letter (41), which, in some cases, has been noticed to advertise the home dweller's profession as a midwife, the husband's sexual potency or just the presence of a certain type of motor vehicle in the vicinity.

Although this project did not set out to study rural wall decoration in any specific detail, during the course of field work there emerged certain patterns which merit some mention. It was noticed, for example, that a measure of heraldry was implied in the designs. A quick survey in the village of Madakamba in the northern Transkei, revealed some interesting facts :

- that in virtually all cases, the dwellings in the same homestead grouping, usually numbering no more than three or four, had the same pattern applied to all the units.
- that in the case of a daughter who had married and settled near her mother, she painted the same patterns upon her dwelling as her mother did upon hers.
- that in the case of a son who had married and settled near his mother, his wife painted the same patterns upon her dwelling as those done by her mother-in-law.
- that in the case of a daughter who had married and settled near her mother, she had changed her own wall decorations, after a family quarrel, to a completely new pattern.

When questioned further on this point local informants admitted to there being a degree of identity implied in the wall patterns but did not give it undue significance. As one young woman phrased it "I could see a drawing from the bus and take it home in my head." Although these results could hardly be deemed to be conclusive, they do highlight the fact that the process of decoration is in the hands of the women folk. Often a mother will execute the work with the assistance of her daughters who are thus trained in the task and eventually take it over. It is possible therefore for the same design to be handed down from one generation of women to the next with relatively little change.

This process is further highlighted in the case of the South amaNdebele of the Transvaal where the same basic decorative motif is often applied on the front wall, on either side of the gateway, on the front of the main or parents' dwelling and on the inside rear wall of the same, behind the "umsamo". The work is conducted either by the mother, or by her daughters under her direct guidance. The complex patterns are thus part of the young girl's training and are reinforced when, upon marriage, she is presented by her mother with a partly-finished beaded apron bearing the essential elements of this design. The daughter is then expected to complete the apron after her marriage. The walls outlining the daughter's homestead are only built some time later, once the young couple have had their first child. The decorations may then be applied. Although in theory the young mother may choose to decorate her walls in whatever pattern she wishes, in reality, her first design seldom strays far from that which she learnt as a child from her mother and which she carried in a shorthand form as part of her wedding dowry.

It is not known, at this stage, what role, if any, is played by colour within such a symbological system. Academic studies conducted among other Nguni groups have, however, revealed that colour plays an important role in the language of beadwork.(42) It is also known that amongst many southern African groups certain types of beads are reserved for the use of members of their royal family. Among the South amaNdebele, for example, the use of a transparent red bead with a deep scarlet centre is exclusive to the ruling amaMhlangu clan. The Royal amaSwazi bead on the other hand is pink and is considered to be a sign of high office.(43)

It was also noticed that among the South amaNdebele the process of decoration took place at three possible times of the year :

- during the period of the young men's initiation
- in the late winter or early spring
- as the result of a forthcoming wedding festivity.

The first two are usually coincidental; all three are regarded as periods of transition, renewal and rebirth. Thus in some ways the decoration of a homestead could be regarded as a statement of woman's fertility, linking the cycle of man and nature through her architecture and decoration. Were we to take this symbolism further, then we could begin to perceive deep sexual and symbological significance in the planning of the homestead itself; the walls become the women's legs, the sculptured and decorated gate posts her labia, the inner courtyard is her marriage apron and the parents' hut beyond is the womb from which the children and the wealth of the family originate; the rear quarters which house the children and the kitchen are the breasts whence all nourishment originates. The symbolism linking decoration to fertility is further emphasised by the fact that the young wife will neither build her courtyard walls nor decorate them until the family's first child has been born. A young man is usually denied full participation in the affairs of the men's court until he has both married and fathered a child. Her work thus advertises to the community as a whole the fact that her fertility has gained for her husband, and hence their nuclear family, a full voice in the political affairs of the group. Further significance could be attached to the fact that the inner apron area is penetrated repeatedly during the wedding festivities by the men who dance in and out of the courtyard in single file. This is a space which is usually associated with the activities of women and this ritual defilement is greeted by the wedding guests with much merriment and laughter.

When one considers the practice of South amaNdebele wall painting in the larger socio-economic and political context of southern Africa, this activity could be interpreted as being symbolic of a new status for women in rural society. The widespread use of migrant labour in the industrial and urban areas takes a large proportion of the rural male population away from their families for the major part of the year. During this time the control of resources is largely left in the hands of their women and although their society is both patrilineal and patrilocal, the absence of the menfolk begins to meet some of the criteria for the establishment of a matrilocal and even matrilineal society.(44) Regrettably the data gathered in this respect to date is neither conclusive nor was this project initially geared to study such an aspect of rural life to any great depth. However, in view of the fact that current field work has shown that such a transmittance pattern is well into its third generation and may well be entering a fourth, it is suggested that this phenomenon may be worthy of further study by anthropologists.

7. The Case of the baSotho Who Settled in Zululand

The baTlokwa are a baSotho community who, before the Difaqane, inhabited the north-eastern Orange Free State. As a result of events in Zululand in 1822 they were attacked by their amaHlubi neighbours who forced them to migrate from their areas. After two years of wandering over the highveld, during which they suffered extreme hardships and privations, they managed to resettle some 100 km south of their original home. However it was not until 1853, once they had accepted the authority of Moshweshwe, that their lives regained a measure of stability. (45) Thus it is understandable that when the British invaded Zululand in 1879 in order to destroy amaZulu political and military ascendance over the region, a group of baTlokwa, under the leadership of Hlubi (46), should have chosen to fight as mercenaries in the Natal government forces. They distinguished themselves during this conflict and when Wolseley partitioned Zululand into thirteen chiefdoms in 1879, Hlubi and his followers were allocated land in the Isandlwana region in recognition of their services.(47)

Records of baTlokwa domestic architecture from this period are sparse. We know that, before the Difaqane, their region as a whole supported both a grass beehive and a cone on cylinder technology.(48) Judging from the reports of missionaries and other travellers, it is probable that this state of affairs continued into the mid-1840s.(49) Thereafter information becomes scarce and no further mention of a beehive technology for this general area is made by either Baines (50), Widdicombe (51) or Wangemann.(52) When Walton (53) conducted his field work in the mid-1940s and early 1950s, he recorded the remnants of a baSotho beehive building tradition elsewhere in Lesotho but fails to mention the baTlokwa in this regard. His own recollections from this time are that the dwellings of this group were being built in the form of the cone on cylinder.(54) It is possible to conjecture therefore that the baTlokwa, much like the rest of Lesotho, slowly phased out their beehive structures in favour of the cone on cylinder. The transition appears to have been well advanced by the turn of the century and was probably complete by the 1940s. Since that time the cone on cylinder itself has slowly been giving way to the flat-roofed parapet dwelling.

By comparison the baTlokwa of the Nqutu district of Zululand still build some of their dwellings in the form of beehives as well as the ubiquitous cone on cylinder. It should be noted at this stage that the baSotho tradition of beehive construction differs considerably from that of the Nguni. The former built a sparse structure of saplings brought radially from the external perimeter to the central apex, giving their dome a slightly conical form. The latter, on the other hand, built a highly specialised and timber intensive structure which consists of two sets of saplings arched and bound at right angles to each other thus creating an almost perfect hemisphere.(55) The baTlokwa example is particularly interesting because many of their amaZulu neighbours have also retained a strong beehive building tradition. Current field work in the neighbourhood of the St. Augustine's Mission Station near Nqutu has revealed that neither amaZulu nor baTlokwa informants perceived a difference between their own beehives and those of the other group. As yet no examples of technological cross-fertilisation between the two have been detected.

NOTES AND BIBLIOGRAPHY

1. The vhaVenda adaptation of playing card motifs has a number of interesting features. In the first place it was noted that only the clubs, spades and diamond patterns are used, the hearts being omitted. The reasons for this are regrettably not known to date. Secondly, their source is something of a mystery. Not only does their use predate the introduction of legalised gambling in Venda, in 1979, but to the best of my knowledge the vhaVenda are not great gamblers and not once since the beginning of this research programme have I personally either seen or heard of vhaVenda playing cards. I can only postulate that their origin is attributable to the fact that card patterns often appear as decorations on the shopping bags of the kind available from hawkers outside urban supermarkets. Made out of a stiff paper, these are popular among rural shoppers and have the reputation of being sturdy enough to outlast the wear and tear of a long bus trip back to the villages.

2. A "shebeen" is an unlicensed, and hence illegal, bar which often acts as the social centre of both urban and rural communities. Most rural shebeens brew their own beer as well as other, often more explosive concoctions which bear such picturesque names as "Barberton", "Skokiaan" and "Mampoer". Many urban establishments also run well-appointed bordellos as a sideline. The name is a direct borrowing from the Irish word "shebeen" which the Oxford Dictionary defines as a "pot-house, unlicensed house selling drink".

3. The origins and identity of the amaXhosa "white-faced" huts will be discussed separately during the course of this chapter.

4. VOGEL, Catherine
"The Traditional Mural Art of the Pedi of Sekhukhuneland". Unpublished M.A. Dissertation, University of the Witwatersrand, Johannesburg, 1983.

5. DAVENPORT, T.R.H. and HUNT, K.S. Editors.
"The Right to the Land". Cape Town : David Philip, 1974.

6. Ibid.

7. FRESCURA, Franco
"Rural Shelter". Johannesburg : Ravan Press, 1981.

8. WALTON, James
"African Village". Pretoria : van Schaik, 1956.

9. Through a strange coincidence, upon the very day I was penning this paragraph, a letter arrived on my desk from Manton Hirst, Curator of Anthropology at the Kaffrarian Museum in Kingwilliamstown. In it he enclosed two photographs taken in c 1919 in the Kentani district of the southern Transkei by the Rev. Yates of Matatiele. They both purportedly show the same hut but in different stages of construction. The one is the timber and wattle framework of what I have come to describe as a raised dome on major cylinder structure. The second shows the completed hut, having the outward appearance of a full-blooded beehive! This proves two things : firstly, that in the Transkei, at least, the "ingqugwala" beehive dome and the "ingqugwala" raised dome are indeed one and the same dwelling form; and secondly that the evolutionary process I suggested in 1981 for the transition of ghe beehive into a cone on cylinder is proven as being correct. It also shows that I should have had more faith in my own informants in the field than I have had on a few occasions in the past. This fact had previously been made known to me in 1982 in the - wait for it! - Kentani district of the southern Transkei, but had been ignored on the grounds of the youth of the man who had supplied it!

10. FRESCURA, Franco Op. Cit. 1981

The shortage of grasses suitable for thatchwork has not always necessarily resulted in the curtailment of traditional grass technology. Barrie Biermann (pers. comm. c 1982) tells a lovely anecdote of how a group of amaZulu living in the Loskop region of Natal, rented a bus for a week-end in order to travel to a valley some distance away where the grasses necessary for the continuation of their building traditions were still available in large quantities. Having spent a couple of days harvesting this resource they loaded it on top of their transport and returned home. Although this demonstrates aptly the determination of some rural groups to continue with their tried, tested and familiar building formulas, in the long term such measures must be seen to be little better than palliative.

11. FRESCURA, Franco Op. Cit. 1981

12. WALTON, James
"Early Ghoya Settlement in the Orange Free State". Bloemfontein : Memoir No. 2, Researches of the National Museum, 1965.

MAGGS, Tim M. O'C.
"Iron Age Communities of the Southern Highveld". Pietermaritzburg : Council of the Natal Museum, 1976.

13. BIERMANN, Barrie
"Nguni House Form and Settlement". Unpublished manuscript made available by author, c 1983.

14. Among most southern African rural groups any uncircumcised male, be he five or seventy five years old, is considered to be a "young boy".

15. Should a young person die before or during initiation, he is buried in an unmarked grave and his name is forgotten as if he had never existed. On the other hand it is considered a great tragedy should a young man die after his initiation but before he has had the chance of fathering children, for then there would be no-one to remember him as an ancestor.

16. WILSON, Monica and THOMPSON, Leonard
"The Oxford History of South Africa : Vol. 1 : South Africa up to 1870". London : Oxford University Press, 1975.

17. CHILD, Harold
"The History of the amaNdebele". Salisbury : Government Printer, 1968.

18. The word "concubine" is used in the sense of a wife who has been captured during the course of war. This is being done to differentiate between these and full "wives", for whom "marriage" or "lobola" cattle were given in a normal course of events.

19. DESMOND, Cosmas
"The Discarded People". Johannesburg : Christian Institute, 1971.

20. BAINES, Thomas
"Journal of Residence in Africa, 1842 - 1853". Cape Town : Van Riebeeck Society, 1961 and 1964.

21. SMITH, Andrew
"Andrew Smith's Journal". Cape Town : A A Balkema, 1975.

22. WILSON, Monica and THOMPSON, Leonard Op. Cit.

23. WILSON and THOMPSON (Op. Cit.) make an interesting point in regard to the intermarriage between Matabele men and baSotho and maShona women. The usual custom in most parts of Africa is for the children to learn the language of the mother. Mzilikazi's men however did not obtain their wives in the normal course of events, when a lobola transaction of cattle would have been involved, but rather incorporated baSotho and maShona women as captives of war. How the Matabele coped with the young men from these tribes whom they absorbed into their regiments, however, is not explained.

24. WALTON, James Op. Cit. 1956.

25. BATTISS, JUNOD, FRANZ and GROSSERT
"The Art of Africa". Pietermaritzburg : Shuter and Shooter, 1958.

26. BURCHELL, William J.
"Travels in the Interior of Southern Africa". Second Edition. Edited by I. Schapera. London : Batchworth Press, 1953.

27. BAINES, Thomas
"Journal of Residence in Africa, 1842 - 1853". Edited by R.F. Kennedy. Cape Town : Van Riebeeck Society, 1964.

28. KROPF, A.
"Das Volk der Xosa-Kaffern ..." Berlin : Evangelische Missions Gesellschaft, 1889.

29. HUNTER, M.
"Reaction to Conquest". London : Oxford University Press, 1936.

30. DUGGAN-CRONIN, A.M.
"The Bantu Tribes of South Africa". Vol. 3, Sections 1, 2 and 5. Kimberley: Alexander McGregor Memorial Museum, 1939, 1949 and 1954.

The photographic records in the Duggan-Cronin Gallery at the Alexander McGregor Memorial Museum, Kimberley, were also consulted extensively.

31. Postcard entitled "Natives at Home", dated 11 July 1903. Author's private collection.

32. This supposition is being made on the basis that the parapet or highveld dwelling was used by indigent white farmers through the period of the Depression in the mid-1930s. To this very day the structure is still referred to by local whites as "Boer-maak-n-plan" which, translated from the Afrikaans, means that the farmer, faced with necessity, will use his ingenuity to make do with what little he has on hand. It should be noted however that an indigenous use of the flat-roofed parapet wall dwelling has been recorded as early as 1906 (postcard entitled "Native Location, Bethlehem, O.R.C." in author's private collection).

33. FRESCURA, Franco Op. Cit. 1981

34. VAN WARMELO, N.J.
"Transvaal Ndebele Texts". Pretoria : Government Printer, 1930.

35. KUPER, Adam
"Fourie and the Southern Transvaal Ndebele". African Studies, Vol. 37, No. 1, 1978. p 107-123. Johannesburg : Witwatersrand University Press, 1978.

36. BRUCE, H.J.
"The Arts and Crafts of the Transvaal Ndebele". Article in "Africana Byways". Anna H. Smith ed. pp 132-150. Johannesburg : Ad. Donker, 1976.

37. Ibid.

38. VAN WARMELO, N.J. Op. Cit. 1930

39. The "umsamo" is a feature of Nguni beehive architecture. It usually consisted of a low clay shelf raised off the ground and set to the rear of the hut, directly opposite and on axis with the doorway. It served as a repository for food and beer pots. Traditionally, it is also the abode of the family's "shades" or ancestral spirits.

40. FRESCURA, Franco Op. Cit. 1981

41. TWALA, Regina G.
"Beads as Regulating the Social Life of the Zulu and the Swazi". African Studies, September 1951, Vol. 10, No. 3 : 113-123.

42. Ibid.

43. DE LANGE, M.M.
"Aspects of South African Beadwork". Article in "Africana Curiosities". Edited by Anna H. Smith. Johannesburg : Ad. Donker, 1973.

44. FOX, Robin
"Kinship and Marriage". Harmondsworth, Middlesex : Penguin Books, 1981.

45. OMER-COOPER, J.D.
"The Zulu Aftermath". London : Longman, 1978.

46. The name of Hlubi, the leader of this small baTlokwa group should not be confused with the amaHlubi, the Nguni tribe whose attack on the baTlokwa in 1822 precipitated the subsequent events of Difaqane. It is probable that Hlubi's name celebrates one of the many encounters between these two groups between 1822 and the scattering of the amaHlubi by the amaMatiwane in 1825. (Omer-Cooper, 1978).

47. GUY, Jeff
"The Destruction of the Zulu Kingdom". Johannesburg : Ravan Press, 1982.

48. MAGGS, Tim M. O'C. Op. Cit. 1976

49. ARBOUSSET, T. and DAUMAS, F.
"Narrative of an Exploratory Tour of the North-East of the Colony of the Cape of Good Hope". Cape Town : A.S. Robertson, 1846.

50. BAINES, Thomas
"A Journal of Residence in Africa, 1842 - 1853". Cape Town : Van Riebeeck Society, 1961 and 1964.

51. WIDDICOMBE, John
"In the Lesuto : a Sketch of African Mission Life". London : Society for Promoting Christian Knowledge, 1895.

52. WANGEMANN, Dr.
"Geschichte der Berliner Missions Gesellschaft ..." Berlin : Im Gelbstverlag des Ev. Missionshouses in Berlin, 1872, 1873 and 1875.

53. WALTON, James Op. Cit. 1956

54. WALTON, James Pers. Comm. July 1985

55. FRESCURA, Franco Op. Cit. 1981

CHAPTER 16 : ETHNIC IDENTITY OR REGIONAL STEREOTYPE?

> "THE EARTHMEN from the ORANGE RIVER, SOUTH AFRICA - the only Specimens ever seen in Europe. They possess peculiarities of Habits, Features and Growth totally distinct from other members of the human family. Their height does not exceed three feet six inches. The Male is fourteen and the Female is sixteen years of age. Admission 2s 6d, Children 1s 6d, from Eleven to Five - 31, Regent-Street, Waterloo-place."
>
> Advertisement in the "Illustrated London News", 14 May 1853. p 375.

Any study which sets out to examine the question of cross-cultural pollination must ultimately also confront the issues of ethnicity, ethnic identity and ethnic stereotypes as part of its agenda.(1) In this context it will be seen that both terms "ethnicity" and "culture" derive their being from the assumption that social groups originating from different regions will be possessed of different speech and behavioural patterns which set them apart from one another. The first relates to the identity, national or otherwise, which any group may perceive itself to possess (2); the second has to do, among other things, with their thought processes and the outward material manifestations of their intellectual achievements. Both concepts tend to stress the differences existing between people rather than their similarities and both assume the creation of norms of behaviour against which that of other groups may be measured.

There are at least three concomitant riders to this last statement.

1. The cultural and ethnic identity of a group will only become manifest when it is confronted by another group whose identity is perceivably different. Indications are that this does not happen automatically but only after a given period of time. There are numerous recorded examples in local history to show that, when confronted with a strange set of circumstances, man's first impulse is to interpret them in terms of his own background and experience. (3)

2. Cultural and ethnic differences are manipulative. This can best be illustrated by the behaviour of immigrants living outside their home regions. It is usual for such groups initially to seek to come to terms with their new surroundings and integrate with it by conforming to its more obvious norms and mores. This is done by maximising any similarities and minimising the differences between their old and new environments.(4) However should a group subsequently feel itself to be threatened and/or its numbers rise to a point where it feels strong enough to assert itself, then the old social and cultural patterns will be allowed to re-emerge as part of a deliberate effort to maximise its differences with other groups.(5)

3. The cultural and ethnic characteristics of any one group are not only manipulative but may undergo a change in emphasis or take on different manifestations under differing circumstances or when confronted by other and different groups.(6)

It is obvious that the scope of a dissertation on the twin subjects of "culture" and "ethnicity" is wide and by no means exhausted by the preceding discussion. The points made above therefore should be viewed as being more in the nature of general principles established in order to explain the social mechanics of historical and current events described in the previous chapter.

THE CREATION OF ARCHITECTURAL STEREOTYPES

There is no doubt that man has a strong propensity for creating stereotypes. The categorisation of aesthetics, culture, behaviour and artifacts is a mental tool which allows us to simplify our thinking and informs us, in general terms, as to the nature of the object or person we may be regarding. Despite its more than obvious shortcomings, this tendency towards simplification is given a measure of credibility by the very fact that academics use it as a legitimate method of research and analysis. Natural scientists use such classifications as class, order, family, genus and species; anthropologists have their races, tribes and clans; art historians talk of schools of painting; and architects refer to styles of building. This does not mean to say that such divisions do not in fact exist : in many cases they perceivably do. But it should also be understood that, in many instances, most particularly when applied to the field of human behaviour, distinctions can in fact be manipulative or subject to a transition of perception. They also suffer in that, once established in a general sense, there is always the temptation to apply them to individual examples.

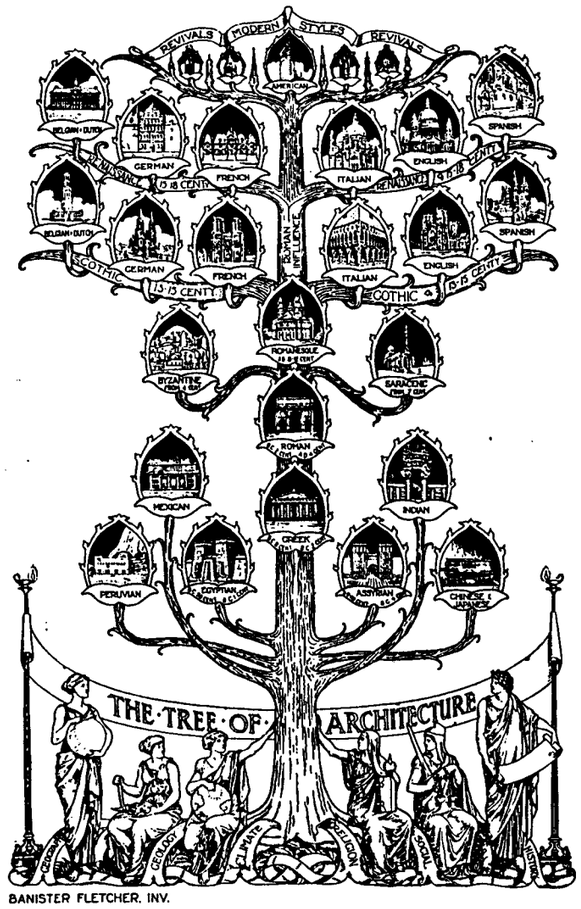
The creation of stylistic stereotypes plays a powerful role in our identification of the built environment. Schoolchildren are taught to recognise the basic elements of arctic, desert and tropical architecture and strong images based upon their form, textures and detailing are presented to them virtually from the outset of their education. This means that even at this early and relatively unsophisticated level we are prepared to recognise the existence of an elementary language of architecture based upon man's response to his physical environment. The existence of such stereotypes in the public mind is therefore undoubted. Whether, however, we can continue to apply such thinking to any but the most extreme of cases, and even then, in the most general of terms, is something which needs to be debated further.

STATING AN IDEAL

Architecture is first and foremost the art of housing man's activities in response to his physical environment. At its earliest and most practical level it was probably no more than the creation of shelter using the natural resources found most readily at hand : the grass, clay, stone and timber available from the immediate environment. It is likely that man's first dwellings were of a temporary and seasonal nature, but as his agricultural skills developed, so then his settlements grew in permanence.(7) Nonetheless, the initial relationship between architecture and local natural resources must have been sustained to a great degree until such a time as either wider foraging or trade made certain materials, specifically timber, available more widely. Thus it can be safely assumed that the earliest architectural stereotypes must have derived their nature predominantly from the textural aesthetics and structural properties of the materials used in their construction.

Although the above statement is being derived in the context of early agrarian society, it will be seen that its principles are valid right up to the present day and are applicable in many parts of the world. The European medieval timber-framed house, the stone-corbelled trulli of southern Italy, the Papuan "boat house" and the amaZulu grass beehive, to mention but a few, are all current stereotypes which evoke in the public mind definite expectations as to structural form and material aesthetics. In Great Britain the textures evoked by such terms as Cotswold limestone, Fife harling and Ulster thatch (8) are an integral part of the housing stereotypes for these regions. The association in our general consciousness between materials and regional architecture is therefore unmistakeable and undeniable.

SOME STEREOTYPES : STYLISTIC, CULTURAL AND ECONOMIC



1. BANISTER FLETCHER. INV.

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1. BANISTER-FLETCHER, 1948. "The Tree of Architecture".
2. a-d. MACKENZIE, 1869. "Houses of (San), (Khoikhoi), Zulus and Bechuanas".
3. VIOLLET-LE-DUC, 1876. "House of Pelasgian Peasant".

Equally unmistakeable is the linkage we create mentally between climate and the built environment of man. The architecture of arid areas, for example, is usually associated with flat roofs, thick earth walls and small window openings and the buildings of our Karoo farmers, the Pueblo Indians and Moroccan villagers do little to dispel the popular stereotypes for these regions. Similar rough models could probably be derived for each of the various major climatic regions of the world and, in a general sense, all would be correct.

It is also possible to derive architectural stereotypes based upon the economic activities of man. Many migrant pastoralist groups the world over share in a tradition of dwellings which are functional, dismountable and easily portable. The forms taken by such habitations seldom coincide but their purpose is unmistakeable and hence easily incorporated into a popular concept of such architecture. Thus the KhoiSan beehive, the Mongolian "yurt", the American Indian "teepee" and the Arabian desert tent are all perceived to belong to the same genre of shelter which, in more recent times, has also been allowed to extend its definition to include the Gypsy caravan, the Afrikaner ox-wagon and the American "mobile home".

It is therefore inescapable that despite the probable angst of anthropologists and architects in this matter, such generalised stereotypes of man's habitat do in fact exist, at the very least in the lay public's mind. It should not be too difficult therefore to concede that where a group is perceived by itself and/or by others to be possessed of a style of architecture which is noticeably different from that of other groups about them, then it will be but a small step for the identity of their habitat to become internalised as part of their own cultural identity as a whole.

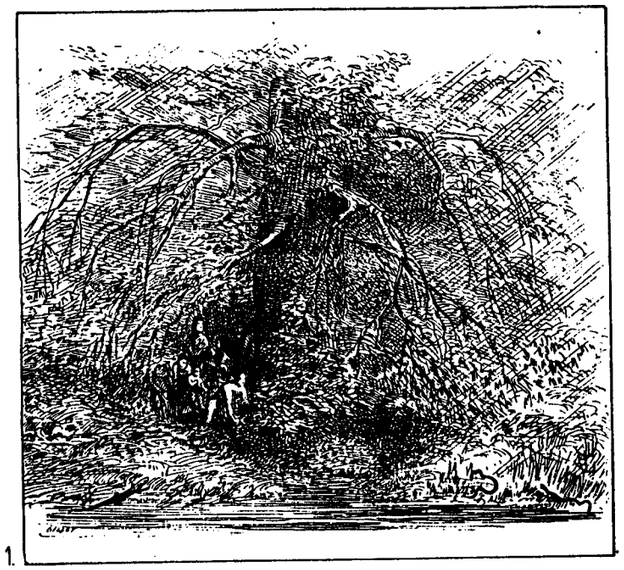
It is undeniable that such environmental and cultural stereotypes have also emerged in a southern African context. Certain types of dwellings have with time become identified in the public mind not only with the geographical regions they originate from but also, unavoidably, with the people who inhabit those regions. The validity of such models, when applied in a general environmental sense, is sound and the better part of chapters five and six of this volume is devoted to a discussion of their nature. When, however, we attempt either to prove the individual case on the basis of the general rule or to give this environmental geography some measure of cultural interpretation (9) numerous and irksome questions begin to demand recognition. It is at this point that the worm begins to emerge from the rosebud and we begin to realise that our carefully constructed model suffers, in fact, from a somewhat limited application.

DERIVING SOME BASIC PRINCIPLES

The phenomenon of "cultural identity" arises upon the encounter of two or more groups whose behavioural patterns, material artifacts and value structures are sufficiently varied from each other as to permit a perceptual differentiation to develop between them. Thus, any discussion which deals with the subject of the built environment as a manifestation of "culture" will first have to identify those elements which are unique to it and contribute to its stylistic make-up. Thereafter, it will have to determine whether or not these can be transmitted, transposed or adopted as part of a process of acculturisation.

If it can be accepted that many of these elements are open to manipulation, then it will be seen that the variety of responses possible in a process of interaction between two groups, or even between the individual and the community as a whole, is potentially vast. In reality however the artificial moulding of cultural

A VICTORIAN GENESIS



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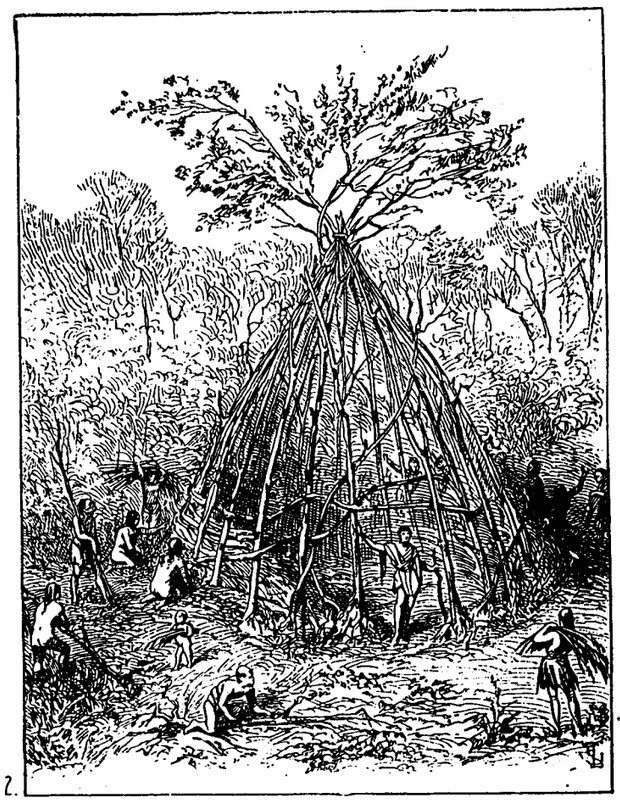

2.

1. VIOLLET-LE-DUC, 1876. "The first shelter".
2. VIOLLET-LE-DUC, 1876. "The first hut".

factors in order to force them into conforming with the criteria of a stereotyped model must be seen to be effective only on a short term basis. If we were to analyse them in the context of a longer and hence more generalised time span, it would be found that the realities of the local physical environment, the group's social processes and the availability of building materials would inevitably bring the personal and individual statement back in line with the communal and regional norm.

It should be pointed out at this stage that this argument is not in agreement with the standpoints of either a structural positivism or a climatic determinism. The positivist school holds that man is content merely to observe the phenomena of the world about him and study the links, historical and current, existing between them.(10) He thus confines himself to establishing the laws which govern such phenomena but ignores the basic principles behind the facts. Much of the earlier work published to date on the subject of pre-industrial architecture has been of a positivist nature (11) and it has only been in relatively recent times that researchers have begun to tackle the more fundamental and generating factors of rural architecture on a multi-disciplinary basis.(12)

However the role of climate in pre-industrial housing activity is not quite as easy to dismiss. On the one hand there is sufficient evidence of a general nature to show that climatic factors can and often do generate a definite set of responses in architecture which may ultimately achieve stylistic status. On the other there are more than enough specific examples to weaken this argument considerably. Rapoport is one author in particular who has done much to effectively debunk a philosophy of climatic determinism.(13) He has also pointed out that each climatic zone is capable of giving rise to not one but several dwelling forms, often within the same geographical region and even within the same settlement, a fact borne out by current research in southern Africa.(14) It could therefore be concluded that if climatic determinism has any validity whatsoever, then it is only in a limited and most general of senses.

Were we to extend the scope of such determinism to embrace the physical environment as a whole then the concept would be seen to gain a measure of merit. For one thing it begins to explain the interaction existing between climate, materials and dwelling forms. It also rationalises many of the constructional details of habitat which had previously been dismissed by non-architects as idiosyncratic quirks of "culture" and re-interprets them in terms of material resources and technology. In the final analysis however this theory also suffers from some notable drawbacks. The most serious of these lies in its most fundamental assumption that the physical environment will initially give rise to stylistic architectural stereotypes which may, with time, become internalised in the culture of their builders. This, in its turn, takes it that man is in a perpetual state of Genesis and that he will re-invent his building technologies from grass roots every time he changes his environment. Human society however has not been in such state for many eons and changes in the environment of man do not necessarily bring about automatic alterations in his habitat.

The dangers of a cultural determinism have been implied at various times during the course of previous chapters. Not only does such a theory assume that human society is locked in some kind of time stasis which keeps it intact from outside influences but it also believes that it is possible to describe its culture in finite and unchanging terms. The fallacies of such an argument are self-evident. Society is in a constant state of flux, creating new structures and interacting within itself and with other societies in a process which is dynamic and thus requiring constant redefinition. While it is true that regional identities and

cultural stereotypes have been known to arise from time to time, these have proved to be neither permanent nor consistent, having been overtaken by historical processes which have broken them down and recreated them in different forms. This is true of human society, its symbology and its habitat. The baSotho, for example, have moved through three different dwelling stereotypes in a brief seven generations; their regional self-identity is probably not much older. On the other hand the highveld or parapet dwelling has been variously associated with six different group stereotypes in the span of ten generations. A more comprehensive listing of similar examples for southern Africa alone could prove to be quite extensive.

It is obvious therefore that it is not possible to consider man's habitat in terms of monodimensional and determinist theories but rather that it should be viewed as the product of a number of interactive and interdependent factors which determine and inform its processes. In these terms therefore it will be seen that the elements of both a physical environment and a social background act more to restrain the built environment than to facilitate it. The lack of certain materials, for example, or the prevalence of extreme climatic conditions will circumscribe man's choice of habitat, not extend it. Similarly the social processes of rural architecture may act to retain certain forms, details or decorations well after the reason for their introduction has been forgotten.

