Aboriginal housing: The state of the art (or the non-state of the art)  

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The provision of housing for Aboriginal people has been a thorn in the side of successive Governments for many years. However the problems of Aboriginal housing are unlikely to ever be resolved until they are adequately understood. Dr Memmott reviews the problems and suggests how the search for long term solutions might be begun.

Over the last few decades one occasionally hears of the so-called ‘Aboriginal housing problem’. One might well ask ‘What is this problem?’ and ‘Where did it come from?’ ‘Why isn’t it solved?’

In this paper I intend to demonstrate that it is actually a complex set of practical sub-problems. When these are subjected to analysis, they do yield partial solutions, but at the same time lead into various other difficult problems for which there is currently insufficient knowledge to resolve (in argument or practice).

This in turn highlights the need for detailed research on cultural change in the people-environment relations of Aboriginal groups over the last 100 to 200 years, and within this framework in-depth study of Aboriginal people-shelter relations. Unfortunately very few such case studies exist, just a motley collection of fragments of knowledge, many unpublished or in scarce locations.

A broad and seemingly safe definition of the ‘Aboriginal housing problem’ would be as follows. Many groups of Aborigines suffer high levels of physical and mental stress which appear to be causally linked (either directly or indirectly) to their domiciliary environment. Stress-related factors include lack of protection from the weather, living in squator, crowding, alcoholism, domestic violence, widespread ill-health, insecurity arising from the temporariness of living circumstances — the threat of forced eviction or migration by authorities. Occupants may find it very difficult to escape from such circumstances even if motivated to do so, due to lack of finance and credibility which in turn arises from a lack of employment and education (the so-called ‘poverty cycle’).

The subject of Aboriginal health and housing is a complete research field in itself which space does not permit to be discussed herein. The reader is referred to Dowling and Ward (1976), Reser (1977), Ross (1966), Ngunampa et al (1987).

Despite the recognition throughout the 1970s of the magnitude of Aboriginal health problems and the associated high mortality rates and short life expectancies, the study by Ngunampa et al appears to be the first that systematically isolates and causally links complexes of health problems with sets of design features and ranks them into a set of priorities based on the likelihood of improving health standards.

We can also note that there are cases of the provision of housing to Aboriginal groups which have aggravated the above family of stress-inducing problems rather than helped to alleviate them. There is an accurately documented report of various Aboriginal households attacking their houses with a chain saw, a bulldozer, a truck and a tractor respectively (Reser 1979:93).

Destruction of houses by Aborigines is something that has become entrenched in the white mythology of Aboriginal housing. However actual examples of this behaviour are not so easy to come by first hand experience, and there has been very little coherent reportage on this phenomenon that identifies the cause and context of such behaviour. This lack of case studies is unfortunate because we do not know whether such destruction is a response to poor architectural design, a by-product of other social or personal problems, or the result of a more complex situation involving a culturally different set of values and attitudes about material things.

An exceptional study has been carried out by Reser (1979) in Arnhem Land in which he examined the potential of house designs to either facilitate user adaption and control or alternatively to generate psychological stress. But in general there are no comprehensive models that explain how the stress factors listed previously are related to house design and to user behaviour and perception of houses throughout Aboriginal Australia. What can be said is that the arbitrary provision of housing does not necessarily lead to a satisfactory solution.

In its broader connotations one could write a book on the white mythology of the Aboriginal housing problem. The amount of money that has been wasted and continues to be wasted is no doubt staggering, but not precisely quantifiable. Houses continue to be abandoned, bulldozed and smashed...

However for many politicians, journalists and members of the public, the Aboriginal housing problem is measured by the visual horror of people living in humpies (not necessarily by a calculated assessment of health problems) and by definitions of needs in terms of number of houses. Gough Whitlam was a victim of this mentality when in 1971 he promised that, if elected to office, he would house all Aborigines in 10 years. Many people still assume that if sufficient politicians agree that sufficient dollars are spent to build sufficient houses to replace all the humpies, then the problem would be solved. This approach has proved to be simplistic and a recipe for disaster.

My focus here will be generally on Central Australia and specifically on Alice Springs town camps and the Warlpiri settlement of Yuendumu with a few other examples included. I place these case studies in an historical framework of events that have provided impetus to practice and research in Aboriginal housing over the last 20 years or so.

Transitional housing

Housing for Aborigines emerged as a national issue in the late 1960s following the 1967 referendum on Commonwealth responsibility for Aborigines. Up until this time of course, each State had its own political history of Aboriginal housing but these State histories have never been well documented in a systematic and accessible manner. (An exception is Glanville’s work in NSW, 1969). These histories were closely linked to their respective State government’s Aboriginal welfare and protection policies. However through the 1950s and 1960s a dominant policy across most States was assimilation, one which is now generally considered to be racist. As part of this policy the concept of ‘transitional housing’ was also being taken up in most States. This involved a belief in an alleged social process referred to by one official as a ‘slow evolutionary path’, whereby Aboriginal people’s living circumstances would proceed from ‘nomadism’ to (a) living in a humpy, to (b) so-called ‘transitional houses’... often a stage 1, stage 2, stage 3, and from there to (c) conventional houses in special settlements or in towns. The stage 1
transitional house was usually single skin metal, one room, possibly with verandahs, no services and often earth floors. The architectural development to a stage 3 type involved the incorporation of more rooms, floor material, linings, and a limited number of services ... it has been referred to in the early 1970s as an 'improved prefabricated garage.' (RAIA 1972, Saini 1967)

However in most Central Australian communities there was throughout this period insufficient funding to provide the full range of transitional housing and most Aboriginal people remained in a stage 1 house if they had one at all. The thinking behind this process was generally ethnocentric, based on assumptions that Aboriginals were of low intelligence and incapable of readily adjusting behaviourally to houses. It was simplistic in that it attempted to provide a solution for a vast range of social groups with possibly differing definitions of needs, undergoing differing processes of cultural change, and possibly with differing values about shelter in the first place. In short, a so-called 'Aboriginal problem' inevitably turns out to be a myriad of different problems each associated with different local groups, or at best regions, and which cannot be generalised across the continent.

