<table>
<thead>
<tr>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cumulus conference 9–10 November 2009 Auckland, New Zealand</td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td>6</td>
</tr>
<tr>
<td>7</td>
</tr>
<tr>
<td>7</td>
</tr>
<tr>
<td>10</td>
</tr>
</tbody>
</table>

**PRESENTATIONS**

| Roger Bateman | 14 | BioChair – Adding Value to the Biomaterial Story |
| Paul Woodruffe | 19 | Industrial Poetry |
| Leslie Haines | 23 | Auckland’s Urban Forests, Functions and Designs |
| Angela Blachnitzky | 28 | Outside culture – the curious Kiwi custom of taking interior furniture outdoors |
| Joanne Drayton | 32 | Vikings of the Sunrise |
| Tullia Moss | 36 | The down under dairy and other stories |
| Donald Preston | 41 | Mapping identity: learning to love our place in the world |

All forest products with the FSC label carry a guarantee to consumers that the product comes from responsible sources.
Kia ora

The Department of Design and Visual Arts, from the Faculty of Creative Industries and Business at Unitec was proud to host our friends and colleagues from around the world at Cumulus Aotearoa. We were all delighted by the very positive reaction we had to the event and look forward to strengthening the friendships made and academic collaborations begun.

The themes of this event – Māori and Pacifica storytelling, and sustainability – are inter-twined via traditions and practice both indigenous to the South Pacific and from more distant origins. A fifteen-generations, and more, approach to sustainability is traditional, but now being embraced by increasing numbers of creative practitioners and sometimes politicians. Narrative content and cultural context frame meaning and help to establish value in increasingly de-materialised creative outputs.

Our two keynote speakers both work extensively with wood and sustainable materials and share a concern for the environment and for narrative. Master Carver Lyonel Grand, PhD [honoris causa] described how he envisaged, designed and constructed the wonderful Wharenui, Ngakau Mahaki at the Unitec marae. He has combined an ancient structural approach, Whakairo (carving techniques), Raranga (weaving) and the use of the latest technology to tell the story of the Auckland region and the Wairaka campus.

The second keynote speaker David Trubridge uses sustainable materials to create dramatic and poetic objects, furniture and lighting with a wide and increasing international audience. His background as a naval architect informs his work with wood in particular as does the landscape, culture and climate of New Zealand (Aotearoa).

Delegates were welcomed to the Marae in a Powhiri (welcome ceremony) and after the keynote speeches took part in workshops on jewellery and weaving which ran alongside papers and discussions across a wide range of topics including film, cultural collaborations, social studies and design.

The welcome and closing ceremonies and social events were as much a part of the content of the pre-conference as the papers and demonstrations, each reinforcing the value of the other.

We are grateful for the presence of Cumulus at our campus and for publishing a range of the content presented at Cumulus Aotearoa. We welcome research and teaching collaborations and invite you to contact us about exchanges and our artist in residence programme.

We look forward to your return.

Naku noa,

David Hawkins
Head of Department of Design and Visual Arts
Unitec, New Zealand
About New Zealand, Culture, identity and design…

Christian Guellerin

It was a very moving experience to be hosted in New Zealand. There was a constant and definite effort to offer foreign visitors a unique experience and show them the original culture of the island. There was not one reception, speech or ceremony in which we did not hear a few words spoken in Maori, as if to pay homage to their past and their strong, unique identity.

Without referring back to or knowing what was done in the past, there is no hope for future creation; we will this still make sense in the near future? Will it still make sense to say this for students who spent a semesters in London, i in Helsinki, i in Milan, i in Auckland… and finally obtained a degree elsewhere.

Times are changing and models must be reinvented because students who complete their Bachelor’s and Master’s curriculum in the same country in the same institution – thus limiting their mindscape to one single culture – are becoming scarce… and odd. The ongoing globalization spurs students to accumulate a wide variety of cultural and technical experiences and to hone their ability to appreciate the most of differences. But then, what type of degree is the most appropriate for the students of tomorrow? And above all, what identity should this degree have? One solution would be to implement a degree common to all schools, but this is risky because doing so could jeopardize schools and their identity, their specific know-how, their uniqueness.