It should also be noted that the interplay existing between physical and social environments need not take place with elements from both sides having an equal emphasis. A balanced interaction between the two implies the existence of ideal environmental conditions which allow the rural builder a free integration of a pragmatic technology with traditionally pre-established aesthetic preferences. In practice it will be found that one set of considerations or the other will establish a priority in determining the form of man's shelter. It could therefore be argued that such conditions of imbalance can only be of a temporary nature : should the cultural component establish an ascendancy then it is only a matter of time before economic, technological and hygiene factors eventually force the builders to adopt a more realistic approach to shelter; conversely it would not take long before the forms and details evolved by a pragmatic technology become established in their own right as the stylistic elements of a new architectural stereotype.

The validity of these two assertions should be tested in the context of the southern African case studies discussed at greater length in the previous chapter.

The amaXhosa woman from Mzimkulu had come from a region which historically has a tradition of proficiency in grass technology. She had approached the problem of thatching her roof from a pragmatic standpoint and realising the nature of the materials available to her she had implemented a solution which was both practical and within her own technological experience. She had not attached any "cultural" significance to her detailing and hence cannot be said to have been swayed by social pressures. Her countrywoman from Butterworth however had been aware of her own regional background and had gone to great lengths to blend in with her new social environment.

The Matabele, on the other hand, must have made the deliberate choice of retaining their old dwelling forms as part of a larger political identity which stressed their "amaZulu" origins in a social environment which was, at first, predominantly Sotho/Tswana and subsequently maShona. They relinquished this aspect of their architectural background when it became irrelevant subsequent to losing their political and military dominance in the region in 1893. Thereafter their domestic structures and building techniques, but not their settlement patterns, rapidly began to resemble those of their neighbours, the maShona.

The case of the South amaNdebele presents a similar example. When the amaNdzundza clashed with the Z.A.R. in 1883, they had probably inhabited their region of the Transvaal for nearly three centuries. Despite this and the intermarriage which must have occurred with their baSotho cone-on-cylinder-building neighbours, they still erected their dwellings in the form of beehives. Following upon their military defeat and break-up as a political group, they adopted a domestic architecture similar to that of their neighbours and former allies, the baPedi, who were politically undefeated and whose style was more suitable to the region they both inhabited. This however was only to last a brief four generations and as early as the 1940s their dwellings began to take on more and more the aspect and technology of the houses of the white farmers upon whose land they resided. This may have occurred as a result of acculturalisation but in view of the fact that their settlement patterns remained essentially unaltered, it is far more likely that their new dwelling forms were a reflection of their changing economic status and proximity to sources of modern industrial materials. This was offset by their practice of wall-painting which began at about the same time. Despite its obvious sources of inspiration and subject matter, their style of decoration was and is still unique to the South amaNdebele. It should therefore be viewed in terms of being a political statement, subtly proclaiming their identity as a group one hundred years after the Afrikaner farmers had supposedly crushed and scattered them.

The same conclusions can probably be drawn about the baSotho of the highveld. Despite the fact that a number of armed clashes occurred during the nineteenth century between this group and the Dutch, they were never defeated, and to this day they still lay claim to a large portion of the present-day Orange Free State. Thus it was found that whilst wall decoration appears to be little practised in Lesotho itself, those baSotho families living as indigent workers on white-owned farmland paint their dwellings in a style which is elaborate and unmistakeably baSotho. The parallels existing between this case and that of the South amaNdebele are therefore unmistakeable.

The case of the "white-faced" huts of the Transkei, however, is somewhat more complex to analyse. At its outset, the practice of white-washing the facade of a dwelling has been attributed by Transkeian informers to the amaMfengu who, as refugees from the Difaqane, came into the eastern Cape region from the mid-1820s onwards. In the process they came into contact with white missionaries and, probably for economic reasons, settled in the vicinity of their stations. There they were christianised, induced to wear clothes and undergo education at a time when the indigenous amaXhosa were actively dissuading their own members from becoming Christians and ostracising from their polity those who did. The schism between the two groups widened when the amaMfengu sided with the whites against the amaXhosa in the border conflict of 1835-6 and were rewarded with land formerly belonging to the latter. The amaMfengu again supported the whites in the wars of 1846 and 1850 and the war of 1878 was brought about through an attempt by the amaXhosa to regain the land from which they had been ousted and which was occupied by the amaMfengu.(15)

Under these circumstances, it would not be too much of an understatement to claim that, during the latter part of last century, the political gap existing in the eastern Cape between immigrant amaMfengu and indigenous amaXhosa must have loomed somewhat large. If the practice of white-washing the hut facades does indeed originate with the former, then we could assume it to be symbolic of a wider set of differences existing between two peoples. The amaMfengu, sometimes referred

to locally as "school people", represented new political affiliations, economic orders and religious beliefs and hence changes in the traditional value systems of rural society; the amaXhosa, sometimes referred to as the "red blanket people", stood for the old order of things. It was only in the mid-1920s that the rift between the two began to heal. This was also the time when Christianity became more generally accepted in the region and, coincidentally, the painting of hut facades began to spread to the rest of the Transkei.

In these terms the prevailing tendency of rural man to retain his circular plan dwellings in preference to the more recently introduced square or rectangular plan must be attributed to more than cultural inertia and can be interpreted as a statement of political and group identity. This is particularly underlined by the position taken by white missionaries whose championing of the square plan cottage helped greatly to establish this form as the stereotype of white domestic architecture. It was also noticed, during the course of current field work, even in those areas where the square plan has received wide acceptance, that at least one unit, usually the kitchen, is retained in the older circular style and is often built in an older technology. The evolution of a class of huts with polygonal floor plans should therefore be viewed in a similar light.

In a more general sense it becomes clear that the variations between groups which form the basis for cultural differentiation can only survive for as long as these are perceived to exist by the parties themselves. Once the need for such distinction becomes unnecessary or actually disappears, then the practical processes of physical environment begin to reassert themselves and bring housing styles and technologies into realignment with the regional norm.

If therefore it can be accepted that the dwelling forms of rural man are subject to the limitations of the physical environment on the one hand whilst being open to the manipulations of cultural and group identity on the other, then it becomes necessary to question seriously whether elements of dwelling form and building style are indeed genuine reflections of man's culture. At this point a measure of guidance is offered by Rapoport who wrote in 1969 that :

> "Architectural theory and history have traditionally been concerned with the study of monuments. They have emphasised the work of men of genius, the unusual, the rare." (16)

He then goes on to point out that the built environment is not in the sole control of the designer, that, historically, only a small proportion of man's habitat has been the result of the work of designers and that the bulk of the rest are structures which come under the general heading of "vernacular architecture". The great architecture of man therefore cannot be viewed outside the context of its vernacular matrix. Rapoport is therefore suggesting that the scope of architectural history ought to be extended and that vernacular architecture should be studied, not alongside, but as part of the more conventionally accepted historical styles of building.

This is not an unachievable ideal. Its progress however is being hampered by two major and interlinked factors. Firstly, the work of previous architectural historians has brought about the indoctrination of the general public as well as countless generations of architectural students whose sole perception of the built environment is in terms of style and outward form. Secondly architectural historians themselves have become moderators and promoters of aesthetic values rather than interpreters of social and economic processes. It is doubtful that the necessary task of re-education could ever be achieved single-handedly by architects alone. However, as the built environment becomes increasingly the concern of multi-disciplinary study, so then the conventional architectural historian will find his role circumscribed to an increasing degree. Instead it will be found that the interdisciplinarian work of such pioneers as Rapoport, Oliver and Papanek will gain in significance and momentum until such a time as the prevailing view of architecture as style is replaced by a more balanced concept of architecture as a series of interlinked processes.

It is clear therefore that the view of man's habitat in terms of its outward aesthetics is sterile and monodimensional or, to coin a word, morphocentric. The built environment is not defined only by material textures, forms and quantifiable space, but is in many cases also governed by considerations of social organisation, mythology, spiritual belief and a sense of cosmological philosophy. In southern Africa, the rural idea of "domus" does not cease at the level of the individual dwelling but extends to the pattern of settlement as a whole where many of these concerns are also expressed. Ultimately it is proposed to extend this discussion on rural architecture to embrace the concept of "culture" at the larger scale of community organisation.

NOTES AND BIBLIOGRAPHY

1. It should be pointed out at this stage that the questions of "culture" and "ethnicity" have deep emotional and political undertones when viewed in a southern African context. In many ways the ideas of "cultural differentiation" and "ethnic identity" have become synonymous, since 1948, with white political domination and institutionalised racial discrimination in the sub-continent. The idea that human beings, originating from so-called different "cultural" groups cannot cooperate with each other and should thus be kept separate to minimise social friction lies at the very heart of an "apartheid" ideology. It has often also been described by political commentators as a policy of "divide and rule".

2. Significantly enough many sociologists view the element of "ethnicity" as being a factor in the creation of social class stratification and hence, discrimination.

   BERGER, Peter L. and BERGER, Brigitte
   "Sociology". New York : Basic Books, 1972.

3. One of the more humorous of such examples is quoted at the head of chapter 4. Another relates to the spread of Catholic missions to Oceania. In one instance a missionary father is reputed to have been horrified to learn that the local inhabitants, who themselves practiced polygamy, held his sexual prowess in some awe, believing him to be husband to some twelve nuns.

   WARNECK, Gustav
   "Modern Missions and Culture : Their Mutual Relations". Edinburgh : James Gemmell, 1888.

4. This can be particularly obvious in South Africa where normative pressures to conform appear to be unusually high, particularly in the field of politics. It is often remarked locally how new immigrants are given to making outbursts of a racist nature in excess even of the local norms. This can be ascribed to the fact that an immigrant, in his efforts to conform to the values of his new environment, will at first read only its most obvious manifestations and unconsciously maximise them in an attempt to blend with his new surrounds. South Africa is, regrettably, a country where racial discrimination is still practised as an everyday occurrence. A new immigrant therefore cannot be blamed if, in an effort to conform with local norms, he behaves in a manner which he perceives to be the acceptable standard. The tragic truth of the matter, of course, is that he is acting as no more than a mirror to local society and its own twisted thinking - always allowing for the eventuality that he wasn't a bigot to begin with!

5. An example which comes to mind is that of the Italian community in South Africa, which is small and relatively apolitical, being generally more interested in its links with Europe than with Africa. Many of them have been here for over forty years and some were born and educated locally. It was not surprising therefore to find that Italian Catholics here still practise certain customs which have not been in common use in Italy since 1945. Their speech patterns also differ from modern Italian in that many of their idioms can be traced back to the Fascist era.

6. A good case in point is that of Royal amaZulu policy towards white immigrants between 1835 and 1879. The Dutch were seen as a threat to amaZulu holding of land and were thus discouraged; the British, on the other hand, were welcomed and ailiances sought with them; the work and movement of missionaries was tightly circumscribed whilst traders were allowed free and unhindered travel throughout Zululand and some, like Dunn, rose to high positions in the service of the King. Each of these groups tended to see the amaZulu from differing perspectives and thus their accounts vary considerably in their interpretation.

7. CAMESASCA, Ettore
"History of the House". London : Collins, 1971.

8. PRIZEMAN, John
"Your House : the Outside View". London : Quiller Press, 1982.

9. "Rural Shelter in Southern Africa" was not originally written from a positivist and structuralist point of view. It became perceivably thus when in 1981, for academic reasons, all elements relating to settlement interpretation and cultural process were removed from the text. This unfortunately allowed academics of a somewhat different political persuasion from mine to graft upon this work their own cultural conclusions. This is regrettable, particularly in the light of my own subsequent findings.

10. ARON, Raymond
"Main Currents in Sociological Thought". Volume 1. Middlesex : Penguin, 1972.

11. WALTON, James
"African Village". Pretoria : van Schaik, 1956.

DENYER, Susan
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INTERLUDE THE SECOND

INTERLUDE THE SECOND : A PERSONAL REASSESSMENT OF SOME RESEARCH PRECONCEPTIONS

"Whatever else He may have been, God was surely inter-disciplinary."

ANON. Quoted by Victor Papenek in "Design for Human Scale". New York : Van Nostrand Reinhold Co. Inc., 1983.

One of the more cherished myths of academic life holds that all researchers are the model of scientific propriety and that all research programmes prove their initial hypothesis. Regrettably hard reality seldom meets up to these utopian ideals and the history of science is littered with unfinished theses, and the work of humorous hoaxers, ambitious rogues and just plain stupid men. Understandably enough the response of scientists has been to impose ever more stringent controls upon their own work in order to enforce greater scientific objectivity. This has occurred in two major respects : the establishment and maintenance of predetermined standards and criteria upon the process of data gathering; and the formulation of an overall guiding philosophy or methodology for the research programme as a whole. Laudable as these may be, they should also be seen as being potentially flawed through their very rigidity and concern for high standards. A strictly applied research process has little time for intuitive thinking and attempts to do away with the possibility of the "happy accident" taking place. These shortcomings are nowhere more evident than in the field of the so-called "human sciences" where the attempt to categorise human behaviour (unpredictable at the best of times) through the application of the scientific method has led many unfortunate researchers into a life of induced schizophrenia.

It is fortunate, in many ways, that architecture has never aspired to the exalted status of a science. It is true that some intellectuals have, from time to time, attempted to formulate rules governing aesthetics and good taste.(1) Admittedly they were often influential in their own time but in the long run all came to naught and today their works are looked upon as curious relics of times past. Being an odd mixture of artistic impulse and practical pragmatism, architecture has always been able to claim for itself a special role in society which has set it aside from both art and science. This means that in the field of research the architect has available to him the best of both worlds : the objective methodology of the scientist coupled with the irrational intuition of the artist. This, of course, does not mean that architects are incapable of using the scientific process. Far from it. Architects employ it every day of their lives in the application of their design skills. However at times it is found that decisions have to be made on the basis of intuitive feeling rather than upon hard fact. It is often only later, once the design has been implemented, that the architect is able to return to those decisions and quantify them. Thus we find that the post-rationalisation of ones work is currently well accepted among architects and although the process is admittedly open to chicanery, in reality this has been minimal and then usually the subject of derision.

The ambiguous status of the architect/researcher was made particularly evident during the course of this research.(2) This was complicated by the fact that, as a study, it sought to bring together the knowledge of a number of different and often seemingly disparate disciplines. Thus, although guidance was sought from experts in diverse fields, the pioneering nature of this work has made a measure of post-rationalisation virtually unavoidable as the concerns of various disciplines had to be harnessed to the needs of what was, after all, an architectural programme. Ultimately it was found that the process of reassessment was concentrated upon two major areas : the collection of data and the formulation of research objectives.

The Collection of Data

It was decided at a relatively early stage of this project that this section of the field research should consist of three major components :

a. a pre-structured survey of the nature, construction and social significance of the local rural habitat;

b. the photographic documentation of the homesteads concerned;

c. the architectural documentation of a selected number of homesteads, including plans, sections and elevations as well as constructional details.

The last two components were, in the main, an exercise in the kind of skills common to most architects. Very little difficulty worthy of mention was experienced in their completion and thus no further discussion is warranted in their respect. The first however entailed an approach to research seldom used in the field of architecture. Being a tool normally associated with such disciplines as sociology and anthropology, it was assumed from the outset that a measure of trial and error would have to be exercised before a survey could be made to meet the needs of an architectural programme.

Social surveys are not, of course, novel to the practice of architecture. Most of the larger, community-orientated projects today will usually make use of this research tool as a means of establishing certain planning priorities. They can yield much in the way of valuable information to support a decision-making process but, if used in isolation from other, parallel actions, their value must be seriously questioned. Personal experience in other contexts has shown that surveys, improperly used, tend to arouse community expectations which the academic researcher is normally not in a position to meet (3). Such research methods should therefore be seen as being potentially alienating to both student and the community alike.

One project where social surveys were used successfully and in their correct architectural context was in the Byker housing redevelopment scheme in Newcastle-upon-Tyne where an entire area of the town was demolished and rebuilt (4). Here British architect Ralph Erskine used them as part of a two-way communication system whereby not only was he informed of the community's feelings upon certain issues but the community itself was drawn into the decision-making process. In October 1975, he stated that :

> "From the beginning we have lived and run our office in the area, and worked in direct contact with the inhabitants. Today, with one thousand families moved into new dwellings, we can say that we have achieved some success. Vandalism, a major problem in such areas, is negligible. The inhabitants are very pleased with their new dwellings and township, and look upon us as their architects. They have become knowledgeable and active in planning and policy issues and several times have, to our satisfaction, demanded that we alter our plans in ways we have found relevant." (5)

Significantly the building used by the architects was one of the last to be demolished. In this case the making of a social survey was met by parallel action on the part of the design team who extended the process of information gathering into a two-way communication system which reinforced their work in

the community and gained them their confidence and respect (6).

Bearing all this in mind it will be understood why the formulation of a survey questionnaire was approached with a certain amount of trepidation and diffidence. The question of how I, as an academic architect, was going to implement a survey project without matching and reinforcing it with a parallel programme of my own was something I despaired of ever answering. Ultimately, as will be seen, the solution was a relatively simple one, although that too only became evident in retrospect.

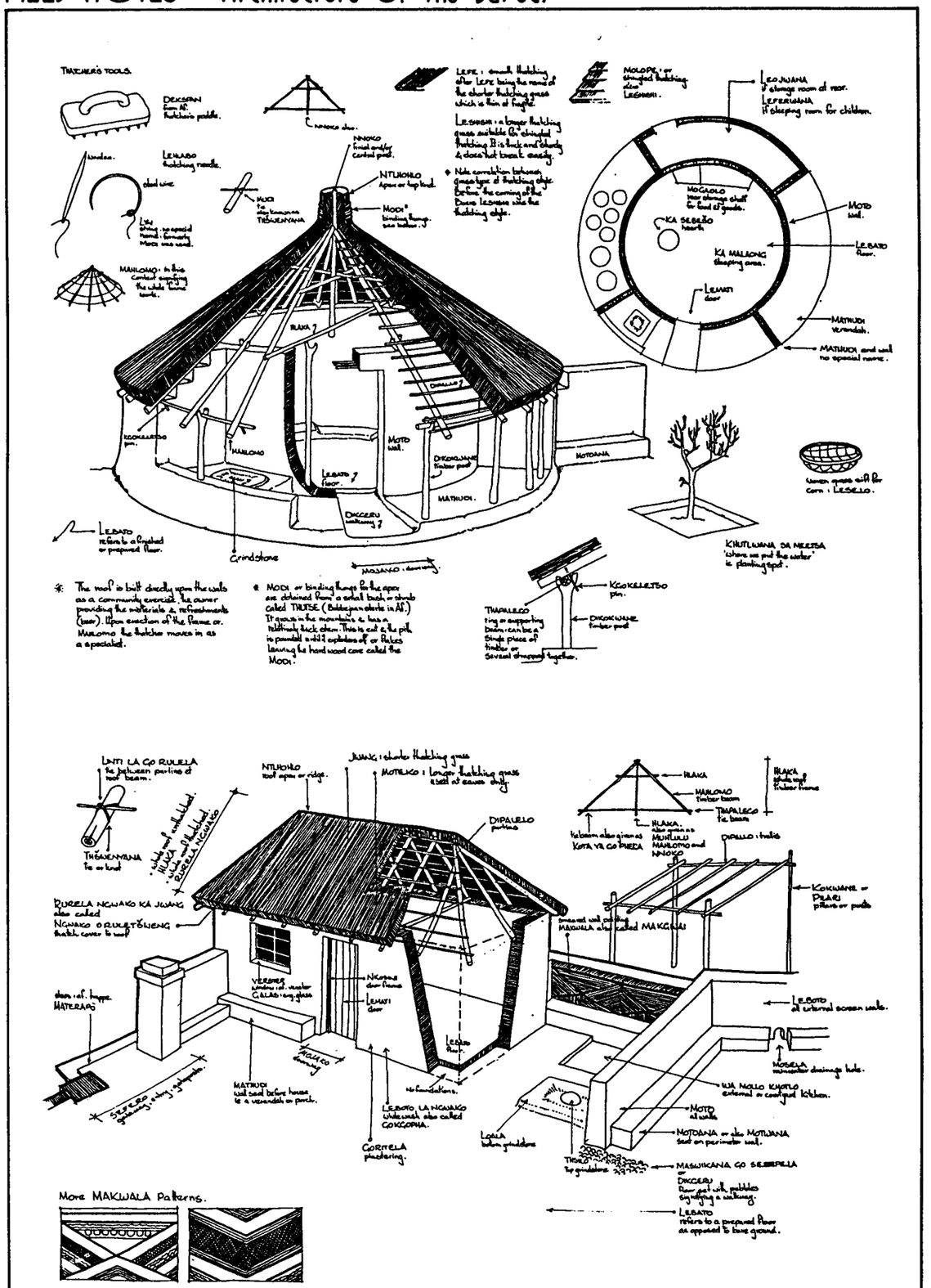
Initially the need for a formal survey form was not questioned. Its formulation was required by research bodies both within and without the university and the research methodology was yet to come under a closer and more critical scrutiny. A great deal of care was exercised in its structuring as well as its wording and several experts in various fields were consulted during the course of this work. A small pilot survey was run in an area already well known where the results could be tested against existing documentation. This called for some small modifications to be made to the wording of some questions and finally the survey was begun under full field conditions.

It is not necessary here to discuss these initial results to any great detail. Suffice it to say that they proved hesitant and often inconclusive. The only questions which were met with a positive attitude were those with a quantifiable content. Informants were usually vague and generally could not understand the reasons for this work. I found that I was being regarded with a great deal of suspicion and was often asked if I was a "GeeGee" or an "amaBhuru" (7), far more than I had become used to during the course of previous and similar research.(8)

It is fortunate that, through a coincidental sequence of events, I was not allowed to compound this mishap. Soon after this initial field trip was made, I took a small party of students to Venda. The intention was to establish a number of new contacts for future work and to complete the architectural survey of a number of homesteads previously photographed. As it happened, upon this occasion no interview forms were brought along and thus when I found I had time to spare and wished to talk to some people, I had to resort to the taking of notes. Very rapidly I discovered that although I had sat down among a group of strangers, by starting off with a blank sketch pad, I could work my way through the construction of a dwelling or the establishment of a homestead without arousing too much in the way of suspicion or antagonism. The page would quickly fill with notes and sketches in response to individual questions; not only could the people being interviewed see what was being written but they were often asked to contribute to the text or drawings in their own hand; above all the finished product did not look official or governmental, it was hand-crafted and often the result of the whole group being interviewed, rather than just one individual.

In retrospect it is obvious what had happened. The pre-structured survey looked official; the questions were being read in isolation of each other and were thus meaningless; it was not clear to what end the results were going to be put; and above all, it all looked as if it had to do with "government". South Africa's rural people have learnt over the years, and with good reason, to look upon government officials with suspicion. Hence the questions of was I a "boer" and did I come from Pretoria. This problem had not been identified during the course of the pilot survey because this had been conducted in an area where I was already well known and where my motives were understood.

FIELD NOTES : Architecture of the baPedi



I soon realized that the technique of using a pad of blank white cartridge paper and interviewing the group as a whole had unconsciously fallen into alignment with the very element of the architectural process which makes rural architecture what it is : the cooperative effort of a whole community in the housing of their individual members (this has been dealt with at greater length during the course of chapter 3).

Although this awareness made the task of allaying local fears much simpler, I was still left with the problem of the process of data gathering. This was resolved by requesting the group being interviewed to describe the simple mechanics of dwelling construction, beginning with the gathering of materials, the setting out of the plan and so on. This not only had the effect of allaying any fears from the outset (what government official is going to ask you how to make mud walls?) but it also served as an introduction to some of the more relevant questions that I required answers to, most particularly those relating to burial, religious belief and social hierarchy.

Although I had not realised it at the time, the question of being an architect/ researcher and taking parallel action in order to create a two way system of communication had been bypassed at the same time. This revolved about my perceived status as a teacher. People would invariably enquire, during the early stages of each interview, as to my profession and what was my business with them. The explanation that I was a lecturer or teacher seeking after knowledge not only gave me access to some of the older and more knowledgeable members of the rural community but, unbeknown to me, it also turned my interview sessions into open-air classrooms. Quite often what would begin as a small group of three to five people could swell up to thirty or forty, most of them between ten and eighteen years of age. Many informants, when thanked for giving me their assistance and time, would thank me in return for providing them with the opportunity of instructing their young people in building skills, some of which were rapidly being forgotten in their own areas. Virtually all informants requested me to forward copies of my drawings to them once these had been completed. In many ways I think I am rather proud of the title of "tisha" or teacher which is my nickname in some rural areas (9).

Another issue which required resolution was the question of interpreters. My chosen field of research covered half of southern Africa and despite having a rudimentary working knowledge of isiZulu, I could hardly be expected to be fluent in all the different Sotho/Tswana, Nguni or tshiVenda dialects this country is endowed with. The use of local interpreters was the obvious solution. However I soon discovered that even here my acceptance as a researcher by the community relied greatly upon my choice or lot of companions. Generally speaking I found that the presence of another white man was usually disastrous to the whole interview. South Africa's rural inhabitants know the mechanics of the "white man's justice" and realise that, in a court of law, evidence collaborated by a second party is usually accepted over an individual's own interpretation of events. Hence whilst the presence of one white man may be permitted, the presence of two is potentially bad news and to be avoided, if at all possible (10). Similarly the presence of black male interpreters originating from outside the community was treated with equal suspicion. On the other hand it was found that the use of black women as interpreters offered some definite advantages. Firstly it would appear that the communities visited invariably assumed that my interpreter and I were romantically linked in some way or another. Under South African law such liaisons were strictly illegal (11) and hence, by definition, I could not be an agent of the government in Pretoria. This had the obvious advantage of accelerating my acceptance within those communities I visited.

Secondly, after we had been introduced to the community, the role of the female interpreter often fell by the wayside as the local headman or chief would usually appoint someone from the district to act as my guide during my stay there.

The presence of a white woman with me, be she wife, young daughter or colleague was usually, with one notable exception, a waste of time, energy and resources. My work was then reduced to the level of tourism and quite obviously I was only being told what was also fit for my woman companion to know.

This leads to one final point in this discussion. I found that, apart from other queries relating to occupation and origin, the questions most commonly asked during my field work related to whether I had a wife and children. At the time of writing these words I am fortunate enough to have one of each (12) but it took some while for the real significance of this question to sink in. Among many of southern Africa's rural groups, a young man is deemed fit to sit in on the discussions of his village elders only after he has both married and fathered a child (13). I am now certain that, despite my supposed status as a "teacher", my presence at some of the gatherings of men I have attended in the past might not have been tolerated had I also not been regarded as the responsible head of a family unit.

The Formulation of Research Objectives

As has been previously stated, the origins of this project may be traced back to the early years of the 1970s. Then, as now, it was thought that southern Africa's rural community was endowed with a habitat which was both exciting and original and which, given the right conditions, could find translation into an urban environment. The mechanics of such a process were only imperfectly understood at the time but the ideal, although somewhat romantic, made a lot of sense in the context of black southern African society.

The early and mid-1970s stand out as something of a landmark period in the history of local architecture. It was a time when a new generation of young designers was seeking to rationalise its role within an African and third-world environment (14). Its dilemma tended to centre upon two major considerations : architecture as a profession had become inescapably identified with the servicing of a developed economy whilst the realities of South African society as a whole were perceivably linked to an under-developed and developing world; and architectural practitioners were members of an urban society which constantly kept turning over its shoulder and looking to Europe and North America in order to define its terms of reference. If we were to replace the terms "developed and urban" with "white" and "underdeveloped and rural" with "black" then it will be understood that the problems they sought to resolve were also of an intensely political nature. The events of the winter of 1976 only served to confirm their beliefs and helped to give their work a greater sense of urgency and purpose.

Personally speaking, the practical aspects of field research assisted in many ways to break through my own ideological log-jam, As the nature of southern African rural society became better understood, so then the processes which generated its habitat were clarified, and as much of the romanticism and mystification was dispelled, the idea of a new role for architects began to evolve.

In 1978 Pancho Guedes invited me to return to the university to continue my research on housing (15). My initial objectives were to establish a programme which sought to study the relationships perceived to exist between the rural house form and its social, economic and physical environment. Like many of

my contemporaries I had also been influenced by the philosophies of Amos Rapoport and his book, "House Form and Culture", published in 1969, struck a responsive chord in our own polyethnic society.

It did not take long for the shortcomings of this research approach to surface. Up to then the preoccupation with the more practical issues of housing and self-help building technology had guided field documentation to such a degree that the analysis of building form and its construction had become its major concern. In doing so it had tended to isolate the dwelling unit from its larger social context thus separating it from the more important issues of settlement structure. Although the full implications of this were not immediately obvious, it was eventually realised that such a research emphasis had unwittingly served to reinforce some long-held white preconceptions about black indigenous architecture. Firstly it had created a number of black cultural stereotypes based entirely upon the outward aesthetic of the rural dwelling. Secondly it failed to acknowledge the fact that rural settlement is not the haphazard bringing together of a number of huts upon a hillside but is subject to some definite ordering based upon a number of social, environmental, economic and cultural factors.

This in itself was not too serious. A background awareness of the wider issues of rural settlement had always been present during the early stages of field work and, once its importance was fully established, it became but a small matter to reorientate the focus of the research programme. Besides, a general survey of rural dwelling forms had not been published since Walton's work in 1956 (16) and one would eventually have been necessary at any rate as part of this work.

The first stage of this present research programme can be said to have been completed by 1980. There followed a brief respite during which some of the research data was published (17) and a strategy for subsequent field work mapped out. By September 1981, the project was once again in progress. If the first part of the research programme had set out to study the individual elements of southern African rural architecture, its vocabulary as it were, then the second part may be said to have been concerned with its language - how these various parts came together and combined into an integrated architectural whole. The project established three major research objectives :

a. a survey of southern Africa's early architectures, not only indigenous but also white settler, missionary and military.

b. a survey of indigenous settlement patterns, both historical and current.

c. a study of the assumed phenomenon of cross-cultural pollination, whether white-black, black-white or black-black.

The period of Difaqane, from 1822 to 1837, was perceived to have been a critical era in the history of southern African architecture as a whole. Not only did this time of social and economic upheaval bring about new regional groupings but, in the process, it also brought together peoples, tribes and clans from disparate cultural backgrounds. It was also a time when Dutch settlers were penetrating far into the northern Transvaal, English settlers were flooding into the eastern Cape, and the influence of both the missionary and military was beginning to be felt throughout the region. If ever there was a time when cross-cultural pollination should have occurred, then surely this was it.

I do not wish to pre-empt the conclusions at the end of this document. Suffice it to say that although the three objectives were neatly separated from each other in theory and for the sake of academic exercise, in practice they were found to be so interrelated as to make distinction virtually impossible. It was found difficult to conduct field research in the one aspect without parallel work being done in the other two, all three informing each other and guiding the research methodology for the overall project. Thus it was found that what began as a survey of settlement patterns, towards the end had become a study of indigenous social structures, economic activities, inheritance hierarchies, sexual mores, burial rites and religious beliefs; the survey of historical architectures had to incorporate considerations of hut tax, land dispossession and cultural imperialism; and the study of cross-pollination became concerned with cultural cores, stylistic stereotypes and population movements.

Some Conclusions

It may be argued that changes of emphasis in research objectives are only to be expected when one considers the size, scope and pioneering nature of a project such as this one. This may well be true, but then one must also question whether such a study should have been conducted under the strictures of an academic discipline in the first place. Had I, as the researcher, or Dennis Radford and Pancho Guedes, as supervisors, decided to enforce a more rigorous discipline to the work, would I have been allowed to uncover the richness of material which, in the event, was revealed? I personally think not.

The problems which have been set out above have largely been ones of academic procedure. The methodology was at first borrowed from other disciplines and it was attempted to graft it wholesale to the study of architecture. Personal experience has now shown that this approach is fraught with difficulties and that even in their own context, such research methods are often unsatisfactory. It is recommended that this area of concern become the subject of further and in-depth discussion, not just on the part of architectural researchers but also by other workers in areas of multi-disciplinary activity.

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1. Among the most eminent of these were Vitruvius (active 46-30 BC) who wrote a treatise contained in ten books entitled "De Architectura"; Alberti (1404-72) who wrote "De Re Aedificatoria" in 1452; Francesco di Giorgio Martini (1439-1501) who wrote "Trattato di Architettura Civile e Militare" in c 1482; and Laugier (1713-69) who wrote "Essai sur L'Architecture" in 1753.

2. This point was highlighted by the response which this research project elicited from two semi-governmental research bodies, the Council for Scientific and Industrial Research (CSIR) and the Human Sciences Research Council (HSRC). When initially solicited for research grants both Councils referred the applications back to me as being within the sphere of concern of the other.

3. FRESCURA, Franco
"The Effects of Demolition upon the suburbs of Doornfontein and New Doornfontein, Johannesburg". Unpublished report, Department of Architecture, University of the Witwatersrand, Johannesburg, 1974.

"Housing Strategies for an Urbanising Black Situation". B. Arch. Dissertation, Department of Architecture, University of the Witwatersrand, Johannesburg, 1977.

"The Development of Rural Vernacular Architecture in Southern Africa". M.Arch. Dissertation, Department of Architecture, University of the Witwatersrand, Johannesburg, 1980.

4. ERSKINE, Ralph
"Housing and Community Planning : Social, Physical and Economic Aspects". Conference paper published in "Housing People". Editor Michael Lazenby. Johannesburg : Ad. Donker, 1977. 207-219.

5. Ibid.

6. In a way we could also question whether Erskine's decision to locate his offices in the heart of the district to be demolished was not in itself an inspired piece of intuitive thinking which could only be quantified in retrospect.

7. Both terms are used by our rural people in a derogatory sense to mean "government official" or "Afrikaner" which are seen by many to be synonymous. The first is derived from the fact that South African government officials drive motor vehicles with "GG" number-plates, denoting "Government Garage". The second is an adaptation of the Afrikaans word "Boer" meaning farmer, a title which the white Afrikaans rural community uses as an everyday appellation for themselves.

8. FRESCURA,Franco
"Rural Shelter". Johannesburg : Ravan Press, 1981. This book was the direct result of research undertaken towards an M.Arch. degree at the University of the Witwatersrand from 1977 to 1979.