Transitional housing was further criticised by Charles Perkins (1967: 799) as being degrading and providing a negative stereotype for aborigines as 'poorly educated, frustrated misfits'.

In the early 1970s in Central Australia it was noted (eg by McPhee 1972) that many of these stage 1 houses were being abandoned, at least for most of the seasonal year, and used as toilets. This was often because people chose to return to living in a humpy which they found more comfortable. Today there still remain Aboriginal people in Central Australia who would rather live in a humpy than a house for various reasons. Unfortunately this represents an incomprehensible (even indigestible) fact for many employed in the diagnosis and treatment of the 'Aboriginal housing problem.'

Life and death of a great desert town — Yuendumu
The Native Affairs Branch of the NT established Yuendumu as an artificial township for Aboriginal people in 1946 and by the end of that year 400 people had been moved there. It was one of five such Aboriginal settlements established in Central Australia by government and 'town planners' during this period, and all of which have similar histories. The reason for the establishment of Yuendumu was to prevent the drift of Aborigines to regular towns and mining camps where they came into contact with an adverse set of problems (veneral disease, alcoholism, removal of mixed-descent children from their mothers, sickness, high mortality, violence, economic exploitation, cultural destruction).

Other functions which became more important as time went on were to provide a base from which to implement the Government's assimilation policy and a centralized point from which to deliver welfare services: health care, education, religious instruction. Various material incentives were provided to promote sedentarization — at first free clothes, rations and tobacco; later, a kitchen which served everyone meals, regular pocket money and a store selling desirable commodities. Missionaries became involved from the outset. A new social structure was imposed in the form of the settlement's Superintendent and the advisory Community Council.

Meggit reported in the early 1950s that there were about 350 people in four camps around the town, each corresponding to a major social grouping of the Walpiri. Traditional shelters were adapted by the incorporation of galvanized iron sheeting.

'An outsider's first impression of a Walpiri camp is usually one of ugly disorder.'

Small shelters are scattered about in apparent confusion. Dozens of goat and nondescript dogs scavenge and bravel through the camp area, which is almost devoid of vegetation for a radius of several hundred yards ... Few trees have survived the constant demand for firewood and building materials. Shallow depressions and small mounds of bones, charcoal and other rubbish mark the sites of abandoned shelters. Closer observation reveals the presence of one or two similar camps, separated from the first by narrow belts of sparse acacia and eucalypt scrub. These divisions, roughly, correspond to the traditional community affiliations ' Meggit (1965:75).

Two types of stage 1 houses were built at Yuendumu in the mid 1960s: the Kingstrand house, a prefab single skin aluminium house; and a concrete block house, once again a single room covered by curved galvanized iron roof to include a verandah space on three sides — known by some as an 'igloo house'.

The Kingstrand house was used widely in Central Australia and later received a good deal of critical publicity. Colin Tatz since measured the internal temperatures of this house in summer (Tatz 1964:442. Saini 1967:732). At 11 pm the floor temperature was 30°C higher than the outside temperature and 13°C higher than the interior of a traditional humpy.

In 1972 the Yuendumu settlement had grown to 900. Soon after, Nuggett Coombs visited and described it as follows:

'In outward respects these settlements somewhat resemble the small bush towns that service their neighbourhoods in outback Australia, but that is about as far as the resemblance goes. Certainly, there is much that is familiar: a scatter of weatherbeaten buildings, in some cases, dilapidated and makeshift; ungrouted and footpathless streets that, having been in the first place but cleared strips of sand or dirt, have again become channelled, potholed and overgrown; much litter and rubbish; a total absence of any apparent civic pride. There is as well an obvious separation of the Aboriginal from the European living area. The 'blacks camps' are about as obviously segregated, squalid and unkempt as in the old bush towns of the east and south. We do not conceal our opinion that the hang-over of these problems will for some time to come limit the extent to which the present Government's different policies and methods can have substantial effect.' Coombs (1974).
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I am going to return to Yuendumu later in this discussion to examine its demise, but the reader will note that I have introduced the issue of squalor in relation to this settlement .... and indeed it was a thorn in the side of every rural local authority during this era, at least those which had Aboriginal fringe settlements adjacent to their towns. However the perception of fringe settlements at the time usually failed to separate three issues: (a) health problems involving pollution, vermin, flies, decay, lack of sanitation; (b) an appreciation of dirt or the soil as something that is not inherently evil or unhealthy at least not in the arid expanses of Central Australia, and certainly not in the minds of the Aboriginal people; and (c) the issue of what constitutes visual squalor and whether this is a culturally conditioned perception. I will also return to this point.

