

BORNEO TO BROKEN HILL: How Our Image of Nature Affects Use

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Abstract

*This paper uses examples from tourism and conservation debates both in Australia and Borneo to explore how subjective images of nature directly affect how we interact with our immediate environment. In Malaysian Borneo, the forest areas have been subjected to intensive logging since the 1960s, with the transformation of virgin rainforest into logging coupes and plantations embraced by many in the urban areas as a sign of Malaysia's transition to a developed country. However the many Dayak groups, who still rely on the forest for food and medicines, do not share this perception. One such group, the Penan, gained prominence in the late 1980s and early 1990s through the film *Blowpipes and Bulldozers* and the work of rainforest activists. The image of the Borneo rainforests seen through the eyes of these activists was again different to that of the local indigenous peoples. This 'conflict of images' weakened support for an aid project initiated in a Penan village.*

Here in Australia, visitors seeking an outback experience are drawn to areas such as Broken Hill, where mine closures mean that tourism is regarded as a potential economic saviour. To attract more visitors, the local council declared a severely degraded area to the north of Broken Hill as the 'Living Desert'. This paper explores the similarity between the image of the wilderness as seen both by visitors and the Broken Hill community, and how this conflicts with ecological realities. The paper concludes with a few remarks on the current forest issues in Tasmania, and the scientifically-driven perspective to nature conservation that dominates discussion in this State.

This paper centres on my experiences in the early 1990s while managing permaculture projects in the rainforests of Borneo and in the semi-arid regions of New South Wales, and my observations of the often conflicting subjective interpretations people have of these environments. I spent two years in a Penan village in Borneo carrying out village development, then three years in far west New South Wales, based in the Broken Hill/Wilcannia area.

Borneo

In the Malaysian State of Sarawak, in northern Borneo, the forest areas have been subjected to logging since the 1960s, with an increase in intensity in the 1980s. I arrived in Sarawak in 1991, at the height of an international campaign to save the area's rainforests from logging. The previous year I had been a volunteer 'project officer' with the Lismore-based Rainforest Information Centre, an 'activist' centre started by Australian deep-ecologist John Seed. Like many environmentalists at that time, I had been made aware of the plight of the Penan people of Borneo through the film *Blowpipes and Bulldozers*, which had been broadcast on ABC TV. Centred on Bruno Manser, a Swiss national who had spent a number of years living with the nomadic Penan after 'doing a bunk' from a guided tour, this film documented the devastating effects that logging was having both on the environment and on the Penan, who lived in and depended on these forests. Although the Penan numbered around 10,000, most

living a settled or semi-settled existence, media attention was focused very much on the group of two hundred to three hundred nomadic Penan. Through the media's representations the nomadic Penan became the 'face' of the tropical rainforest logging issue.

In 1989 Graham Richardson, then Federal Minister for Arts and the Environment, had called on environmental groups to help him to convince his Cabinet colleagues that Australia needed to ban the import of Malaysian rainforest timbers. My work with the Rainforest Information Centre was based on raising public awareness of the rainforest timber issue, and lobbying Federal politicians to implement the ban. Although Richardson's 'Green' rhetoric was merely part of a wider Federal Labor Party scheme to appeal to emerging 'Green voters' (as noted in Richardson's autobiography *Whatever It Takes*), at the time many in the environmental movement felt we were close to achieving our aim. I soon realised otherwise, however. After I had talked with every politician who would see me, my lobbying led me to the Environment Division of the Malaysian desk of the then Australian International Development and Aid Bureau (AIDAB). Here a public servant informed me that there was no way Australia would even consider banning the timber. He stated: 'I've got 20,000 letters from people who want us to ban rainforest timber from Malaysia, but they don't understand. Australia wants to increase trade relations with Malaysia, and such a ban would place such trade in jeopardy'.

After this experience I began to concentrate less energy on lobbying and more on raising public awareness of the issue. In late 1990, while conducting a three-month 'tent-embassy' and hunger strike protest outside the Malaysian Embassy in Canberra, I was asked to organise the Australia leg of the 'Voices from the Rainforest' tour. This was a 'global' tour by Bruno Manser and three indigenous people from the Borneo rainforest, a Kelabit and two Penan. Although Bruno had been living with a group of nomadic Penan, these three men were all from settled communities due to the logistics of obtaining passports and government approvals for travel.