9. The idea of instituting a programme of more formal architectural action was not allowed to die through complacency however. During 1983 and 1984 I was the prime mover and organiser of a project called CHORE, an acronym for Centre for Housing Research, at the University of the Witwatersrand. This sought to bring about a greater involvement by the Wits. Department of Architecture in the building affairs of the local black community. During its eighteen-month existence, CHORE assisted in the housing of over five hundred families in urban as well as rural areas. We were also involved in the training of black draughtsmen and the design of facilities for preschool pupils, a home for the aged and various other projects of a community nature.

FRESCURA, Franco
"CHORE : A Motivation and Report". Published Report, Department of Architecture, University of the Witwatersrand, Johannesburg. April 1984.

10. This is a concept which originates from within the tribal system. Some rural groups presuppose and accept that a witness in a court case will perjure himself if he belongs to the same family, clan or group as the accused. Whites, being perceived as belonging to the same group, are assumed to substantiate each other's stories in such an eventuality. This is only one of the areas where the white legal system is perceived by blacks to be inherently unjust.

11. Those sections in South African law which prohibited marriage, courtship or sex across the colour line were only repealed on 15 June 1985, having been in force since 1949 and, in an amended form, even earlier.

12. Many women often expressed sympathy with me at only having one child, and then "only" a girl at that. It was not generally understood why I did not have a second wife to remedy this state of affairs and in some instances, where a female interpreter was present, it was suggested to me that she would make a suitable mother to my children. One village head went as far as to suggest that I build a house locally and, by implication, take a local girl in marriage.

13. This is one of the mechanisms of discrimination against celibacy. Not only is a bachelor unable to create certain spaces about his dwelling but he cannot obtain additional planting lands for himself and may not take part in most of the social life of the village. By not taking a bride and fathering children he is perceived to be doing nothing to promote the future of his group and is thus considered to be behaving in an antisocial manner.

14. LAZENBY, Michael. Editor.
"Housing People". Johannesburg : Ad. Donker, 1977.

15. Pancho Guedes is currently Professor and Head of the Department of Architecture at the University of the Witwatersrand (Wits.), Johannesburg. Later that year he also invited me to join his teaching staff, on which I remained until December 1984.

16. WALTON, James
"African Village". Pretoria : van Schaik, 1956.

17. FRESCURA, Franco. Op. Cit. 1981.

EERBEWYS DER HOTTENTOTTEN AAN EEN SEKER INSECTE.

BOOK THREE : SETTLEMENT

> "The establishment of villages in an extensive country thinly peopled may be considered as the first step to a higher state of civilization. A town or a village, like the heart in the animal frame, collects, receives, and dispenses the most valuable products of the country of which it is the centre, giving life and energy and activity by the constant circulation which it promotes."
>
> BARROW, John. "An Account of the Travels into the Interior of Southern Africa". London : T. Cadell Jun. and W. Davies, 1801 and 1804.

The human perception of such concepts as house, homestead and village tends to vary as one moves from culture to culture, from people to people and from place to place. Whilst such terms may outwardly appear to find application in a number of disparate backgrounds, generalisations of this nature usually fail to stand up to closer scrutiny as further considerations of kinship structures, spatial organisation and social hierarchies are brought into the argument.

In the case of the white settlers in southern Africa during the course of the last century an awareness of this distinction was slow in developing and we find that many of the accounts of early travellers, traders and missionaries into the region are fraught with the use of conflicting terminology. It was not until 1935 that a method of describing settlement patterns was to be pioneered by Schapera during the course of his studies on the baTswana (1). This chapter is directly concerned with many of his theories. However, due to the fact that this study is essentially of an architectural nature, it is not possible to draw upon Schapera's work en bloc. Rather, it becomes necessary to enlarge upon it in order to give it greater architectural relevance.

The entire question of rural settlement may be said to revolve about the definition of exactly what constitutes a rural "house". Contrary to most misconceptions the indigenous rural peoples of southern Africa do not live in "kraals". A kraal derives its name from the Portuguese word "caral" meaning a cattle byre or an animal enclosure (2). To state therefore that our rural peoples live in "kraals" is obviously demeaning and incorrect. What has generally become known as the "kraal" is usually a central living space or common, only a small area of which is set aside for the penning of animals and which may also function, among other things, as a place of entertainment or ceremony, of dancing, of burial, of gathering and of judgement.

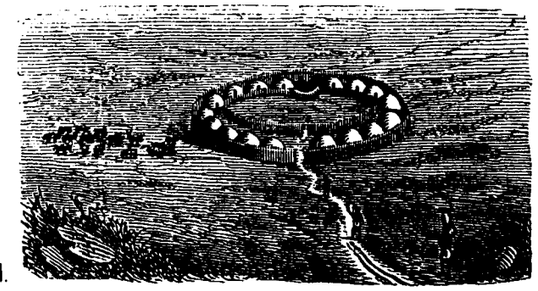
Similarly the individual dwelling unit cannot be termed a "house" in the Western sense of the word. It may comprise the total house in some singular instances where it serves to shelter a hermit or a bachelor, both rare in rural society, but generally it is but one unit within a larger domestic complex. Most white immigrants to the region also tend to look at this within the ambit of their own architectural experience which then leads them into difficulty when they find that they have to define each unit more specifically i.e. a house for cooking, or a house for sleeping and so on. Such terminology is obviously awkward and cumbersome and may be easily avoided by simply regarding each dwelling unit as being one room within a larger domestic complex.

The term "settlement" is also one which is capable of finding a number of different interpretations. In this case it is proposed to resolve the issue simply by using it as a generic word to describe all human habitat in its widest possible context, embracing in its scope the full scale of population numbers ranging

THE CATTLE BYRE

The cattle byre fulfilled a number of functions in the planning of the southern African homestead. This included the corraling of cattle, dancing and ritual and, under the amaZulu and Matabele, the parading of military regiments.

1. WANGEMANN, 1873. Indigenous homestead, probably amaZulu.
2. WANGEMANN, 1875. Young warriors engaged in mock combat.
3. UNKNOWN, c 1835. Gathering of amaZulu warriors.



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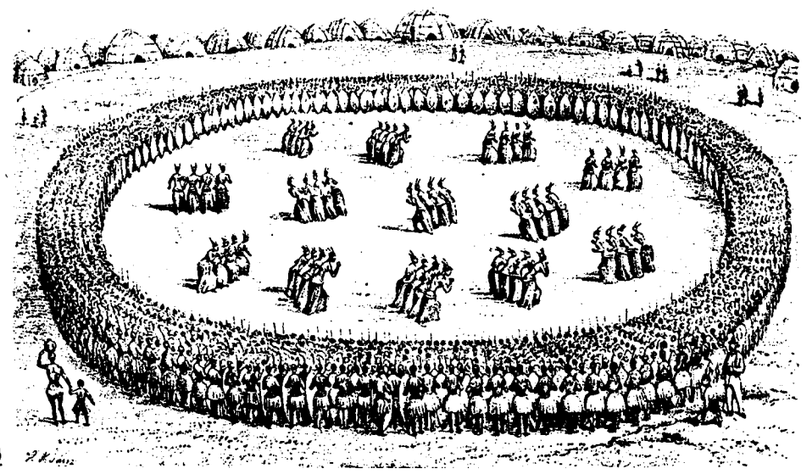

3.

in size from the individual family through to the larger village and town.

a. The Dwelling Unit

Within such a broad spectrum therefore the individual dwelling unit may be defined as a single structure, usually one-roomed, ranging in form from the grass beehive through to the flat-roofed highveld dwelling (3).

b. The House

When used in the context of southern African settlement, the term "house" tends to be a particularly misleading one. Not only is it subject to the kind of white misrepresentation described above, but when used in an indigenous sense, it tends to be applied as a description of social hierarchies rather than of human domicile. Thus it will be found that, in some local societies, the household of the first wife in a polygamous marriage may be described as either the "Great House" or the "First House".

When this term is indeed used to designate a place of residence, then it should be seen as embracing the wider scope of rural settlement, comprising one or more dwelling units usually clustered about or giving onto a common space. In some groups such as the vhaVenda, baPedi, baSotho, baTswana or amaNdebele, this area might find expression as an enclosed or walled courtyard or, as amongst the Nguni, it may merely become defined by usage and the clearance of natural surface vegetation. However the concept of a "house" in the context of local rural architecture is not considered to be a particularly relevant one and for the purposes of this work it will be found that the terms "domestic unit" or "homestead" are generally preferred in the discussion which follows.

c. The Domestic Unit

The "domestic unit" may be said to occur in those groups where each wife in a polygamous union is allotted her own living space comprising one or more dwelling units set within their own system of courtyards. Each wife will then be said to have her own domestic unit. In many such cases, the husband and head of the homestead will often not have a residence or domestic unit of his own but will share those of his wives, each in equal turn, whilst still retaining his principal place of abode with his first or chief wife.

d. The Compound Homestead

The "compound homestead" may be defined as that area occupied by a nuclear family either monogamous or polygamous, under the leadership of one person, usually the husband and/or father. Such a homestead will then consist of a number of dwelling units which may still be grouped into separate domestic units but which will usually involve the disposition of the family's constituent parts according to culturally predetermined patterns which recognise and formalise the status of each individual within that family. Although considerations of compound "homestead" normally also involve elements of locality, these need not be conclusive, as was found to be the case among the baPedi and the amaXhosa, where the proximity of the constituent domestic units of a homestead was either made impossible by the evolution of the settlement form itself, or was made undesirable by social custom.

e. The Extended Homestead

It could legitimately be claimed that anthropologists in southern Africa have, in the past, been so concerned with the study of social structures that certain elements of material culture, more specifically the built environment, have been either glossed over or even totally ignored. This lack of concern is reflected in the fact that whilst a complex vocabulary has been built up over the years to describe a number of social structures, little if any work has been done to describe the formal and conscious organisation of living spaces. In some cases local indigenous terms have been misapplied whilst others having local architectural context have been given wider social and political significance.

Thus we find that Schapera's "ward" (4), which he defined, in 1936, as containing households belonging to segments of one or more agnatic lineages whose constituent families are either closely related to the headman or otherwise related through the male line to one common male ancestor could, at its most basic level of application, be applied to describe the basic baTswana settlement. Similarly Mönnig's use of the word 'kgoro' to describe a social group having "a core of agnatically related men together with their wives and children" (5) could, by his own admission, be equally applied to describe the larger baPedi settlement, the people it housed or just the centrally enclosed gathering place. In the cases of both "ward" and "kgoro", however, we find that the larger sense of the words has prevailed and that today amongst anthropologists, they tend to find usage as descriptions of social systems or political units rather than as the names of a particular form of rural habitat peculiar to the Sotho/Tswana people. This was subsequently reinforced by Hammond-Tooke whose work (6) extended the sense of "ward" and "sub-ward" to the social organisations of the Cape Nguni.

As this work is of an essentially architectural nature, it is not intended to embark upon a long and complex analysis of social structures. On the other hand settlement patterns resembling those of the baPedi kgoro have also been recorded among the baSotho, the baTswana, the North and the South amaNdebele. These display a high degree of spatial sophistication and hold a great deal of interest for the architect. They therefore certainly warrant a descriptive noun of their own. A similar case could also be made for Nguni settlements of comparative size where, although it is true that the social organisation inherent in their form does not have the strong agnatic structuring which is found in their Transvaal counterparts, they are nonetheless built along predetermined cultural patterns governed by definite rules and possessed of a recognisable idiom of their own. The fact that such large settlements having a formal structure and achieving a full circular format are seldom if ever constructed in current Nguni society should not preclude their definition.

It should be seen therefore that, at this level of settlement, the search for a suitably descriptive terminology in the field of rural habitat is not a simple one. Its pre-requisites are that not only should it find general application in the diverse cultural context of southern African rural society, but also, for reasons that are obvious, it should not come into conflict with the existing nomenclature of other disciplines. This means that such nouns as "ward" and "kgoro" are automatically excluded whilst "village", which to date has only been imperfectly described (and then only in terms of larger urban settlement), must be excluded in view of its implied larger size. What in fact is required is a term which will serve to link the settlement of a nuclear family, that is to say, a compound homestead, to the larger population unit, a village or town, where considerations of administrative

structure and of population size place it beyond the concerns of traditional settlement patterns.

In the context of Sotho/Tswana society, where such settlements have been recorded through to the present day, we know that their form, at the genesis, is inspired largely by considerations of kinship; usually a set of agnatically related families come together and establish a habitat for their common convenience. Such a settlement could therefore be considered, at its lowest level, to be the residence of an extended family and, for the purposes of definition, could be described as an "extended homestead".

It is probable that, with the passing of time, the agnatic orientation of an extended homestead will weaken as groups of strangers, not necessarily directly related to the extended family, will be allowed to join the settlement. At such a point, the extended homestead would cease to be such, by definition, and would be considered to move into small village development.

f. Ward and Sub-Ward

Architecture may be generally defined as the art of the built environment. As such its concerns do not necessarily cease at the design of individual buildings or at the visual by-play that is often created by a grouping of buildings, but often extend to cover the full habitat of man, including his cities, towns and villages. Similarly the study of architecture does not limit itself to the micro-environment but is also concerned with those structures of society which have a bearing, direct or indirect, upon the larger settlements of man.

Thus it is possible to argue that, in the context of a study of rural architecture, analysis of kinship structures and political systems must have their place, especially in those examples where social patterns have found direct expression in the settlement forms. This has certainly been the case in dealing with the various definitions of house, household, homestead and neighbourhood unit. However this argument begins to break down when dealing with such terms as "sub-ward" and "ward" where although it is possible to describe a ward as any number of traditional Sotho/Tswana neighbourhood units, this is not necessarily always the case. Also the terms of dwelling unit, domestic unit, compound and extended homesteads have all been given an implied sense of "locality" as well as of "built environment"; sub-ward and ward are descriptions of political authority having broad territorial implications and therefore only warrant cursory mention in this paper.

g. Village and Town

The difficulty of translating a foreign nomenclature into a local rural context is especially highlighted, at this point, by the confusion which arises in separating such terms as hamlet, village and town. A number of definitions have been offered over the years to cover their meaning. Most of these however appear to have been derived in the historical context of European urbanisation, and because they use a value system unique to that society, their application to the settlements of a different culture becomes fraught with problems. A case in point is that of Emile Holub, a traveller through the southern African region in the mid-1870s, who in his writings freely accorded such (white) settlements as Philippolis and Fauresmith the accolade of "town" although neither's population at the time could have exceeded four hundred souls, whilst such indigenous settlements as the Tswana town of Moshaneng had to achieve a size of 7 000 - 10 000 people before he would pay them a similar courtesy.(7)

It is of course true that none or few of the criteria which originally gave rise to the European definition of such terms as "town" and "city" can be said to have existed in southern African pre-industrial society. The old medieval English town derives its status from a royal charter to hold market activities (8), but basically also had to be surrounded by a rural population large enough to support such a commercial venture; the old medieval city derived its status from the fact that it was the seat of a Bishop and was therefore endowed with a cathedral, although such status usually meant that it was also a regional administrative centre of some importance.(9) Obviously neither concept can be said to have found parallels locally and therefore one can understand the difficulty experienced by early travellers such as Holub in applying a foreign terminology to local conditions.

For the purposes of this paper it is proposed to define a "village" as a settlement of indeterminate size which exceeds the scope of the agnatically-based extended homestead by including in its make-up or locality more than one family. The fact that the constituent families of such a village may eventually become interrelated through marriage does not detract from this definition. In the improbable case of an extended homestead reaching such a size as to warrant division without first having absorbed other families in its make up in the process, then the presence of two extended but interrelated homesteads in close proximity to each other may be considered to constitute a village.

A town on the other hand is more difficult to define without the application of a set of arbitrary values. Certainly no "town", in the European sense of the word, appears to have existed historically in indigenous southern Africa, although it could probably be argued successfully that a number of the "zimbabwes" which existed at one stage in the northern parts of the region more than met comparative criteria of trade, regional administration and population size. For the purposes of this paper it is proposed to extend the scope of this definition to encompass not only these "zimbabwes" but also those centres of centralised regional authority which have been recorded amongst both Sotho/Tswana and Nguni societies. Such settlements were usually not only of such population and physical size as to warrant recognition, but were also normally the seat of traditional government for the region. Large-scale settlement appears to have been a feature of Sotho/Tswana society for some considerable time before the arrival of white travellers into the region (10) and was probably heavily influenced by such factors as the presence of water and other resources. In the Nguni example however the evolution of Royal Towns among the Zulu appears to be a post-Shakan development, these functioning essentially as military barracks with a predominantly male bachelor population. The existence of parallel centres of administration and political power among other Nguni groups, most particularly in the Transkei region, has to date not been ascertained.

Some Conclusions

The definitions set out above should not be seen as finite parameters but rather as a provisional set of flexible criteria which have attempted to give as neutral a nomenclature to a wide range of local settlements as is possible under the circumstances. The temptation to use locally-derived terms was strong and most

enticing but was nonetheless resisted, firstly, because the wide degree of interpretation inherent in them is not fully understood by the general public and secondly, because in the context of southern African society, it is almost impossible to find one linguistic term which will be common to all the various local language groups.

Although these terms can be seen as describing an ascending hierarchy of settlements, beginning with the individual dwelling unit as a constituent of a domestic unit which is linked by reasons of marriage to the compound homestead, this in its turn being linked by reasons of marriage to the extended homestead, a basic constituent of the larger settlement of a village or a town, they should also be seen to have the ability to a degree to telescope into each other. Thus where we are unable to discover the anthropology of a small settlement, it should not be impossible to describe it by a simple generic term such as "homestead". Similarly a "domestic unit" need not be the constituent of a larger compound homestead should the parents' marriage be monogamous nor should the term preclude it from being part of an extended homestead if the family is joined by other kin and their families and a recognisable settlement structure is formed.

It must also be borne in mind that certain terms such as "extended homestead" have no relevance in the context of traditional Nguni society, being strictly speaking a Sotho/Tswana phenomenon, nor, for that matter, have towns of any recognisable traditional structuring existed among the Nguni since the crushing of amaZulu military power by the British in 1879.

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2. The earliest reference found to date on the word "kraal" comes from Kolbe who, in 1727, interchanged it freely with the word "village". (Vol. II, chapter 7). Burchell, who did the same in 1822, also explained that it was "a Hottentot word, used, properly, for signifying a village or horde." (Vol. I, p 162).

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9. Ibid.

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> "The Kraal of Haabas is situated at about four hundred paces distant from the river Groot Vis, on a gentle ascent, which rises imperceptibly ... The huts, which are about forty in number, and which occupy an area of about six hundred feet square, form several half circles, and are united with each other by those little enclosures in which each family keeps its calves and lambs; ..."
>
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A BRIEF REVIEW OF EARLIER WORKS

Over the years numerous researchers have attempted to describe the settlement architecture of indigenous southern Africa. Early travellers to the region were initially unable to perceive any but the most general of forms and significantly the majority of their reports concentrated upon the individual dwelling unit. Some, like Burchell, who described Dithakong in the northern Cape in 1812 as follows :

> "The buildings were nowhere ranged in the form of streets, nor placed according to any regular plan; but were scattered about, in some places far apart, and in others standing so closely together as not to admit a passage for my waggons between them." (1)

could find little sense in their layouts and although he later stated of the same town that it :

> "... may be considered as a collection of little villages, each under the superintendence of its own chieftain; ..." (2)

he was unable to make the link in his own understanding between the "collection of little villages" and the extended family structure of the baTswana. The reports of other visitors to the interior suffered from exactly the same shortcomings. In 1835 Smith described a Matabele settlement as follows :

> "Instead of each town having a number of separate cattle pens as it will be remembered is the case among the Bituanas, the Zoolas (3) have only one which forms the centre of the kraal. The space so appropriated is encircled by a double fence, composed of brushwood, closely and neatly interwoven, or of large branches of trees ..... Over the space enclosed by the two fences the houses of the inhabitants are either disposed in regular rows, or scattered about without regard to order .,."(4)

and although he enclosed to this account a tolerably good ground plan of this establishment, he too failed to recognise the social structuring inherent in its settlement form.

One of the earliest authors to show such an awareness was Warner who wrote in 1856 that the abaThembu built their homesteads with :

> "The "ibotwe" or house of the great wife, ... on the upper side of the cattle fold, and ... opposite the gate thereof; and the houses of the other wives are arranged in a semi-circle right and left of it, according to their rank." (5)

The analysis of indigenous homesteads in terms of social hierarchies became standard practice among anthropologists from the early 1900s onwards and most major studies of rural culture and custom thereafter were to pay particular attention to this phenomenon. However very little work on a comparative basis appears to have

been done on this subject until the publication of James Walton's "African Village" in 1956 (6) when for the first time a great deal of the information available on settlement structures was collected into one volume. Regrettably much of this opus was descriptive and did not attempt to establish the nature of the forces which generate such settlement forms.

In 1964 de Jager attempted to analyse rural settlement in terms of cluster groupings. He came to the conclusion that southern African homestead patterns could be classified along lines which were conveniently coincidental with those perceived by anthropologists to exist between the baSotho, baTswana and Nguni language groups.(7) His paper was significant not so much for its findings as for the fact that its considerations included factors of social hierarchy, private spaces, inheritance patterns and cultivation systems. However his tabulation was not consistent enough to justify his findings on a comparative basis and his data was not the result of first-hand field research but was obviously obtained from bibliographical sources.

A subsequent paper by Erasmus (8) was scarcely more than a bibliographical survey which failed to reconcile some of the conflicting data from his historical sources and ultimately came to no conclusions whatsoever.

The next landmark in this historical process was reached by Kuper who, through the use of Lévi-Straussian analytical methods, came to the conclusion in 1980 that both the Nguni and the Sotho/Tswana were part of a larger southern African cultural grouping.(9) Without necessarily disagreeing with his substantive conclusions, it was found, during the course of current research, that some of Kuper's bibliographical data was at variance with that which was being obtained from personal informants in the field. This was most particularly true in regard to some of the various regional interpretations of exactly which side of the homestead could be termed to be on the "Left Hand" and which on the "Right Hand". His analysis was also open to criticism in that his data base appeared to suffer from a Nguni bias.

The issue of reconciling conflicting data both within the established bibliography and between historical sources and current field informants became an important one during the course of this research project. A good example of this was discovered in the case of the amaZulu of Zululand. Here, writing in the 1920s, Bryant found that the local homestead followed a basic circular form with the cattle byre being located centrally within it. The settlement was invariably approached from below and uphill and entry was gained through a gate at its lower end. This entry then established an imaginary vertical axis which ran through the homestead from top to bottom and acted as a major pivotal point for most of the social hierarchies existing in the family group. The "Great Hut", the residence of the first or head wife and hence, also, that of the father and head of the household, was located on this main axis at the top of the homestead and directly opposite the main gate. The dwellings of the second and subsequent wives were then sited on either side of the Great Hut, alternating in descending order according to their individual status.(10)

Most if not all established references upon the subject were found to be in general agreement with this description of a basic amaZulu homestead. At this point however certain difficulties began to manifest themselves in the interpretation of the settlement's social hierarchies. Bryant found that the orientation of aspect in the homestead was established from its entry point, looking into the byre and across it to the Great Hut thus creating within it the concept of a "Left Hand" and a "Right Hand" side.(11) This is supported by Walton (12), Krige (13), Grossert (14) and Raum (15) but is not borne out by current research where informants in the field, both chief and commoner, were emphatic that the opposite was the case.(16) Bryant also held that the second wife was located on the left hand side of the homestead, a fact which is unsupported by either the above sources or current research. Similar discrepancies were also found to exist in the historical interpretation of the homestead architecture of other groups.

The question inevitably arose as to the validity of such information. Did this, for example, signify that the interpretation which one group of researchers placed upon this phenomenon was in any way more reliable than that of those who held the opposite to be the case? Or, perhaps, had the custom relating to such a usage undergone a number of radical changes since the time of Bryant? The answer quite obviously lay in neither camp.

It must be realised that although polygamy was a marital state apparently aspired to by most of the indigenous male population of southern Africa, it was, as will be shown in the discussion which follows, only achieved by a relative minority. This means that such questions of hierarchy within the rural homestead are, in most cases, of academic interest only. When applied in practice they were open to interpretation, not only on the part of researchers, but also on that of the settlement builders themselves. Under such circumstances it also becomes conceivable that such an ideal was open to manipulation, possibly for reasons of political identity or, more likely, practical expedience. What becomes relevant to us therefore is not the fact that one rural group placed their Great House "thus" or that another read their orientation "thus" but that both are linked by a common awareness of such issues in the determination of their own settlement hierarchies.

However the idea that social hierarchies could be used as a basis for the differentiation between the settlement patterns of the Nguni, the baSotho and the baTswana was not allowed to die at this point. Instead Adam Kuper's data base was extended to cover a wider range of historical as well as regional examples, this being reflected in those pages entitled "Spatial Hierarchies of Settlement" which accompany this chapter. The brief study which followed was based upon the following criteria :

a. A perception of "left and "right" within the individual dwelling unit.

b. A similar perception within the larger homestead space.

c. A perception of "male" and "female areas" within each individual dwelling unit.

d. The culturally predetermined positioning of the dwellings or households of the first, second and third wives.

e. The orientation of the byre's entrance.

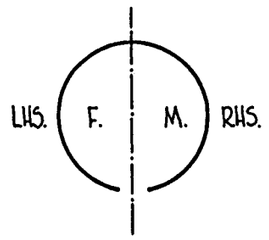
f. The orientation of aspect.

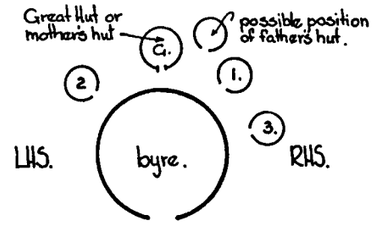
A further element, the direction of the doorswing within the individual dwelling unit, was also introduced.

The resultant analysis clearly shows that no recognisable patterns could be found to exist either in the internal organisation of the individual dwelling space or in the distribution of social hierarchies at the larger homestead level. Instead the breakdown proved that such considerations cut across the lines of differentiation previously thought to have existed between the Nguni and the Sotho/Tswana. Attempts to derive separate models for the settlements of both

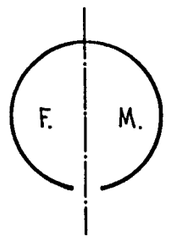
SPATIAL HIERARCHIES OF SETTLEMENT 1

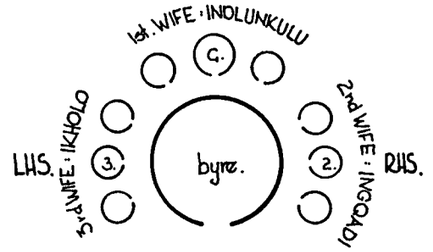
Natal Nguni
Commoner's Homestead.
After Bryant.



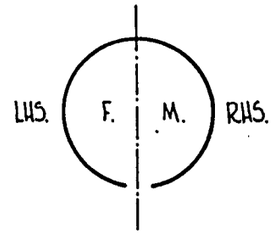


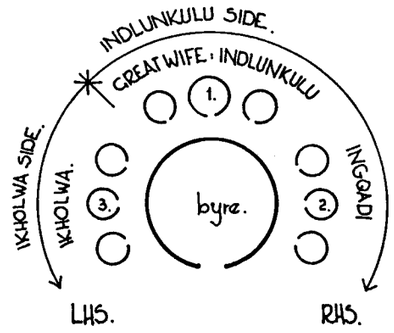
Natal Nguni
After Walton.



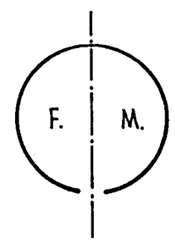


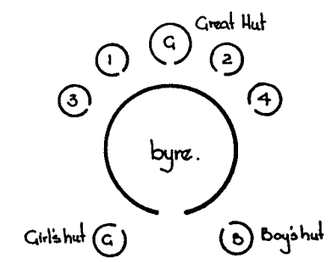
Natal Nguni
After Krige



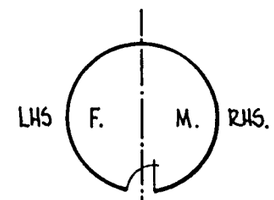


Natal Nguni
After Grassert.

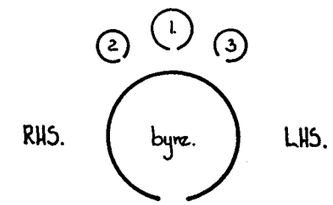




Natal Nguni
Current Research.



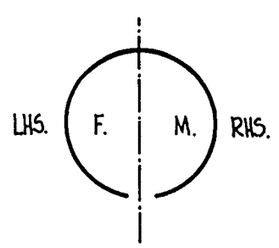
Plan of Dwelling Unit.

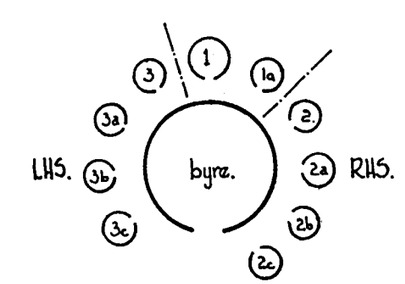


Plan of Homestead.

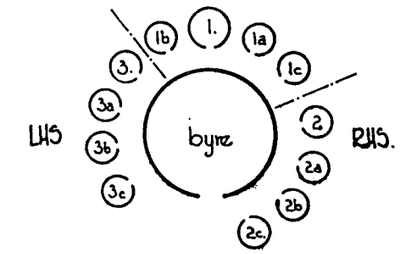
SPATIAL HIERARCHIES OF SETTLEMENT 2

Natal Nguni
Polygynous Homestead.
Raum.

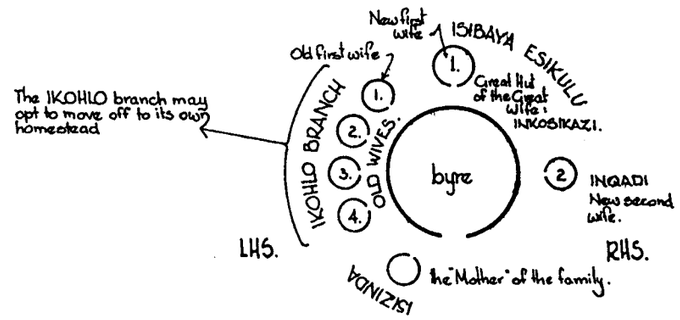




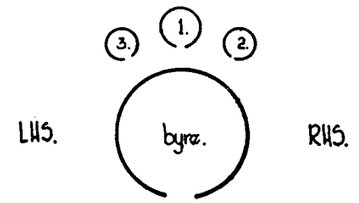
Natal Nguni
Royal Homestead
Raum.



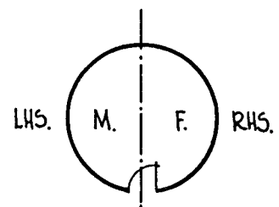
Natal Nguni
Royal Homestead
Bryant.



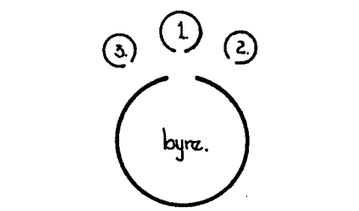
Cape Nguni : Bomvana
Current Research.



Cape Nguni : Hlubi
Current Research.

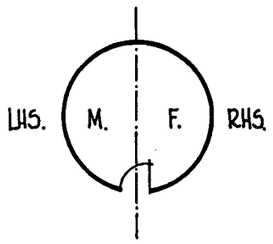


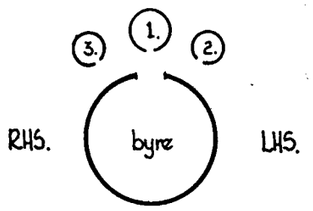
Plan of Dwelling Unit



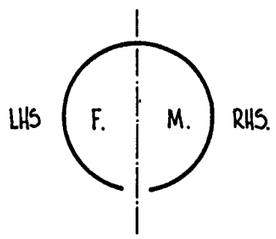
Plan of Homestead.

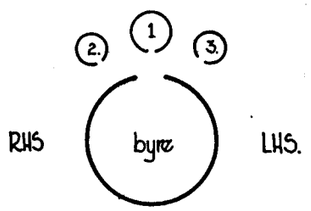
Cape Nguni : Mfengu.
Current Research.



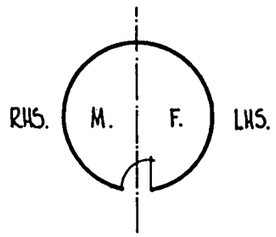


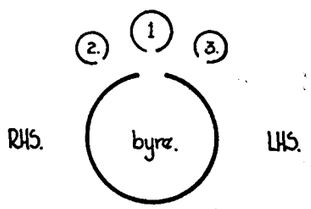
Cape Nguni : Mpondo.
Current Research.





Cape Nguni : Thembu
Current Research.





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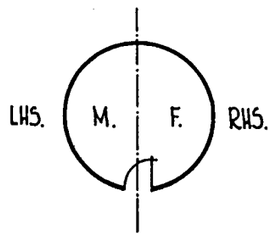
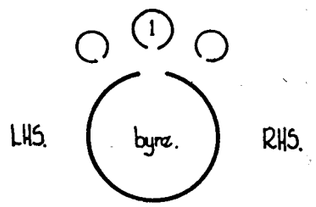
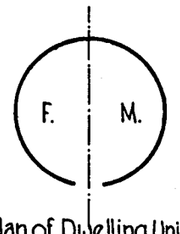
Current Research.

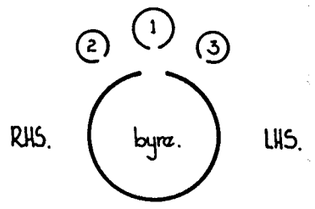




Cape Nguni
Walton.

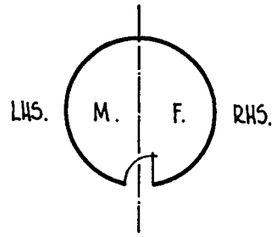


Plan of Dwelling Unit.

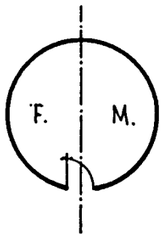


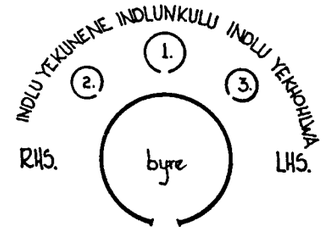
Plan of Homestead.