RAIA Seminar, Canberra 1972.
In 1972 an historic architects’ seminar was held on Aboriginal housing, conducted jointly by the Royal Australian Institute of Architects (RAIA) and the then Council for Aboriginal Affairs of the Federal Government (RAIA 1972). Representatives of the architectural branches of the various State Governments gave papers on the policies, practices and problems of their respective State. There was also one particularly inspiring paper, that by architect/anthropologist Peter Hamilton (1972). It dealt with the spatial and sensory behaviour of desert Aborigines in their camps, an issue that had not before been brought to the attention of architects, and it had a strong influence on the direction of future research.

The findings from this seminar represent the first published source in which we find definition in varying degrees of some of the critical dimension of the Aboriginal housing problem. Some of the significant observations were:

* The abandonment of a house upon the death of an occupant.

Top & centre. The Kingstransl house, a stage 1 type, at Amoonguna, 1965. (Photograph by Balwant Saini)
The observation that for many remote groups there was a lack of emphasis on personal possessions (as opposed to group possessions of a ritualistic nature). This appeared to explain why housing did not necessarily have a high value for Aboriginal groups and the subsequent lack of concern about damage or disuse of housing.

The retention of traditional kinship behaviour amongst households, leading to high numbers of visitors and consequently severe strain on servicing.

Different beliefs and practices concerning health and sickness which did not conform to the Western demands of appropriate house lifestyle.

Strategic methods that were suggested for dealing with the problem were as follows:

(a) Given that many Aboriginal people were retaining their traditional culture despite the staged housing philosophy and the assimilation policies, there was clearly a necessity to start positively designing for relevant aspects of Aboriginal domiciliary behaviour.

(b) Following on from this it was realized that more adequate consultation by professionals was required during the design process, as well as an emphasis on the involvement in decision-making of the Aboriginal community. (There is an implicit definition of the client here, as the Aboriginal community council.)

(c) A recognition of the need to involve the community in the construction process, to explore the value of self-help solutions to utilise Aboriginal labour and to attempt to teach building skills to Aboriginal people. Implicit to this approach was the assumption that an involvement in planning, construction and at one extreme total self-help, leads to a strong personal identity with a house and an accompanying attitude of caring and valuing. (Today there are some who would contest this assumption. It has never been satisfactorily tested.)

(d) A need to investigate more unconventional approaches, eg the provision of low-cost prefabricated lightweight structures (tent types); also portable ablation blocks to facilitate more mobile groups.

These and other ideas represented a turning point in the thinking on Aboriginal housing at the time, although many of them proved far more difficult to implement or resolve than was expected. Once again the approach was too simplistic and unable to be generalized throughout diverse situations. Nevertheless, for the time being it was the model of how housing experimentation should proceed, although it took a number of years before it was thoroughly implemented.

Aboriginal Housing Panel (Phase I)

Out of the seminar was born the Aboriginal Housing Panel (Phase I) with modest funding from the Federal Government. The initial objective of the panel was to investigate and to contribute to the implementation of solutions to problems related to Aboriginal housing. It saw itself as having an advisory and investigative role in relation to relevant government departments. From the outset there was a proposal for pilot studies on prototype houses in selected Aboriginal settlements.

During 1972 to 1975 the Panel was exploratory. There was a proposal developed for consultants to construct a range of designs for Central Australia with an intention of carrying out comparative post-occupancy evaluation of them (Heppell 1977). This was one of the first attempts to give communities alternative housing experiences and encourage them to be discretionary in terms of their own needs when choosing a design type.

These consultants, and other architects acting independently during this period, were generally well-meaning and idealistic, but they lacked any rigourous discipline in their approach, often basing it on false assumptions, and were sometimes guilty of inadequate consultation and understanding of their clients' lifestyle, needs and social problems. There was no text book to follow, no systematic research base, nor any agreed-upon research methodology to work from, just the strategies mentioned before and the initiatives of the individual architects.

Some of the better-known house designs of the early 1970s together with their sources of documentation (and evaluation, where available) are as follows. A number of them were bravely experimental, which later led to various degrees of criticism, and in some cases abandonment by the Aboriginal tenants due to the dominance of the architect's thinking in the solution and not that of the client's.

Alistair Knox's organic house at Ernabella .... inspired by Ayers Rock, and traditional Aboriginal dome shelters. He described it as a 'corrugated iron cave .... a house without corners.' (Knox 1975; 'Ayers Rock House' etc, 1972).


Apatula house by Andrew McPhee, manufactured by an Aboriginal company at Finke .... a space frame roof on four posts, supposedly allowing flexibility of room layout within the parameters of the module, and thus more potential for client involvement in architectural change (McPhee 1972, Heppell 1977: 27, 78-88, App. 4-7).


The S1559 and S1560 designs of the Queensland Department of Works for the Department of Aboriginal and Island Affairs — a conventional design raised on posts (Woolnough 1972, Memmott 1979:359-389).

The Wilcannia house design by Ken George, a staged self-help project using concrete blocks manufactured by an Aboriginal housing company, and employing a generative plan geometry (George and Smith 1975; George and Clark 1980; Memmott 1983) .... also significant because of its integrated architectural, social and economic planning approach, one that was also explored in Wilcannia by Peter Myers (1975).
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An important significance of these case studies despite any criticism they incurred, is that they represent the best documented examples of Aboriginal housing to date, and as such have provided a forum for highlighting the principles of successful and unsuccessful design. At the time of writing, there are no published findings on post-occupancy evaluation of Aboriginal houses in the 1980s, with the notable exception of the work carried out by Dr Helen Ross in the Halls Creek area of the Kimberleys (Ross 1987).

