

People working with technology in remote communities

ourplace

Number 28

**Research that works for
communities**

**House and home in
Indigenous Australia**

**Revolution in Indian Country:
thoughts on the American way**

BUSH TECHS

- How to develop a project for your community
- The use of gas for cooking

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The whole house system

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In this issue we focus on housing. Our insert and our articles in Technology on page 9 and Outlook, page 14 all deal with variations on the theme of housing, which we know is an area of concern for many people living in remote communities. There are many aspects to the discussion on housing and we hope that these contributions will serve to inform people to make appropriate decisions regarding home ownership.

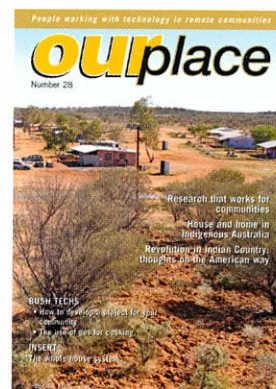
On page 16 Metta Young reports on her visit to the University of Arizona as a Fulbright Scholar, and shares her findings on the progress that has been made by Native American Tribes in their quest for self determination and economic development. "Although...economic prosperity is not a widespread reality as yet, there is substantial optimism that it will be".

Clearly there are some interesting parallels and lessons for Australian policy makers.

Elsewhere we have a thought provoking article on research in communities on page 12. We report on the National Conference on Sustainability of Indigenous Communities as well as an update from our Technical Services Group page 7. Our BUSH TECH #31 is a step-by-step guide to putting together a community project and in BUSH TECH #32 we are cooking with gas.

I hope you enjoy this 28th edition of Our Place and I urge readers to respond to our request for information on page 5 regarding your stories and experiences of Vocational Education and Training. This is an area of particular interest to CAT and your input will be greatly appreciated.

Narelle Jones, Publications Officer



Front Cover

Engawala community. Engawala is 210 km north-east of Alice Springs. The community is determined to improve standards of living and quality of life for the residents. CAT is currently working with the community which will feature in future Our Place editions.



Our Place

ISSN: 1325-7684

Our Place is published three times a year by the Centre for Appropriate Technology, an Indigenous science and technology organisation, which seeks to secure sustainable livelihoods through appropriate technology.

Subscriptions: Free to people living or working in Indigenous communities.
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Opinions expressed in *Our Place* are those of the authors and not necessarily those of the CAT Board or staff.

Our Place number 28, 2006
© Centre for Appropriate Technology Inc.
32 Priest Street, Alice Springs NT 0870
Print Post: 545270/00016

Production and design: Narelle Jones
Editing: Steve Fisher
Printing by Colemans Printing

The production of *Our Place* is funded by the Commonwealth Department of Family and Community Services and Indigenous Affairs.



On house and housing

Houses are complex social and technological systems that comprise many components, including old and modern materials and technologies. Houses provide many functions, ranging from basic needs like shelter from the rain, to contemporary ones like watching DVDs. Houses are also the sites for complex interactions. There are interactions between the parts of the houses – like the washing machine and the water supply – and between the parts of the house and the people who live there and use the shower to get clean and the stove to cook a feed.

If we think of the house as a system, understanding how it works means more than knowing about all the parts that come together in the building. We also need to know how the house influences the people who use it and how the people who use it influence the house. We should have an understanding of how the cost of repairs, local council or government

policy and funding arrangements might affect the proper functioning of the house. These influences in turn lead to the various patterns of behaviour that we see around a house, like cooking outside. They also affect the responsibilities for maintaining the house in good condition and undertaking repairs.

The house in remote communities

The house in remote Indigenous communities is the space where the cultural and economic impact of the changing world is its most evident in the lives of people. In the Western world, the house is a base from which families engage with the wider world, making choices about education, accumulation of material wealth or opportunities to participate in civic society. By contrast, Indigenous people historically tended to organise their society and environment differently,

the interests of the group taking precedence over individual choices, education paths and participation in society were regulated by tradition, and accumulation of wealth, as it is commonly interpreted in contemporary Australia, was unknown.