Cape Nguni
Shaw et van Warmelo

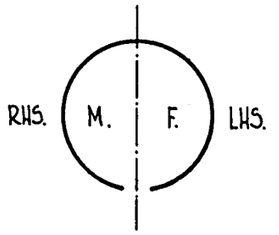


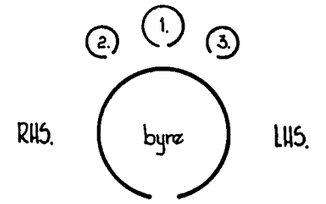
Swazi
Marwick.



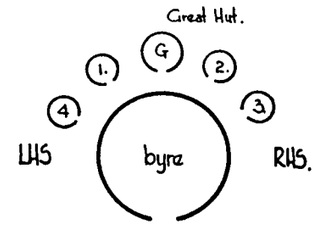


Swazi
Kuper.

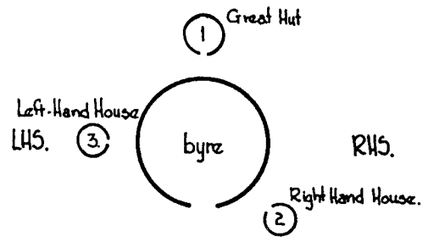




Swazi : Dlamini
Walton.



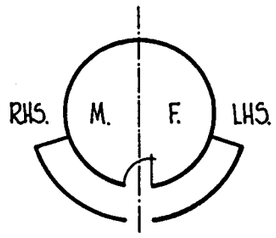
Swazi : Ngwane
Walton.

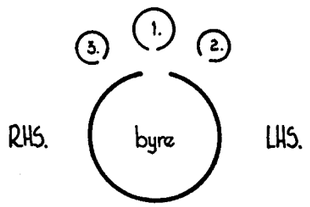


Plan of Dwelling Unit

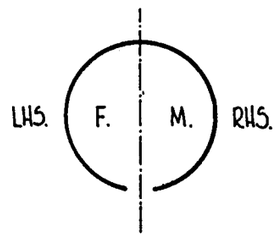
Plan of Homestead.

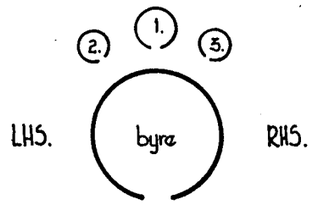
Transvaal Nguni
Ndzundza Ndebele
Current Research.



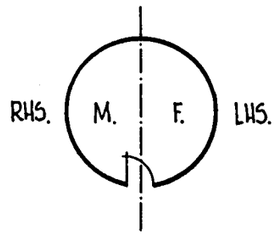


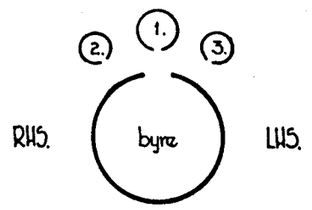
Tsonga
Junod.



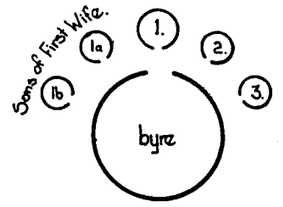


Tswana : Bakwena
Current Research.

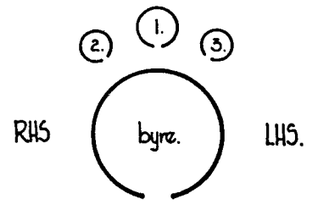




South Sotho
Walton.



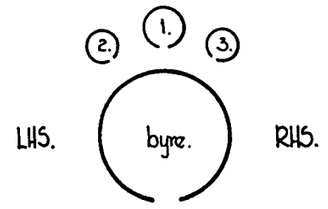
North Sotho
Walton.



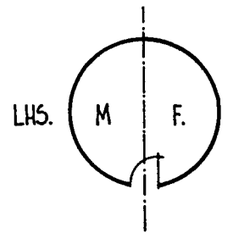
Plan of Dwelling Unit

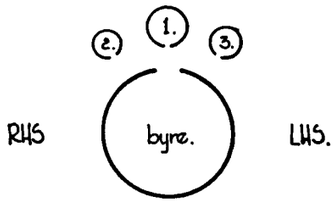
Plan of Homestead.

North Sotho
Mönnig.

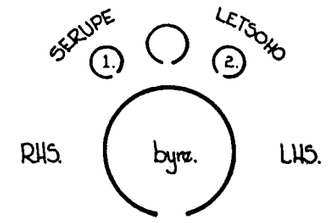


South Sotho
Current Research.





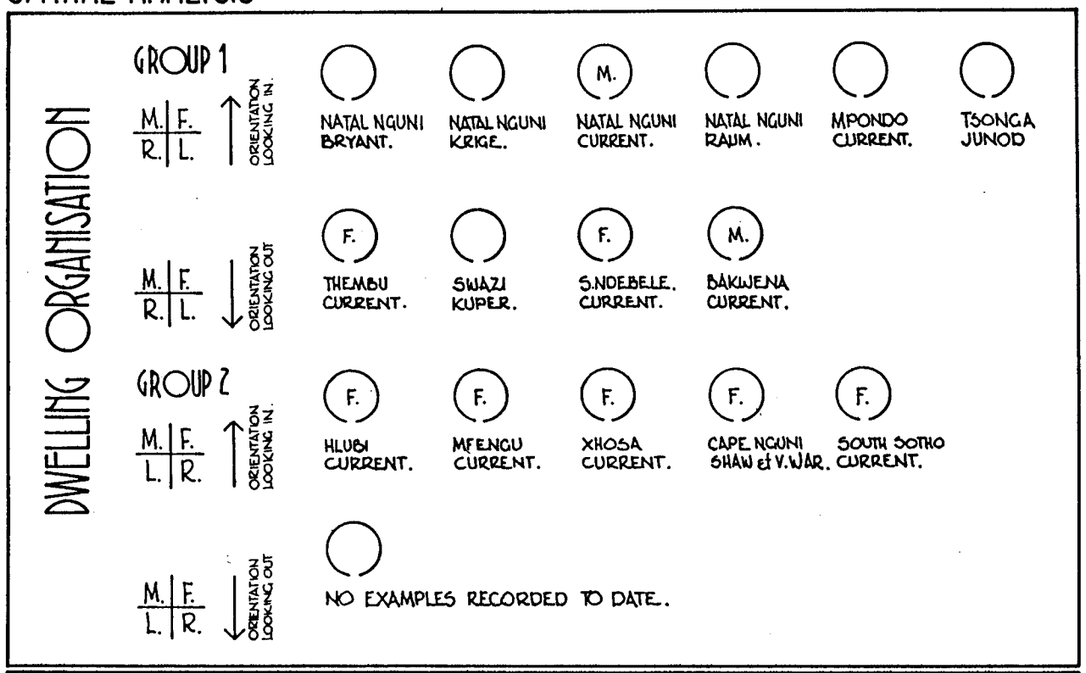
North Sotho
Harries.

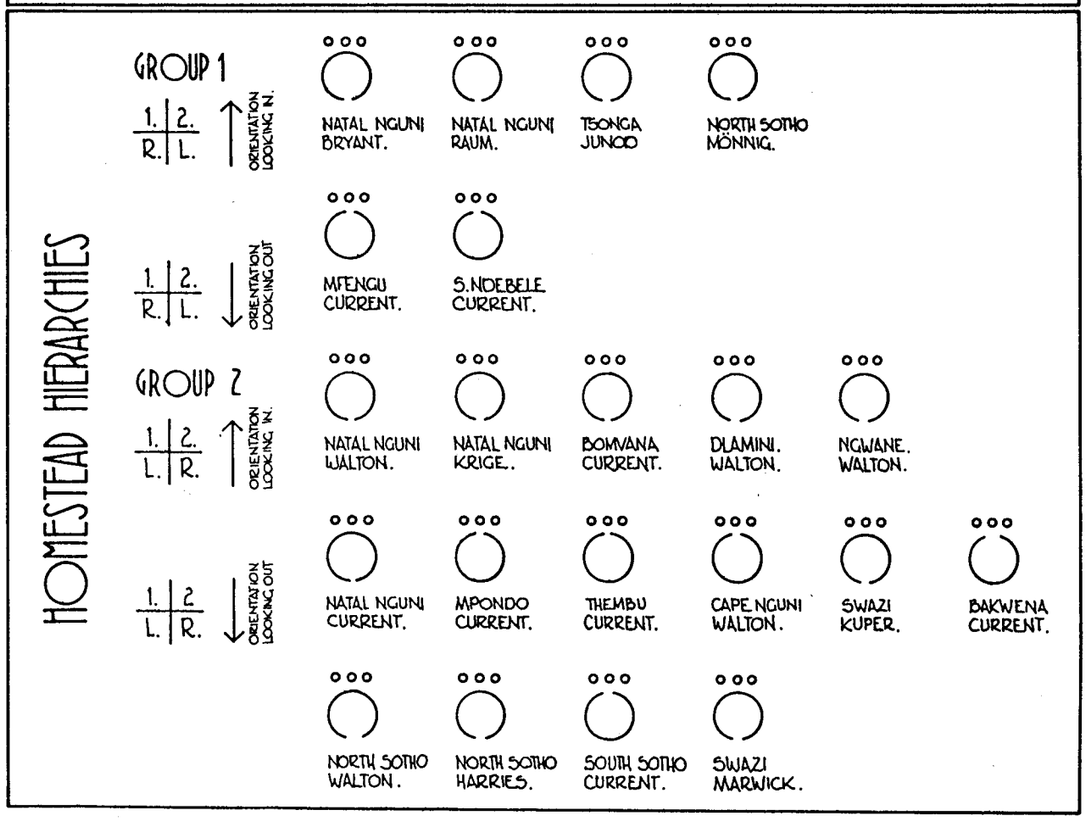


Plan of Dwelling Unit.

Plan of Homestead.

SPATIAL ANALYSIS





Notes.
1. Male (M.) has been assumed to be ascendant over Female (F.) throughout.
2. The First or Head Wife has been assumed to be ascendant over the Second Wife throughout.
3. In the dwelling unit analysis, door swings have been indicated thus : M F = F. M F = M.

groups were not successful but rather it was found, taking all such factors into consideration, that one single model satisfied the criteria of Nguni and Sotho/Tswana alike. Both divided their dwelling and settlement plans into left hand and right hand sides; both separated male from female areas within the individual dwelling unit; both distributed the households of individual wives according to precepts governed by left and right orientations; both located their cattle byres centrally within the homestead; and both used an essentially circular form for their settlement plan. In the process other similarities such as the location of burial, kitchen and gathering areas also emerged. The fact that in some instances individual groups differed in their interpretation of such issues as "left" and "right" did not detract from the idea that they were linked by a common awareness of these principles.

The discussion and analysis of southern African indigenous settlement patterns was also greatly assisted when the existence of a second settlement culture in this region was perceived during the course of current field work. This was represented by the vhaVenda, a small group living in the north-eastern Transvaal whose historical links are believed to lie more with the maShona north of the Limpopo than with their Sotho/Tswana neighbours to the south.(17) Their homesteads are guided by none of the principles which have been discussed above, being neither circular nor axial, having no concept of left or right and no centralised byres. Being so radically different from any of the other settlement patterns which could be found elsewhere in southern Africa, the vhaVenda homestead acted as a useful foil in establishing the general principles which govern the establishment of rural indigenous settlements in this region. It is also possible that a third distinct architectural tradition may have existed locally up to a century ago, that of the KhoiSan. Regrettably few detailed historical records of their built environment have come down to us and their position in southern African architecture remains ill-defined.

A BRIEF HISTORICAL OVERVIEW OF POLYGAMY IN SOUTHERN AFRICA

One of the preconceptions more popularly held by both academics and lay public alike in regard to southern African rural society is that the indigenous family unit is polygamous in nature. This is only partly true. A broad survey of homestead patterns in the region reveals that whilst a number of polygamous settlements were documented during the course of current research, these were in a distinct minority and that monogamous marriages appeared to be the more general norm. It could of course be argued that this is a recent development brought about by the work of Christian missionaries, but the validity of such a statement should not be left to go unquestioned. For one thing the Christian churches which enjoy the largest following in southern Africa, the so-called Independent Churches (19), permit their followers to practice polygamy. For another it was found that although this practice indeed appears to have been more prevalent during the last century than it is today, its presence was not as widespread as various missionaries may have wished us to believe. Lichtenstein wrote of the amaXhosa in 1812 that :

> "Most of the Koossas have but one wife; the kings and chiefs of the kraals only have four or five." (20)

This was reinforced by Alberti who stated, also of the amaXhosa, that :

> "The number of women that a man may live with simultaneously in a state of matrimony, is not limited by any law, and simply depends upon his wishes and foremost on his resources. Those with least resources, must be satisfied with one woman, others have two, and rarely more. Only the chiefs are enabled by their greater wealth, to own a greater

number, and one finds some among these, who have seven to eight wives." (2)

Contemporary visitors to other parts of the country came to similar conclusions. Livingstone went one step further and in 1857 estimated that approximately 43% of baTswana men practiced polygamy and then only a very small minority of these had more than three wives.(22) By 1946 the official census revealed that this figure had dropped to 11% with only 1.3% having three wives or more.(23)

The practice of polygamy was explained by Moshoeshoe in 1833 when he told Casalis :

> "For us chiefs, it is a means of contracting alliances with the heads of other nations, which helps to preserve peace. Moreover, we receive many travellers and strangers; how could we lodge them and what could we feed them on, if we did not have several wives?" (24)

Among certain other groups polygamy is also viewed as a social device used to ensure the continued status and welfare of widows and orphans within an established family structure. The baPedi, for example, traditionally allowed a new widow a number of alternatives. She could choose to remain a widow and become head of her own household or enter that of one of her husband's younger brothers as a minor wife. There she would still have had the further choice of becoming this man's wife in the fullest sense of the word or she could have opted to remain nominally linked to his household. In the latter case the two parties would have come to a discreet arrangement regarding her future sex life.(25) However recently obtained data would seem to show that this form of polygamy is falling into disuse as some 27% of rural households are currently headed by widowed women.(26) If we were to assume that in the 1850s an equivalent number of women could have become widows and were thus absorbed into the monogamous households of family members, thus making them polygamous, then it will be seen that this form of union could have accounted for most of polygamous marriages recorded by Livingstone among the baTswana.

It becomes clear therefore that the practice of polygamy in southern African rural society was overwhelmingly linked to either the forging of political links or the control of resources, or both. Harries explained in 1929 that baPedi men :

> "... regard the marrying of many wives as a sound investment, for in the first place the wives are self-supporting, and, secondly, the more wives a man possesses, the more cattle he is likely to derive in his mature age from the daughters of his establishments when they are given in marriage." (27)

The general trend away from polygamous unions could therefore be explained in two ways. The growth of urbanisation and the establishment of urban-based political structures has brought about a decreased emphasis upon both tribal group identity and the power of the traditional and inherited rural leadership. The need for making unions based upon political expediency has thus lessened considerably. Also the economics of obtaining a bride in the rural areas have changed substantially over the past five generations. Traditionally the average "lobola" or "child price" was relatively low but, as Arbousset and Daumas reported, things were already changing in 1846 :

> "Formerly two or three head of cattle was all that was required by a Basuto to enable him to procure a partner in life, while now the number required is increased to ten, to thirty, or in some cases even to a hundred - a circumstance favourable only to the rich." (28)

By 1962 Henri Junod was able to state that, among the vaThonga :

> "Polygamy is uniformly practised all through the tribe. This is not to say that every man has many wives; ... Many men are monogamists, not from choice, but by force of circumstances." (29)

The conclusion therefore is that the practice of polygamy may have been common in southern Africa up to the end of the last century but that it was certainly never widespread. Although polygamous unions may still be found to the present day, these are few and generally far between and although they may be perceived, in some cases, to have a measure of social merit, the economics of such marriages have placed them beyond the reach of all but the rich and politically powerful. This is an important point in an architectural context for as will be seen during the course of subsequent discussion, the hierarchies of a polygamous family unit find direct reflection in their settlement architecture. Although historically few family groups became polygamous, they were all potentially so and hence made provision for such an eventuality from the outset. However once it became accepted that polygamy was still possible but unlikely, the homestead layout was freed from many such considerations. Thus it will be found that whilst contemporary rural architecture still follows the basic idioms of an earlier rural culture, factors of site location and pragmatic choice have wrought considerable changes upon the basic southern African homestead plan. The most important of these has probably been the swing away from the circular settlement pattern to one which tends to be more linear and follows the dictates of contour and site access.

FINDING A BASIS FOR COMPARATIVE STUDY

The analysis of the built environment on a comparative basis has long been used by architectural historians as a tool in their study of the buildings of man.(30) Its use can be said to have developed largely in the context of an European architectural ethos, one which traditionally has been concerned with buildings grand and monumental but which has tended to ignore their humbler domestic and vernacular contemporaries.(31)

Thus it was found that, when applied to southern African rural architecture, comparative analytical methods suffered from three major drawbacks. Firstly they tended to break down architecture into component elements rather than dealing with them as integral parts of a larger socio-economic whole. Secondly such an approach is preoccupied, in the main, with the aesthetics of product as against the mechanics of process. Finally they sought to create "styles" of architecture, finding differences on the basis of the smallest of variations and recognising similarities where few existed save on the most general of levels. This led to the creation of stereotypes which, through their very nature, were usually based upon a general, and hence incomplete, description of the built environment.

During the course of a previous chapter it was discussed how the concept of a dwelling stereotype based upon a composite view of such general factors as physical environment, material textures, structural forms, building technologies and economic activities have become accepted in the mind of the lay public. However it was also found that the image presented by such stereotypes could be manipulated for any number of reasons and that a number of such instances could be quoted from the recent history of southern Africa alone. It was thus concluded that the terms of reference provided by a conventional approach to architectural history were not sufficient to create a comprehensive understanding of the local built environment but that these should be extended to encompass other criteria such as some social practices and cosmological beliefs.

It was found during the course of current research that a study of the various regional homestead patterns should also include discussion upon the following criteria :

- General architectural form and governing axes.
- Aspect or direction of approach and orientation.
- Hierarchical determination and the relationships existing between husband and wife or wives, parents and children, family and visitors, domestic unit and community.
- Inheritance patterns.
- The architectural expression of territorial statements, common spaces, work areas and privacy.
- Areas of interaction between the individual family unit and the community as a whole.
- Position of byre and other animal enclosures.
- Position of cooking facilities and attendant functions.
- Location of burial areas and places of religious significance.
- Other considerations such as seating hierarchies, spatial divisions determined by sex and age, etc.

These then create the basis for the comparative analysis of southern African rural settlement patterns which now follows.

CONCLUSIONS

This chapter did not set out to provide a definitive survey of the settlement architecture of southern Africa. The bibliography on the built environment of the various rural regions is extensive and need not be repeated here in anthological form. Instead the discussion sought to establish, on a comparative basis, the nature of their major components and the interrelationship existing between them and the settlement as a whole in order to derive the basic principles which generate their forms. This then creates the basis for further analysis in the chapters which follow.

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COMPARATIVE ANALYSIS OF SOUTHERN AFRICAN SETTLEMENT PATTERNS 1

Language Group	Nguni
Regional Group	AmaXhosa
General Settlement Form	Circular compound homestead with central byre. Homestead is not fenced on its outside perimeter, byre is fenced.
Axes Governing Settlement Form	Vertical axis governs hierarchy of wives; back/front relationship establishes the position of the parents as against the children.
Direction of Aspect	Looking into the great hut.
Concept of Left/Right	Present
Social Hierarchies	Social hierarchies are based upon the relative status of individual wives and that of parents as against children.
Location of the Father's Abode	Nominally in the great hut at the head of the homestead, this being the dwelling of the first or great wife, but he also visits the other wives in equal turn.
Location of the Wives' Abodes	The first wife is at the head of the homestead; junior wives are distributed alternately on either side of her according to their individual status.
Location of Byre	Central to the homestead, below the great hut.
Byre Entry Point	Opposite great hut.
Place of the Men	In the open space between the great hut and the cattle byre.
Areas of Burial	The head of the homestead is buried just inside the byre entry, to its left as one looks into it. (Soga, 1930).
Other Areas of Spiritual Significance	The male side of the hut as well as the space to the rear.
Divisions Within the Hut	A vertical axis separates the hut into male and female areas. Elders sit to the front nearest to the hut doorway, young sit towards the rear.
General Notes	Initiation lodges built as temporary beehive shelters which are burnt down at the end of initiation period.

COMPARATIVE ANALYSIS OF SOUTHERN AFRICAN SETTLEMENT PATTERNS 2

Language Group	Nguni
Regional Group	AmaBomvana
General Settlement Form	Circular compound homestead with central byre. Homestead is not fenced on its outside perimeter; byre is fenced.
Axes Governing Settlement Form	Vertical axis governs hierarchy of wives; back/front relationship establishes the position of the parents as against the children.
Direction of Aspect	Looking into the great hut.
Concept of Left/Right	Present
Social Hierarchies	Social hierarchies are based upon the relative status of individual wives and that of parents as against children.
Location of the Father's Abode	Nominally in the great hut at the head of the homestead, this being the dwelling of the first or head wife, but he also visits the other wives in equal turn.
Location of the Wives' Abodes	The first wife is at the head of the homestead, junior wives are distributed alternately on either side of her according to their individual status.
Location of Byre	Central to the homestead, below the great hut.
Byre Entry Point	At lower end of settlement, away from the great hut.
Place of the Men	
Areas of Burial	Just outside the entry to the cattle byre, to its left as one looks into it. (Cook, 1931).
Other Areas of Spiritual Significance	
Divisions Within the Hut	A vertical axis separates the hut into male and female areas.
General Notes	

Language Group	Nguni
Regional Group	AbaThembu
General Settlement Form	Circular compound homestead with central byre. Homestead is not fenced on its outside perimeter; byre is fenced.
Axes Governing Settlement Form	Vertical axis governs hierarchy of wives; back/front relationship establishes the position of the parents as against the children.
Direction of Aspect	Looking out from the great hut.
Concept of Left/Right	The right hand "protects the head". Hence the "great house" is perceived to be ascendant. There is no left hand house.
Social Hierarchies	Social hierarchies are based upon the relative status of individual wives and that of parents as against children.
Location of the Father's Abode	Nominally in the great hut at the head of the homestead, this being the dwelling of the first or head wife, but he also visits the other wives in equal turn.
Location of the Wives' Abodes	The first wife is at the head of the homestead, junior wives are distributed alternately on either side of her according to their individual status.
Location of Byre	Central to the homestead, below the great hut.
Byre Entry Point	Opposite great hut.
Place of the Men	In the cattle byre or in the open space called "inkundla" between the byre and the great hut.
Areas of Burial	In the cattle byre.
Other Areas of Spiritual Significance	The male side of the hut.
Divisions Within the Hut	A vertical axis separates the hut into male and female areas, elders sit to the front nearest to the hut doorway, young sit towards the rear.
General Notes	Initiation lodges built as temporary beehive shelters which are burnt down at the end of initiation period. Cooking done in area before each wife's dwelling.

Language Group	Nguni
Regional Group	AmaHlubi
General Settlement Form	Circular compound homestead with central byre. Homestead is not fenced on its outside perimeter, byre is fenced.
Axes Governing Settlement Form	Vertical axis governs hierarchy of wives; back/front relationship establishes the position of the parents as against the children.
Direction of Aspect	
Concept of Left/Right	Present
Social Hierarchies	Social hierarchies are based upon the relative status of individual wives and that of parents as against children.
Location of the Father's Abode	Normally in the great hut at the head of the homestead, this being the dwelling of the first or great wife, but he also visits the other wives in equal turn.
Location of the Wives' Abodes	The first wife is at the head of the homestead; junior wives are distributed alternately on either side of her according to their individual status.
Location of Byre	Central to the homestead below the great hut.
Byre Entry Point	Opposite great hut.
Place of the Men	
Areas of Burial	In the byre.
Other Areas of Spiritual Significance	
Divisions Within the Hut	
General Notes	

Language Group	Nguni
Regional Group	AmaPondo
General Settlement Form	Circular compound homestead with central byre. Homestead is not fenced on its outside perimeter, byre is fenced.
Axes Governing Settlement Form	Vertical axis governs hierarchy of wives; back/front relationship establishes the position of the parents as against the children.
Direction of Aspect	Looking out from the great hut.
Concept of Left/Right	Present
Social Hierarchies	Social hierarchies are based upon the relative status of individual wives and that of parents as against children.
Location of the Father's Abode	Normally in the great hut at the head of the homestead, this being the dwelling of the first or great wife, but he also visits the other wives in equal turn.
Location of the Wives' Abodes	The first wife is at the head of the homestead; junior wives are distributed alternately on either side of her according to their individual status.
Location of Byre	Central to the homestead below the great hut.
Byre Entry Point	Opposite great hut.
Place of the Men	
Areas of Burial	
Other Areas of Spiritual Significance	
Divisions Within the Hut	A vertical axis separates the hut into male and female areas.
General Notes	

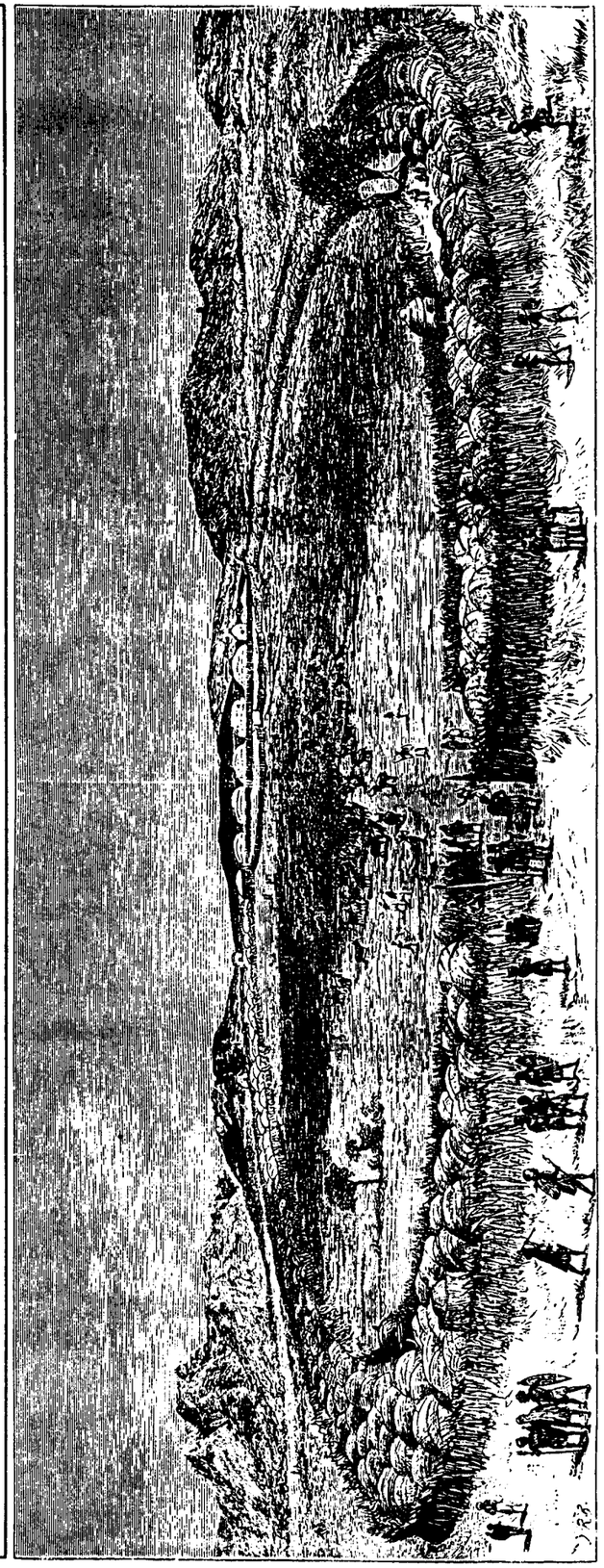
Language Group	Nguni
Regional Group	AmaMfengu
General Settlement Form	Circular compound homestead with central byre. Both the homestead and the byre are fenced on their outside perimeters.
Axes Governing Settlement Form	Vertical axis governs hierarchy of wives; back/front relationship establishes the position of the parents as against the children.
Direction of Aspect	Looking out from the great hut.
Concept of Left/Right	Present
Social Hierarchies	Social hierarchies are based upon the relative status of individual wives and that of parents as against children.
Location of the Father's Abode	Normally in the great hut at the head of the homestead, this being the dwelling of the first or great wife, but he also visits the other wives in equal turn.
Location of the Wives' Abodes	The first wife is at the head of the homestead; junior wives are distributed alternately on either side of her according to their individual status.
Location of Byre	Central to the homestead below the great hut.
Byre Entry Point	Opposite great hut.
Place of the Men	
Areas of Burial	
Other Areas of Spiritual Significance	
Divisions Within the Hut	A vertical axis separates the hut into male and female areas. Elders sit to the front nearest to the hut doorway, young sit towards the rear.
General Notes	

COMPARATIVE ANALYSIS OF SOUTHERN AFRICAN SETTLEMENT PATTERNS

Language Group	Nguni
Regional Group	AmaZulu
General Settlement Form	Circular compound homestead with central byre. Both the homestead and the byre are fenced on their outside perimeters.
Axes Governing Settlement Form	Vertical axis governs hierarchy of wives; back/front relationship establishes the position of the parents as against the children.
Direction of Aspect	Previously recorded both as looking out of and looking into the great hut. Current research confirms only the former i.e. looking out of the great hut.
Concept of Left/Right	The right hand wields the spear and is therefore ascendant.
Social Hierarchies	Social hierarchies are based upon the relative status of individual wives and that of parents as against children.
Location of the Father's Abode	The father can have his own separate dwelling but his abode is normally assumed to reside in the great hut at the head of the homestead, this being the dwelling of the first or great wife. However he is also expected to visit his other wives in equal turn.
Location of the Wives' Abodes	The first wife is at the head of the homestead; junior wives are distributed alternately on either side of her according to their individual status.
Location of Byre	Central to the homestead, below the great hut.
Byre Entry Point	At lower end of the settlement, away from great hut. In pre-Shakan times this was reversed and the entry was opposite the great hut.
Place of the Men	In the "ibandla", located immediately below the cattle byre or just outside the main entrance to the village.
Areas of Burial	The homestead head is buried in front of the great hut, close to the byre fence.
Other Areas of Spiritual Significance	The male side of the hut, as well as the "umsamo", a low shelf located to the rear of the dwelling.
Divisions Within the Hut	A vertical axis separates the hut into male and female areas. Internal seating arrangements locate the oldest men closest to the door, youngest men closest to the "umsamo" and oldest women closest to the "umsamo", youngest women closest to the door.
General Notes	No circumcision practices known since the time of Shaka. Cooking huts located to the rear of each wife's dwelling. The head's mother will often be given residence in the great hut or in a special dwelling alongside it.

AMAZULU ROYAL TOWNS

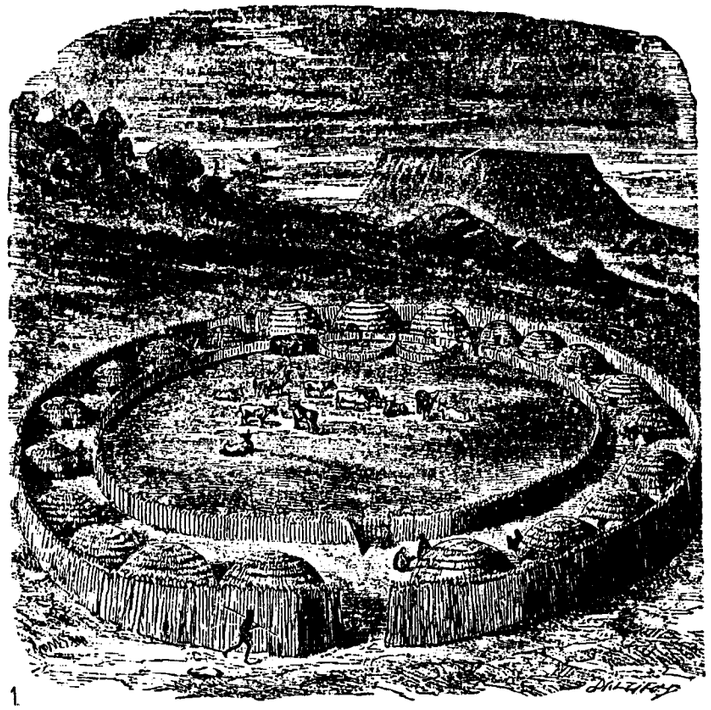
1.



2.

1. BAINES, c.1840. View of Mgungundlovu, the Royal town of Dingane.
2. GRAPHIC, 1879. View of Ondini, Cetshwayo's Royal town at Ulundi.

