Appendix 2. Banjarmasin riverscape: a. the Muara Kuin floating market; b. locals’ activities; c. canal for transportation in traditional kampong; d. a market in the riverbank; e. a modern commercial area; f. Sultanate graveyard and mosque in an historic quarter.

Voyages of discovery - immersive learning within indigenous cultural landscapes

Renée Davies
Department of Landscape Architecture, Unitec Institute of Technology, Auckland, New Zealand
E-mail: rdavies@unitec.ac.nz

Abstract

Landscape architecture embodies the symbiotic relationship between society and environment and this human-nature interaction is manifest at its most profound within those places that are referred to as cultural landscapes. Within the Asia Pacific region there is considerable diversity in both the environment and culture. The region has one of the highest proportions of Indigenous peoples within national
populations and the highest proportion of people living within traditional governance systems in any region of the world. Together these qualities underpin the uniqueness of cultural landscapes in the Asia Pacific region.

The challenge of ensuring an appreciation and respect for these local cultural landscapes and adhering to professional ethics when working with local communities within an increasingly globalised landscape is an ongoing area of concern in the practice of landscape architecture and one that is therefore particularly relevant to landscape architecture education.

This paper considers the importance of enabling an exchange between students of landscape architecture and non-western worldviews set amidst a different culture and within an unfamiliar environment. The case studies outline student experiences of the cultural landscapes of tropical forest peoples within the Asia Pacific region and a methodology for engagement that utilizes sensory immersion to explore human and non-human interaction.

1. Introduction

Based on the qualities identified by the United Nations criteria there are approximately 400 million indigenous people worldwide that belong to over 5,000 distinct tribes, found in over ninety countries. Although only making up 6% of the world’s population, these communities represent 90% of the cultural diversity and their territories span only 24% of the earth’s surface but are home to 80% of its total biodiversity. (Who are Indigenous Peoples n.d.). These people and their environments provide an appropriate and rich cultural resource for experiencing landscapes.

The inclusion of indigenous perspectives in higher education is now considered an imperative (Konai 2003) as the need to ensure different worldviews are acknowledged and indigenous peoples are provided the opportunity to own and champion their own knowledge. The ability for western scholars and students to embrace these concepts is challenging due to the western (mechanistic view) that separates human and nature with an anthropocentric basis. This is in contrast to the place-based, interdependent and de-centralized notions of indigenous people – who see themselves as part of the place and not separated from it. Bridging this dichotomy in perception requires a methodology of student engagement that explores the existence of differing conceptions of life – or worldviews.

For design education, exploration of this indigenous wisdom enriches the curriculum through incorporation of different perspectives to knowledge. As further stated by Konai (2003) “Valuing indigenous ways of knowing usually results in mutually beneficial collaboration between indigenous and non-indigenous peoples, and improves their treatment of each other as equals” (p. 2). This notion of ethics and respect for other views is therefore an important aspect of the journey to becoming a landscape architect, where working with communities that represent a variety of cultures is becoming more a part of design process. But understanding culture and its immaterial (spiritual) dimensions can be a difficult concept to ‘teach’ due to its strong link to personal emotion and ethics. So the notion of providing an authentic emotional engagement with cultural landscapes to better understand and build personal perspectives is indispensable.

Within landscape architecture education the need to address this skillset is strengthened by the International Federation of Landscape Architects Code of Ethics requirement to ensure local culture and place are recognised so that anyone undertaking work in a foreign country will ensure collaboration with a local colleague, so that they recognise and protect the cultural, historical and ecosystem context to which the landscape belongs when generating design, planning and management proposals (IFLA By-Laws & Rules of Procedure n.d.).

Globalisation today is predominantly based around the spread of western knowledge, values and practices, rather than indigenous knowledge and wisdom (Thaman 2003). As such how, within a highly western educational structure, can authentic exploration of these issues be embedded and skillsets developed? A possible methodology to answer this
question lies in immersing students within a cultural landscape and enhancing their emotional responses to both nature and culture through an intense physical and spiritual experience that utilises all the senses.

The Bachelor of Landscape Architecture programme at Unitec Institute of Technology aims to achieve this through travel to overseas locations where students live with local people to understand strategies for sustainable development. In doing so students see the place of their own island, New Zealand, within the global environment and values associated with cultural landscapes from a different worldview.

2. Sensory immersion methodology

Learning through travel is not a new theory, and exploration of the benefits of transformative learning have been explored in adult education. Transformative learning is a process of critical reflection that can be brought about by people, events, or changes in a context that challenges our basic assumptions of the world (Mezirow, 1981).

