

## Indigenous Engagement with Modernity: Domestic Water Supply, Risk and Reflexive Modernization

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### **Abstract:**

One of the enduring images portrayed in the Australian media, in secondary school textbooks and through the popular imagination is the idea that Indigenous Australians in remote homeland regions remain hunters and gatherers bound by strong ties to kin, land, ancient myths and rituals. While this conception of Aboriginal people as the 'noble savage' is often disrupted by evidence of their struggles to come to terms with modernity through reports of intra-family violence, petrol sniffing and the consequent morbidity and mortality, there appears to be little understanding in the non-Indigenous imagination that Aboriginal peoples might also be reflexive bi-cultural citizens who respond in pro-active ways to local events in the light of their knowledge of an increasing globalised world and in accordance with Aboriginal laws and customs. Using a case study dealing with the provision of safe water this paper draws on Giddens' and Beck's theories of trust, risk, and reflexivity to raise questions about the possibilities for Indigenous Australians to engage reflexively in the risks of post modernity.

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## **Introduction: Indigenous Australians and modernity**

Indigenous Australians living in the remote regions of Australia have often been tied to notions of the traditional, as opposed to products of modernity (see Attwood, 1992: iv-v). Indigenous engagement with modernity, as reflexive individuals who understand the nature of technology and science including the risks embedded in this technology, is seldom explored. Different accounts of remote Aboriginal people suggest they act from an understanding of traditions based in pre-modern times because they remain isolated from the forces of globalization and modernization in remote communities (McGrath, Ogilvie et al., 2005). Indeed, the tradition of anthropology itself is one key example of the implication of Aboriginality with tradition, as opposed to modernity (Cowlshaw, 1999:4).

In this paper we explore the idea that remote Aboriginal people are differentially implicated in modernity. Drawing on a case study from a remote Aboriginal community where the water supply became contaminated with lead we explore the possibility that the response of individuals reflects an understanding of the inherent risks of modernity. The paper begins with a brief overview of Giddens' theories of modernity, risk and reflexivity, then analyses the case study in the light of these ideas. In the final section we pose questions for further research drawing on an alternate interpretation from post-colonial theory.

### **The theory of modernity**

In *The consequences of modernity* Giddens (1990:25) argued that modernity is characterized by two forms of disembedding institutions within the social system. These are 'symbolic tokens' and 'expert systems'. In explaining the concept of symbolic systems Giddens uses the example of money and the global exchanges of finance. Importantly, as a symbolic token, the transfer of money depends on trust. The necessity for trust goes beyond believing in the certainty of symbolic systems such as money, to placing our trust in 'expert systems'. Giddens defines expert systems as both the system of expert accomplishments (the artifacts) and the technical expertise that organise the large areas of the social environment of the modern world (Giddens 1990: 27). Examples of expert systems include the basic infrastructure that provides safe water supplies for large populations along with the engineers needed to provide these services. Daily immersion and trust in expert systems is based on perceived

confidence - the fact that when we turn on a tap we are confident of the science of reverse osmosis that transfers non-potable water to potable. However, trust is not an act of faith; it is based on knowledge of the idea of expert systems and an assumption that it works well, rather than its' workings being magical acts (Giddens 1990). This trust in expert systems does not mean that we are not aware of the potential dangers of technology and the fallibility and risks inherent in science. We are, but for most part we assume we can depend of the regulations put in place to maintain our health and safety (Giddens 1990).

Trust and risk are modern secular concepts separate from God, luck, or from mythologies of how the world is ordered (Lupton and Tulloch 2002). However, with trust there is always an alternative, which is that things will break down. Trust is the realization that expert systems are not infallible since science is not infallible; it is also awareness that our own knowledge of science and technology is fallible. It assumes that there are dangers, and that we must take the trouble to avoid these dangers through a series of safeguards, which while overly bureaucratic, are necessary. Trust assumes the need to plan for contingencies in the face of fallible expert systems; it assumes risks. Where we do not trust these abstract systems, or the regulations put in place, it is usually because of some experience of mistrust, based on more detailed knowledge revealed to us at an access point of vulnerability. Access points are places of tension between lay skepticism and expert knowledge and rely on up-dates in information gained through the media, conversations with other lay people or experts (Giddens 1990).

It is this reflexivity about scientific knowledge that is characteristic of modernity. We know that any given knowledge could be revised. This view is not the result of a wide spread cultural pessimism in progress, but arises out of our very understanding of the nature of science. The ontological security we enjoy includes an awareness that science is of its nature 'falsifiable' (Beck 1992: 54). Our reflexivity about this complexity of science also allows us to understand that it has negative side effects; for example life giving antibiotics can also be illness producing.