AMAZULU HOMESTEAD ARCHITECTURE



1

2

1. TYLER, 1891. AmaZulu homestead.
2. SWEDISH MISSION, c 1836. AmaZulu homestead.

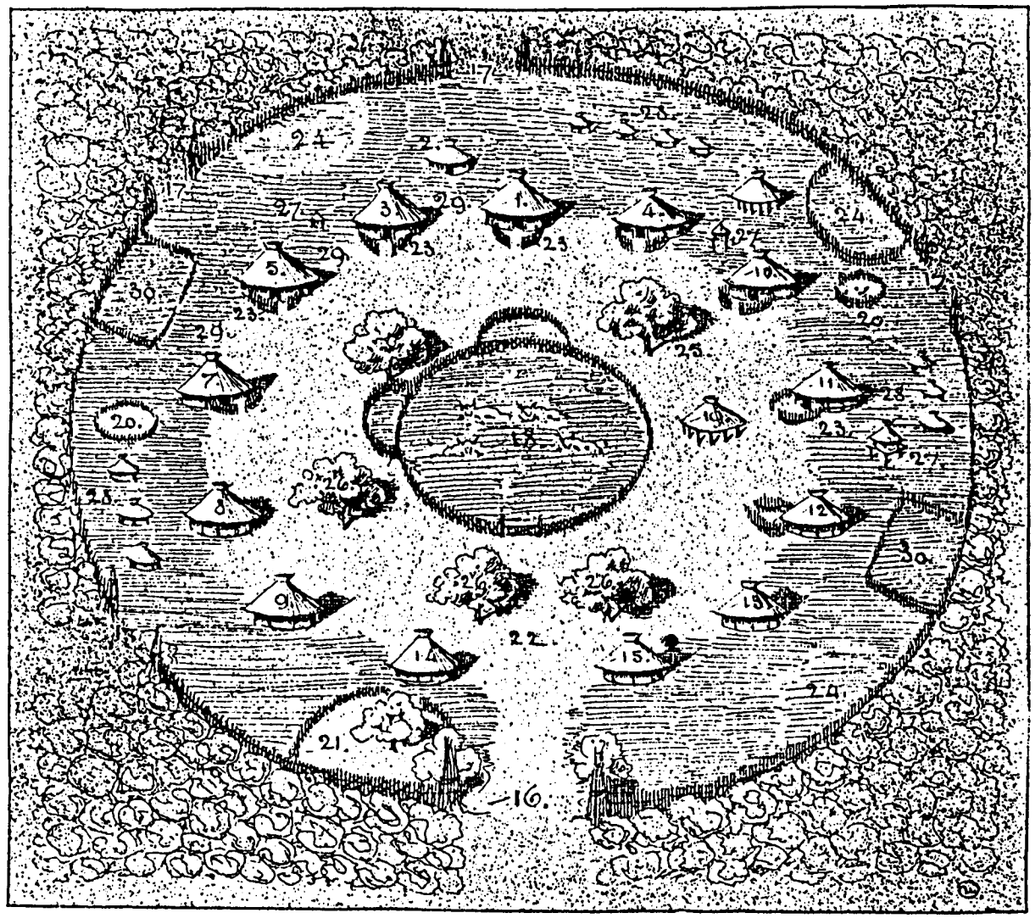
COMPARATIVE ANALYSIS OF SOUTHERN AFRICAN SETTLEMENT PATTERNS

Language Group	Nguni
Regional Group	AmaSwazi
General Settlement Form	Circular compound homestead with central byre. The latter is fenced on its outside perimeter.
Axes Governing Settlement Form	Vertical axis governs the position of the great hut, which is usually occupied by the head's mother, as well as the hierarchy of wives. Back/front relationship establishes the position of the parents as against the children.
Direction of Aspect	Looking out from the great hut.
Concept of Left/Right	Present.
Social Hierarchies	Social hierarchies are based upon the relative status of individual wives.
Location of the Father's Abode	Nominally in the great hut, the dwelling of his mother, from where he conducts his daily business. In reality he resides with each wife in equal turn.
Location of the Wives' Abodes	Wives are distributed alternately on either side of the great hut according to their individual status. When the head's mother dies, then his first wife will be allowed to take up her rightful abode in the great hut.
Location of Byre	Central to the homestead, below the great hut.
Byre Entry Point	At lower end of settlement, away from the great hut.
Place of the Men	In the "libandla", usually to either side of the entrance to the byre.
Areas of Burial	The homestead head and his first wife are buried in the space between the great hut and the byre, usually in proximity to the rear of the byre.
Other Areas of Spiritual Significance	The great hut as a whole is considered to be an important shrine. Also the "umsamo" to the rear of the hut where libations to the ancestors may be made.
Divisions Within the Hut	A vertical axis separates the hut into male and female areas.
General Notes	Cooking huts located to the rear of each wife's dwelling.

COMPARATIVE ANALYSIS OF SOUTHERN AFRICAN SETTLEMENT PATTERNS

Language Group	Nguni
Regional Group	VaTsonga
General Settlement Form	Circular extended homestead with central byre. Both the homestead and byre are fenced on their outside perimeter.
Axes Governing Settlement Form	Vertical axis governs hierarchy of blood brothers and of wives; back/front relationship establishes the position of the parents as against the children.
Direction of Aspect	Looking into the great hut.
Concept of Left/Right	Present
Social Hierarchies	Social hierarchies are based upon the relative status of individual blood brothers, of individual wives and that of parents as against children.
Location of the Father's Abode	The father may have his own separate dwelling, but his abode is normally assumed to reside in the great hut at the head of the homestead, this being the dwelling of the first or great wife. He is also expected to visit the other wives in equal turn.
Location of the Wives' Abodes	First wife is at the head of the homestead, junior wives are distributed alternately on either side of her according to their individual status.
Location of Byre	Central to the homestead, below the great hut.
Byre Entry Point	At lower end of settlement, away from the great hut.
Place of the Men	A small area called the "bandla" is set aside for this purpose alongside the homestead entry point.
Areas of Burial	Behind the hut of the deceased.
Other Areas of Spiritual Significance	
Divisions Within the Hut	A vertical axis separates the hut into male and female areas.
General Notes	Initiation lodge built and subsequently destroyed by fire. Cooking area located to the front of each wife's dwelling.

VATSONGA SETTLEMENT PATTERNS



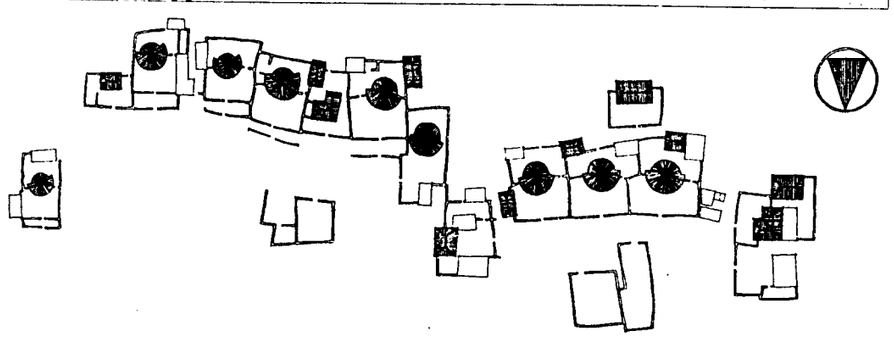
Drawn by J. Wavre.

1. Hut of the headman's first wife. 2. Headman's private hut. 3. Hut of the headman's second wife. 4. of the third one; 5. of the fourth. 7 and 8. Huts of the two wives of the headman's younger brother. 9. Wife of third brother. 10. Wife of fourth brother. 11. Headman's son. 12. Headman's nephew. 13. Hut of a stranger. 14. Lao of the boys. 15. Nhangu of the girls. 16. Great entrance. 17. Back gates. 18. Oxen byre. 19. Goats' byre. 20. Pigs' byre. 21. Square of the men (bandla). 22. Square of the village (hubo). 23. Fire places. 24. Ash-heaps. 25. Tree of the village. 26. Shade-trees of the hubo. 27. Henhouse. 28. Storehouses. 29. Place of jealousy. 30. Tobacco-gardens.

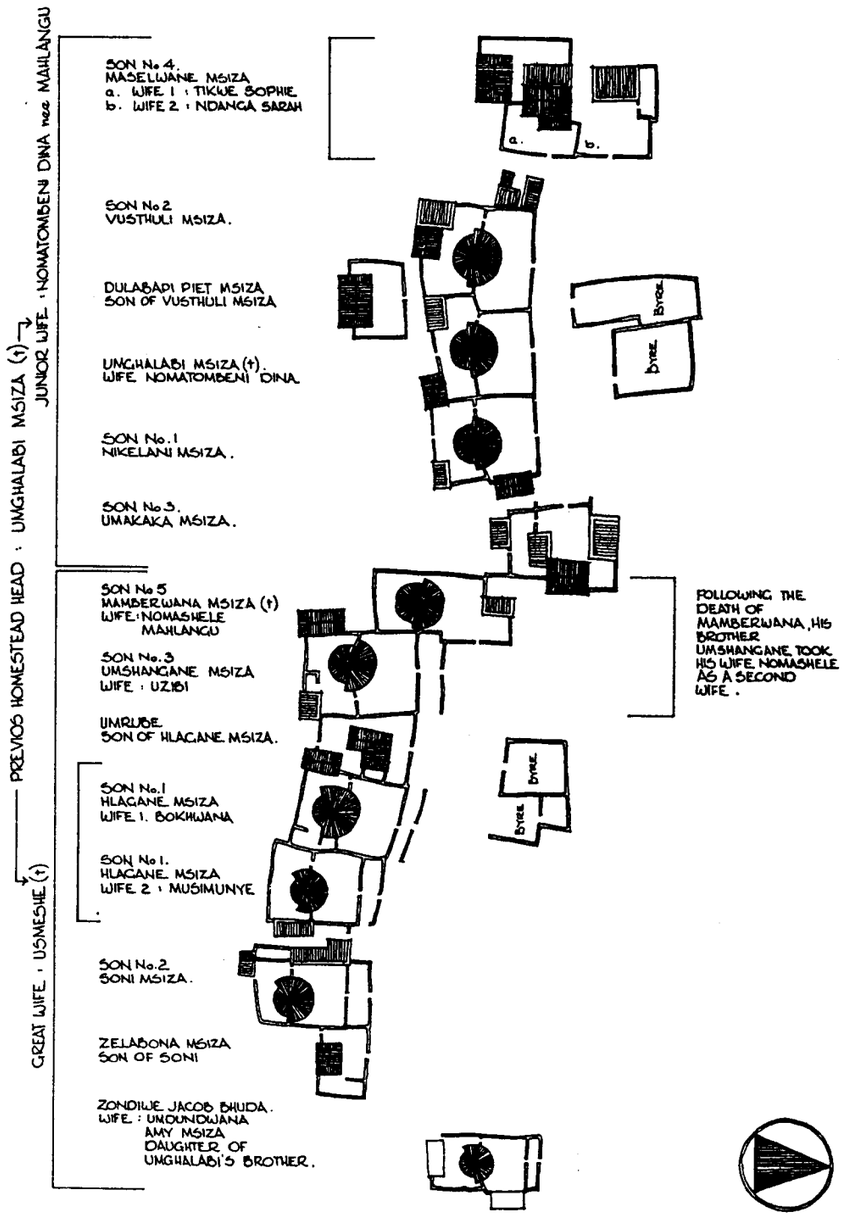
COMPARATIVE ANALYSIS OF SOUTHERN AFRICAN SETTLEMENT PATTERNS

Language Group	Nguni
Regional Group	South AmaNdebele
General Settlement Form	Linear extended homestead following the lines of contour. May have been circular before 1883. Domestic units of individual wives follow a bilobial pattern and are demarcated by means of perimeter walls.
Axes Governing Settlement Form	Vertical axis establishes hierarchical relationships at two different levels : between blood brothers in an extended homestead, and between wives in each brother's compound homestead. Front/back relationship establishes the position of the parents as against the children. It is possible that this is the vestigial trace of an original inner/outer relationship such as that found in baPedi circular settlements.
Direction of Aspect	Looking out of the domestic unit of the first wife.
Concept of Left/Right	The right hand wields the spear and is therefore ascendant.
Social Hierarchies	Social hierarchies are based upon the relative status of individual blood brothers, of individual wives and that of parents as against children.
Location of the Father's Abode	Normally in the domestic unit of the first wife, but he also visits the other wives in equal turn.
Location of the Wives' Abodes	The domestic unit of the first wife is central, junior wives are distributed alternately on either side of her according to their individual status.
Location of Byre	Central to the homestead, below the domestic unit of the first wife.
Byre Entry Point	Facing the domestic unit of the first wife.
Place of the Men	In a special area set to one side of the cattle byre or within it.
Areas of Burial	Formerly in the byre.
Other Areas of Spiritual Significance	The male side of the hut, as well as the "umsamo", a seat located to the rear of the dwelling.
Divisions Within the Hut	A vertical axis separates the hut into male and female areas.
General Notes	Initiation huts built and subsequently destroyed by fire. Cooking area located to the rear of each wife's homestead.

SOUTH AMANDEBELE SETTLEMENT PATTERNS

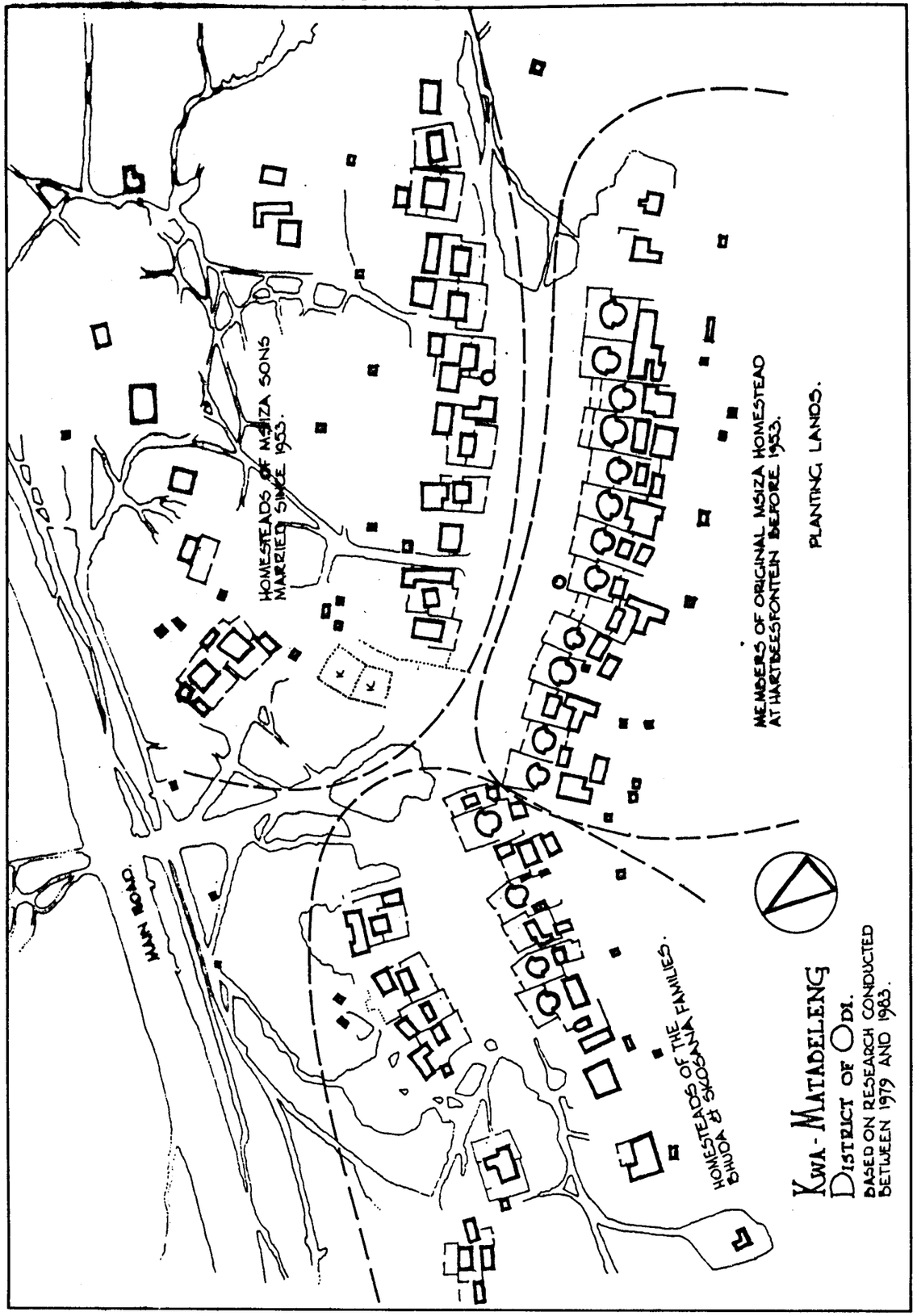


SOUTH AMANDEBELE SETTLEMENT PATTERNS



Kwa Msiza
FARM HARTBEESFONTEIN
AFTER MEIRING c 1953.
HOMESTEAD HEAD :
HLAGANE MSIZA
ALSO KNOWN AS CORNELIUS SPEELMAN.
INFORMANTS : MASELWANE MSIZA.
SALAMINA MSIZA.
KOROI SOPHIE MSIZA.

SOUTH AMANDEBELE SETTLEMENT PATTERNS

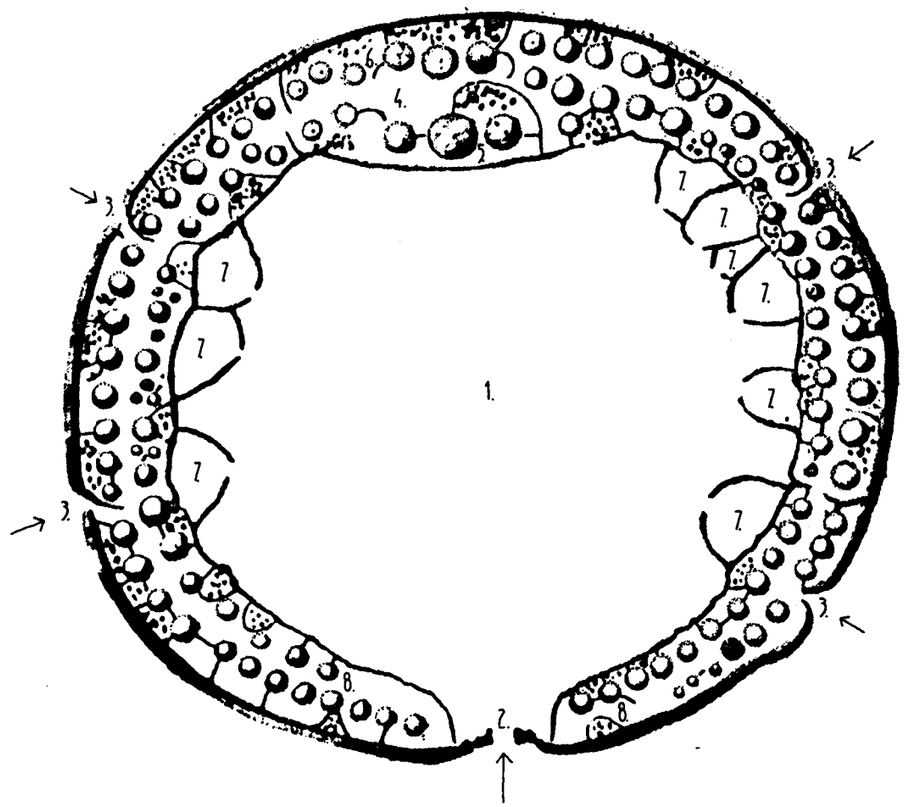


Kwa-Matadeleng
District of Odi.
BASED ON RESEARCH CONDUCTED BETWEEN 1979 AND 1983.

COMPARATIVE ANALYSIS OF SOUTHERN AFRICAN SETTLEMENT PATTERNS

Language Group	Nguni
Regional Group	Matabele
General Settlement Form	Compound homestead, originally circular. The byre is attached to one side of the homestead or set slightly apart from it. Both byre and homestead are fenced about their outside perimeters.
Axes Governing Settlement Form	Vertical axis governs hierarchy of wives; back/front relationship establishes position of the parents as against the children.
Direction of Aspect	Looking out from the great hut.
Concept of Left/Right	Present
Social Hierarchies	Social hierarchies are based upon the relative status of individual wives and that of parents as against children.
Location of the Father's Abode	He has his own dwelling located to the left of the great hut, but normally he will reside with each wife in equal turn.
Location of the Wives' Abodes	The great hut is central; junior wives are distributed alternately on either side of her according to their individual status.
Location of Byre	Central to the homestead, below the great hut.
Byre Entry Point	At lower end of settlement, away from the great hut.
Place of the Men	
Areas of Burial	In the open fields although in former days men of importance would be interred close to their huts.
Other Areas of Spiritual Significance	
Divisions Within the Hut	
General Notes	The cooking hut is located to the rear of each wife's dwelling.

MATABELE SETTLEMENT PATTERNS : ROYAL TOWNS



LEGEND : After Andrew Smith, 1835.

1. Cattle byre and parade ground.
2. Main axial entrance.
3. Secondary entrance points.
4. Royal quarters.
5. Great Hut.
6. Royal wives.
7. Calf and goat enclosures.
8. Small dwellings for children.

COMPARATIVE ANALYSIS OF SOUTHERN AFRICAN SETTLEMENT PATTERNS

Language Group	Sotho/Tswana
Regional Group	BaTswana
General Settlement Form	Circular extended settlement with a central byre. Domestic units of individual wives tend to a bilobial form and are demarcated by means of brush fences or perimeter walls. Byre is central and either fenced or walled. Older settlements have the appearance of a string of beads laid in a loose circular shape.
Axes Governing Settlement Form	Vertical axis establishes hierarchical relationships at two different levels : between blood brothers in an extended homestead, and between wives in each brother's compound homestead.
Direction of Aspect	Looking out from the domestic unit of the first wife.
Concept of Left/Right	Present.
Social Hierarchies	Social hierarchies are based upon the relative status of individual blood brothers, of individual wives and that of parents as against children.
Location of the Father's Abode	Normally in the domestic unit of the first wife within which, in the past, he has also been known to have had his own separate apartment. Other wives are also visited in equal turn.
Location of the Wives' Abodes	The domestic unit of the first wife is central; junior wives are distributed alternately on either side of her according to their individual status.
Location of Byre	Central, below the domestic unit of the first wife.
Byre Entry Point	Facing the domestic unit of the first wife.
Place of the Men	In the central space between the domestic unit of the first wife and the byre.
Areas of Burial	In the byre.
Other Areas of Spiritual Significance	
Divisions Within the Hut	A vertical axis separates the hut into male and female areas.
General Notes	Cooking area or hut located to the rear of each wife's homestead.

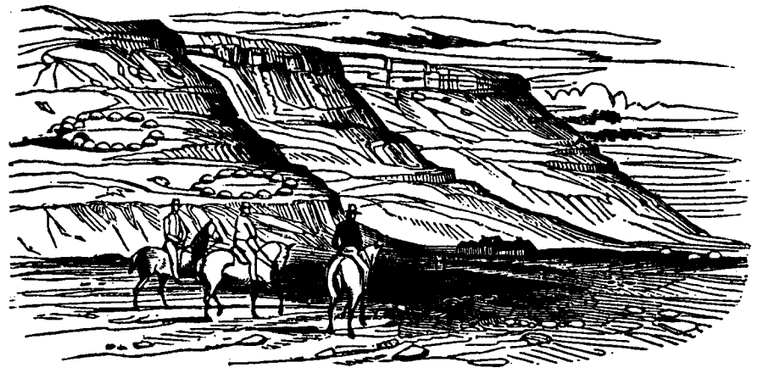
BATSWANA SETTLEMENT PATTERNS

BUFFELSHOEK 471 IQ

COMPARATIVE ANALYSIS OF SOUTHERN AFRICAN SETTLEMENT PATTERNS

Language Group	Sotho/Tswana
Regional Group	BaSotho
General Settlement Form	Originally the homestead was extended and circular with a central byre. Today a linear form, following the lines of contour, prevails. Byre is fenced or walled in.
Axes Governing Settlement Form	Vertical axis governs hierarchy of wives.
Direction of Aspect	Looking out from dwelling of first wife.
Concept of Left/Right	Present.
Social Hierarchies	Social hierarchy based upon the relative status of individual wives and that of parents as against children.
Location of the Father's Abode	He may sometimes have a separate dwelling in his own right but his official residence is in the abode of the first wife. The other wives are visited in equal turn.
Location of the Wives' Abodes	The dwelling of the first wife is central; junior wives are distributed alternately on either side of her according to their individual status.
Location of Byre	Originally central to the homestead below the dwelling of the first wife.
Byre Entry Point	At right angles to the main axis of the homestead, usually facing towards the men's gathering place.
Place of the Men	Symbolically in the byre, but in reality in a space to one side of it.
Areas of Burial	Beneath the byre wall close to the entry point.
Other Areas of Spiritual Significance	
Divisions Within the Hut	A vertical axis separates the hut into male and female areas.
General Notes	Initiation hut built and subsequently destroyed by fire. Cooking hut located to the rear of each wife's dwelling.

BASOTHO SETTLEMENT PATTERNS



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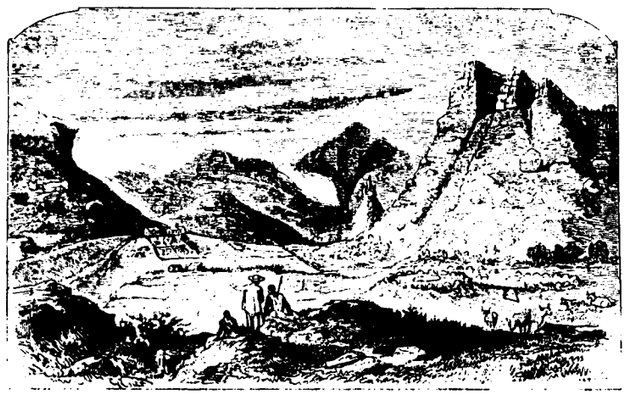

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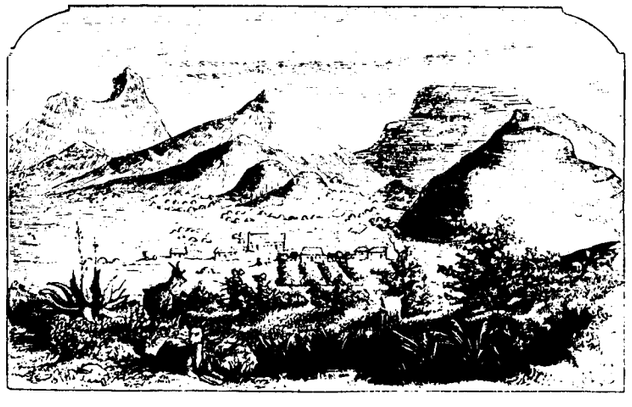
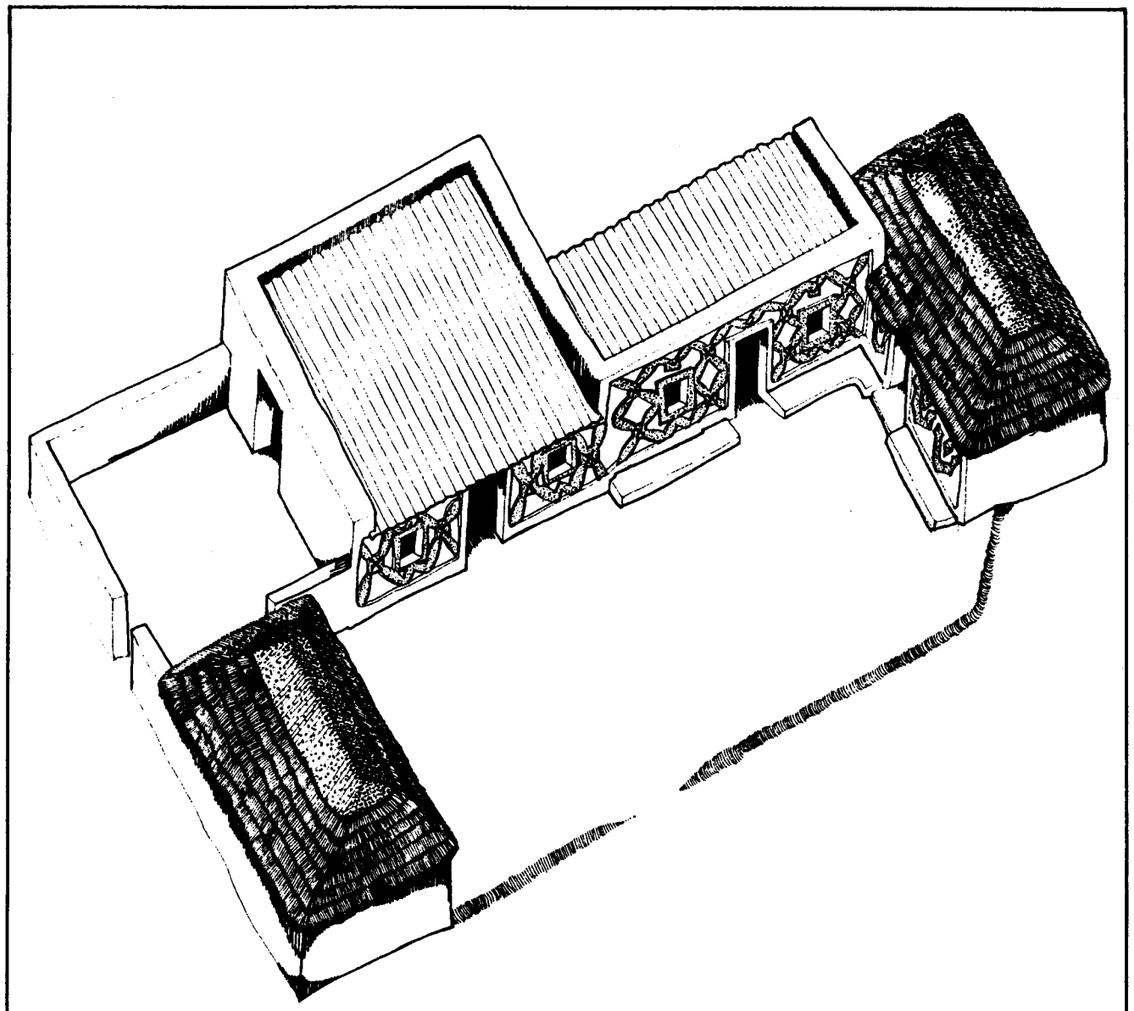


3.

1. BACKHOUSE, 1839. Morija M.S.
2. CASALIS, c 1861. Thaba Bossin, Moshweshwe's capital.
3. CASALIS, c 1861. Bethulie M.S.

BASOTHO SETTLEMENT PATTERNS



DRAWING BY EVAN DAVIES AFTER MEASURED DRAWINGS BY 1st YEAR ARCHITECTURAL STUDENTS, WITS UNIVERSITY, 1978.

COMPARATIVE ANALYSIS OF SOUTHERN AFRICAN SETTLEMENT PATTERNS

Language Group	Sotho/Tswana
Regional Group	BaPedi
General Settlement Form	Originally the homestead was circular and extended but more recently has tended to conform to a linear form following the lines of contour. Domestic units of individual wives tend to be bilobial and are demarcated by means of perimeter walls. Older settlements have the appearance of an open fan with a common space, including the byre, in the centre.
Axes Governing Settlement Form	Vertical axis establishes hierarchical relationships at two different levels : between blood brothers in an extended homestead, and between wives in each brother's compound homestead. Inner/outer relationship establishes the position of the parents as against the children but in more recent linear settlements this has taken a front/back interpretation.
Direction of Aspect	Looking into the domestic unit of the first wife.
Concept of Left/Right	Present
Social Hierarchies	Social hierarchies are based upon the relative status of individual blood brothers, of individual wives and that of parents as against children.
Location of the Father's Abode	Normally in the domestic unit of the first wife but he also visits the other wives in equal turn. In more recent times he has begun to build a separate dwelling unit within the domestic unit of the first wife.
Location of the Wives' Abodes	The domestic unit of the first wife is central; junior wives are distributed alternately on either side of her according to their individual status.
Location of Byre	Central to the homestead below the domestic unit of the first wife.
Byre Entry Point	At the lower end of the settlement, away from the domestic unit of the first wife.
Place of the Men	In the central common or "khoro", below the byre space.
Areas of Burial	In the upper part of the byre, closest to the domestic unit of the first wife.
Other Areas of Spiritual Significance	
Divisions Within the Hut	A vertical axis separates the hut into male and female areas.
General Notes	Initiation lodge built and subsequently destroyed by fire. Cooking area or hut located to the rear of each wife's homestead.

BAPEDI SETTLEMENT PATTERNS : RADIAL FORM

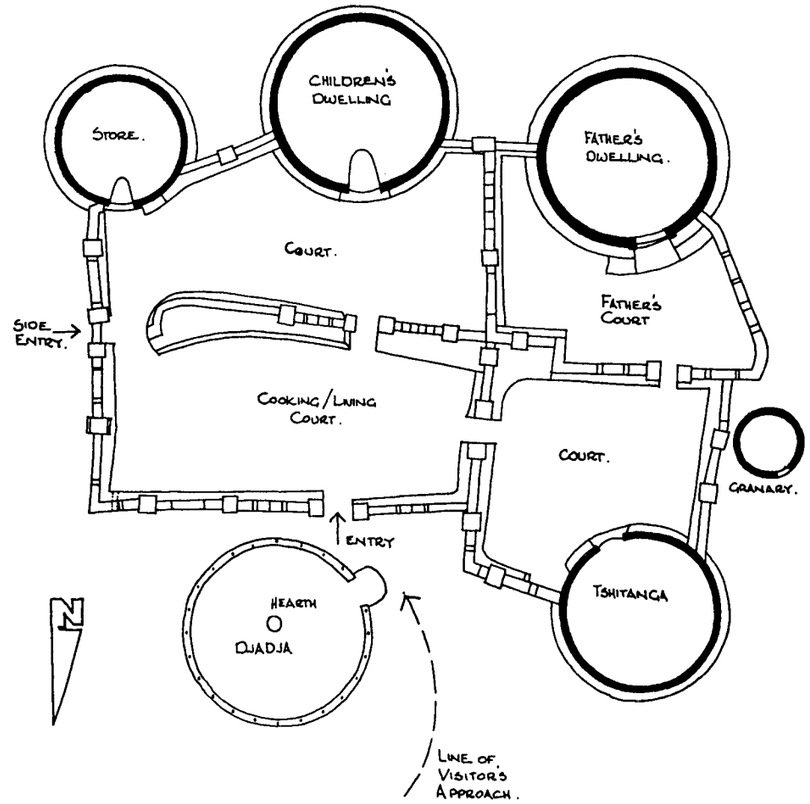
BAPEDI SETTLEMENT PATTERNS : CLUSTER FORM

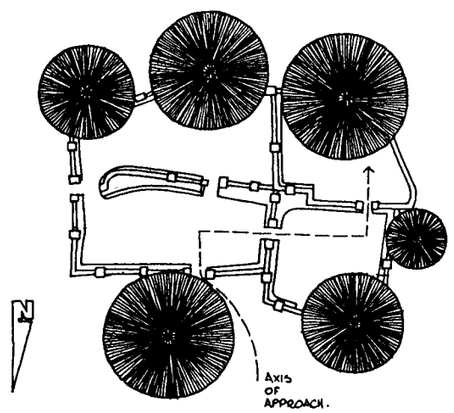
The cluster settlements of the baPedi of the central Transvaal resemble in many ways those of the baTswana of central Botswana. However they manage to retain the essential radial form so distinctive of baPedi extended homestead structure.