During the Australian leg of the tour we managed to gain widespread media attention, with stories on the front pages of the *Sydney Morning Herald*, the *Melbourne Age*, the *Brisbane Courier Mail*, and the *Mercury* in Hobart. In Canberra I organised a press conference at Parliament House, but half an hour before the conference Benazir Bhutto resigned as Prime Minister of Pakistan and so hardly any media turned up. Bruno and the guys also made appearances on SBS's *Dateline*, *The Midday Show* with Ray Martin, *A Current Affair* with Jana Wendt, and numerous radio shows around the country. This exercise led me to question what influence this media attention was actually having, since after our 'fifteen minutes of fame' nothing seemed to have fundamentally changed. People were still buying meranti and other 'cheap' rainforest timber, the Penan were still starving, and the media had moved on to the next story. This is not to say that the media doesn't have an effect—just that this effect is often cumulative, rather than instantaneous.

During our tour Unga Paren, headman of the Penan village of Long Bangan, asked for help growing food. Although the 220 people of Long Bangan had lived a settled life for more than 20 years, they still depended on the forest for the bulk of their food and medicines. As relative newcomers to swidden agriculture (also known as slash-and-burn), the Penan had adopted rice-growing from neighbouring Dayak groups. Settled people, these Dayak groups traditionally intertwine rice-growing with religious beliefs and practices, and had hundreds of years of experience in this type of agriculture. However, the traditionally nomadic Penan had little such experience. They were barely growing enough rice to last six months, were not

intercropping with other food plants, and had no tradition of household food gardens. The logging around Long Bangan had depleted the forest areas of jungle fruits, and the people and animals were starving.

Since most Australian environmental groups involved in the rainforest issue were focused on supporting Penan blockades, this plea for agricultural assistance was going unanswered. So in early 1992, after two weeks of permaculture training and with financial assistance from the Body Shop, I found myself deep in the Borneo rainforest running an overseas aid project in the village of Long Bangan. Fortunately I had spent the previous few years in northern NSW familiarising myself with food species suitable for the sub-tropics—and techniques for growing them—and found much of my agricultural knowledge was readily transferable.

There is evidence that the Penan were the first humans to arrive on Borneo, with later population waves moving down the Malay Peninsula. The forest was their backyard, supermarket, and pharmacy. They practiced a type of conservation known as *molong*, which basically translates to only taking what you need and leaving enough for the resource to survive. For example, after harvesting a clump of sago palm for their edible centre the Penan would always leave enough individual palms for the clump to survive. When harvesting timber for manufacturing blowpipes, they carved a section from the side of a large tree and left the tree growing. One large tree near Long Bangan had had a large rectangular section, about two metres high, taken for such a purpose—with no obvious ill effects on the tree.

Although most Penan are now settled, they retain their conservationist perspective regarding forest resources. This is reinforced by the fact that they have a practical use for a wide range of species. Even young children possess an amazing botanical knowledge. As part of the project, the people planted more than 5000 native fruit trees in the secondary forest surrounding Long Bangan. We grew seedlings in small bush nurseries dotted through the village, including a larger demonstration one around my hut. My germination technique consisted of eating the rainforest fruits, then throwing the seeds and peel out the window. Once a week I would trawl through the semi-decomposed waste and pick out any germinated seeds to pot up. It became a bit of a game for the kids to bring me fruit I hadn't tried, and even the youngest could recognise the seedlings and tell me their names.

In contrast to this perspective is Malaysia's vision to become a developed nation by 2020. Under this paradigm, many in the urban areas embrace the transformation of virgin rainforest into logging coupes and plantations as a sign of Malaysia's development. While the Penan were interested in food and in retaining their forest environment, the government wanted what it regarded as development.

The month I arrived in Sarawak an international group of environmentalists had chained themselves to timber barge at the mouth of the Barum River, resulting in a number receiving two-month prison sentences. Due to this anti-logging campaign, journalists and environmentalists were banned from entering Sarawak, and tourists were only allowed a four-week visa. Thus in order to stay in the country long enough to give any real assistance I had to gain government support for the project. But even with my executive haircut, shiny shoes and a suit and tie I was still grilled by the Sarawak authorities as to my environmental beliefs, and found myself often repeating, in a McCarthyist fashion, 'no I am not, and have never been, a member of any environmental organisation'. They had not heard of permaculture, but seemed a bit suspicious that it was a 'fellow traveller'. The most amusing time was when the deputy chief of the internal security organisation and six police officers escorted me into the

village—a whole day trip. We stayed the night in a logging camp, where the police presented me with a cold ‘slab’ of Australian beer. After my first couple of swigs I noticed no-one else drinking, and so offered the beers around. ‘Oh no, I’m Muslim and can’t drink’ was the common reaction. It seemed as though the plan was for me to drink myself into a state where I would inadvertently reveal my ‘Green’ leanings—probably the most enjoyable interrogation technique I could be put under! However I can be very single-minded, and was still slurring away about banana pits and gardening techniques well after the kero lamp had been blown out.