Ordinary citizens are also aware of this knowledge through a variety of media. We also know that more knowledge about the physical world will not ensure our control over it. While it might be possible to gain near perfect knowledge of the natural world, the resources for doing so are not available to all, are unevenly divided and

subject to power (Giddens 1990: 27). However, this does not stop citizens from acting collectively when the need arises, or for that matter implementing in their daily lives practices aimed at protecting themselves and their families against the risks of modern 'science and technology'. Anxieties about the risks and dangers of a globalized world lead us to practice constant behaviour modification in our everyday lives (Lupton and Tulloch 2002).

### **Exploring Aboriginal engagement in reflexive modernity**

Studies of remote Aboriginality have been the preserve of anthropology. It is only relatively recently that Aboriginal engagement with modernity, or their engagement with whites has begun to surface more prominently (Cowlshaw, 1999: 4). Indeed, media representations of remote Aboriginality still retain the preoccupation of Aboriginality with tradition and pre-modernity (see Langton, 1992; Lattas, 1992:45-58; Muecke, 1992: 32-44) . Carney (2006:23) argues that Aboriginal people's singular engagement with the pre-modern results in them being oblivious to the implications of expert system and western technology (Carney 2006). The classic example often cited is their 'failure' to present at health clinics when they or their children are not well (Weeramanthri and Plummer 1994) or the often cited 'common sense' that Aboriginal housing is wasted and derelict by their use and actions. While this may at times be the case, it is also possible that Aboriginal people choose not to comply with expert systems because they are reflexive individuals who bring to the various situations that confront them a healthy skepticism about science and technology. It may well be that they are creatures of modernity as well as tradition; embracing science, but also remaining reflexively critical about its potential (Giddens 1990).

In order to explore this idea the case study below provides an alternative interpretation. The study outlines Aboriginal responses to the contamination of domestic water supplies at Iwantja community in 2000. In this case, a contractor installed defective PVC pipes that resulted in a lead residual being detected in the water supply. The long-term consumption of water with a high lead concentration may lead to increases in kidney and central nervous system dysfunction, cancer and developmental delay (NHMRC, 1996). Although the Department of Aboriginal Affairs and Reconciliation (DAARE) and the Department of Human Services health division acted in a timely and appropriate way to this event, this case shows the

failure of an expert system. The study explores the (continuing) skepticism and mistrust of the Aboriginal population of this expert system after the reticulation system had been completely replaced. Even though testing had demonstrated the absence of harmful levels of lead, and the community had been informed that the water was safe to drink, the community refrained from using the water. To what extent can we say this skepticism is an example of the reflexive self, a reflexivity developed through Indigenous engagement with modernity?

### **Methods used in the study**

Data for this paper is drawn from a larger research project that was conducted between 2002 and 2004 in remote South Australia (Willis, Pearce, Jenkin, Wurst and McCarthy 2004). The study sought the views about domestic water supplies of Aboriginal people living on communities covered under the Commonwealth/State Bilateral Agreement. The case study reported here refers to events at Iwantja community. Focus group interviews at Iwantja were conducted with six community council members in English and taped with the permission of interviewees.

### **Iwantja community and its water supply**

Iwantja is the most easterly community in the Anangu Pitjantjatjarra Yankunytjatjara (APY) lands. While the remoteness of Iwantja should not be overlooked various high technology communication media are provided to the community along with a school, clinic, store and craft centre. These include radio and television, telephone and Internet services. Commercial television, as well as the ABC, began broadcasting to the region in the early 1980s with the launch of AUSAT and the roll out of the Broadcasting in Remote Aboriginal Communities Scheme (PY Media website 2005).

Iwantja has two separate reticulation systems: a potable supply accessed from two bores and a non-potable supply which taps groundwater of a lesser quality. Both the potable and non-potable water supplies undergo treatment with ultraviolet light prior to reticulation. The two bores that supply drinking water to Iwantja comply with the Australian Drinking Water Guidelines with the exception of aesthetic considerations. Close monitoring of the supply enabled the detection of problems in the water supply outlined below which led to the entire water reticulation system at Iwantja being replaced in 2000, a mere six months after an upgrade had been completed under the

National Aboriginal Health Strategy in 1999. Residual levels of lead were detected in the water supply in December 2000. Investigations indicated that a lead coating on the newly installed pipes was responsible for the elevated lead levels. On December 13<sup>th</sup> the community was notified in writing by the DHS of the elevated lead levels in the water supply. As the lead levels were high some six months after installation (i.e., lead attenuation had not been adequate), it was decided by an independent consultant that the offending pipework should be removed in its entirety, and the Chairperson was notified in writing of this action on the 20<sup>th</sup> December 2000.