COMPARATIVE ANALYSIS OF SOUTHERN AFRICAN SETTLEMENT PATTERNS

Language Group	Tshivenda
Regional Group	VhaVenda
General Settlement Form	No clear form discernible. Settlement tends to follow the lines of contour although its structuring is pyramidal in nature. Homestead is usually compound but extended examples have also been recorded.
Axes Governing Settlement Form	Nil. Axis follows any number of deliberate lateral dislocations or zig-zags which force the visitor to move sideways repeatedly.
Direction of Aspect	None perceived.
Concept of Left/Right	None perceived.
Social Hierarchies	Social hierarchies are based upon the relative status perceived to exist between husband and wife or wives, father and sons, chief and people.
Location of the Father's Abode	The husband has his own separate dwelling behind and uphill from those of his wife (or wives) and children : each wife will visit him in her own turn and remain with him until such a time as she has fallen pregnant.
Location of the Wives' Abodes	The wives' domestic units are located in front and downhill from that of the husband. Only the status of the first wife is recognised by virtue of the fact that the approach path leads to her door. The location of the domestic units of junior wives is subject to factors of convenience and personal preference.
Location of Byre	Removed to the side of the homestead and located according to factors of convenience.
Byre Entry Point	No set pattern. Does not appear to be relevant.
Place of the Men	A special area set aside for social events, dances, judicial proceedings and political discussion is located outside the homestead.
Areas of Burial	To the rear of settlement besides or near the residence of the father.
Other Areas of Spiritual Significance	River stones or certain types of plants are sometimes incorporated into the courtyard floor and act as places where libations can be made. The father's hut is also held to be sacred.
Divisions Within the Hut	None perceived.
General Notes	Initiation lodge located permanently outside main approach to chief's homestead. Initiation is a custom derived from their Sotho/Tswana neighbours. Cooking huts are located to the front of the domestic unit directly alongside the entry point.

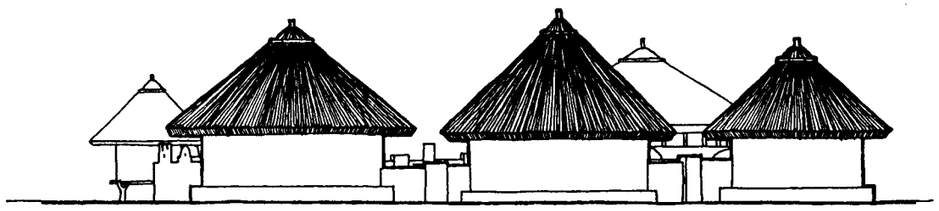
VHAVENDA SETTLEMENT PATTERNS





HOMESTEAD MUSINYALI, SAMBANDOU, VENDA.

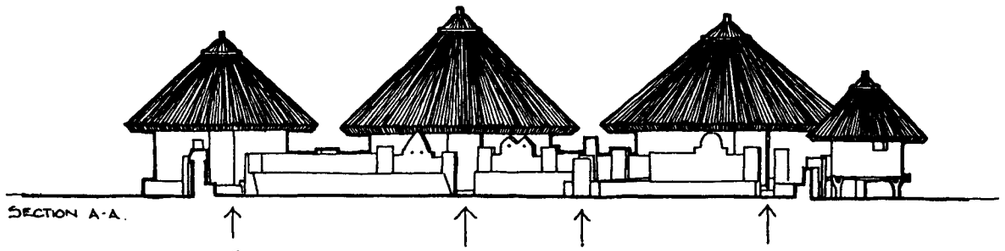
VHAVENDA SETTLEMENT PATTERNS



SOUTH ELEVATION : REAR.

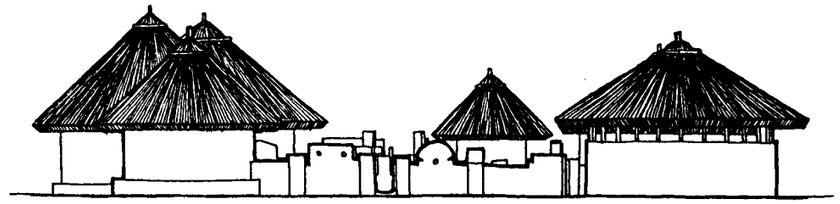
NORTH ELEVATION : APPROACH.

POINT OF PRIMARY ACCESS.



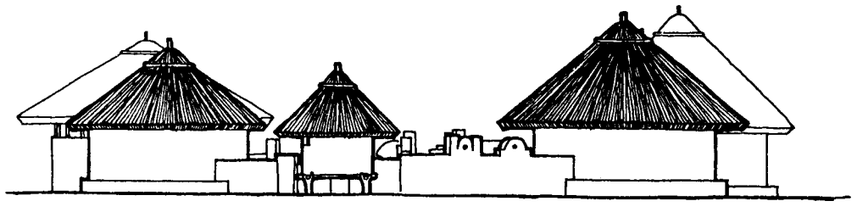
SECTION A-A.

POINTS OF TRANSIT BETWEEN INTERNAL COURTS.



EAST ELEVATION : SECONDARY APPROACH.

POINT OF ACCESS.



WEST ELEVATION.

HOMESTEAD MUSINYALI, SAMBANDOU, VENDA. JULY 1982.

COMPARATIVE ANALYSIS OF SOUTHERN AFRICAN SETTLEMENT PATTERNS

Language Group	ChiShona
Regional Group	MaShona
General Settlement Form	No clear form discernible. Settlement tends to follow the dictates of site contour. Homestead can be either compound or extended.
Axes Governing Settlement Form	Nil.
Direction of Aspect	None known.
Concept of Left/Right	None known.
Social Hierarchies	Social hierarchies based upon the relative status perceived to exist between husband and wife or wives.
Location of the Father's Abode	Father has his own separate dwelling.
Location of the Wives' Abodes	There is no ranking of wives.
Location of Byre	
Byre Entry Point	
Place of the Men	
Areas of Burial	Varies. In some instances chiefs have been known to have been buried within the confines of their own huts.
Other Areas of Spiritual Significance	
Divisions Within the Hut	None known.
General Notes	

Language Group	Khoisan
Regional Group	San (Hei-//Om)
General Settlement Form	Temporary in nature, apparently circular (Burchell, 1811), although Schapera (1930) subsequently stated that they had no fixed form. Homesteads could be compound or extended.
Axes Governing Settlement Form	Axis established along a line from east to west, representing the apposition in status between the homestead head and his married daughters.
Direction of Aspect	Not known, possibly from each dwelling looking into the settlement centre.
Concept of Left/Right	Not known.
Social Hierarchies	Social hierarchies are based upon avoidance taboos between male and female, brothers and sisters.
Location of the Father's Abode	On the eastern point of the east-west axis.
Location of the Wives' Abodes	With the husband. No particular ordering apparent.
Location of Byre	Not applicable.
Byre Entry Point	Not applicable.
Place of the Men	In the central area beneath the !heis tree.
Areas of Burial	Removed from homestead.
Other Areas of Spiritual Significance	Not known.
Divisions Within the Hut	Not known.
General Notes	

Language Group	KhoiSan
Regional Group	Khoikhoi
General Settlement Form	Circular extended homestead, outside perimeter established by a line of huts in close order. Settlements were temporary and no fences are thought to have been used. Kolbe (1727) recorded them as having one single entry point but Schapera (1930) stated that two were used.
Axes Governing Settlement Form	Twin points of entry established a north-south axis; the location of the homestead head on the western perimeter established an east-west axis.
Direction of Aspect	From each dwelling looking into the settlement centre.
Concept of Left/Right	Not recorded but may have existed.
Social Hierarchies	Social hierarchies are based upon the relative status of clan membership, clan seniority and kin seniority.
Location of the Father's Abode	In the dwelling of the first wife, located on western point of east-west cross-axis. Polygamy is not believed to have been commonplace.
Location of the Wives' Abodes	Not recorded.
Location of Byre	No formal byre space. Cattle could either be herded into the central common or be hobbled along the external perimeter.
Byre Entry Point	North and south, when the central space was being used as such.
Place of the Men	In the open field outside the homestead perimeter. (Kolbe, 1727).
Areas of Burial	Kolbe (1727) stated this to be removed from the homestead but Campbell (1815) claimed that it took place inside the cattle area.
Other Areas of Spiritual Significance	Not known.
Divisions Within the Hut	Hut divided into male and female areas. (Kolbe, 1727).
General Notes	Initiation huts known to have been used, possibly inside a regular hut, thus creating a hut within a hut.

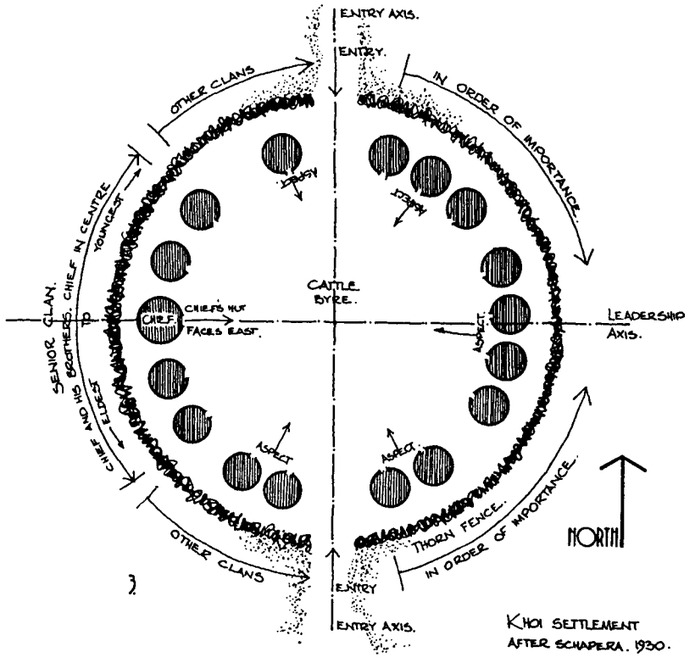
KHOIKHOI SETTLEMENT PATTERNS

1. HOE DE HOTTENTOTTEN HAAR HUYSEN BOUWEN.

2. MANIER VAN BEGRAVEN ONDER DE HOTTENTOTTEN.

1. KOLBE, 1727. Khoi village and dwelling construction.
2. KOLBE, 1727. Khoi burial, village in background.

The Schapera model of a typical Khoi village is not in agreement with Kolbe's illustrations made two centuries earlier. The latter shows Khoi settlements to have but a single entrance and a structure of unspecified function located in the centre of the cattle area.



3. KHOI SETTLEMENT AFTER SCHAPERA. 1930.

CHAPTER 19 : TOWARDS A LANGUAGE OF RURAL SETTLEMENT

> "The town had been built without the least attempt at regularity of arrangement; and the houses were placed with as little appearance of order or of any particular plan, as the trees of the grove which stood there before them."
>
> BURCHELL, William J. (describing the baTswana town of "Lettakoo" or Dithakong in July 1812). "Travels in the Interior of Southern Africa". Second Edition, Ed. I. Schapera, London : Batchworth Press, 1953.

One criticism which has been levelled against architectural historians from time to time by linguistic purists has been the former's appropriation of the term "vernacular", a word generally linked with language, but more recently also applied to a certain genre of domestic and pre-industrial buildings. Such critics tend to ignore that the concept of a "language of architecture" is long-established (1), and that, indeed, some close parallels may be drawn between these two disciplines. For example, both are possessed of a basic vocabulary of expression; both are subject to certain rules of grammar; both may be considered to be systems of symbols and codifications; and both may be classified as having "high" and "vernacular" branches.

The similarities do not cease there. Language, or more generally "communication", is widely accepted by social scientists as an important socialising factor in the induction of new members into a community.(2) Other value systems, either silent, unspoken or unconscious, also exist as part of the socialising process : role playing for example or some social taboos such as incest. In the case of architecture it may be found that society attaches certain values to the form of its dwellings, to their textures, details and colours, and to the organisation of its living spaces, and that these tend to vary as one moves from region to region.(3) Although relatively little work appears to have been conducted in this regard by the social disciplines, there would seem to be some justification for the claim that architecture provides an unspoken and generally unconscious language for the classification of man's built environment. If this assumption is correct, then the sense of disorientation experienced by many new visitors to a country could be attributable as much to their different perception of the local habitat as to their unfamiliarity with indigenous languages and social behaviour patterns.

Were we to extend this analogy between architecture and linguistics a little further then it would be possible to point out that both disciplines are the result of historical and evolutionary processes which, with time, have created new forms of expression and have made certain older forms redundant and archaic. In the case of architecture, therefore, it is conceivable that the idioms of spatial expression of previous generations have undergone over the years a series of evolutionary changes, the values and styles of each being inevitably linked to those of previous societies and eras. The idioms of nineteenth century architecture, for example, are not so far removed from those of the present day that, were modern man to be placed within the ruined shell of a Victorian villa, he would not be able to assign values to the spaces with a reasonable degree of accuracy.

On the other hand, the specialised knowledge of a historian or archaeologist might be required to decipher the spatial distributions of an Aegean megaron or a Roman courtyard house.

In a similar way it could be stated that the various rural groups of southern

Africa have also developed their own value systems of spatial organisation which have proved to be equally susceptible to evolution and change. VhaVenda fortified villages, for example, were last used some six or seven generations ago and are believed to have been largely the product of the conflicts which beset the region during the early nineteenth century. Current vhaVenda settlement on the other hand has been moulded by different social, economic and environmental pressures from those of the past - yet a modern vhaVenda will often be able to read the barest signs of settlement by his ancestors and give them spatial significance. As in the case of the Victorian villa, the idioms of the nineteenth century vhaVenda homestead are not so far removed from those used currently as to require specialised historical knowledge for their interpretation.

As a corollary to this discussion it could also be added that the usage of an architectural idiom within the context of any given society or socio-economic ambient will also involve the question of 'expectation'.

Architecture acts as a mirror to social customs and economic activity and the relationships existing within any dwelling between the various spatial elements will serve to identify the resident's cultural background as surely as any linguistic idiosyncrasies they may display. Man has certain definite expectations, not only in regard to the progression of spaces within a dwelling but also as to their size and functions. Thus urbanised western society may be seen to lay particular stress upon the separation of living and service areas and, in the process, to give rise to the middle class cult of the salotto, salon or lounge, depending on whether one is in Italy, France or England. On the other hand a more popular or rural culture in these same countries will lay a much greater stress upon the kitchen as a multi-purpose living space supplemented by a not-always-separate sleeping arrangement. In the former case, therefore, it is expected that the lounge will be the largest room in the house; in the latter, the kitchen.

Similarly in southern Africa's rural societies there may be found certain expectations of space based upon function and hierarchy where a divergence from the norm will immediately identify the family as outsiders or perhaps stress some form of anti-social behaviour. This has been most aptly illustrated by the recorded cases of some amaZulu diviners who, in an effort to disorientate visitors and increase the mystique surrounding their own persons and their trade, have wilfully inverted their patterns of settlement from those of their immediate society.(4) Another good case in point is that of the rural bachelor, discussed during the course of an earlier chapter. Among the baPedi of the northern Transvaal,for example, a visitor to a homestead will usually expect to be confronted by a number of dwelling units surrounded by a series of low walls which define areas of privacy and outdoor activity. Such walls are built by the woman of the house after the birth of her first child. A dwelling unit standing alone and without courtyard walls will therefore usually signify that the couple living inside is probably newly married and they have either not begun their family as yet or the new mother has not yet had the opportunity of building her own courtyard walls. The discovery that such a unit is the home of a single man destroys such an expectation. Although this in itself is not necessarily perceived to be a serious act of anti-social behaviour, it may be seen how the refusal of isolated individuals to conform to the rural norm of marriage and procreation can threaten the fabric of rural life at numerous and different levels.

Similarly, a visitor approaching a rural domestic unit or a homestead will pften be informed about the residents within before a single word has been exchanged. Provided he knows the architectural language involved, he will be able to determine

their regional background, how many wives are part of the extended family, the status of each within the family hierarchy, whether their husband is still living, the wealth and status of the family, the location of kitchen, living and sleeping areas, and the method of approach the visitor should follow. In some regions of southern Africa it should also be possible to ascertain whether the husband is chief or commoner, the location of his mother's dwelling and the spaces reserved for cooking, for entertainment, for work, for meeting, for judgement and for mediation.

The sophistication of the idioms and spatial values found in southern African rural architecture is further stressed by the high degree of specialisation found in the outside spaces of settlements which are not always clearly defined in architectural terms. This is demonstrated by a number of factors : firstly there exists a high degree of interchangeability between inside and outside space with season, weather and individual preference acting as the major determinant factors (5); secondly outside spaces tend to be defined by a highly developed set of visual signals and territorial statements such as low walls, kerbs, shelving, and even decorative textures; and finally the question of the privacy of the family is established and regulated by etiquette and custom. A visitor outside a low wall will often not be recognised until he presents himself at the formalised threshold. Similarly a passerby, in some southern African regions, will pointedly ignore the household activities within a homestead unless specifically first spoken to. Most Nguni and Sotho/Tswana groups have also established a separation of internal spaces which differentiates between male and female, young and old, visitor and visited and in some cases, chief and commoner.

Current research appears to provide sufficient evidence to indicate that the building idioms and spatial values of the southern African rural builder play a far greater part in the common culture of the people themselves than has been the case in post-industrialization European society. It is proposed subsequently to take a comparative look at the spatial values and major systems of hierarchical determination which have evolved in rural southern African society as recorded during the course of current field work and archival research.

FORMULATING A BASIC GRAMMAR OF SETTLEMENT

There would appear to exist a number of major themes which run like threads through the fabric of southern Africa's rural settlements. These involve the relationships between the various individual elements of settlement and between them and the settlement as a whole. Rural society appears to be highly ordered in this respect and many interpersonal relationships which are internalised in the traditions and culture of a people are often mirrored in the organisation of their habitat to the extent that an individual's status within his society or peer group will predetermine his location within the overall settlement structure.

In general terms it may be said that the interpretation of space in southern African settlement is subject to three major considerations `

a. Approach and orientation of aspect.
b. Location and orientation of the cattle byre.
c. Differentiations of hierarchy.

Current personal research would also appear to indicate the presence of yet a fourth consideration based upon burial custom, religious practices and cosmological beliefs. It is regrettable that field data obtained in this respect is not complete but early results appear to be borne out by independent researchers

in other disciplines.(6)

Although it is possible to interpret settlement in the region in terms of each of the above individually, in such form these tend to be but part explanations which usually fail to deal satisfactorily with the many inconsistencies which inevitably arise in any attempt to formulate a model which will serve the region as a whole. The tendency in recent times therefore has been to apply all three criteria simultaneously (7) which does tend to give a more complete overall interpretation but which, however, can also give rise to such numbers of permutations as to make comparative study an almost impossible task.

For want of a better model therefore and for the purposes of this chapter, it is proposed to adopt a composite approach to the problem by accepting considerations of a hierarchical nature to be the major generators of settlement form whilst allowing the other two to play a substantial supportive role in our interpretation of traditional space.

SOCIAL HIERARCHIES AS GENERATORS OF SETTLEMENT FORM

Although theoretically it would be possible to claim that each different cultural or even tribal group in southern Africa is possessed of a settlement form which is uniquely its own, in reality it will be seen that generally only two themes predominate : those involving the relationship between "left" and "right" in the first instance and, in the second, the relationship between "front" and "back". Traditionally a third theme, that involving the relationship between "centre" and "perimeter" can also be said to exist in some larger Sotho/Tswana settlements. However groupings of such size are seldom found today and although such a theme is not strictly relevant to the main thrust of this argument, it will be dealt with briefly at a later stage.

a. The Concept of "Left" and "Right"

The concept of "left" and "right" has been recorded as existing in both Sotho/Tswana (8) and Nguni (9) societies and is based upon the hierarchical relationship perceived to exist between the "Head" and subsequent wives of a polygamous marriage. The interpretation of which hand is assumed to be ascendant varies from group to group and is the subject of numerous historical anecdotes or myths. Generally speaking it may be said that those groups who hold "right" to be superior to "left" explain this by means of a metaphor which reflects an old rural belief that a warrior wields his spear with his right hand and his shield with his left. The right is therefore assumed to have an ascendance over the left being "active" and "aggressive" whilst the left is "passive" and "defensive".(10) On the other hand where the converse is held to be true and "left" is held to be ascendant over "right", this is explained by a person placing his right hand over his head and stating that the right hand serves or protects the "head". In such cases it was also found that the wives were not placed in "Right Hand" and "Left Hand Houses" but were either in the "First House" or the "Right Hand House" and at no time was the right hand described as being inferior to the left.

This social hierarchy finds reflection in the form of the settlement in that the "First" or "Head" wife will be located at the head of the settlement, in a central position and on axis with the entry to the homestead. Second and subsequent wives are then located alternately on either side of the first wife in descending order of importance. Such settlements are normally circular and axial in nature which not only emphasises the importance of the first wife, but also stresses the fact that her dwelling, the Great Hut, is also the formal abode of her husband, the head of the homestead. The other wives will each have their own dwelling as well as, in some cases, their own separate cooking facilities or even their own separate households. In such instances conjugal rights are meant to be enjoyed in strict rotation (11) with the husband visiting each wife in turn. Strictly speaking therefore, in such a society, the husband does not have a dwelling in his own right, and although his home is held to reside in that of the first wife, in reality even that belongs to and is the responsibility of the woman concerned. This becomes an important factor in our later comparison with those settlements where hierarchy is expressed in terms of "front" and "back".

Although considerations of "left" and "right" are basic to both Sotho/Tswana and Nguni settlement the form of the settlement itself can however vary greatly while still permitting individual elements to find their culturally predetermined positions within the whole.

The Sotho/Tswana of the northern Cape and the western and the northern Transvaal are known to have built their settlement in the shape of an open fan with a large space, the "khotla", being located at the central focal point. The first wife of the senior man was sited at the head of the homestead on the central axis of the settlement directly opposite the main entry to the central space, with subsequent junior wives being located alternately to her left and her right. The homesteads of his brothers or other members of his retinue would then also be located alternately to the left and right of his abode according to their descending order of status in relation to him. They, in their turn, would also follow a left-right hierarchy in the distribution of their wives within their own individual residences.

Today, although it has been found that the circular fan pattern has fallen largely into disuse and individual homesteads tend to follow a linear form along the lines of land contour, the same considerations of left and right have prevailed and are still being maintained by succeeding generations.

Similar settlement patterns have also been recorded among the South amaNdebele of the Transvaal where the direct influence of their Sotho/Tswana neighbours is clearly evident. In their case it was found that, despite their persistent language links to their Nguni background, their patterns of settlement have been heavily influenced by their Transvaal neighbours. BaSotho-like fan shaped settlements have been recorded amongst them up to recent times (12), but few of these survive and they should be regarded as being unique. Like their Sotho neighbours, the South amaNdebele today appear to build mostly linear settlements which follow the lines of land contour but, also like them, they have retained their left-right preoccupation with hierarchy.

An interesting elaboration of the South amaNdebele distribution of "left" and "right" was recorded in the 1950s by Meiring at the Msiza homestead on the farm Hartbeesfontein north of Pretoria, a site more popularly known in its time as "Speelman's Kraal".(13) Here it was not only the two wives of the homestead that assumed the traditional settlement relationships vis-à-vis each other but, later on, once their individual sons grew to adulthood and married, they too took up positions in close proximity to their mothers' domestic unit and in doing so established hierarchical positions among themselves based upon the traditional left-right relationship. Current research among other South amaNdebele homesteads (14) has shown that whilst such a practice

is still being largely observed, the economics of land management and the requirements of space are today beginning to manifest themselves in settlement patterns which, although planned out along traditional lines, are beginning to make small but significant departures from the layouts of their parent homesteads.

Thus subsequent research among the self-same Msiza group, nearly 30 years later, showed that once they were relocated to their new home at KwaMatabeleng, the initial settlement still followed the old left-right distribution, but when male children began to settle down with families of their own, the traditional pattern was disrupted by the location of the planting lands and the need to keep these intact from human settlement.

The concern with "left" and "right" was also found to exist in current Nguni society, where, however, it has survived to the present day to a much lesser degree. In the Transkei, for example, the combined onslaught of Christian missionaries and economic change appears to have done its work well and today few polygamous settlements survive. Where extended polygamous families do occur, the second wife usually has her domestic unit built separately and at a distance from the first. Also such settlements today follow a linear pattern along the contour line although historically they used to be both circular and axial in form.

Among the Natal Nguni however the traditional circular settlement pattern may still be found to a large extent, even in the case of some small homesteads where a basic circular form was retained. Variations on this theme have also been recorded among the Nguni by other researchers, most notably where differences are based largely on the definition of what is "left" and what is "right" and are dependent upon whether the viewer is looking into or out of the settlement.

It should also be mentioned very briefly that, in the course of current research, the concept of "left" and "right" was found to exist in the context of the individual dwelling unit where a differentiation was made between the man's and the woman's side of the internal habitat. The rules governing such a distribution were however found to be variable from group to group, and in fact did not necessarily coincide with each group's application of "left" and "right" hierarchies in the larger context of the settlement. The notable exception to this rule was found to be the vhaVenda amongst whom no such distinction was made within the individual dwelling unit or, for that matter, in the homestead.

b. <u>The Concept of "Front" and "Back"</u>

While it is generally true that the concept of "left" and "right" as a determinant of hierarchy within a settlement was found to be fairly consistent in its application among southern Africa's indigenous groups, the same cannot be claimed of the concept of "front" and "back". Although an awareness of the latter was perceived to exist in the settlements of Nguni, Sotho/Tswana and vhaVenda alike, their individual interpretations differed so radically as to make it impossible to establish any generalised rules of application.

In the case of the Nguni, both northern and southern groups practise a social structure which inhibits marriage within their immediate kinship circle. Unlike the Sotho/Tswana where the preferred marriage for a man is to a first cousin on the mother's brother's side, the Nguni generally marry outside

their community. Thus we find that the traditional Nguni settlement has a built-in schism line between the older generation (at the back) who will continue their residence in the parent homestead and the young (in the front) who will eventually hive off and start separate homesteads in their own right elsewhere.

The Sotho/Tswana on the other hand, are possessed of a settlement pattern which can best be described as "fan-shaped".(15) In their case a hierarchical differentiation may be said to exist between those homesteads which are closest to the central common i.e. the residence of the parents and those homesteads located on the external perimeter i.e. the residence of the children. Although strictly speaking such a differentiation can best be described as one existing between the "centre" and the "perimeter" this is only valid for as long as the settlement form remains circular. Once the settlement breaks up into individual homesteads which tend to follow a linear pattern along the contour lines, a trend in Sotho/Tswana settlement which has accelerated in more recent times, then it will be seen that the traditional centre-perimeter apposition will become translated into one based upon the concept of front and back. In the context of the individual traditional Sotho/Tswana domestic unit, the apposition has always been one between "front" and "back" where the dwelling of the parents is located in the fore court or lobe of the homestead whilst the areas of privacy, of cooking and of children's residence have been located to the rear. This is a pattern of settlement which is better known to archaeologists as "bilobial".

In both Nguni and Sotho/Tswana cases however, it may be successfully argued that what front-back appositions do arise are in reality no more than form variants resulting from the circularity of the larger settlement. In both cases also, front-back appositions only arise between parents and siblings and in no example was this found to be the case between husband and wife or wives.

The instance of the vhaVenda can be said to be unique in the context of southern African settlement for whilst all other groups use a system of hierarchical differentiation based upon their concept and individual interpretation of "left" and "right", in their case all distinction is made in terms of "front" and "back" in establishing the relative status of husband against wife, father against son, chief against people.

Such a differentiation becomes evident at the level of a humble domestic unit where the dwellings and activity centres of the wife, (or wives in a polygamous union), will be located before and preferably downhill from those of the father and family head. Similarly the homesteads of a man's sons will be placed in front of and downhill from the parent homestead whilst themselves repeating the pattern set by the father's. The settlement of a vhaVenda chief or headman will tend to follow the same basic pattern as that applicable to his people, except that the process of ascent to his quarters will be complicated by the introduction of defensive ramparts and narrow access passages, all designed to protect his person in the case of attack. An old maShona proverb, which was also found to be in usage in Venda, roughly translated states : "To climb a mountain go zig-zag" (16), an obvious metaphorical reference to their chiefs and, indirectly, to the structure of their settlement patterns. It is equally applicable to commoners at the level of a small nuclear family. Thus in a way it may be said that the humblest of vhaVenda domestic units is a microcosm of their society as a whole.

VhaVenda settlement is also differentiated from that of their neighbours in southern Africa by the fact that, in a polygamous marriage, the vhaVenda father has a dwelling in his own right with its own courtyards and, in some cases, its own granary. This contrasts sharply with the practice of most other southern African groups where, under similar circumstances, the dwelling of the first wife will be recognised as that of the father as well, although, strictly speaking, he has no dwelling of his own and is expected to rotate his residency equally among those of his wives.(17) On the other hand, the head of a vhaVenda homestead will require his wives to come to his dwelling as and when requested. This also means that, with the exception of the head wife, no hierarchy of settlement is followed in determining the position of the domestic units of second and subsequent wives, their location being a matter of personal preference and negotiation with the head of the homestead. (17)

The Politics of the Cooking Hut

An important component in the planning of the rural homestead is the location of the women's work areas, most particularly the cooking hut. Not only can its positioning be considered to be a reflection of woman's political status in her society but in many ways it is also an indicator of the power interplay existing between the sexes in a family environment. Much of this has to do with the control of resources, food probably being the most important one. The division of labour in most southern African rural groups has brought about a situation where traditionally the women were predominantly responsible for the growth and production of food whilst the men were assigned the responsibility for animal husbandry. Cattle however are viewed as a source of wealth and barring a small yield of milk, their nourishment potential is generally low. Thus the control of food resources can generally be said to be in the hands of women; theirs is the task of feeding their menfolk. Thus the kitchen is truly a source of nourishment and hence must be viewed as a centre of power in the affairs of the homestead. Casalis commented in c 1833 that baSotho housewives were "very jealous of their rights" (18) whilst Moshweshwe highlighted the powerful position of baSotho women in a polygamous marriage when he joked to Casalis that :

> "... you cannot imagine how these women aflict us with their mutual quarrels and the rivalries which they foment amongst out children! See, in spite of all my cattle and my hoard of grain, there are days when I run the risk of dying of hunger, because all my wives are sulking and refer me from one to the other, 'until', as they say, 'until you find your favourite who will certainly have a juicy morsel in store for you.'" (19)

This interplay between man and woman, food and power, finds a measure of reflection in the settlement patterns of rural architecture. Among the Nguni and Sotho/Tswana, for example, the cooking areas are always located to the rear of the homestead, together with the grain stores; contingency granaries however were usually placed below ground and inside the byre enclosure where women of child-bearing age were excluded by numerous taboos relating to cattle. Thus although food growth and production were the result of the wife's labour, its control was placed partly in the hands of the husband thus creating a power balance between the two. Among the vhaVenda on the other hand the cooking hut or "tshitanga" and the granaries are always placed to the front of the homestead where the wife acts as a pivotal link between the community, her family and her husband. This position of power is regulated by the fact that the husband has his own living area to the rear of the homestead which includes a separate dwelling unit as well as, quite often, a small granary. Normally the husband's area also has

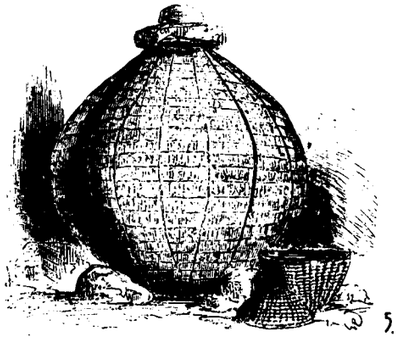
GRAIN STORAGE


1.


2.


3.


4.


5.


6.

1. HOLUB, 1890. Batswana granary.
2. GRAPHIC, 1879. AmaZulu maize stores.
3. GRAPHIC, 1879. AmaZulu store, allegedly for arms.
4. CASALIS, 1861. BaSotho grain baskets.
5. CASALIS, 1861. BaSotho basket granary.
6. CHAPMAN, 1863. BaTswana granaries.

its own discreet entry point which allows him to retain a measure of control over his own private life.

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5. A good example of this may be found in the cooking activities of baPedi women where both a courtyard and a hut are usually provided for this purpose in the structure of the domestic unit. Although the cooking of food was observed in the main to be conducted in the outside courtyard, under certain weather conditions it did take place indoors. By comparison it was noted that amongst the vhaVenda most cooking is done indoors, even under extremely hot weather conditions.

6. KUCKERTZ, Heinz
"Authority Structure and Homestead in a Mpondo Village". Unpublished M.A. Dissertation, University of the Witwatersrand, 1983.

7. KUPER, Adam Op. Cit.

8. MÖNNIG, H.O.
"The Pedi". Pretoria : J.L. van Schaik, Ltd., 1967.

SCHAPERA, I.
"The Social Structure of the Tswana Ward". Bantu Studies, Vol. 9, No. 3, September 1935. pp 203-224, and others.

9. KRIGE, E.J.
"The Social System of the Zulus". Pietermaritzburg : Shuter and Shooter, 1950.

SOGA, John Henderson
"The Ama-Xhosa : Life and Custom". Lovedale : Lovedale Press, 1930, and others.

10. This analogy can be seen to have parallels in Western society. The medieval custom of placing the honoured guest at the right hand of the host, or of locating a man's wife to his left so as not to interfere with his sword arm, lost its intent with usage and, over the years, became internalised in European social etiquette.

11. This appears to be an important point in comparison with vhaVenda social custom where not only does the husband enjoy his own dwelling quite independently of any wives he might have, but also they visit him individually. A vhaVenda wife is expected to take up abode in her husband's quarters until such a time as she falls pregnant. At approximately the sixth month of pregnancy she is allowed to return to her own dwelling, only to be replaced by another wife. VhaVenda male informants showed some reluctance at the prospect of co-habiting with more than one wife simultaneously, something that their Nguni and Sotho/Tswana counterparts thought little of, and at least one expressed the fear that, should two of his wives fall pregnant simultaneously, he would be summoned to appear before his chief, be accused of behaving "like a dog" and fined a cow for his pains.