Having come from *kampongs* where home food gardens were the norm—unlike Penan settlements—the police and many in the agricultural department were genuinely interested in a system that incorporated traditional plant varieties and techniques rather than the wholesale adoption of ‘Western’ techniques. However, what finally convinced the Sarawak authorities to let the project proceed was that I continually stressed how it would help the Penan make the transition to a ‘settled’ lifestyle.

The project was initially concerned with developing 50 home food gardens. However, it expanded to include the planting of a communal banana/sugar cane and fruit tree strip along the river, 150 banana/papaya ‘circles’ around the village, and, as mentioned, the enrichment of the surrounding forest through the planting of five thousand native fruit trees. At the request of the village the project also expanded to include rebuilding of the village houses, many of which were too small and constructed of bamboo strips and old tin.

One common criticism I received was that other local people, rather than Caucasian Australians, should be teaching gardening to the village: the project was a type of white imperialism. This criticism did not take into account that until fairly recently the other Dayak groups had headhunted the Penan, and sometimes used them as slaves. The Penan also mistrust Chinese-Malays, since they manage many of the logging companies. By contrast, the British Brooke regime had treated the Penan very well, creating market days and barring missionaries from their territories. So white faces are welcomed and trusted by the Penan.

With growing government support came growing criticism from environmentalists in Australia, many of whom I had closely worked with in the past. Most had not been to Sarawak, and had very much a ‘media-derived’ image of the situation. This image focused on the ‘nomadic’ Penan, partly due to Bruno Manser and the *Blowpipes and Bulldozers* film, and partly to the media surrounding the ‘Voices from the Rainforest’ tour. The argument presented to the media (that I also supported) was of a gentle nomadic people threatened with cultural genocide by multinational logging companies and a corrupt government. Much was made of the fact that Datuk James Wong, the Environment Minister for Sarawak at the time, was the single largest logging concession holder in the State. He once stated that logging has nothing to do with the environment; rather, his major concern was keeping the streets clean. Since I had obtained government funding for the project I was accused of helping the government settle the ‘nomadic’ Penan and, after I had supplied 400 chickens to the village at the villagers’ request, of turning them into chicken farmers.

Many environmentalists therefore saw me as a traitor to the cause, and some were incredulous that I had purchased two chainsaws for the village. The communal chainsaws were supplied in response to a request by the villagers, who selectively logged small trees for poles and medium-sized trees for planks with which to rebuild their houses. I readily admit I was helping settle an already settled group of Penan and this was why the project had

received government support, but what many back in Australia couldn't comprehend was that the people of Long Bangan, like most settled Penan, didn't want to return to a nomadic existence. For many it had been the lifestyle of their parents and grandparents, and rather than a return to that type of life most people wanted such things as clean water, a reliable food supply, linoleum floors and louvre windows for their houses, access to medical facilities, and education.

Near the end of the project the negative reaction from Australian environmentalists led to an 'activist' from Melbourne, who spent one night in the village, reporting that the project had failed. Unfortunately I was out of the village at the time and, due to her Chinese-Malay heritage, the villagers treated her as a logging company 'spy'. No one felt comfortable talking to her, and due to her lack of knowledge about tropical agriculture and permaculture she did not even recognise the food plants growing throughout the village. She also had no idea that the village had been almost totally rebuilt, with the new dwellings larger in size than those they replaced, or that the surrounding forest had been enriched through the planting of native fruit trees and sago palms. I had been trying to arrange funding from the Body Shop to supply large rainwater tanks for the village, since the Penan were reliant on open 44-gallon drums. Not only are these insufficient in size, forcing the people to use the silted river water, but the open drums are breeding grounds for mosquitoes. I first heard of the negative report prepared by this 'activist' when the Body Shop withdrew financial support for the Long Bangan project.