Ross investigated the Aboriginal perception of different housing types by drawing on a psychological theory called ‘Kelly’s construct theory’ and its associated methodology, repertory grid analysis. Through a process of her subjects comparing and contrasting different house examples, she was able to isolate a range of attributes which they employed in their personal constructs of good and bad housing. The fundamental importance of this approach is that it attempts to identify objectively how Aboriginal people perceive houses rather than making assumptions about how they perceive them.

Research in the 1970s

In the mid and late 1970s the first relevant body of meaningful research became available. It was largely based on the premise that adequate design could not occur until Aboriginal domiciliary lifestyle was scientifically studied, recorded and used to generate design criteria. The best laboratory for such research was in self-constructed Aboriginal settlements: traditional camps and also the sedentized fringe settlements of humpies near towns, missions, and cattle stations. These were settlements that had been designed and built by the residents themselves with their shelters arranged spatially to suit their own needs. Here was the best chance to understand what distinct cultural factors underlay Aboriginal domiciliary lifestyle. (although it was a quickly disappearing chance as most of these settlements were eventually bulldozed by local authorities)

Methodologically, such research required a crossing between the disciplines of social anthropology and architecture. It also coincided with and partly stemmed from the emergence of the new discipline of architectural psychology in the late 1960’s which broadened into environmental psychology or people-environment relations.

The principal properties of Aboriginal domiciliary lifestyle that were examined in isolated case studies were as follows:

1. The study of traditional Aboriginal shelter or ethno-architecture re-gained respectability. Ethnographers had been interested in this subject at the end of the last century (Smyth 1878, Worsnop 1897, Roth 1897, 1910) but only one definitive paper was subsequently published up until the 1970s, by anthropologist Donald Thomson (1939). In the more recent research the seasonal range of shelters was recorded for individual social groups (sometimes up to 12 or 13 shelter types), and the architectural properties of each type examined: form, structure, cladding, construction process, etc. (Biernoff 1974, Memmott 1979A). The composition of the domiciliary space was recorded, made up of shelters, hearths, artifacts and activity areas (O’Connell 1979, Memmott 1979B: 188-184, 339-340). Only one partial study (Koettig 1976) has been made on the distribution of different shelter types across the continent. Negligible reportage has occurred on galvanized iron humpies, a notable exception being the architectural thesis of Savarton and George (1971) which looked at fringe settlements in Wilcannia and Weilmargile, western NSW.

2. The composition and nature of domiciliary groups and their social identity was another allied research area, although this was a sub-study of kinship and as such a subject in the mainstream of social anthropology. These properties underlie the construct in (3).


4. The behavioural use of domiciliary space. Typical diurnal/nocturnal behaviour patterns for different seasonal periods... including a range of studies on such subjects as approach and departure behaviour, sensory communication between domiciles, sleeping behaviour, cooking behaviour and use of hearths, the use of storage artifacts and resources (Hamilton 1972, Biernoff 1974, Memmott 1979: 346-358, Heppell and Wigley 1981).

The socio-spatial patterns mentioned above have proven to be far from static. There are multiple co-existing social structures in traditionally oriented Aboriginal societies (matri and patri moieties, subsections or sections, language and dialect groups, clans and bands, patrilineages and matrilineages, etc.) Such multiple structures facilitate a dynamic of residential location. Any individual has at any given time a range of families with whom they can choose to stay depending on what bonds they choose to activate. There is high incidence of residential mobility both in and between settlements over most of Aboriginal Australia. This runs counter to maintaining responsibility for one house and paying regular rent for it.

There are a variety of reasons that may trigger such mobility and these form topics of research in their own right. Examples are residential conflict, the abandonment of shelter after death, and the traditional patterns of local movement for economic, social and religious purposes. Regional patterns of mobility (as opposed to local ones) have not received close attention from anthropologists, neither for traditional nor contemporary contexts.

Research issues of a distinctly cultural nature

There are certain interesting outcomes from this research, certain behavioural characteristics that I would like to stress as being culturally distinct and of ongoing significance to the problems of housing. Unfortunately they are seldom vocalized or made explicit by Aboriginal people themselves, at least not to outsiders, and are thus difficult to study.
1 to 8 Eight sub-camps of the Arrernte. The three-quarter circles indicate nocturnal windbrakes (or domed huts, dependant upon weather conditions), which were largely used by nuclear families. In each sub-camp the male spouses of each nuclear family share the same social class. There are eight classes altogether (1 to 8).

A,B. Four diurnal meeting shelters of the men, C,D called ‘ungunja’. Each ungunja contains the men from two specific classes, plus visitors.

→ Directions in which the men from each class must walk when circling the camp to visit another group’s ungunja.

a,b. Four diurnal meeting shelters of the women, c,d called ‘lukwurra’. Each lukwurra contains the women from two specific classes plus visitors.

→ Directions in which the women from each class must walk when circling inside the camp to visit another group’s lukwurra.

Early photographic study of an Arrernte family, shelter, and external domiciliary space near the Alice Springs Telegraph Station in 1896. (Photograph by Baldwin Spencer, reproduced by courtesy of the Museum of Victoria Council. This photo should not be further reproduced without the permission of the Council.)