In remote communities, outside of welfare payments, probably no other institution of the European social model has catalysed as significant a change in traditional lifestyles as the house. There are suggestions that houses are increasingly valued more highly than cultural obligations. Examples include the denial of access for kin, or holding onto the house after the passing of a family member, and even more significantly the acceptance of these actions by the extended family and community. These behaviour changes are more important indicators of how remote indigenous housing is valued than the tidiness or life-cycle of houses. ►



Approaches to improve living conditions

The connection between adequate housing and residents' environmental health, physical-mental-social well-being and the capacity to function and achieve in society is well documented and recognised¹. Given the importance of housing for overall life experience and potential, it is not surprising that adequate housing for remote settlements has been a priority for governments and Indigenous peoples for many years. Also given its central importance, it is not surprising that discussions about housing cover a wide range of approaches. Responses to "housing needs" in communities include housing and infrastructure programs and may incorporate new construction, upgrade or repair and maintenance. Some of these programs consist of technical interventions as well as research and educational activities.

Healthy houses – healthy people

One of the earliest and best known housing intervention advices comes from the Uwankara Palyanyku Kanyintjaku (UPK) Report². UPK is based on the principles of public health, and on the recognition that houses and infrastructure that do not work well actually promote disease. Building on extensive consultation on the Anangu Pitjantjatjara (AP) Lands Nganampa Health Council developed a set of recommendations around the central principle that the main role of the house is to provide access to "health hardware" for residents.

Further steps on this path included the AP Design Guide³, the development of appropriate specifications and design for health hardware components, the institutionalisation of the UPK recommendations through the Minister's Specifications (SA)⁴, and the nationwide rolling out of the Fixing Houses for Better Health (FHBH), and more recently Managing Housing for Better Health (MHBH) programs. These programs are now funded by FaCSIA.

The significance of UPK lay in the recognition that 'the provision of housing to all Anangu on the AP lands is probably beyond the capacity of Government and

their agencies'⁵ and that it focussed on what it considered a technically achievable goal with potentially enormous impact. CAT contributed to the health hardware approach through the research and design development of several appliances and building components.

Evidence of lasting positive health impacts resulting from these programs still remains to be seen. However the focus on improving the functioning of health hardware has led to the identification of a range of issues beyond the lifestyles or skills of householders themselves that affect how well these function. For example the choice of components (light switches, taps) and the quality of their installation has a large impact on the life cycle of these parts. Also, the FHBH's focus on functioning health hardware through regular follow-up surveys has improved understanding of how regular housing maintenance programs can be designed to support environmental health improvements. These lessons from the FHBH approach highlight the importance of understanding the house as a system.

New houses – number of bedrooms

Another approach to improve living conditions in remote Indigenous communities, addresses overcrowding. Overcrowding adds to the burden of ill-health and highlights housing shortage. This approach relies on definitions of social science in measuring housing needs, crowding and homelessness. The "housing shortfall" approach considers the building of an adequate number of houses (in reality the appropriate number of bedrooms for the given population based on a formula⁶) as the solution.

Construction programs for new houses in some areas make attempts to include design features that appropriately respond to the cultural, climatic and environmental settings. However, they almost invariably fall short of fulfilling these goals, often citing shortages in funding, a conservative attitude in the construction industry, or tenant resistance. CAT has produced innovative housing designs, the long-term evaluation of which would certainly provide some valuable lessons.

The number of bedrooms approach may have a positive impact on the housing shortage in remote indigenous settlements, but on its own does not offer a universal remedy. In some instances the value of new houses to indigenous families is limited and even if there were adequate resources to eliminate the current shortfall, it is possible that the short lifecycle of new houses increases peoples vulnerability and adds to the complexity of the house as a technical system.