This experience showed me how media portrayals, especially ones that support preconceived beliefs and perspectives, can have more impact than the reality of a situation. Unfortunately the nuances of a situation cannot be easily explained in a five-minute media grab. To gain support for any issue it needs to be clearly defined in black and white, whereas reality comes in subjective shades of grey. The nomadic Penan do want to continue their traditional lifestyle, but the vast majority of Penan want development. The Penan in Long Bangan were against commercial logging and clearly suffering from the effects, but a few villagers worked for a nearby logging company and three owned their own chainsaws. The villagers also relied on a logging company to provide transport to a medical centre and stores in a distant *kampong*, and for children attending boarding school. Although it was clear that logging was having a devastating impact on the environmental integrity of Sarawak, what muddied the waters was equating the Penan perspective on forest conservation and use, and how this was expressed in everyday reality, with that of the media-derived perspective held by 'Western' conservationists.

Broken Hill

There are also many examples of differing environmental perspectives in Australia. I came across several of these perspectives in the three years I spent working on permaculture-based projects in the Broken Hill/Wilcannia region of New South Wales. About half the population of far west New South Wales, or about 21,000 people, live in the city of Broken Hill. Due to mine closures and a downturn in mining-related employment in this region, tourism is seen as a potential economic saviour. To boost the fledging tourism industry the Broken Hill City Council declared an area to the north of the city as the 'Living Desert', and opened it up to tourists. The project I coordinated for the Council was a 17-hectare permaculture-based environmental remediation project within this 'Living Desert', incorporating rainwater-harvesting earthworks and native 'bush tucker' species. This site is the only environmental remediation carried out in the 2,400 hectare 'Living Desert' area.

Visitors seeking an ‘Australian Outback experience’ are drawn to such areas as Broken Hill. The region is classified as semi-arid rangelands, and receives only about 200 mm of rain in a good year. Accustomed to the lush tropics of Borneo, I originally thought the barrenness of the landscape was merely my own subjective perspective. Tourists and locals similarly perceive the current landscape around Broken Hill as natural desert. However, in actual fact the environment is severely degraded. The area suffered an eco-collapse following the so-called ‘Federation Drought’, which began in the mid 1890s and reached its climax in late 1901 and in 1902. Nearly 100 years ago, the degraded landscape surrounding Broken Hill

stretched for miles without a vestige of any green thing and each stone or old tin had a streamer of sand trailing out from it. The fences were piled high with sand, inside and out and it looked as if the intended railway lines would just be buried every dusty day, which was every windy day (Morris 1908, in Mining Hall of Fame Pty Ltd 2004).

Mining activities were the cause of much of the degradation. At one time the vegetation was so thick there are stories of people losing their way in the scrub—smelting created a landscape now virtually denuded of trees for hundreds of kilometres in every direction. In addition to firing the smelters, trees were used as mine supports. At Silverton, just outside Broken Hill, tourists can go down one of the early mines and see the trunks of some of these large trees supporting the roof and sides of the mine shafts. The few remaining living trees are river red gums, dotted along the dry creek beds, protected by legislation banning their removal.

In addition to the removal of the larger trees, the environment has suffered due to the introduction of hard-hoofed animals such as sheep and cattle. Although in most areas cattle stocking rates plummeted during the Federation Drought, and have never again reached pre-Federation levels, the damage has been done. Other than in a few isolated areas of south-eastern Australia, where scattered trees still grow amongst tussocks of native snow grass, ‘... little else in the vegetation has survived over a century of sheep and cattle grazing’ (Kirkpatrick 1999, p. 35). In some areas the topsoil is covered by a cryptogamic crust, a thin surface layer made up of mosses, lichens, algae and bacteria that appears on non-cultivated soils with low rainfall. This crust is undamaged by soft-padded marsupials but is destroyed by hard hooves, leading to soil erosion.

One group of native plants that have survived the onslaught of hard-hoofed animals—and have even thrived as competing plants were removed—are the *Eremophila* family. Known as woody weeds by graziers, these plants are unpalatable to stock due to their high oil content. As Flannery (1994) notes, ‘If grazing animals such as sheep and cattle interrupt the cycle of the firestick, Australia’s open woodlands turn into a dense thicket of woody shrubs ... [as] ... fire suppresses woody weeds in favour of grass’ (p. 349). Graziers commit large amounts of time and money to removing these plants, and do not see them as a potential resource.

However, the local Barkintji people told me that one of these woody weeds, *Eremophila longifolia* (known locally as emu bush), was an important medicinal plant and still commonly used. Through further research I discovered that the indigenous people over a wide area of arid and semi-arid Australia have traditionally used this particular plant. The leaves feel oily and emit a strong menthol-like smell when crushed. For bruising and general aches and pains a few leaves are rubbed on the body or placed in a bath, and for colds the leaves are boiled in water and the vapours inhaled. Bindon (1996) notes that a decoction of the leaves is also

drunk to treat colds, while smoke from the burning branches is used to cure headaches. With a shift in perception, and some research and development, the oil from these woody weeds could possibly be marketed in much the same way as tea-tree oil. Walker and Crowley (1999) believe that '[w]ith over 500,000 unique flora and fauna species, Australia is the world's only affluent 'megadiverse' country, and if managed properly, this richness of biodiversity offers significant economic opportunities that are available nowhere else' (p. 146).