A kumpy in the Mallee town camp of Wilcannia, western NSW, recorded in 1970. It accommodated twelve residents and had a complex plan form with six rooms, verandah and a right-angled corridor. (Reproduced from Savarton and George 1971)
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- Aboriginal models of privacy and crowding remain ill-defined, but culturally distinct. Norms relating to these concepts underlie in part the phenomenon of the external orientation of domiciliary groups, a tendency for Aboriginal people to spend much of their time outside their houses, maintaining communication with and surveillance of their neighbours. Sleeping behaviours can involve substantial numbers in a single room.

- An aspect of traditional kinship that pervades contemporary Aboriginal behaviour, despite extensive cultural change in many cases, is the sharing of objects, food and house facilities. The author argues that object possession has a different set of properties in Aboriginal cultures and that this subject has not received serious consideration by social scientists to date. This more abstract problem links into high incidence of damage to houses and failure to pay rent — two practical problems faced by housing authorities.

- The custom of abandonment of a house or a whole housing sector upon the death of a resident has still not been carefully documented, and it remains a formidable problem for housing authorities. The thrust of the above research led into a conceptual paradox for the few involved architects who took it seriously. The obvious strategy was to try to design residential environments supportive of these various distinctive properties of people-environment relations. One way to do this was to attempt to upgrade a fringe settlement so that its architecture was structurally sound and weatherproof, its servicing was adequate with health hazards eliminated, but at the same time to take care to preserve the architectural character, scale and form, and social spacing of the original indigenous settlement.

Ironically no architect, as far as I know, has found an Aboriginal client who totally subscribes to this approach. There is a strong architectural conservatism amongst many Aboriginal clients which results in requests for conventional three-bedroom-type houses. Any deviation from the local white standards of rural housing may be resented. Behind such reaction often lies an understandable desire to achieve equality, to be accepted, to have some modest but recognized status, and not to be ridiculed.

An interesting example of this occurred in Wilcannia (Western NSW) in 1975, where architect Ken George was briefed by a large Aboriginal community to locate their newly planned residences in the same locations as their humpies and thus preserve their self-generated social spacing. At the same time they requested conventional houses visually similar in character to those of the white townspeople and with the average range of rooms and services found in such housing (George and Clark 1980).

The second part of this paradox is that clients may well retain their culturally unique norms of behaviour when they move into their new conventional houses. If the design is inappropriate this may result in stress and eventually damage, disillusionment, and evacuation. One could term this problem 'having unrealistic aspirations about houses.' An obvious conclusion is that more should be done to educate Aboriginal people about the meaning of architectural design and the desirability of a 'design-fit' between house and client's lifestyle, as well as the occupancy adjustments and problems that tenants should expect to incur.

Aboriginal Housing Panel (Phase II)

In 1975-1976 the Housing Panel underwent internal reconstitution catalysed by the appointment of a salaried Director, Dr Michael Heppell. The Panel was detached from the RAIA, incorporated as a company, and funded by the Federal Department of Aboriginal Affairs. The Panel members were largely replaced by Aboriginal people who revised the direction and nature of the Panel's activities.

Politically, this coincided with the new Federal Government Aboriginal policies that emphasised self-determination, self-management of Aboriginal issues and the commencement of the 'Aboriginalization' of Government agencies that dealt with Aboriginal affairs. (The last involved replacing white officers by black ones where possible).

The focus of the Panel turned away from regional solutions, and to the architect/Aboriginal client interface. There was a general downplay of research by the Panel although Heppell attempted to report and record as much as he could on behalf of the Panel. He was in fact a prolific writer and critic, producing a number of evaluations of certain Aboriginal house designs of the mid-1970's (Heppell 1976B, 1977).

These evaluations were included in the four Occasional Papers he produced for the Panel (refer bibliography). Another one of these was titled 'The Architect and the Aboriginal Community' (Heppell 1976A) and dealt thoroughly with the problems of consultation. Heppell edited a book titled 'A Black Reality' that contained a collection of some of the research papers referred to previously on the people-environment relations in camps and settlements (Heppell 1979). In this book Heppell also contributed a political and historical overview of housing at the time, and concluded with a report on the demise of the Panel. For in mid-1978, the Minister for Aboriginal Affairs closed the Panel down, reverting its responsibilities and role to the Departments of Aboriginal Affairs and Housing and Construction.

Some politicians and government administrators may not agree that this action was a retrograde step, for the Panel had had its share of problems; but for the few architects and numerous communities involved in Aboriginal housing and in touch with the Panel, it was a disaster. The design developments, dialogue and evaluation that had been gaining momentum were replaced by a vacuum. Admittedly a handful of Commonwealth architects in Alice Springs and Darwin made a contribution.
in the early 1980s, (Geoff Barker, Paul van Schaik), but there has been no published feedback on their work.

A year prior to this (February 1977), a full-time architect Julian Wigley had been appointed to the Panel and his focus had been the Aboriginal town camps in Alice Springs. He co-authored an account of his work with Heppell, and they titled it ‘Black Out in Alice’ (Heppell and Wigley 1981). This was the first and so far only published detailed description of an architectural design process based on the type of research approach to Aboriginal people — environment relations previously described.

The Alice Springs town camps and campers, as in other regional rural centres had a long settlement history. The history of some of the 27 camps goes back to first contact, and some of the contemporary camps are 40 years old. Each language group in Central Australia has its territorial niche in the Alice Springs camps. Wigley found himself working at Mt Nancy camp in which were predominantly Anmatjere/Kaytej people.

Mt Nancy 1976 — 1978

Wigley’s design philosophy and process at Mt. Nancy were shaped by the following initial parameters:

1. The town campers wanted a conventional appearance to their houses, one which conformed to the urban character of Alice Springs. They wanted brick construction.