12. RICH, Peter
"The Bantwane Settlement of Kwarrielaagte". Architecture SA, November/December 1982. pp 38-43.

13. MEIRING, Prof. A.L.
"The Amandebele of Pretoria". SA Architectural Record, April 1955, pp 26-35.

14. FRESCURA, Franco
"Kwa Mapoch - An Ndebele Village". ISAA, September 1981.

15. This is a statement which deserves a little further definition. Although it is probably quite true to state that the settlement form of the baPedi, a baSotho group, bears a considerable outward resemblance to that of the baTswana, the mechanics of growth and schism appear to differ considerably between the two. Whilst they share a number of similarities, they also have individual and quite distinct identities which prevent their being treated as one in any but the most general of discussions.

16. PLANGGER, A.B.
"Tshona Proverbial Love and Wisdom". Gwelo, 1974.
Also KANGALE, Alfred, Pers. Comm.

17. The Head or First Wife can usually be identified by the fact that the main path of access to the homestead leads directly to her domestic unit.

18. CASALIS, Eugene
"The Basutos". Cape Town : Struik, 1965. Facsimile reprint of 1861 Edition.

19. CASALIS, Eugene
"Mes Souvenirs". Paris : Société des Missions Evangéliques, 1930.

CHAPTER 20 : FURTHER CONSIDERATIONS OF SETTLEMENT

"I never heard Bechuanas speak with affection of the open country ... But I have often heard them speak fondly of the mountains which they inhabit, and which form their refuge in times of war."

MACKENZIE, John. "Ten Years North of the Orange River". London : Frank Cass and Co., 1971. Second Edition.

APPROACH AND ORIENTATION OF ASPECT

During the course of previous discussion it was found that such terms as "left and right" and "front and back" could be conveniently applied to describe the social structuring of indigenous settlement forms. In most cases these also became interchangeable with such concepts as "young and old", "husband and wife" and "parent and child". However, far from being absolutes, such apposites were also open to cultural interpretation and group manipulation, and their definition, much like other subjective terms as "house" and "village", was found to vary from region to region. As both "left and right" and "front and back" represent physical positions, their description depended greatly upon the whole issue of "aspect" or "viewpoint" which included elements of orientation as well as application. A question which also had to be asked was whether the definition of a location or space within the structure of a rural settlement served any practical function in pre-ordering the life of its inhabitants.

In these terms it was found that amongst the vhaVenda the concept of "front and back" was a major element in the social differentiation between husband and wives, father and sons, chief and people. Because of the physical nature of their settlements it was also interchangeable with the idea of "top and bottom". This contrasted sharply with the manner in which this concept was applied among other southern African groups. Among the Nguni, for example, "front and back" was also used to differentiate between the dwellings of the unmarried children (front) and those of the parents (back). However, in those instances where a son had married and remained within the parent household, he usually located his dwelling behind that of his natural mother. In such cases the social hierarchy ceased to be governed by a concept of "front and back" but gave way to one of "inner" (parental) and "outer" (filial) rings of settlement.

Among some baSotho, baPedi and Transvaal amaNdebele groups the concept of "front and back" was also found to exist as a means of differentiating between the residence of the parents (front) and those of the unmarried children (back). This was formalised into "inner and outer" rings of settlement once the married sons established their homesteads behind that of their natural mother. There is therefore an apparent similarity at a mature stage of development between this settlement model and that of the Nguni. It should be pointed out however that whilst it was common in earlier generations to find Transvaal settlements with inner and outer rings of homesteads, this idea never achieved full development among the Nguni and few such examples have been recorded in the past. This may be attributed to the differing marriage patterns between the two groups. In more recent times both the baPedi and Transvaal amaNdebele have tended to abandon their larger, circular, extended family settlements in favour of smaller, linear, nuclear family homesteads. In such cases the idea of inner and outer rings of settlement has given way to the already extant concept of "front and back" which, in the process, has become reinforced. It is possible to argue that, in the case of the baPedi, such changes occurred at least in part as a reaction to the proximity of their vhaVenda neighbours to the north where the concept of "front and back" is applied in the same way but with the exact opposite meaning to their own.

It is also worthwhile noting that among the Sotho/Tswana and Transvaal amaNdebele groups the idea that a family's homestead has a "front" and a "back" is used to create a hierarchy of spaces from the public common to the rear areas of privacy and work.

The issue of "left and right" was simultaneously found to be both simple and complex to resolve. On the one hand its presence proved to be a ready indicator of settlement culture between the vhaVenda, where it is totally lacking, and the Nguni/Sotho/Tswana, who use it extensively in establishing their social hierarchies, both at the homestead and the dwelling unit level. On the other, little correlation could be found in the emphasis and interpretations which the various rural groups placed upon this concept. This was due to the number of variables involved in the process including the orientation of the byre and of the aspect, the comparative positions of the households of the first and second wives, the allocation of the values of "left" and "right" and the interpretation of the metaphor upon which this concept is based.(1) The question was further complicated by the fact that some groups, such as the amaMpondo, appear to apply one set of values in their settlement patterns and another diametrically opposite set in the case of their individual dwelling units. Ultimately, as it was seen during the course of an earlier chapter, the number of permutations possible based upon these criteria becomes such as to make any comparative study almost impossible. Generally speaking however it might seem that many of these variables do not necessarily represent fundamental differences in social attitudes towards the individual elements of a homestead so much as in the actual relationships existing between the elements themselves. As such, differences may well have come about as a result of regional environmental conditions, evolving social practices and even deliberate political manipulation.

The case of the amaZulu is an apt illustration of this point. Recent archaeological research has revealed that the region's pre-Shakan Nguni settlements generally tended to orientate the entrance to their cattle byres uphill, facing into the Great Hut.(2) However it was found that post-Shakan settlements reversed this order, a condition which has been maintained to the present day. The reasons for this may be self-evident. Nguni culture saw the byre as an area of cattle enclosure, religious ritual, male gathering and family ceremonial. . However when Shaka took the amaZulu homestead form and translated it directly into a centre of political power, its functions changed, becoming a royal garrison town rather than an oversized farming community. In the process the role of the central byre space was also transformed, with only one small portion being retained, perhaps symbolically, to house some of the king's prize cattle. Under such circumstances, the decision to reorientate the byre by 180^{o} becomes understandable for both practical and symbolic reasons. The new byre entrance would now have faced downhill and away from the Great Hut or, in this case, the royal quarters, thus facilitating the access of troops into the parade ground, giving the King's residence greater privacy and accentuating,the settlement's central axis. The latter would have had the added advantage of reinforcing the dominant siting of the Royal enclosures, presenting the incoming visitor with a grand ceremonial and processional path into a vast central area.(3)

The act of reorientation of the cattle byre on the part of the more general amaZulu should also be seen in the context of a larger centralisation of political power in the region. Nguni settlement, by the nature of the people's social and marriage customs has always been of a scattered nature.(4) A great deal

of localised power and responsibility was therefore in the hands of each individual homestead head. The former position of the byre entrance, uphill and facing towards the domicile of the father in the Great Hut, can thus be seen to have served two distinct functions : one was practical and had to do with his control of cattle and food resources, the second was the symbolic acknowledgement of his leadership position within the immediate family structure and physical region. The rise of a centralised amaZulu state however had the effect of reducing regional political autonomy and hence the power of clan, group and family leaders. The act of turning the byre gates away from the Great Hut and towards the homestead entrance was thus not only done in emulation of the Royal example but also as acknowledgement of the suzerainty of the King. The symbolism of this act may have been directed not so much against the authority of the homestead head as upon his control of the cattle, these having now become the potential property of the State by virtue of the system of centralised taxation. Another simple explanation of this phenomenon could of course lie in the fact that such changes had been forced upon the layout of Royal residences for reasons of practicality and pragmatism. However as these became established as symbols of a centralised administration and capitals of the amaZulu nation, the people who identified with that ideal would have brought their settlement patterns into alignment with those of their King as a symbolic gesture of support and solidarity, thus giving rise to an element of group identity which separated their homestead plans from those of their other non-amaZulu Nguni neighbours.

The development of an axial and ceremonial path into a central reception space among the amaZulu compares with similar patterns found in baTswana and baPedi settlements which, for different reasons, also reached a high degree of centralisation at about the same time.(5) Both these groups orientate their central settlement space, only part of which functions as a byre, away from the domicile of the group or family head, on axis and downhill from it.

It is not known whether this new order of amaZulu Royal settlement spread to the homesteads of commoners because the people themselves wished to follow the examples of their King or because Shaka himself codified it. In both cases however, the question must arise of just how far one had to travel from the core of "amaZulu" culture (or authority) before this kind of influence began to be cancelled out by other similar factors. There certainly seems to be a strong element of group identity involved, with, as in the amaBomvana and amaTsonga instances, people being able to identify elements of their settlement or architectural culture as being "Zulu-like".(6) If this was indeed the case, then we should also ask to what extent did some conquered Nguni clans revert back to their pre-Shakan settlement culture once the amaZulu kingdom's authority was reduced in 1879. Current research would seem to indicate that, once established, amaZulu settlement values were maintained to a degree of uniformity which not even the misunderstanding and maladministration of white officials have managed to alter over the years.(7)

CONVENTIONS OF PERCEPTION OF ASPECT

The question of orientation of aspect is a fundamental one for it has to do directly with the resident's own perception of his dwelling or homestead and is usually governed by the conventions of his society. Thus it will be found that western society reads its maps with the north turned to the top of the page; similarly architects usually place the plan of their buildings along an accepted north-south orientation although when matters of approach or facade are discussed then the norm may be deviated from for the sake of effect or expediency.

An interesting insight was gained in this respect when, during the course of field work among an Ndundza amaNdebele group at KwaMatabeleng, the village's elder, Maselwane Msiza, was shown Meiring's plans of the original Msiza settlement at Hartbeesfontein which had been vacated nearly thirty years previously.(8) Being an architect, Meiring had drawn his plans with the most dramatic view in mind, showing the courtyard walls facing towards the reader. In the process he had not only inverted the architectural norm of a north-south axis, but, more importantly in this case, the viewer was looking into the settlement from the cattle byre outside. Both Maselwane Msiza and the other men gathered about failed to recognise the plans until one of them, with a flash of inspiration, suddenly turned them "upside down" so that he was viewing the settlement from the inside looking out. Thereafter not only were the group able to give a detailed account of the buildings but also a breakdown of who had lived where originally.

NOTES AND BIBLIOGRAPHY

1. It has previously been stated that those groups who held "right" to be ascendant over "left", used the metaphor of "the right hand holding the spear" whilst those who held the converse to be true, talked about "the right hand serving the head". In the case of the latter it was also found that such groups often understood the former's metaphor and usually applied it in their interpretation of spatial values within their individual dwelling units.

2. MAGGS, Tim M. O'C.
   "Mgoduyanuka : Terminal Iron Age Settlement in the Natal Grasslands".
   Annals of the Natal Museum. Vol. 25 (1). pp 83-113. Pietermaritzburg, October 1982.

   The convention of facing the cattle byre entrance onto the Great Hut was explained by one informant with the words "But of course! that is the hut of the father and he has to know what is going on!" and should therefore be seen as having pragmatic and practical origins. This is still the general practice of the southern Nguni of the Transkei/Ciskei region, the one recorded exception amongst them being the amaBomvana who, during the course of current research, described themselves as "...building like the Zulus ..."

3. This tends to relate directly to the previous discussion on the subject of the hierarchical relationships inherent between "front" and "back" as well as "top" and "bottom".

4. DE JAGER, E.J.
   "Settlement Types of the Nguni and Sotho Tribes". Fort Hare Papers, Vol. 3, 1964. pp 19-30.

5. DANIELL, Samuel
   "African Scenery and Animals, 1804-1805". London : W. Daniell, 1820.

6. FRESCURA, Franco
   "Rural Shelter in Southern Africa". Johannesburg : Ravan Press, 1981.

7. Following events in Zululand in 1879, the British administration set about subverting and supplanting the authority of the amaZulu king and his headmen, by removing their judicial functions and transferring them to white magistrates. These functions included the ability to adjudicate in civil disputes such as inheritance. The organisation of the amaZulu settlement is a direct reflection of their inheritance hierarchy and an understanding of this is necessary to any person wishing to act in this field. Unfortunately the guidelines for magistrates in this respect were originally drawn up by Theophilus Shepstone who, despite his reputed "great" knowledge and understanding of matters amaZulu, still managed to misinterpret the social structuring of their homesteads. (Rodney Harbour, Pers. Comm.)

8. MEIRING, A.L.
   "The AmaNdebele of Pretoria". SA Architectural Record, April 1955. pp 26-35.

> "On entering the town they proceeded directly to the enclosure in front of Mateebe's house, where the king and his captains were seated on the left side of the gate. A considerable assemblage of women greeted them on their arrival. The captains were seated in the form of the crescent, the king sitting in the middle and in front."
>
> CAMPBELL, John. "Travels in South Africa ... A Second Journey". London : Francis Westley, 1822.

Much has been said over the years about the supposed "ethnic" composition of the indigenous population of southern Africa. In this respect, particular stress has been laid upon the many supposed differences, material, cultural and linguistic, which white immigrants into the region have perceived to exist between the various regional groups. Some of these have become internalised, over the years, into stereotypes which, being only partly correct, have become the basis for yet further white misconceptions on the subject. Yet, as was shown in a previous chapter, were an emphasis to be placed upon the similarities which are known to exist between these "diverse" cultures, then it is probably that what differences which do exist would be seen as being no more than regional variants, much as those between Cornishman and Yorkshireman, Englishmen both.

However it has been shown that were architectural values and a language of settlement the only criteria available, then it would be seen that if cultural divisions do indeed exist in the population of the sub-continent, they are not along the traditionally supported lines between the Nguni and the Sotho/Tswana but rather along those between vhaVenda society on the one hand and that of the Nguni, the baSotho and the baTswana on the other. To a certain extent this viewpoint has been supported by other researchers in the field (1), some of whom have gone so far as to suggest that the vhaVenda represent a southern and ancient outpost of maShona culture.(2) Certainly, when such differences in settlement form, function and spatial perception are tabulated (see below), then a strong case may be made in support of such an outlook.

SOME BASIC DIFFERENCES OF SETTLEMENT

VHAVENDA	NGUNI/SOTHO/TSWANA
1. Settlement patterns are linear and follow the ascending lines of contour.	1. The settlement form is traditionally circular.
2. The approach and entry path into a homestead is laid to follow a deliberate non-axial or zig-zag route.	2. Approach and entry into a traditional homestead is along a strong central axis.
3. The positions of the wives' individual domestic units are determined by negotiation with the husband and there is no (traditional) attempt at creating a balanced plan.	3. The layout of a traditional settlement follows a strong basic ordering about a central vertically imposed axis.
4. Hierarchical differences within the family are expressed in the plan of the settlement in terms of "front" and "back".	4. Hierarchical differences within the family are expressed in the plan of the settlement in terms of "left" and "right".
5. There is no hierarchical differentiation drawn between the location of the dwellings of the second and subsequent wives.	5. The position of the dwellings of all the wives within the larger settlement plan is subject to culturally predetermined siting.
6. The husband has his own private dwelling.	6. The husband's dwelling is generally recognised to be also that of his first wife, but, in theory, he has no dwelling and is expected to take up abode with each wife separately and in rota.
7. The wives visit the husband's dwelling each in their own turn and do not leave until such a time as they have fallen pregnant.	7. The husband visits his individual wives at their own dwellings in rota, regularly and often.
8. The cattle byre is located to the side of the homestead and not within it.	8. The cattle byre is usually incorporated centrally within the homestead plan.
9. Settlement does not necessarily reflect an inheritance hierarchy.	9. Settlement is a direct reflection of the inheritance hierarchy.
10. The pattern of settlement is determined by the apposition of "husband" as against "wife" or "wives".	10. The pattern of settlement is determined by the apposition of "wife" as against "wife".
11. Upon his death the burial of the homestead head takes place behind or near his former domicile or dwelling unit.	11. Upon his death the burial of the homestead head takes place in or near his cattly byre.
12. No special definition of space within the individual dwelling unit could be perceived to exist in the course of current research.	12. Considerations of both "left" and "right", of "front" and "back" and of "male" and "female" are applied in the allocation of seating and living space within the individual dwelling unit.
13. The nomenclature of the component elements of homesteads belonging to the ruling class differs considerably from that applied to the homesteads of ordinary people.	13. The component elements of the homesteads of both the ruling class and the ordinary people share a common nomenclature.
14. The architecture of the homesteads of the ruling class is	14. The architecture of the homesteads of the ruling class is not qualitatively

	qualitatively different from that of the common people, having a monopoly of some distinctive materials of construction and dwelling forms forms but sharing in the same basic principles of settlement organisation. Thus their architecture acts as a direct reflection of social status and as such has become internalised in the structure of their society.	different from that of the common people being but larger scale versions of the same settlement, sharing the same form, basic spatial organisation materials of construction and dwelling forms.
15.	Married sons establish homesteads in front of and below that of their father's.	15. Married sons establish their homesteads behind that of their mother's. Amongst some Nguni groups this is usually a temporary arrangement prior to the sons breaking off altogether and establishing separate homesteads elsewhere.
16.	Teenage initiation lodges are substantial and become permanent fixtures of the homesteads of chiefs or headmen, thus also denoting leadership status and political power.	16. Teenage initiation lodges are secreted away from the main settlement areas, out of sight of any passing visitor, and are burnt to the ground with all their contents upon completion of the rituals.
17.	The kitchen hut and cooking activities are located to the front of the homestead.	17. The kitchen hut and most cooking activities are located to the rear of each wife's homestead.

SOME SIMILARITIES OF SETTLEMENT

1. Both groups use the concept of "front" and "back" to establish a hierarchical differentiation between parents and children although their individual interpretations of this do not necessarily coincide.

2. Both groups incorporate an awareness of "top" and "bottom" in the topographical placing of a settlement.

3. In the cases of both groups, approach to a settlement is made from the lower or "bottom" level.

4. The position of the first or "Great" wife is recognised and her dwelling or domestic unit is given a dominant position within the overall settlement structure.

5. Both recognise that fundamental differences exist between the life of man and that of woman.

6. The same basic principles of settlement organisation are applied to the homesteads of their ruling classes as well as those of the common people.

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DU TOIT, Fredrich
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2. HUFFMANN, T. Pers. Comm.

CONCLUSIONS

This research programme was based upon the broad hypothesis that the indigenous rural architecture of southern Africa underwent important changes in its make-up between 1822 and 1837 as a result of the events of Difaqane. Not only did this era witness the displacement of whole communities, the depopulation of entire areas, the rise of regional centres of political power and the emergence of local leaders whose vision extended beyond the narrow confines of clan and tribal loyalty; but it also saw increasing contact between the region's indigenous black groups and immigrant whites from the south. This occurred across a wide spectrum of social, cultural and economic activities involving migrant Dutch farmers, missionaries, traders and the military. What was at issue therefore was not so much whether changes had in fact taken place, but rather what was the exact nature of these changes and what processes had brought them about.

Initially this project was divided into three main components. The first sought to describe the social and environmental context of southern African rural architecture; the second examined the historical background of the various indigenous dwelling forms; and the last concentrated upon the structuring of local settlement patterns. It also attempted to describe the mechanics of vernacular architecture through a series of models based upon such diverse factors as physical environment, availability of building materials, building technology, economic activity and cultural identity.

When applied in a general sense each of these theories was found to have a measure of validity. However none was individually capable of making a comprehensive analysis of the architecture of the region and examples which departed in any way from the local housing norm tended to expose serious flaws in their logic.

It was realised that although certain aesthetic elements such as dwelling form, material texture and decorative motif could have a strong sense of group identity attached to them, these were also open to a large measure of manipulation. In some historical instances it was recorded that a community could adopt a domestic structure as a means of creating differences between itself and neighbouring groups or as part of a larger political identity. Once the need for such differentiation became irrelevant, that community usually reverted to a more pragmatic form of architecture for that region.

The case of settlement patterns however proved to be somewhat different. Here it was found that in many instances the dwelling form had been subjected to a measure of cultural contamination from European sources through a number of different agencies. However the sense of the individual residential space within the larger context of a family's homestead organisation had survived with few changes through a century and a half of contact with immigrant sources. It was established that rural settlements are part of a highly ordered, functional and organic architecture capable of expressing a variety of spatial principles, and of reflecting the inhabitants' cultural mores and social and economic organisations. It possesses a clear and detailed language which, when understood, reveals much of a people's concepts of society as a whole, of the community, of the family and of the role that each individual plays within these in the everyday processes of life.

Once it was realised that settlement patterns were subject to such a language then it became possible to devise models which could be used to give a more realistic reflection of the true nature of indigenous architecture.

It also became evident that most existing definitions of the local built environment

had been derived in the context of European morphocentric value systems which had tended to focus upon the dwelling unit at the expense of all other elements of architecture. This had led to the belief that the influence of white-originated building materials, technologies and dwelling forms upon the rural environment had been quite extensive. However once the social processes and value systems surrounding the creation of the indigenous rural dwelling became more fully understood, then it was realised that any acculturisation which did occur was of a relatively minor nature; that the adoption of new materials, technologies and dwelling forms was in the nature of a mature and pragmatic vernacular culture; and hence that the cultural component of such an influence could be considered to be negligible.

On the other hand the nature of indigenous settlement patterns could be seen to be subject to a wider set of cosmological beliefs and the result of interaction between social hierarchies, religious ritual, orientation of aspect and control of resources. Therefore settlement patterns could be deemed to reflect a broader base of cultural factors than was ever the case with any single domestic dwelling.

Finally, when the concept of a "spatial language" was applied to the homestead architecture of a number of southern African groups, it became possible to perceive the existence of a number of divisions and groupings. These did not lie along the bounds generally preconceived to exist between ten tribal groups; nor did they follow the anthropologically and linguistically conceived lines dividing the Sotho/Tswana from the Nguni. Instead the criteria tended to cut across all previously held theories of differentiation and pointed to the existence of two separate settlement cultures in the region. The first was that of the vhaVenda, a small community of about half-a-million persons inhabiting the far northern Transvaal; the other consisted of the larger Nguni and Sotho/Tswana grouping who comprise the remainder of the country's indigenous population. A third settlement culture, that of the KhoiSan may have existed at some distant time, but this research programme was able to discover only the barest traces of its presence in the ethnographic literature.

It is true that various differences were perceived to exist between some regional groupings in their individual expression of certain spaces. The Nguni, for example, do not create hard divisions between the households of the various wives within a complex homestead whereas most Sotho/Tswana groups do so. In most cases however these were deemed to be little more than stylistic variations and hence interpretations of the same basic principles of settlement organisation.

APPENDIX "A" : A GLOSSARY OF TERMS

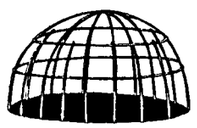
"I am too rude, clearly to define
Or to describe this work in every part,
For lack of terms belonging to that art."

LYDGATE, John. "The Troy-Book." c 1412-1420.

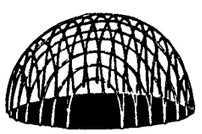
One of the difficulties which emerged from time to time during the course of this study was one of terminology and definition. Considering the multi-disciplinary nature of the work, this was not entirely unexpected, especially in cases where different disciplines shared in the same terminology and nomenclature but awarded them varying values. The interpretation of the word "structure" is an apt illustration of this point. Here it was found that whereas architects, and indeed most laymen, use the term to mean "that part of a building which carries load in addition to its own weight" (1), anthropologists have given it significance in terms of social frameworks. In such instances, and wherever possible, the original intent of the word has been allowed to prevail and the word "structure", originating from the Latin root "struere" or "to build", was retained in its strict architectural sense. Where used in the context of other disciplines, such as anthropology or archaeology, then it was applied in a more qualified manner, coupling it with terms which extended its meaning, such as "social structure", "settlement structure" and so on.

The need for a glossary in this volume was realised when it was found that many of the technical terms necessary for the proper description of such building activities as thatching and brickmaking were no longer common currency in the idioms of everyday life, even that of the building industry itself. While a more general dictionary of building was, quite evidently, beyond the scope of this project, there was nonetheless the need to bring together in one section the terminology most commonly used in the study of vernacular architecture.

In most cases it was deemed convenient to retain a nomenclature which had previously been established by European craftsmen over a period of many generations, especially in such instances where local builders have not evolved one of their own. Where indigenous terms were known to exist and to enjoy a wide currency, then these were also included. In view of the multi-disciplinary nature of this project, it was also decided to include in this section brief descriptions of local terms falling outside the direct sphere of architecture. It should be noted however that these do not set out to be definitive and the interested student is addressed to sources more authoritative in their respective fields.



· AMAXHOSA ARCH FRAMEWORK.



· AMAZULU ARCH FRAMEWORK.

ADOBE. Earth used for making unburnt, sunbaked bricks or blocks containing chopped straw as reinforcement. This technology is popular in central America, southwest USA, Australia and other semi-arid regions.(1)

AFDAK. Local name for a lean-to or catslide roof. The name originates from the Afrikaans and literally means an "off-roof". See also "Catslide Roof".

ANNULET. (Lat. "annulus"). A ring.(2)

APEX. A tip, top, peak or apex of a triangle or cone.(10)

ARCH. (Lat. "arcus", an arch or a curve.) Normally defined as a structure of wedge-shaped blocks over an opening which support one another by mutual pressure.(2) An arch however may also be created by bending two saplings and bringing them together at their apex.(4)

· 'BAFOKONA': SQUARE-PLAN DWELLING, DISTRICT OF BALFOUR, TVL.

ASHLAR. Masonry of smooth squared stones in regular courses, in contradistinction to rubble work.(2)

AUGER. A drilling tool shaped like a cork-screw and used for boring holes in wood.(1)

BAFOKONA. Sotho/Tswana term used mainly in the Transvaal to indicate a square plan or four-cornered dwelling.

BAND. Twisted band of straw, reed or sedge used for tying a bunch of the same material.(3)

BARGE. Also known as "flue", "verge" or "gable". The finished edge of thatch overhanging a gable.(3)

BATTEN. Horizontal strips of timber which span from beam to beam and help to carry the roof covering. In the case of thatching grass, the bundles will be sewn onto the battens by means of twine. See also "purlin".(1)

BATTER. Also known as "rake". A uniform slope, usually applied to a wall with an inclined face.(1,2)

BHACA. A Nguni-speaking group originating from the Mount Frere district of the Transkei. The people are more currently known as the amaBhaca.

BHULU. Nguni word derived from the Dutch "boer". More properly used as amaBhulu, it is a term usually applied on the coastal region to white, Afrikaans-speaking South Africans. See also "Boer" and "Leburu".

BIDDLE. Alternative name for a leggett.(3)

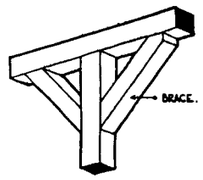
BINDER. See under "sway".(3)

BLOCK. A masonry unit larger than a brick.(1)

BOER. (pl. Boere). A Dutch word originally meaning "farmer". Since the latter part of the nineteenth century it has gained a measure of group identity which has made it interchangeable with the noun "Afrikaner". It is still used by the local white farming community as an appellation for itself although the black derivations of "amaBhulu" (Nguni) and "leburu" (Sotho/Tswana) have distinct pejorative undertones.

BOER-STYLE THATCHING. The almost universal indigenous term for a method of combing the grass roof covering with a leggett (or a dekspan) to provide a smooth even finish.

BOMVANA. A Nguni-speaking group originating from the Elliotdale district of the Transkei. The people are more correctly known as the amaBomvana.



BRACE. A timber piece used to stiffen a joint such as the one created when a vertical timber post abuts at right angles into a horizontal timber beam (as in a post and lintel system).

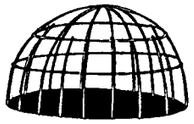
BRICK. Clay kneaded, moulded and baked by fire or sun. The term is currently applied to a module which conforms to certain standard measurements (228 x 114 x 76 mm British) but is more generally understood to refer to a wall building unit which is easily manipulated into place with one hand. Anything bigger or heavier than a brick is considered to come under the heading of "blocks".

BROW-COURSE. The first course of thatching reed which also sets the pitch of the roof.(3)

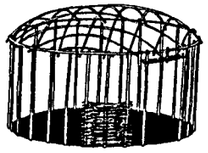
BUTT. The thick or lower end of a bundle of straw or reed.(3) The southern African indigenous thatcher usually takes the opposite view of his material and refers to the "thin"

BEEHIVE DOME CONSTRUCTION

• AMAZULU FRAMEWORK.

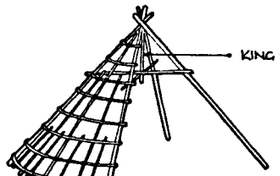


• AMAXHOSA FRAMEWORK.

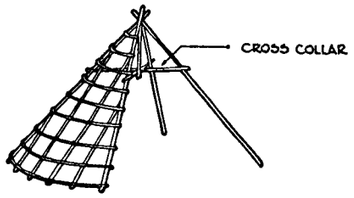


• AMAXHOSA FRAMEWORK.

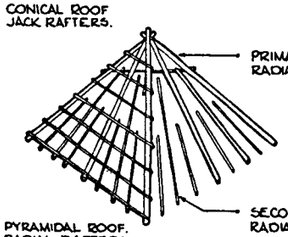
ROOF CONSTRUCTION



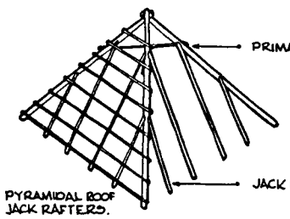
• CONICAL ROOF RADIAL RAFTERS.



• CONICAL ROOF JACK RAFTERS.



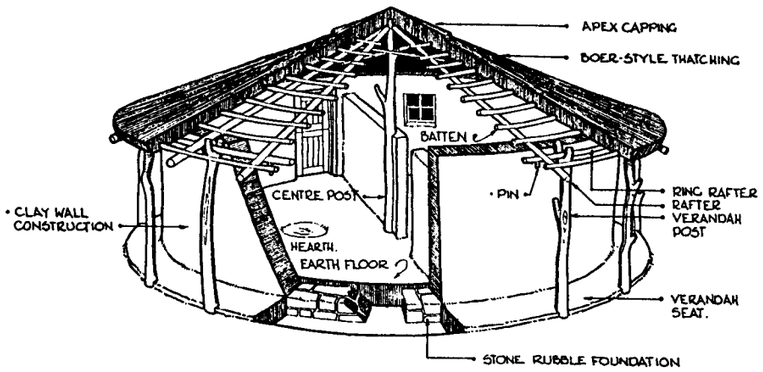
• PYRAMIDAL ROOF. RADIAL RAFTERS



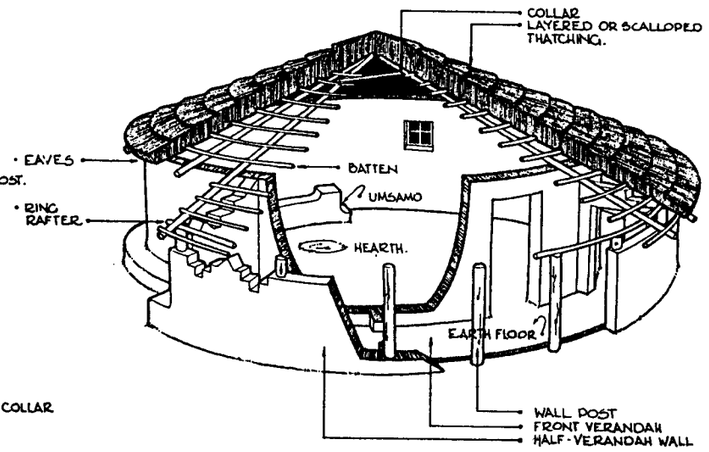
• PYRAMIDAL ROOF JACK RAFTERS.