Transformative learning is an adult education theory that explains how adults revise what Mezirow (1981) called meaning perspectives. These meaning perspectives are often acquired uncritically in the course of childhood through socialization and acculturation and support us by providing an explanation of the happenings in our daily lives, while also being a reflection of our cultural assumptions. These assumptions can constrain us, making our view of the world subjective, and sometimes distort our thoughts and perceptions (Cranton, 2006).

When we come upon a new experience, our meaning perspectives act as a filter through which each new experience is understood and given meaning. A change in our meaning perspectives – a worldview shift – is central to transformative learning theory (Mezirow, 1991).

The concept of a sensory immersion experience that blends cultural and environmental learnings within an indigenous cultural landscape has the potential to challenge currently held beliefs about other cultures through critical reflection thus bringing about a new viewpoint or perspective that can inform our ability as landscape architects to address the management of landscape change.

In order to fully appreciate and even begin to understand the spiritual and material aspects of a cultural landscape it is necessary to engage in an active exchange with both people and landscape and to recognise other worldviews. As a worldview is the set of beliefs about fundamental aspects of reality that ground and influence our perceiving, thinking, knowing and doing, this is best achieved by engaging all of our human senses.

The methodology for sensory immersion aims to add value to student learning through acclimation to a new place, integration into a community and interaction with local people and new environments through active use of all their senses as within a cultural landscape.

To sense is to see, hear, taste, smell and feel stimuli from the world and from the self. Our five senses – sight, hearing, touch, taste and smell might appear to operate independently, as five distinct modes of perceiving the world. In reality, however, they collaborate closely to enable the mind to better understand its surroundings and it is this understanding that can lead to a better appreciation of other worldviews.

Students are encouraged to be both designers, anthropologists and ecologists, whatever cultural landscape they are sensing – to be aware of their own self in the environment, to sharpen their observational skills and get 'in tune' with their surroundings (to experience the design fundamentals of balance and harmony manifest in most indigenous worldviews). All this in order to understand the true essence of the place. In the tropical forest indigenous communities of Samoa, Nuie, Tonga and Sarawak, this involved, alongside daily life experiences, an exploration of the critical current issues that were impacting on these indigenous peoples, predominantly deforestation, tourism and hydro-energy production.
The challenge to the students, set amidst the principles of working in different cultures and within unfamiliar environments, was how to ensure (within the context of globalisation) they retained a perspective on the particularities of the region. The immersion within an ancient and very different cultural landscape enabled students to explore an indigenous worldview which was a highly inclusive and holistic way of thinking about their place in the environment and community.

The concept of sensory immersion and engaging in an active exchange, enables a strong connection and appreciation of the principles of indigenous wisdom. The forest trails and environments the students were guided into by local people highlighted to them the astounding ability these people had to know their environment. Topics explored with local people during the shared time with them included:

- Theological and cultural bases of values, worldviews and framework of the communities.
- Traditional art, craft, food and medicine.
- Local history and land significance.
- Contemporary social, economic and political realities.

These topics were explored predominantly through sharing of stories, listening, questioning, observing, participating, mapping, drawing and photography.