References

1. There is a wealth of public health sources, most recent ones include Booth, A. and Carroll, N., 2005, Overcrowding and Indigenous Health in Australia, CEPR Discussion Paper 498, RSCS, ANU, Canberra; Waters, A., 2001, Do Housing Conditions Impact on Health Inequalities between Australia's Rich and Poor, Final Report, AHURI. The 1993 Annual General Meeting of the Public Health Association of Australia (amended at the 1999 Annual General Meeting) recognised the crucial role housing plays in the health of people and the importance of adequate community-based housing for vulnerable groups
2. Nganampa Health Council, SA Health Commission and A.H.O.o. SA. 1987. Uwankara Palyanyku Kanyintjaku – A Strategy for Well-Being: An Environmental and Public Health Review within the Anangu Pitjantjatjara Lands.
3. Pholeros, P. 1990. AP Design Guide: Building for Health on the Anangu Pitjantjatjara Lands: Nganampa Health Council.
4. Housing on designated Aboriginal lands – Minister's Specification SA 78A2000. edited by P. SA.
5. Pholeros, 1990, p9.
6. Australian Institute of Health and Welfare. 2005. Indigenous housing needs 2005 – a multi-measure needs model. Canberra provides a detailed definition of overcrowding. "Overcrowding can be measured using either the Proxy Occupancy Standard or the Canadian National Occupancy Standard. Households requiring two or more additional bedrooms to meet the Proxy Occupancy Standard are considered overcrowded. Households requiring one or more additional bedrooms to meet the Canadian National Occupancy Standard are considered overcrowded" (p111).



House and home in Indigenous Australia

Housing, assets and values in Indigenous Australia

Thirty-two years ago, I lived in the house pictured above in a small community of Yolngu peoples in Arnhem Land. The house that I lived in was built by a team of builders and carpenters all of whom were Aboriginal people from the community.

The house was built with cypress pine timber which grew locally, was felled by a team of Indigenous men and then milled in their community sawmill into floor boards, wall panelling, ceiling panelling and weatherboards.

This was a community where housing was in short supply. There was full employment for working adults, although the church administered the finances of the community and the wages were not award wages. Unfortunately following cyclone Tracy it was decided that the cypress pine did not meet the structural requirements of the new cyclone code, hence the sawmill closed.

Since that time there have been significant investments in infrastructure,

training, improved governance, health, education and housing, numbers of reports and policies, programs and interventions in the name of self-determination and self-management in this and other communities.

Despite these positive investments, today 32 years later a contractor from outside the community constructs every new house in this community and the local residents are offered training so that they can assist him.



What happened in the process of self-determination, change and development that led to this outcome?

Certainly there was a period during this time where greater public accountability meant that financial support had to be directed through technical consultants rather than directly to communities. One consequence of this action was an increased emphasis on meeting standards and complying with a growing number of regulations. Attempts to improve environmental health took centre stage in the battle to improve Indigenous health overall and through programs like Fixing Houses for Better Health the performance of all of the wet, smelly and difficult to clean areas of a house were highlighted, measured, recorded, and fixed. People were able to demonstrate that a well-constructed functioning house could improve health. And government could demonstrate that taxpayers dollars were well spent. Technical consultants took charge, equity was pursued and peoples rights were defended.

The unintended outcome of increased regulation, rights and accountability was that Indigenous people were gradually



disenfranchised from the one area where males particularly were competent and practiced.

But this story is not only about building houses, what does it mean to own one?

Recent changes in Indigenous affairs have centred on reform of the land tenure arrangements to enhance investment in economic ventures and home ownership.

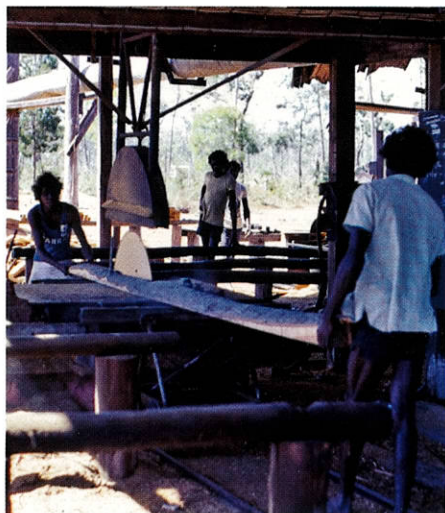
A number of prominent people have espoused home ownership as a desirable outcome. This article is not arguing for or against ownership as it is ultimately a choice that individuals have to make depending on their circumstances.