2. Wigley recognized the broader problem of relating house provision to a coherent community plan — economic, social and physical. For Mt Nancy, this involved the establishment of a housing association, application for lease over the camp area, installation of fencing, lighting, ablation block, roads.

3. The necessity for a close working relation between the architect and the client. If the architect had to identify the lifestyle of the people and decide how to design for its various elements, then he or she had to enter into a lengthy consultation process to overcome the communication barriers and gain the trust of the client. This involved (and still involves) the architect having to observe and participate in the life of the fringe camp, including those aspects that were unfamiliar and unpleasant to the middle class urban individual. ... sitting in the dirt surrounded often by rubbish, drunkenness, fighting, etc. It also involved an abnormally high time commitment to individual clients. This was in contrast to the Phase I Panel who were seeking a limited range of solutions for use through as large a region as possible.

   The behavioural attributes identified by Wigley for translation into design were much as listed before, and are examined in excellent detail in his book. I shall only mention a few:
   - Wigley noted the external orientation of domiciliary lifestyle, the intense sensory communication between households, and the necessity for external surveillance. In this case there was an added function ....to monitor the nearby Stuart Highway for the comings and goings of cattle station personnel with an aim to initiating enquiries about employment prospects.
   - Wigley was concerned with the vertical and horizontal scale of the humpy in relation to a house design and its ultimate room sizes. This involved such spatial issues as (a) in-reach of adults but out-of-reach of children and dogs, and (b) blocking the wind with a windbreak but being able to look over it from a ground sitting position.
   - Wigley studied the role of town campers in hosting visiting relatives from bush communities, and tried to identify the types of facilities, spatial preferences, and level of interaction optimally required. (This has grown into a major problem of town camp housing design.)
   - Another significant behavioural attribute was the approach and departure behaviour of individuals in relation to the overall domiciliary space, and also with respect to bedrooms, stairs, hallways, buffer spaces; plus a general principle of providing higher levels of individual privacy in the interior of the house. (This is in contrast to the courtyard designs of Howroyd and McPhee, mentioned earlier.)

Tangentyere Council

The closing down of the Aboriginal Housing Panel coincided with the emergence of Tangentyere Council. This is an Aboriginal organization formed in late 1977, and an amalgamation of all of the Alice Springs town camps (currently 19). In its ten year history it has developed a highly individual approach to its function of providing integrated housing services. It expanded the Panel’s criterion of community planning into many logical forms, that architects and bureaucrats do not appear to have successfully achieved elsewhere in Aboriginal communities.

   Its characteristics as an organization include:
   1. A philosophy of Aboriginal control by a body of representatives from the town camps who meet very frequently to manage and regulate decision-making.
   2. A works department with about 30 employees based in a large workshop.
   3. An architectural department (four architects) that provides intense consultation with clients and monitors post-occupancy problems, amongst other normal services.
   4. Aboriginal housing officers and homemakers who consult with the residents in individual camps, facilitate camp decision-making and intervene, assist, or report on a wide range of behavioural problems that have an impact on the housing stock. They in turn have ‘back-up’ from social workers.
   5. A bank for tenants through which occurs a rent collection service. ... This is facilitated by a transport service to and from the camps.
   6. A landscaping service concerned with climatic and dust control of housing and the provision of edible plant foods to improve health.
   7. Direct and indirect provision of Aboriginal schooling, pre-schooling and after-school activities for town camp children; other social services for adults (women’s officer, old peoples’ services).
   8. A high priority on employment and training for town campers within the organization.
9. An ability to solve complex problems by coordinating the skills available in the various departments and carrying out all necessary transactions with the outer world of government and building industry.

This approach is in direct contrast with trends elsewhere in government which are promoting mainstreaming and decentralization of welfare services amongst different agencies. This multiplies the number of organizations Aboriginal people have to deal with and the accompanying communication difficulties, as well as demanding that individuals acquire an understanding of the specialized functions and procedures of every separate agency. Such situations present formidable barriers to many Aboriginal people in Central Australia who have poor education and are often illiterate, and may be intimidated in cross-cultural communication contexts. I believe that this approach is geared for failure in the field of Aboriginal housing.

Success is further exacerbated by the often unclear delineation of responsibilities between various government departments for various housing services, their tendency to ‘pass the buck’ to and fro under difficult circumstances, and to frequently change their policies, personnel and commitment levels to the detriment of those Aboriginal housing associations trying to maintain some sense of continuity in a community housing programme over five or ten years (Mennott 1986: ch 11).

The value of Tangentyere’s approach is that it recognizes that good housing designs will only work with appropriate back-up services for clients (especially rent collection and maintenance) and that these and other relevant services are best delivered from within one integrated and Aboriginal-controlled organization.

However there are also some significant problems currently affecting Tangentyere and the Alice Springs town camps.

The alleged high cost of Tangentyere’s services is occasionally commented upon. Unfortunately, systematic comparative evaluations with alternate systems of delivering and maintaining housing stock involve so many qualitative factors that such evaluations are not very potent in influencing the top level bureaucrats and politicians whose preoccupation is often with ‘$ per house’ type analyses. Nevertheless the value of Tangentyere as a prototype system in the Aboriginal housing sector is widely recognized and replicas or variants of the organization are springing up elsewhere in the NT and WA.