Examples of ways in which the five senses were engaged with in these cultural landscapes is shown in Table 1. It focuses on the experiences the students had and the type and combinations of sensory immersion that resulted and the perception or insight gained. In particular the table highlights that most of the experiences ensured engagement with a minimum of three senses — thus intensifying the learning experience and in many cases, all five senses are engaged.
<table>
<thead>
<tr>
<th>Experience</th>
<th>Sensory Immersion Examples</th>
<th>Reflections and Learning Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sleeping</td>
<td>Hammocks in rainforest Floor of traditional house Open fale on beach</td>
<td>Traditional building functionality Connection with environment Appreciation of specialist building skills Challenging and different living conditions Family connections</td>
</tr>
<tr>
<td>Conversation</td>
<td>Talking with elders Talking with peers Talking to young people Talking to Government officials</td>
<td>Different beliefs and values Contrasting viewpoints and worldviews Understanding and observation of debate and conflict over current issues (eg dams, deforestation, tourism) Social structures and community dynamics Ethics</td>
</tr>
<tr>
<td>Weaving</td>
<td>Rattan bracelets with Penan Rattan traditional baskets with Penan Pandanus mats and fans in Tonga &amp; Samoa</td>
<td>Traditional craft techniques Natural resource use Linkages between environment and design Complexity of craft Linkages between form and function Social roles</td>
</tr>
<tr>
<td>Cooking</td>
<td>Umu with Tongans &amp; Nuiean's Open fire with Penan</td>
<td>Tradition Natural resource use Spirituality Skill and community roles</td>
</tr>
<tr>
<td>Walking</td>
<td>Rainforest topography Trails and off-trail Within villages</td>
<td>Skill of local people in wayfinding Knowledge of local area Appreciation of rainforest ecology Links between forest and people</td>
</tr>
<tr>
<td>Fishing</td>
<td>River with Penan Sea with Tongans</td>
<td>Traditional food gathering Sustainable resource approaches/thinking Ecology of aquatic environments Importance of sea and rivers to indigenous peoples</td>
</tr>
</tbody>
</table>
| Ceremony   | Ava ceremony, Samoa Church services Nuiean, Tongan and Penan | Tradition  
Spirituality  
Use of traditional plants within cultural ceremony  
Link between ceremony and social order/structure |
|------------|-------------------------------------------------------------|--------------------------------------------------|
| Carving    | Hardwood tools/equipment with Samoan's  
Tourist products  
Boat building from tree trunks with Penan, Nuiean's and Samoan's | Traditional methods  
Natural resource use  
Craft skills  
Sustainable approaches  
Authenticity of tourism  
Economic considerations |
| Transport  | 4x4 walking boat  
small plane | Traditional travel techniques  
Fun  
Experience of remoteness  
Physical challenges of location/environment |
| Eating     | Local foods cooked traditionally | Natural resource use  
New flavours, textures and smells  
Understanding of subsistence agriculture  
Contrasts with wild and cultivated foods |
| Hunting    | Blowpipe with Penan  
Spear fishing with Samoan's | Traditional techniques  
Subsistence living  
Spiritual links and attitudes to animals  
Principles of sharing and resource use  
Animal husbandry |
| Gathering  | Rainforest foods (fern fronds, leaves, roots)  
Rainforest medicinal plants  
Rainforest carving wood and weaving materials  
Cultivated foods from local plantations (rice, taro, sweet potato, fruits etc) | Natural resource use  
Spirituality linked to resources  
Symbiotic relationships with rainforest plants  
Importance of traditional plants in culture  
Ethnobotanical techniques  
Agricultural techniques and approaches  
Changes over time (eg. Nomadic to cultivated plots with Penan) |
| Washing    | River with Penan & Tongan's | Traditional techniques  
Natural resource use  
Appreciation of different ways of being |
<table>
<thead>
<tr>
<th>Building</th>
<th>Hardwood stilt houses, Penan Traditional fale, Samoa Boat building, Tongan’s Penan and Nuelean’s</th>
<th>Traditional building techniques Natural resource use Form and function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Designing</td>
<td>Cultural museum, Nuie Wayfinding and tracks, Tonga Cultural Landscape Analysis, Samoa</td>
<td>Appreciation of local needs/desires Understanding local drivers</td>
</tr>
<tr>
<td>Music</td>
<td>Nose flutes, Penan Drums, Tonga Singing, Samoa and Nuie</td>
<td>Tradition Natural resource use Spirituality Cultural stories/knowledge Ceremony</td>
</tr>
<tr>
<td>Sense</td>
<td>Example of experience from student case studies in Tropical Forest Communities</td>
<td>Sight Sound Taste Touch Smell Insight</td>
</tr>
</tbody>
</table>

3. The tropical forest as a cultural landscape

The sensory immersion methodology goes beyond mere transformative learning by the inclusion of experiences with cultures that have direct and long established relationships with the environment. The notions of exploring both physical and spiritual connections are generally heightened in these types of cultural landscapes as they are inherently about exchange “the story of the dynamic relationship of reciprocal dependence between humans, non-humans and the land itself” (Arntzen 2008, p 17).

The concept of a cultural landscape is “in a material sense seen as landscape or environment as it has been modified by humans, and in an immaterial or spiritual sense as landscape or environment with which humans with their practices, beliefs and emotions have special bonds” (Arntzen 2008, p 64).

Rainforests are often viewed as natural and pristine environments with recent influence from human interaction, but this belief belies the reality that within their long history, these tropical environments have been host to a range of human societies that have influenced, modified and interacted with the complex ecosystem in which they lived.

The European Landscape Convention goes some way to highlighting the dual spiritual and physical concept of landscape through the definition of landscape being an area, as perceived by people, whose character is the result of action and interaction of natural and/or human factors (ELC 2000 n.d.).