I am, however, keen to tease out what it means to own a house in remote Australia. Neither Indigenous Australians nor non-Indigenous people have previously experienced the current set of pressures that confront these types of small remote settlements. It is a new experience to both Indigenous and non-Indigenous people and it will require the shared knowledge and collective effort of both to develop sustainable opportunities.

Home ownership

It is difficult to contemplate ownership without subsidy. If you were going to invest in an asset that costs more than \$300,000 to build remote from most markets and employment opportunities where the half-life of the asset was somewhere between five and eight years (that is you need to invest about \$200,000 in that time to maintain the house as a serviceable and healthy technology) would you see this as a wise investment? Noel Pearson has suggested you would be better to invest in an asset elsewhere away from your community in a stronger market.

The motivation to live "on country" and the price that people pay to do so is not well understood. People make choices about where they live and carry the cost and benefit of those choices. Some communities pay \$2000 for a single visit



of a tradesperson to service a bore and others truck in bottled water because they are concerned about the taste and the composition of their rainwater or bore water. Living remote is expensive.

For many remote people the cost of services, distance to specialist technical support and finding replacement parts and suppliers who can provide consistent supply leads to high redundancy and the short half life of assets. We need to better understand the full lifecycle analysis of assets in remote areas before we come to conclusions about home ownership.

Whilst the popular view is that home ownership is the solution, the practical implications of this solution are not well understood or developed.

It may take a lifetime for people to accumulate a level of asset wealth around housing, let alone make the cultural adjustments in moving from communal ownership to personal wealth.

Educational outcomes may improve in fifteen years if we start now. There is going to be a shortage of skilled engineers, technologists and technical trades that will be felt most in remote Australia. Without these skills, sustaining the current housing model across remote Australia will be difficult and increasingly expensive and will be dependent on Indigenous peoples ability to manipulate, understand and control the technologies that make a house function.

Is it house ownership or home ownership?

What is it that people actually mean when they talk about home ownership? Is there a difference in peoples minds between a house and a home. A number of people I have spoken with describe home as country not house.

The article "On housing" has described some of the thinking that has shaped Indigenous housing policies over the past ten years. While all of these approaches are useful and necessary to improve hous-

ing overall, CAT is concerned that there is a part of the house story that is often overlooked because it is something that is difficult to deliver in a house construction program.

The "On housing" article establishes that the house is actually a complex system not unlike a car or a plane. It consists of many individual parts that must work together for people to derive the health and lifestyle benefits that a functioning house makes possible.

In as much as people attempt to use or value the parts differently so they will obtain different outcomes.

Whilst Indigenous housing suffers from overcrowding it is possible for more than four people to live happily and healthily in a house - but you have to live by a set of rules and values that accommodate a shared view and use of the components of the house.

In order to get my meaning ask yourself the following. What causes you to pick up something off the floor or to remove food scraps from the floor of a house? How did you learn this response?

Or have a look under your kitchen sink or in a laundry and identify the range of tools, minor assets, chemicals and wipes that you need to maintain environmental health functionality on a daily basis.

Ask yourself why you turn taps off or switch lights off? Who would you call if you had water streaming off your roof from the solar hot water heater? How long would it take for someone to arrive to repair it?

Owning a house requires you to own a set of values and networks that come to mind when you answer the above questions and many more.

If you add to this the interaction of water, waste and power systems in bathrooms, laundries and kitchens along with people using bedrooms as family rooms this increases the complexity of experience and understanding required.

All of this is before you take account of cultural pressures and social obligations. Indeed there is a question being raised in general about the meshing of technology with cultural practice and whether there is compatibility in all cases.

It should be clear that in owning a house you are owning all of these things that make your asset a valuable one that you derive ongoing benefit from.

Part of CAT's contribution to these discussions is to draw attention to the unspoken and often hidden aspects of making a house work so that people are better informed to make decisions around home ownership. ●

Bruce Walker

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