On completion of the work in Iwantja, water tests were conducted and the results conveyed to the community that indicated the lead problem had been resolved. However, in the focus group discussions we held in 2003 with Council members they revealed an abiding distrust in the replaced water system, despite acknowledging being told by the various expert officials that the water was now safe to drink. This expert information did not instill confidence in the future safety of their water supply, as illustrated in the comments from five of the six participants that arose during the focus group discussions:

The water was all right here before, during the 1980s, around about 2000, that water become no good for people to drink in the community, a lot of people started to drink rainwater, they are not drinking the borewater. Sometimes little kids drink the borewater, and they all got sick. That's what they do, those little kids, but all the big kids they drink rainwater. When they workers came, they fixed borewater and now it is all right to drink, but some people still do not drink it, they always drink rainwater ... [And] tell their kids not to drink the [bore] water.

The water is all right in the camp for big man and for big women, but for little kids, no good, it upsets them. Kids get upset stomach and get sick. No good for kids, borewater.

New bore, someone reckon water no good, but I don't know I drink [rainwater] tank water now.

Water wasn't good, 2-3 years ago..... Old pipes...Maybe a couple of hours, be crook from the water.

These comments highlight an abiding caution in the replaced water supply. Lupton and Tulloch (2002) note people's responses to the risks and dangers emanating from science and technology are characterized by ambivalence and contradictions. How is this skepticism an expression of the community's reflection that an expert system has

failed them? In the first instance their skepticism express and engagement with the expert system and therefore a critical engagement with the modernity that this water supply brings.

### **Aboriginal people engaged in modernity**

In our research a bureaucratic and technicist response to the ongoing skepticism related that the community retained a preoccupation with the traditional and magical. From the technical, modernist rationality, the Aboriginal's skepticism was irrational, based in a preoccupation with tradition. However, it must be remembered that Aboriginal people on most remote communities in Australia have a much closer relationship with essential service technology than the majority of citizens in urban areas. Most communities employ an essential service officer to maintain water, power and sewerage systems, and in the case of breakdowns, notifying authorities. In small communities these experts and the expert systems they maintain, are part of the 'neighbourhood of everyday life'; the man or woman next door may very well be the technician, or ESO. As a consequence knowledge of the technology, and its vulnerability is more immediate than would be the case for the majority of urban, and non-Aboriginal citizens, who for the most part know little more than the telephone number to ring in the event of a breakdown.

Similarly Aboriginal people living in remote communities have closer links with the outside experts who monitor essential service technology. These experts may very well be 'fly-by-nights', but they are not faceless strangers. Aboriginal people are constantly being asked about how they use science and technology, whether they want it or not, or what impact it might have on them. These political and consultative aspects of technology become the guiding principles of their understanding of science. It would not be an exaggeration to suggest that they are provided with more opportunities than most to think reflexively about their condition.

In the case study above some Aboriginal people at Iwantja indicated that they remained distrustful of the borewater supplies and preferred to drink the rainwater. Ideas ranged from viewing the borewater as dangerous for everyone, to it merely being unsuitable for children. This distrust also oscillated between acceptance and rejection over time with council members requesting continuing surety about water quality

... that bloke who come and check the bores doesn't tell the council. He should come and tell us whether the water is good or bad...

As the quote suggests the Iwantja residents wish to be informed on a regular basis about their water supply in order to make judicious daily decisions about its use. They understand that science and technology must be constantly monitored for risk and danger. However, even more generally, we can see how Aboriginal Australians have always had some implication in modernity from the time of occupation. The poisoned flour or rations of the past is a living memory, one that expresses a skepticism of the commodities of modernity as an instrument of nefarious calculation. Thus, to be represented as pre-modern is not to suggest that the subject has not engagement with the modern.

#### **An Alternate view on Indigenous Australians engagement in modernity**

The evidence offered illustrates access to the information and an a distrust in the science of domestic water supplies in this instance, but this distrust arises from a particular position of dependence on welfare services for both the service and the information. Moreover, it arises from a particular relationship with (post)modernity and the traditional. The expert system has failed and it has made people sick, this has confirmed their experience that the instruments of modernity cannot always be trusted. Yet, this is not an ideal that arises out of the Aboriginal location within the pre-modern. While, the remote Aboriginal community may seek to retain its customs and traditions, and may utilize the technologies of modernity in alternative ways to the Western technological intention, this again does not locate them outside of modernity. Indeed it confirms their location within modernity. The Aboriginal community retains the memory of engagement with modernity, with the supply of rations and flour and the interaction with the white man – the source of the modern. It is a matter of survival to retain a suspicion of the modern which raises one point worth considering. Because, by virtue of Settler conceptualization of the Aboriginal as pre-modern, the Aboriginal has not been included in the project of Western modernity, yet by virtue of their marginalization they are foundationally implicated in Western modernization. The Iwantja skepticism is an expression of their learnt skepticism of modernity – through the provision of lead poisoned water supply.



Rather than an example of their location in the traditional this is an example of their long historical subjection to Settler technologies of modernization.

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