Landscape is therefore seen as important in the Convention, not as mere scenery but because it links culture with nature, and past with present. “Landscape is not simply a collection of objects but is concerned with the intangible meanings and values people attach to their surroundings” (Menzies 2010, p. 1). It is engagement with these ideas that is at the core of a sensory immersion methodology.

Recognition of how culture and worldviews impact on peoples use and perception of the landscape has been explored by Seddon (1998) when he highlighted the distinction in other languages between territorio (a piece of land) and paesaggio (a way of looking at that piece of land). He emphasises that our English word landscape (derived from the Dutch landskip which is a painter’s term) retains a sense of detachment from the landscape. To Seddon this is an important point for education of landscape professionals, because to ignore the cultural dimensions of landscape may mean unwittingly imposing our own cultural dimensions of landscape. As the artist portrays an experience they have had – in contrast
the landscape architect tries to create an experience that an individual can then perceive and portray as they wish.

4. Exploration of sustainability issues

"Every piece of land or landscape contains as many meanings and constructions as the people who have interacted with it" (Pretty 2002, p. 23).

The cultural landscapes of Asia Pacific rainforest communities are a source of essential knowledge about sustainable management approaches. They possess unexplored wisdom and inspiration for us as designers for making better future landscapes.

Immersion within the cultural landscape of these people allowed students to explore a range of issues relating to sustainability and how connections with and perceptions of the land can influence approaches and opportunities for more appropriate management of change and to explore more fully the role of landscape architects as the agents or facilitators of responsible and appropriate change.

As Davis (2009) outlines, the Penan view their forest as home and it contains a network of intricate and living places of cultural and economic significance and these places inform and provide linkages to past present and future relationships for the Penan. It is this sense of stewardship, borne from a sensitivity to the necessity for sharing their environment that emphasises their worldview as one which contrasts dramatically with the worldview of economic development and unsustainable resource use that currently threatens their home and our world.

The exploration of concepts around authentic tourism in the student case studies has informed the concept of sensory immersion methodology in landscape architecture and provided links to sustainable economic development potentials.

5. Understanding and managing change

The concept of change is one that landscape architects tackle on a daily basis and much of our work involves identifying and facilitating appropriate change within the environment. Being able to embrace this role and understand the generators of change is therefore an important component of landscape architectural education. As Davis (2009) states "Change itself does not necessarily destroy a culture. All societies are constantly evolving. Indeed a culture survives when it has enough confidence in its past and enough say in its future to maintain its spirit and essence through all the changes it will inevitably undergo".

Experiencing the landscape and talking to the local people in the case studies showed that there is considerable concern among them about their future and students hearing this concern and seeing its outcomes heightened their ability to explore landscape change within a cultural and environmental context.

Fig. 2. Examples of students engaging with indigenous communities within the setting of a cultural landscape.

6. Conclusion

In talking with local people on their journey in the rainforests of the Asia Pacific Region, students learn how stories enable the knowledge of the past and present to guide and inform their understanding of the wider set of cultural meanings and values these people have with their environment. From this they learned of the implications for sustainable tourism and development within the Asia Pacific Region and the appropriate management of change in such a sensitive and valuable cultural landscape.
The exchange of knowledge and different worldviews that occurred within these cultural landscapes highlights the intricate human and non-human relationship that defines these places. It illustrates that authentic design of landscapes should recognize both the spiritual and material in order to fully represent our place in this world. Experiencing the dialogue between opposing worldviews of indigenous people and western society has enabled students to appreciate the contribution that indigenous wisdom may have to temper and guide the process of change. As a result this informs a more holistic vision of landscape architecture’s place as a positive conduit for that change.

But as the results of sensory immersion methodology show, we also need to connect with individual consciousness and ethics as “worldviews are not only cultural and social abstractions but also the embodiment of our sense of self in the world. It is the way we think and our capacity for wisdom that ultimately produce the world we live in now and shape the world of the future” (Thaman, 2003 in Teasdale and Rhea 2000, p. 1).

The outcomes of the exchange experienced by the students showcases the potential of sensory immersion within indigenous cultural landscapes as a methodology for embedding appreciation of non-western and indigenous worldviews within the landscape architecture profession. In so doing, raising the awareness of the legitimacy of not only physical but spiritual relationships to landscape and how these can positively influence the outcomes of design. All of this has the potential to guide in more meaningful and appropriate ways our ability as a discipline to influence sustainable development.

Acknowledgements

The author would like to thank the indigenous people of Sarawak, Euia, Nuie and Fagaloa Bay Samoa for sharing their lives, thoughts and expertise with us – enriching our understanding of their tropical forest homes and our place in the world.

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