Another major problem is the impact of visitors on town camps. The mobility between bush communities and Alice Springs continues to increase. Kinship obligations and sharing behaviour regularly lead to large numbers of visitors residing in and near town camp houses. Visitors consume alcohol often resulting in intoxication, disturbances, damage to housing stock and consequently very high maintenance bills for tenants. At the same time visitors consume the tenants’ food and money, depleting the household finance for rent and maintenance.

The situation is aggravated by the reluctance of the NT Government to grant leases for more camps in Alice Springs. One need for more camps sites is to enable different language groups in the higher density camps to be separated, this being a source of the larger scale forms of social conflict as population increases.

Tangentyere’s design approach
This is an extension of the Wigley approach. I would venture to say that more knowledge and feedback from housing successes and failures goes into the current Tangentyere house than most other Aboriginal housing in Australia. This is because three ‘generations’ of architects have contributed over twelve years and built upon one another’s experiences and mistakes. This does not mean the Tangentyere designs should be widely used, because they arise in response to a specific set of client needs. Nor does it mean that all Tangentyere designs are successful; there is varying success.

Some of the design features are:
- The personal design service for clients provides one to six bedroom houses and duplexes, as well as extensions and renovations. Inner walls are usually concrete block to provide adequate thermal capacity. These are surrounded by lightweight verandahs, ‘sleepouts’ and pergolas which are useful for accommodating visitors.

• Once again these houses have a relatively conservative appearance, conforming to the norm of what a house should look like to a resident of Alice Springs, but at the same time with an architectural style that is distinctive in its own right, involving the use of strong
Concrete block houses by Tangentyere Council in Alice Springs town camps, 1984-85. Design is characterized by extensive verandah and sleepout areas for external activities and to accommodate visitors, pot belly stoves for winter heating, lockable storage cupboards, refrigerator inside lockable pantry, pergola with decision wines, exhibition rooms separate in case of efficient blockages, security grilles. Architects: Mark Savage and Jane Dillon.

The responsibility taken for children by parents and other related adults, and has generated little, if any sense of responsibility for the overall settlement, (a settlement which was never asked for, but imposed on the people). Little is objectively known about the origin or sociology of this violence. Counselling, punishments and design measures have little effect on curbing it. Aboriginal leaders describe it as a form of cultural defiance.

The outstation movement also developed rigorously in the late 1970s (Coombs et al. 1980). This brought a decrease in the degree of occupation of the Yuendumu houses. Of a total current population of 1400 there are between 300 and 500 residents away at outstations at any one time. (There is also an expressed demand for conventional housing in all of these outstations.) This absenteeism further facilitates vandalism. Death also continues to be a major cause of empty houses — up to 15 households may evacuate in the case of an important person unexpectedly dying. During a five month period at the end of 1986 it was noted that the tenancies of 52 out of 45 houses changed. Another 35 houses remained unoccupied. Of the total 80 houses in the settlement, there were 21 that needed repair and maintenance in excess of $30,000.

An aboriginal building team has operated at Yuendumu since the early 1970s and has relentlessly focused on the repair and extension of the igloo houses. Many have had extensions provided, viz an additional bedroom, service rooms and weather protection walls. The involvement of the building team is claimed to psychologically assist in motivating residents to value their houses. But youths still smash these houses freely, before, during and after occupation. I have been observing the building team repairing and upgrading the igloo houses for eleven years and I wonder whether their task will ever end.

The tenants once paid rent. They do not anymore. No rates are paid either. Garbage has not been collected for two years. The Western visitor is startled by the appearance of Yuendumu. The town

 colour interaction, roof form play and external living spaces.
 • Careful design for the regional climate, high durability, security, adaptability for visitors if required, comparatively low servicing costs, capable of being extended, and the careful integration of landscaping, are further design attributes.

Return to Yuendumu
The Alice Springs town camp situation is in stark contrast with the settlement properties of Yuendumu over the last decade.

The late 1970s were marked by a number of diverse developments that were peculiar to Yuendumu's origins as an institutionalised settlement but equally due to the creative and dominant Warlpiri culture. I shall mention a few of these to make some salient points.

Ceremonial life was then still strong and continues to be so i.e. certain aspects of the culture are very much intact despite much change. The impact of the Baptist Mission has to a large extent, resulted in the absorption of Christianity into the mainstream of Warlpiri culture, rather than the reverse as in many other Aboriginal communities. The verses of the Old Testament have been translated into corroboree and the stained glass church windows contain symbols of Warlpiri dreamings. One is struck by the creative vigour of the Warlpiri.

As in other desert communities, the Yuendumu Warlpiri have in recent years taken up fine art in a Western commercial sense by adapting the Dreamtime stories and symbols to the canvas for export to art galleries in New York, Tokyo and other lucrative art and tourist outlets. The famous pointillist technique of the desert ceremonial sand painting is employed. The best of this art displays sophistication and innate skills in creative visual order. The use of colour interaction is reminiscent of the American and British colourist painters of the 1960s and early 1970s (eg Rothko, Barnett Newman, Jules Olitski, Morris Louis, Bridget Riley). Despite this capability and understanding of visual and aesthetic order, Yuendumu has deteriorated into an even more squallid settlement than that described by its earlier observers, both visually and health-wise.

The late 1970s brought increased mobility in cars and Toyotas; also an increase in alcohol consumption and a spate of petrol sniffing. Vandalism became vogue amongst youths and the housing stock has been severely punished ever since. It seems that the cultural engineering of the government has led to a decrease in
The 'igloo' house at Yuendumu, a Stage 1 type with a single room, built in the mid 1960s. Total stock numbers about 10, arranged in parallel lines. Most have undergone extensive damage over the years.