So the perspectives I found in outback New South Wales varied considerably. From a scientific perspective, the area surrounding Broken Hill is degraded and impoverished and at further risk from feral goats and rabbits; to the tourists and to locals it is a 'living desert'; to graziers the area is infested with woody weeds; and to the Barkintji it is a veritable medicine chest. But due to the dominance of the 'living desert' perspective, environmental rehabilitation of the area is not a priority. The wide treeless plains are an iconic Australian landscape, the basis of the tourism appeal of the region. This landscape has also been used as the backdrop for many films and television commercials that aim to portray the 'real' Australia. Scenes for *Mad Max* were shot in the area, and the Silverton Pub has been featured in numerous beer ads.

In contrast to the 'Living Desert', immediately surrounding the city of Broken Hill is a green belt of vegetation. This belt was established between 1936 and 1938 to prevent severe sand storms from engulfing the town. Initiated by Albert Morris, a Quaker and amateur botanist working for one of the mines, this belt involved planting indigenous species to check the wind and hold the soil; strategically placed barriers to shield plants from the winds; and fencing to exclude stock and rabbits. People were also excluded from this area, to give the natural regrowth as much chance of survival as possible. Possibly one of the first environmental remediation projects in Australia, this green belt gives a much better perspective on how the original landscape would have appeared, but remains off-limits to locals and to tourists. (The Council has continual problems keeping the local teenagers from using certain areas as short cuts.)¹

Beyond

Visitors to Broken Hill are deterred from entering the ecologically richest and more sensitive areas, and are instead led to those that fit the media-derived image of outback Australia. In Tasmania, the opposite occurs: areas of high scientific and environmental value, such as Cradle Mountain, as set aside as national parks and then opened up to tourism. Calls to protect areas of low scientific value are derided as woolly-minded and emotional. But what is wrong with this perspective? Although we need to approach conservation of natural resources in a scientifically-driven fashion, the environment and the tourism industry would both be better served if the protected area system was widened to include places with low scientific value, but strong visual impact and aesthetic appeal. After all, the vast majority of tourists in Tasmania are not attracted by the scientific importance of an area—they come for the

¹ Environmental remediation continues in the city today, albeit for different reasons. Broken Hill is located directly over the mines and curves around a massive skimp dump, the product of more than 100 years of lead and silver mining. The soil and air are heavily contaminated, with some children having dangerously high lead levels in their blood. Exposure to lead has been '... associated with serious health impacts including intellectual impairment and kidney and liver damage' (Yencken & Wilkinson 2001, p. 87). Even at low soil concentrations, lead can impede the development of the central nervous system, with young children being particularly susceptible to the resulting learning and behavioural difficulties (Young & Young 2002, p. 174). One small project I initiated was the revegetation of the local high schools, to decrease the amount of lead-'enriched' dust blowing through the school grounds.

stunning scenery. But according to Walker and Crowley (1999), '[t]he ... Labor government of Tasmania celebrated its accession to office in August 1998 by doubling the rate of woodchipping' (p. 234). Many of the areas going under the bulldozer's blade are just those areas that should be protected for their spectacular beauty, and subsequent tourist potential. The Styx Valley and the Blue Tiers are two such areas. But due to their relative lack of 'scientific importance', they are not covered by the Regional Forests Agreement.

I am not advocating the locking-up of scientifically-important areas. Rather, through encouraging tourism to some of these less scientifically-important areas, as is done in the Broken Hill region, we could remove some of the pressure from areas such as Cradle Mountain.

In conclusion, perceptions of natural areas are incredibly varied, and these perceptions form the basis of human action. What is a living resource to one group is a barrier to development to another. Although certainly not deriding the scientifically-driven perspective to nature conservation which dominates discussion in Tasmania, this paradigm is certainly not comprehensive enough to encompass the multi-faceted objectives and desires of all stakeholders. While other States have gone beyond their scientifically-based Regional Forest Agreements in environmental conservation, in Tasmania it is held up as the last word. To balance our current approach and to widen the perspectives we bring into play, we need more woolly-minded and emotion-driven input, not less.

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