CONE ON CYLINDER CONSTRUCTION

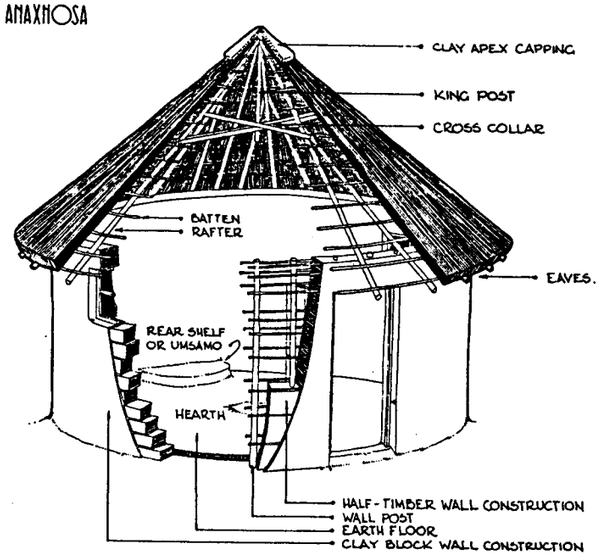
BATSWANA



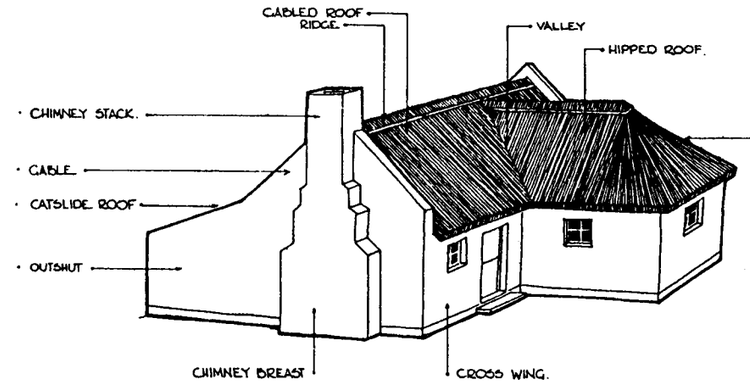
SOUTH AMANDEBELE

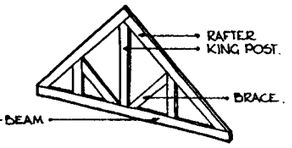


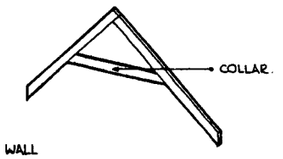
AMAXHOSA

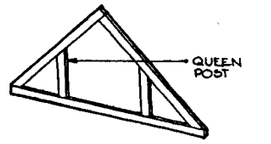


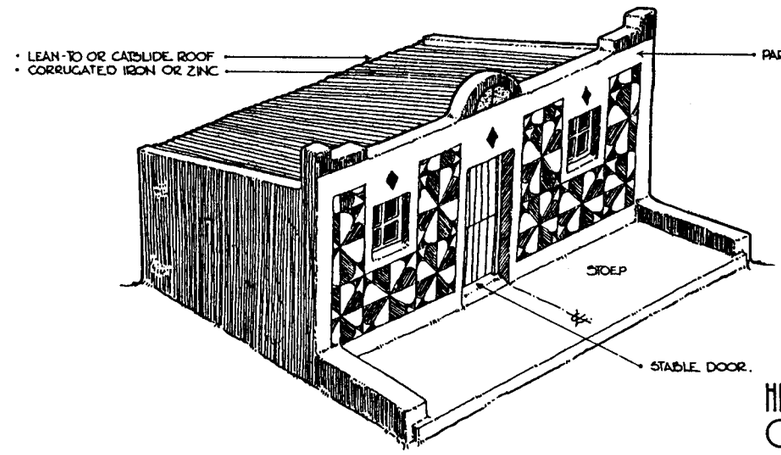
PERSPECTIVE VIEW OF T-PLAN COTTAGE



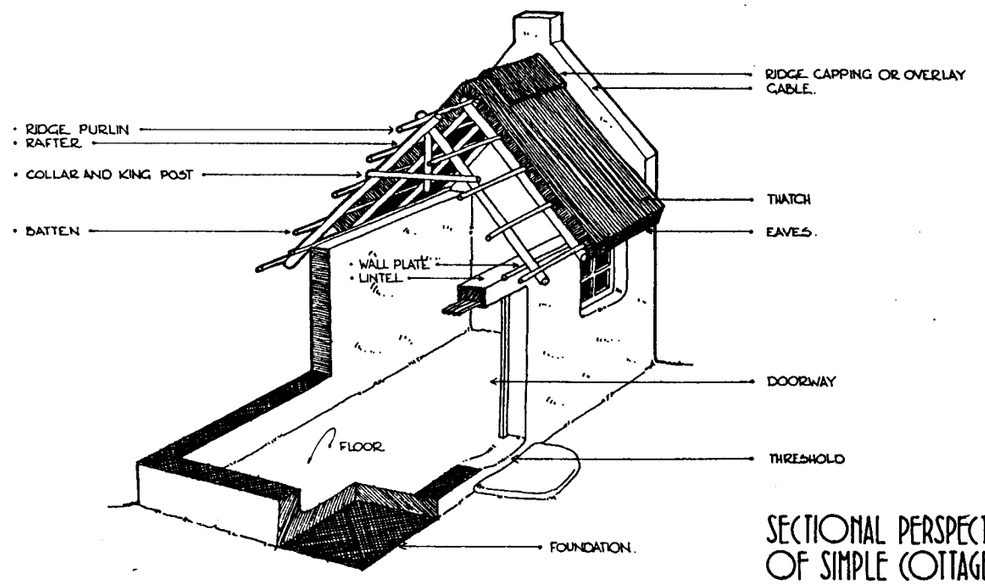




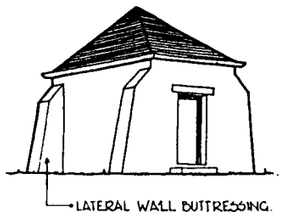




HIGHVELD, PARAPET OR LEAN-TO DWELLING



SECTIONAL PERSPECTIVE OF SIMPLE COTTAGE



or "seed end". Also the name for a type of hinge.

BUTTING. The action of dressing the butt-ends of grass bundles by dropping onto a hard surface.(3)

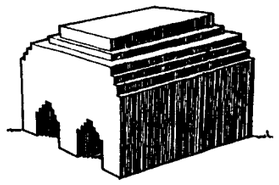
BUTTRESS. A masonry pier built against a wall to resist outward pressure being applied on the opposite side.

CATSLIDE ROOF. Better known as a lean-to roof. Usually the result of an extension to an existing structure necessitating the new roof either to be tucked in beneath the existing roof eaves or to join onto the existing roof but at a lower pitch.

CENTRE POST. The additional support given by southern African indigenous builders to the apex of a conical roof. This is normally a temporary measure aimed at strengthening the roof during the period of thatching when it may have to support the extra load of one or two men. In some recorded examples however, the large span of the roof timbers made it necessary to retain the centre post permanently.(4)

CHIMNEY BREAST. The chimney wall which projects beyond the general wall surface and contains the fireplace and flues.

CHIMNEY STACK. The brickwork containing one or more flues and projecting above the roof.(1)



· BRICK CLAMP OR FIRING STACK.

CLAMP (OF BRICKS). A stack of bricks burnt over flues. The clamp is erected with the same bricks which are due to be fired, leaving an open cavity or flue in its lower end. It is then filled with combustible materials and set alight. This is an old European way of making bricks which is throught to have been introduced into southern Africa by missionaries during the latter part of the nineteenth century.(4)

COLLAR BEAM. A horizontal, sometimes curved, tie beam in a timber roof.(8)

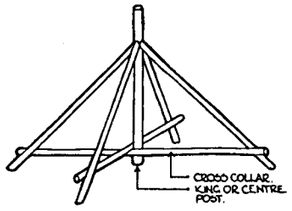
COMBED LEGGET. See under "leggett".

COMPOUND HOMESTEAD. A homestead occupied by a nuclear family, either monogamous or polygamous, under the leadership of one person, usually the husband and/or father. See also chapter 17.

CORNICE. A moulding at the top of an outside wall which overhangs it and keeps the rainwater drips from running down the wall surface.(1)

COURSE. (Masonry). A horizontal layer of bricks, blocks or ashlar.

COURSE. (Thatching). A horizontal layer of straw or reed thatch.(3)



CROSS COLLAR. Constructional detail found mainly in conical and pyramidal roof construction. Initially the twin cross collars act to steady the central support post during the process of roof building and thatching. Once the need for the extra support lapses however, the central post is cut away leaving behind a vestigial king truss which, in some recorded cases, can support some kind of apex finial.(4)

CROSS-RODS. Ornamental hazel rods fixed between liggers.(3)

CROSS WING. A general term used to describe the arms of a T-plan dwelling.(8)

CROWN POST. Also known as a "king post".(1) A vertical timber which supports the ridge of a king-post roof truss and carries to the tie-beam of the truss at its foot.

DAKA. An indigenous term used to signify wet clay. It is used as a wall-building material, as floor packing, as daub

· DORMER WINDOW.

or it mixed with cowdung, as a finishing plaster. More correctly spelt "udaka", it is pronounced as "daga" with a hard "g" (not to be confused with "dagga", a slang term for marijuana).

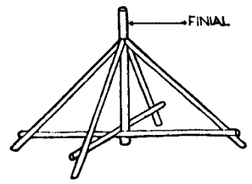
DEKSPAN. More generally known to rural thatchers as "idekspan", it is the Dutch name for a combed leggett.

DIFAQANE. Sotho/Tswana term meaning literally "the scattering of the people". It refers to the period of internecine warfare which took place in southern Africa between 1822 and 1837. See also "Mfecane".

DOLLY. See under "Roll".(3)

DOMESTIC UNIT. General term used to define the homestead of a wife in a polygamous union where she is allotted her own living space comprising one or more dwelling units set within their own system of courtyards. See also chapter 17.

DORMER WINDOW. A window in a sloping roof, usually that of a sleeping apartment, hence the name.(2)

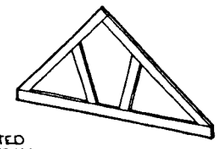


DRAKENSBERGE. The Dutch name given to the principal mountain range of southern Africa. Literally translated it means "Mountains of the Dragon". See also "Kahlamba Mountains".

DWELLING UNIT. General term used to define a single domestic structure, usually one-roomed, ranging in form from the grass beehive through to the flat-roofed highveld dwelling.(4)

EAVES. The lower part of a roof projecting beyond the face of the wall.(2)

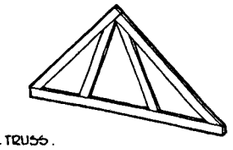
EXTENDED HOMESTEAD. A term which embraces the Compound Homesteads of a number of families who are either closely related to the headman or are otherwise related to one common male ancestor. See also chapter 17.



· INVERTED FINK TRUSS

FINIAL. (Lat. "finis" or "end"). The upper portion of a pinnacle, bench-end or other architectural feature.(2)

FINK TRUSS. A triangulated truss which replaces the more conventionally-used king and queen (vertical) posts with a series of diagonal braces.



· FINK TRUSS.

FLUE. A passage for smoke in a chimney.(1)

GABLE. The triangular portion of the end-wall of a building, between the enclosing lines of a sloping roof.(2)

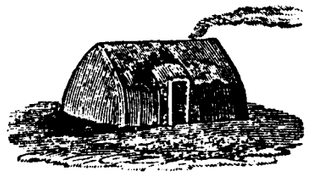
GADD. Length of hazel before splitting.(3)

GARIEP. Indigenous Khoi name for the Orange River. The name is more correctly spelt !Garieb meaning "river of the wilderness". (5) See also "Orange River".

GREEN BRICKS. A clay brick which has been sun-dried.

HALF-TIMBER CONSTRUCTION. A structure formed of timber posts, rails and struts. The inter-spaces of this frame are then filled with brick, rubble, clay or other materials and the whole is often plastered over.(2)

· HARDBIESHUIS c 1838. FROM BACKHOUSE'S "NARRATIVE".



HARDBIESHUIS. (pl. -e). From the Dutch, literally meaning "house made from hard reeds". A dwelling form built in southern Africa up to the turn of the twentieth century by both white settlers and indigenous residents. It consisted of a series of modified A-frame trusses placed on the ground and thatched over with reeds. See also "kapsteilhuis".

HIP RAFTER. A rafter spanning from roof ridge to eaves thus creating the hip ridge.(1)

HOMESTEAD. General term used to indicate rural settlement of indeterminate size and composition. See also chapter 17.

HOOK. An iron hook used for fixing thatch to timbers.(3)

HOUSE. Used only in an anthropological context to describe the social hierarchies and inheritance patterns of indigenous settlement, thus negating the more conventional sense of built environment and domicile. See also chapter 17.

HOUSEHOLD. Used in a general sense to describe the social group comprising a rural domestic establishment. See also chapter 17.

IMBRIGATION. An overlapping of tiles with each row breaking joint with the next, as in the manner of the scales of a pine cone.(2)

INGESI. Indigenous Nguni noun applied to white English-speaking South Africans.

JACK RAFTER. A short rafter between hip rafter and eave or between valley and ridge.(1)

JAMB. The sides of doors and windows.(2)

KAHLAMBA MOUNTAINS. The indigenous name for the principal mountain range of southern Africa. It stems from the Nguni word "isikhahla" meaning "thrown down in a heap". Hence its meaning can be read to be a "tumble of rocks".(6) Alternative spelling : "Quathlamba". See also "Drakensberge".

KAPSTEILHUIS. (pl. -e.) From the Dutch, literally meaning "house of steep trusses". A dwelling form built in southern Africa up to the turn of the twentieth century by both white settlers and indigenous residents. It consisted of a series of A-frame trusses placed on the ground and thatched over with reeds. See also "Hardbieshuis".

KHOIKHOI. A group indigenous to southern Africa which in the past has been more generally, and erroneously, referred to as the Hottentots. The term is thought to translate as meaning "men of men".

KHOISAN. A conglomerate word created by anthropologists and archaeologists to describe the migrant pastoralist and hunter gatherer groups who inhabited southern Africa at the time when the first white visitors arrived on these shores.

KI GARIEP. Indigenous Khoi name for the Vaal River. This has been translated in the past to mean "Yellow River".(7)

KIMBERLEY BRICKS. Sun dried or green bricks, also known to indigenous builders as "kimmerli bricks".(4)

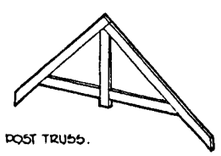
KING POST. A vertical post extending from the ridge of the truss to the tie-beam below.(2)

KING POST TRUSS. A wooden roof truss consisting of a pair of principal rafters held by a horizontal tie-beam, a vertical king post between tie beam and ridge and usually also two struts to the rafters from the foot of the king post.

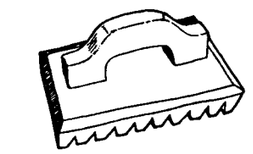
KRAAL. From the Portuguese "caral" meaning a "cattle byre". This is a term which is generally, and erroneously, applied in southern Africa to mean a rural homestead. See also chapter 17.

· KAPSTEILHUIS c.1812 FROM LICHTENSTEIN'S "TRAVELS": FOUND IN BACKGROUND OF ILLUSTRATION "ANTELOPE MELAMPUS."

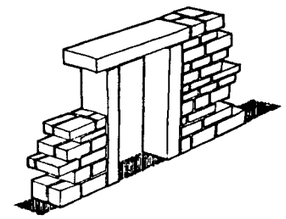
· 'NARINA : A YOUNG GONAQUAIS' c1790 FROM LE VAILLANT'S "TRAVELS".



· KING POST TRUSS.

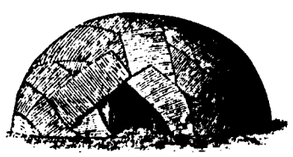


· LEGGETT.



· POST AND LINTEL SYSTEM.

MATABELE WARRIOR c.1846. FROM ARBOUSSET AND DAUMAS' "NARRATIVE".



· KHOIKHOI MATTING HUT.

LEAN-TO ROOF. See "Catslide Roof".

LEBURU. Sotho/Tswana word derived from the Dutch "boer". It is usually applied to white Afrikaans-speaking South Africans. See also "amaBhulu" and "Boer".

LEGGETT. Also spelt "leggatt". A thatcher's wooden tool for striking the butts of reeds or straw to bring them into line. Three types of leggett are used : the Norfolk reed, the long handle combed and the paddle combed. The last is the only one recorded in use in southern Africa. Alternatively known as a "dekspan" or "idekspan".

LEKGOWA. Sotho/Tswana word generally used to denote a white man.

LIGGER. Length of hazel 1200-1500 mm long used in conjunction with spars on the external face of thatch.(3) Also known as a tool or a runner.

LINTEL. The horizontal member, either in timber or stone, which spans an opening, being supported on either side by posts, columns or masonry.(1,2)

LOBEDU. Indigenous southern African group inhabiting a region of the northern Transvaal immediately south of Venda. The people are more correctly known as the vaLobedu.

LOBOLA. More correctly spelt "ukulobola". The practice whereby a number of cattle are handed over by the bridegroom to the parents of the bride as part of the nuptial negotiations.

MASONRY. Stone and the craft of stone wall building, including the preparation and the fixing of the stones.(1)

MATABELE. ChiShona adaptation of the noun "amaNdebele". This was the name given by the Sotho/Tswana to the Nguni group who, under the leadership of Mzilikazi, moved out of northern Zululand in 1822 and eventually settled down in western Zimbabwe in 1837. The word stems from the Tswana root "tebele" meaning "plunderer" or "stranger". The Matabele should not be mistaken with the amaNdebele groups of the Transvaal.

MATTING. The use of grass or reed matting in the process of dwelling construction in southern Africa appears to have been limited to KhoiSan and Nguni groups. The former are known to have used reed matting as well as animal skins as part of a dismountable and reusable system of transportable shelters. The latter used grass matting in conjunction with thatching as part of a more permanent technology of grass hut building.

MFECANE. Nguni term meaning literally "the scattering of the people". It refers to the period of internecine warfare which took place in southern Africa between 1822 and 1837. See also "Difaqane".

MFENGU. Collective name for the Nguni-speaking groups, mostly originating from the Zululand region, who fled into the southern Transkei and Ciskei regions between 1822 and 1837. The name, meaning "beggars" or, perhaps more kindly, "homeless wanderers", was applied to them by the amaXhosa upon whose lands they eventually settled. They are also more popularly known as the "Fingos", this being an anglicisation of the noun "amaMfengu".

MPONDO. Nguni-speaking group originating from the coastal region of the north-eastern Transkei. They are more correctly

known as the amaMpondo but have also been known to white settlers as the "Pondos".

MPONDOMISE. Nguni-speaking group inhabiting the Qumbu district of central Transkei. They are more correctly known as the "amaMpondomise".

NDEBELE. Sotho/Tswana noun which has been applied in various contexts to indigenous groups who have either settled on or moved through the highveld region of southern Africa. Its roots have been attributed to the seTswana noun "tebele" meaning "plunderer". At one time it was believed to have been an appellation created by the Sotho/Tswana as a general term for the Nguni but more recent research has shown that its use has also been made in a Sotho/Tswana context. Various groups are known, both currently and in the past, to have used this noun or its derivatives. This includes the Matabele of western Zimbabwe, the South amaNdebele of the south and eastern Transvaal, the North amaNdebele of the central Transvaal and the baHlubi clan of the baTlokwa, living in the Nqutu district of KwaZulu. Their language is referred to as isiNdebele.

NGUNI. Term used to define the language spoken by those indigenous groups largely inhabiting the eastern littoral of southern Africa from Swaziland in the north to the Ciskei in the south. These include those agglomerations currently referred to as the amaSwazi, the amaZulu and the isiXhosa speakers of the Transkei and Ciskei as well as the South amaNdebele of the Transvaal and the Matabele of western Zimbabwe.

ORANGE RIVER. First reached by white settlers in 1760 and so named in 1779 by Colonel Jacob Gordon after the Stadholders of Holland.(7) See also "Garieb".

OUTSHUT. Extension to a domestic structure made from below its eaves. Its roofing usually involves the use of an "afdak", "catslide" or "lean-to" system.

PANEL. A compartment, sunk or raised, in walls, ceilings, doors, etc.(2)

PARAPET WALL. (Lat. "parare" meaning "to protect" and "pectus" meaning "breast"). The portion of wall above the roof gutter or roof surface. Also applied to the same feature, rising breast-high, in balconies, platforms and bridges.(2)

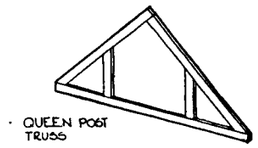
PEAK. See under "Pinnacle".(3)

PEDI. Sotho/Tswana speaking group inhabiting the Sekhukhuneland region of the central and northern Transvaal. They are more correctly known as the baPedi, their language as sePedi, their country as boPedi. They are also sometimes referred to by anthropologists as the Northern baSotho.

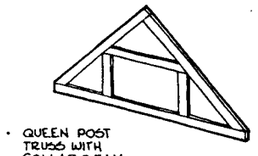
PIER. (Lat. "petra" meaning "rock".) The loadbearing brickwork in a building between openings. Is built on one or both sides of a wall, in which case it is known as a "pilaster".

PILOTIS. (Fr. "stilts"). A post or column projecting through an open ground floor space to carry the structure above.(1) Also could be interpreted to mean a "pile" or "stake".(8)

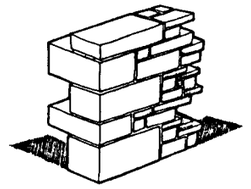
PINNACLE. The raised end in the ridge surrounding a gable and point of hip.(3)

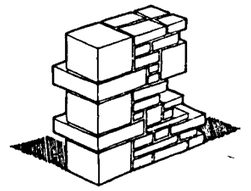


QUEEN POST TRUSS



QUEEN POST TRUSS WITH COLLAR BEAM.





STONE QUOIN WORK IN RUBBLE WALL.

BATSWANA CONE ON CYLINDER DWELLING.

PLINTH. The projecting stepped or moulded base of any building. Also applied to the lowest square member of the base of a column.(2)

POST. A main vertical support of a building frame or a partition or a sub-frame.(1)

PURLIN. A horizontal timber piece or beam in a roof, at right angles to the principal rafters or trusses, and carried on them. It carries the common rafters, if any, or the corrugated sheet.(1)

PURLIN ROOF. A roof for small houses, in which the purlins are carried on the gables or the cross walls, rather than on a system of trusses.(1)

QUATHLAMBA. SeSotho name for the Kathlamba or Drakensberg range of mountains.

QUEEN POST. The two posts nearest the midspan in a queen-post truss. It is also applied more generally to any vertical post in a Howe truss which is not the "King Post".

QUEEN POST TRUSS. A truss having no central post but two queen posts, one each side of the centre.(1)

QUOIN. (Fr. "coin" meaning "angle"). A term generally applied to the corner-stones at the angles of a building, and hence to the angle itself.(2) During the building of stone structures, careful attention was paid to the setting out and the corners would be built by more skilled craftsmen with the general walling between being done by less skilled workers.(9)

RAFTER. A sloping timber extending from the eave to the ridge of a roof.(1)

RAKE. The angle of inclination to the vertical. See also "batter".(1)

REVEALS. The total surround to an opening comprising of the jambs, the head and the cill threshold.

RIDGE. The apex of a sloping roof, running from end to end, usually in a horizontal line.(1,2)

RIDGE CAPPING. A covering over the ridge. May be done in a variety of materials and styles.(1)

RIDGE CREST. Exterior ridge or upper angle of roof.(8)

RIDGE POLE, PURLIN OR PIECE. A timber beam extending along the internal ridge of a roof on which the upper ends of the rafters rest.(8)

RINDERPEST. Cattle plague known in Europe and Asia since ancient times. It was endemic in central Africa during the latter part of the last century and began to spread southward during the 1890s, crossing the Gariep in March 1897. Bovine losses in southern Africa alone have been estimated to have reached 4.5 million head during that time.(7)

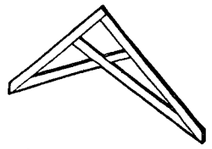
ROD. See under "Ligger".

ROLL. Bundle of reed or straw, 100-200 mm in diameter, used to build up the apex.(3)

RONDAWEL. Afrikaans term for the cone on cylinder domestic structure indigenous to the southern African region. It is possibly derived from the Dutch "rondheuwel" meaning "a round hill". The word has entered local rural terminology as "routawuli".

RUBBLE. Also known as "rubble work". Walling of rough undressed stone.(2)

· SCISSORS TRUSS



· AMAZULU GRASS ROPE WORK.

· MOSOTHO WARRIOR, c 1861 FROM CASALIS' 'THE BASUTOS'

RUNNER. See under "Ligger".

SADDLE-PIECE. The junction of a ridge with the main roof cover. See also "Ridge Capping".(3)

SAN. Name given by the Khoikhoi to the indigenous group of southern African migrant hunter-gatherers more commonly known as the "Bushmen". In view of the pejorative undertones of the latter word, anthropologists and archaeologists have opted, in more recent times, for the former which is believed to signify "a person without domestic stock".

SAPLING. A thin pliable length of young timber, usually less than 20 mm in diameter.

SCISSORS TRUSS. A simple truss formed of four main members. Two are rafters from wall-plate to ridge; the other two extend from the rafter at wall-plate level to the middle of the opposite rafter. These two members intersect at the middle of the span, giving a scissors-like appearance to the truss.(1)

SCUD. Twisted rope of straw used in conjunction with spars for fixing thatch.(3)

SEED-END. See under "Butt".

SETT. See under "Course (Thatching)".

SETTLEMENT. A generic word used to describe all human habitat in its widest possible context, embracing in its scope the full scale of population numbers ranging in size from the individual family through to the larger village and town. See also chapter 17.

SHEARING HOOK. A sickle-shaped cutting tool used by the thatcher for cleaning down the face of finished work.(3)

SHONA. A group of people indigenous to Zimbabwe, although in the past their lands are thought to have included large areas of the northern Transvaal. They are more correctly known as the maShona and their language is referred to as chiShona. The vhaVenda are also currently believed to be part of a larger maShona identity.

SHUTTER. A wooden panel that fastens over a wall opening, either over the window itself or instead of it.(1)

SIDE PURLIN. Any timber member in a purlin roof which is not the ridge purlin.(8)

SMOOTH STYLE THATCHING. See under "Boer Style Thatching".

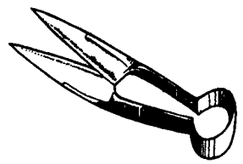
SOD BRICK CONSTRUCTION. A method of wall construction used in some parts of southern Africa whereby the building blocks are obtained by cutting up a field of turf into squares approximately 300 x 450 mm. The sods are then lifted up by means of a spade with the clay particles being held together by the vegetation. After the sods have been laid into a vertical wall, the continued growth of the grass is often encouraged in order to bind the individual parts into one larger and homogenous mass.(4)

SOTHO. A group indigenous to the interior of southern Africa who today are generally regarded by anthropologists as belonging to a larger Sotho/Tswana identity. The current use of this term refers to the southern baSotho of Lesotho and the southern highveld whose national homeogeneity is of relatively short standing, being the result of the events of Difaqane and the subsequent colonialisation of the region. Their language is known as seSotho.

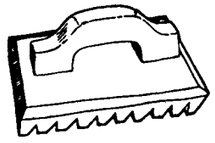
THATCHING TOOLS

· SPAR-HOOK.

· SHEARING HOOK.



· TRIMMING HAND SHEARS.



· LEGGETT, DEKSDAN, THATCHING PADDLE OR BIDDLE.

SPAR. A split length of hazel, pointed at both ends and twisted in the middle, using for fixing liggers, cross-rods and scuds. Also known as a spit.(3)

SPAR HOOK. Thatcher's tool used for splitting and pointing hazel spars.(3)

SPIT. See under "spar".(3)

SPRINGING. See under "Tilting Fillet".(3)

STABLE DOOR. Also known as a "Dutch door". A door cut through horizontally at about half its height and having each half separately hung.(1)

STITCHING NEEDLE. Iron or timber needle used in conjunction with either vegetable fibres, twine or tarred cord to sew the thatch or reed cover onto the timber framework below.(3)

STRUCTURE. Manner in which a building or organism or other complete whole is constructed. This is usually a reference to the supporting framework although it could also be taken to mean the building as a whole.(10)

SWAY. Length of hazel or sapling, used in conjunction with iron hooks, to fix thatch to the roof timbers.(3)

SWAZI. Nguni-speaking southern African group inhabiting the north-eastern part of the region also known as the Kingdom of Swaziland. They are more correctly known as the amaSwazi and their language is referred to as isiSwati.

SWEEP. The curve formed in a roof valley.(3)

THATCHING GRASS OR REED. Various types of this material are available in the southern African region and often two or more may be employed by the rural thatcher within the same structure. The following are the most popularly used by local thatchers :

"Hyparrhenia turta" : abounds in the Natal mountain areas.

"Hyperphilia dissoluta" : northern and eastern Transvaal.

"Thamnochortus insignis", also known as Dekriet or Cape Thatching Reed : found in the Albertinia and Riversdale districts of the Cape.

"Hyparrhenia dregeana" : Natal midlands and mountain areas.

"Hyparrhenia filipendula" : coastal regions of Zululand.

"Thamnochortus erectus" and "thamnochortus specigerus" : the latter is also known as Dekriet : Cape coastal regions.

"Chondropetalum tectorum" : widespread in the Cape region.

"Phragmites australis" also known as "Norfolk reed" : widespread throughout southern Africa. It is also known as umHlanga.(11)

THATCHING HORSE. A timber beam which is suspended by means of rope from the apex or the ridge of a roof to be thatched. This enables the live load of the thatcher to be distributed over a wide area when the covering process has reached the middle and upper roof slopes and he is forced to stand upon work already completed. Also known as a "Thatching Stirrup".

THATCHING NEEDLE. See under "Stitching Needle".

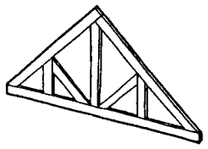
THATCHING PADDLE. See under "Leggett".

THATCHING STIRRUP. See under "Thatching Horse".

THATCHING TWINE. Can consist of a number of materials including grass ropes, woven vegetable fibres, certain types of barks, lianas or monkey ropes as well as commercially-available twine and tarred cord. These are used in conjunction with a metal or wooden stitching needle to fix the thatch to the battens.(3)

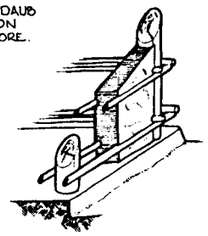
· BATSWANA WOMEN c 1850 : FROM CHAPMANS "TRAVELS"

· COMPLEX OR HOWE TRUSS

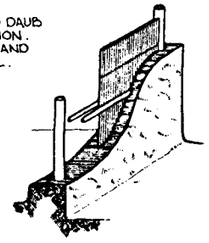


· SIMPLE TRUSS WITH COLLAR OR TIE BEAM.

· WATTLE AND DAUB CONSTRUCTION WITH CLAY CORE.



· WATTLE AND DAUB CONSTRUCTION. WITH REED AND CLAY CORE.



THEMBU. Nguni-speaking group residing in the central region of the Transkei. The people are more correctly known as the abaThembu.

TIE BEAM. A horizontal or slightly cambered beam connecting the principal rafters of a roof.(8)

TILTING FILLETT. Roof timber used in the treatment of the eaves to provide tension in the reed.(3)

TREKBOERS. Name given to migrant Dutch pastoralists who, during the eighteenth and early part of the nineteenth centuries, settled in the more arid regions of the Cape.

TSONGA. An indigenous group inhabiting the eastern littoral belt of southern Africa from Kosi Bay northwards to Sofala in Mocambique. As a result of the Difaqane wars some groups moved westwards and settled in an area immediately south of Venda which is today known as Gazankulu. The people are more correctly known as the vaTsonga and their language is referred to as siTsonga.

TSWANA. A group indigenous to the interior of southern Africa who are today generally regarded by anthropologists as belonging to a larger Sotho/Tswana identity. Although they originally populated much of the highveld region, the events of the Difaqane forced many of them to move westwards. Today they inhabit Botswana, parts of the western Transvaal, the northern Cape as well as a small enclave in the Thaba 'Nchu district of the Orange Free State. The people are more correctly known as the baTswana and their language is referred to as seTswana.

TRUSS. A frame built to carry a roof or other load, its component members being designed to act either in tension or compression.(1)

TWINE. See under "Thatching Twine".

UMLUNGU. Nguni noun generally applied to white male South Africans as a whole. The term is normally used in a neutral sense although it has gained pejorative undertones in some parts of the eastern Cape. See also "Likgowa".

VAAL RIVER. (Afr. "vaal" meaning "tawny"). Derived its name from its yellowish-brown colour. Its Khoi equivalent was the Ki Gariep or Yellow River.(7)

VALLEY. The intersection between two sloping roof surfaces, towards which the water flows. This is obviously the opposite of a roof hip which sheds water from it.(1)

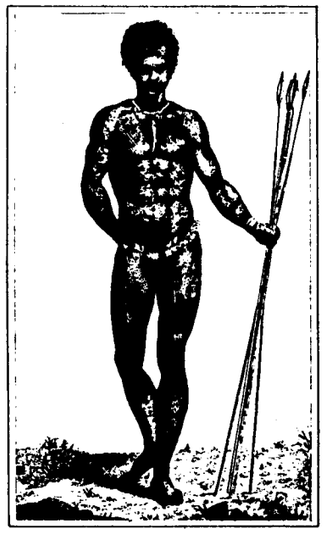
VENDA. Indigenous group inhabiting the northern Transvaal in an area bordering with eastern Zimbabwe. The people are more correctly known as the vhaVenda and their language is referred to as tshiVenda.

VERANDAH. An open gallery or balcony with a roof supported by light supports.(12)

VERGE. See under "Barge".(3)

WALL PLATE. Horizontal timber extending lengthwise on top of the wall immediately beneath the timber roof, thus distributing the load of individual trusses over a larger wall area.(8)

WATTLE-AND-DAUB. Walling made from vertical timber stakes or posts interwoven horizontally with branches and reeds. The whole is then plastered over with clay.(8)



AmaXhosa Warrior c.1790 from Le Vaillant's "Travels from the Cape."

WITHY. Flexible rod of willow wood, sometime used instead of hazel.(3)

XESIBE. Nguni-speaking group originating from the northern Transkei. The people are more correctly known as the amaXesibe.

XHOSA. Nguni-speaking group originating from the southern Transkei, Ciskei and eastern Cape region. The people are more correctly known as the amaXhosa and their language is referred to as isiXhosa.

YARN. See under "Thatching Twine".

YEALM. Prepared layer of wetted straw 350-450 mm wide and 100-150 mm thick.(3)

ZULU. Originally a small Nguni-speaking group numbering about 2000 persons inhabiting the region of northern Zululand between the Upper Mhlatuzi and the White Mfolozi rivers. They rose to political dominance under the leadership of Shaka between 1816 and 1819. Ultimately the Zulu kingdom spread along the eastern littoral from the Pongola in the north to the Tukela in the south. The word "amaZulu" literally means "children of the sky" and refers to the people as a whole, their country is KwaZulu and their language is referred to as isiZulu.

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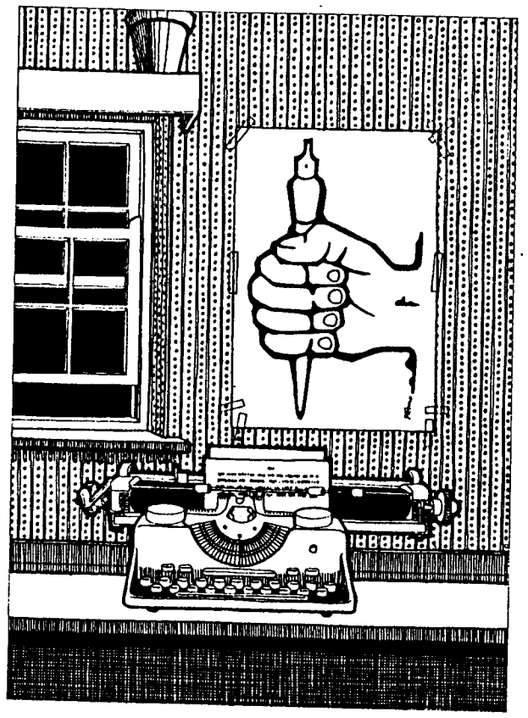

"No work of art is ever finished;
it is only abandoned.."
Arthur C. Clarke, 1984

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