The housing programme involves reconstruction and extension of these houses. Protective screen walls are added as well as an additional bedroom, kitchen, sleeping area, shower and toilet.

is its own rubbish dump. The spinifex hummocks extending away on the plains are all dotted with plastic bags. The people do not seem overly concerned with this. They do not seem to respond negatively to what we would regard as visual squalor, nor to what could be a major health hazard. On the contrary, they diligently maintain their preoccupation with their own forms of visual order. In all of this should lie some important lessons in the differing attitudes and values of the Warlpiri about objects. But there are unfortunately negligible findings in the available research on the nature and origin of the concept of possessiveness in Aboriginal cognition and its variation with respect to different categories of objects and property.

The last word on 'tin sheds'
In the last year a new house design has been utilized at Yuendumu. .. a type of 'Nomad' house. It is a pre-fabricated two-roomed single-skin steel dwelling reminiscent of the Stage 1 or 2 houses of the 1960s. Each one cost $10,000 delivered and another $10,000 was spent on their erection, the installation of a concrete floor, septic system, and water reticulation (no electricity). These have been erected in the 'west camp' where people have resisted moving into igloo houses closer to the centre of town.

After occupying the Nomads for some six months the residents declared they were happy with these dwellings. Interestingly enough, upon their completion, people did not necessarily demolish their old humpies. The humpies are still valued and considered architecturally superior under certain climatic conditions. Some residents now regard their houses as consisting of both the Nomad steel shed and the humpy, all in one.

In the last few years these Nomad dwellings and other similar simple steel dwellings are being proliferated all over Central Australia in response to the backlog of housing. The steel sheds are usually accompanied by pit toilets and freestanding shower units with solid-fuel hot water systems. There do not appear to be any architects directly involved with this solution type. It has been generated by systems builders, construction companies, entrepreneurs, and alternate technology specialists.

The housing backlog is the result of an ever-increasing population and a steady suppression of funding by the governments. Demand is outgrowing supply rate. Communities are presented with a choice of buying a few conventional houses or perhaps six to ten steel sheds, with their annual housing money from the Government. The latter option is often taken up.

There appears then to have occurred a full cycle of architectural solutions in the last 20 years at Yuendumu and elsewhere, from the aluminium sheds of the 1960s to the steel sheds of the 1980s. Will the steel shed be also obsolete in five years, impractical to repair and abandoned, with the result that this interim measure simply postpones and magnifies the size of the Aboriginal housing problem in Central Australia as a legacy for the next generation of Aborigines, bureaucrats and architects? The available base of research knowledge is not strong enough to provide an answer to this question.

Conclusion
To conclude this discussion a further series of related questions from the Yuendumu situation and which are widely relevant can be posed:

- What is the cognitive construct of a 'house' in the minds of the Warlpiri? Is it changing? How is it affected by the other cognitive domains of the Warlpiri culture?
What should the priorities of government expenditure be at Yuendumu?
What is a reasonable time and cost to spend on finding a solution?
How many more generations at Yuendumu must endure different styles of houses and ‘tin sheds’ before an acceptable solution is found? And when it is, how will the backlog of housing bebridged?

It is unlikely that such questions can be adequately resolved until much more is understood about the Aboriginal housing problem and until changes in government policies are effected in accordance with such findings. Architects need to accelerate their research effort to document and evaluate their housing solutions, continue studies of domiciliary lifestyle, investigate aspects of the Aboriginal phenomenology of objects, link their research to models of cultural change, examine the potential application of findings at regional levels, educate younger practitioners (especially Aboriginal ones) and encourage them to participate in this specialised field.

It is essential to educate and involve Aboriginal people in the provision of their housing, at least to the extent that they appreciate the process of design, delivery and maintenance of housing so that they can exercise control over key decisions in all of this process. Such decision making has to be integrated with the provision of other social services and the solving of other social and economic problems such as breakdown in social cohesion and control, unemployment, alcoholism, impact of visitors on communities and internal conflicts.

However these proposals concerning client education and research require funding which must, in the last analysis, be a responsibility that governments face. Federal and state governments should re-examine their histories of providing housing to Aborigines and document their mistakes instead of constantly re-inventing the wheel and committing the same errors. They should set goals to establish an efficient and stable approach to the provision and preservation of housing stock before the end of this century. Dynamic efforts are needed to overcome the barriers between the individual departments in the various governments. But, in the long term, positive benefits will accrue, not only for Aboriginal communities, but for the taxpayers who foot the bills for the numerous failed projects that one continues to encounter whilst wandering the back blocks of wild Australia.

Unique Aboriginal housing organisations such as Tangentyere Council (Alice Springs) and Jukurrpa Council (Tennant Creek) should not only be encouraged and thanked, but regarded as experimental models of self-determined management that are of national significance and that might be studied and adapted for use in other regions and states.

The RAIA needs to re-activate its ethnic and political role in these matters as a responsible professional body. It took the initiative once in 1973. It is capable of doing it again in 1988. There is an unquestionable need for a central research and development agency along similar lines to the old Panel with an Aboriginal steering committee but structured so as to have assured stability and autonomy in order that its continuity is not disrupted by political ebbs and tides (such as the ‘razor gang cuts’ of the late 1970s). The ‘Aboriginal housing problem’ has its own unique scale of dimensions that are not commensurate with the current short term cycles of Australian political time.