We’ll probably be compelled to focus on values other than degrees, to define other criteria for selection that go beyond titles, training courses, places… and ultimately create new kinds of identity.

Thank you to all those who brought this unique experience to Cumulus: Dr David Hawkins, Associate Professor – Conference Chair; Dr Leon de Wet Fourie, Associate Professor – Executive Dean Faculty Creative Industries & Business, Annabel Pretty, Conference Executive Officer, Dr Rick Ede, Chief Executive Unitec Institute of Technology, Hare Paniora, Pae Arahi Unitec and the rest of organizing team.

Christian Guellerin
President of Cumulus

Wharenui ‘Ngakau Mahaki’

The following is a summation of an address I gave to the assembled Cumulus conference delegates in the Marae complex facility known as Te Noho Kotaiahanganga located at the Unitec Institute of Technology Owairaka campus, Mt Albert, Auckland on the 4th of November 2009.

While it is customary to pre-empt such an important address with the preparation of a formal script, I felt moved to access the mood of the conference collective and thus let the meeting house speak through me. Therefore this account is not a verbatim interpretation of what was said, rather a retrospective synopsis that hopefully will recount the essence of my speech at that time.

As the general underlying themes of the conference were storytelling and sustainability, for me the Marae project that I had recently completed that year, namely Te Noho Kotaiahanganga, was the perfect vehicle to eloquently convey these sentiments. While my initial response to themes such as sustainability in particular were predicated to the impact on natural resources, the more I pondered the topic, further augmentation of the theme began to emerge. For example: the sustenance of a living culture as embodied in the building space, its build methodology and its ornamentation. The maintenance and nourishment of language, culture, and relationships, are all as relevant as the salvaged timbers that were harvested after a 20 year period of languishing in the elements since their clear felled demise in the 1960’s.

In addition to the narratives that comprise the art work both interior and exterior; the story or stories of the journey that created the meeting house were just as prevalent. I hoped that the audience got some semblance of that story…

Wharenui ‘Ngakau Mahaki’ by Dr Lyonel Grant

Kia ora koutou katoa nga Manuhuri hau e wha, nga Hauanga haere mai, whakatau mai.

Should you ask me what is your mountain? I would reply, Ko Te Arawa toki maungo, ko te rata katoa kaihau a Pukiao.

Should you ask me, what is the body of water you affiliate to? I would reply, Ko Te Rotoiti kite a Ihenga ko te rata moana pitaata.

Should you ask me, on what ancestral canoe did your forbears arrive to this land? I would reply, Ko Te Arawa toki waka tapuna o nehe ra.

Should you ask me what is the place you feel the right to stand and call your own, I would reply, Ko Hohowai toki turangawaewae.

Should you ask me, who is the principle ancestor to whom you trace your genealogy? I would reply, Ko Te Tukutuka Lyonel Grant toki ingoa, kia ora huia mai tatau katoa.

While the initial moment when you, the esteemed visitors from afar entered the wharenui I was personally moved to wonder, what where your initial impressions? For me this environment is the frontline of our culture, our history genealogy, our artistic expression in an ‘all welcoming’ embrace – in fact it is a moment of truth when all ‘bullshit’ is swept aside, when your ancestors and mine meet in a common place. Our ancestors are portrayed on the back wall of the meeting house. The forced perspective seemingly makes them melt into the landscape that terminates in a horizon. This space in the walls composition represents Te Ao Wairua or the spiritual world. The divider between the spirit world and the physical is delineated by a row of vertical figures I call them the ‘arai’ or veil that delineates the two worlds. From that point the chronology begins and the story of human occupancy in this area is recounted through the exploits of famous and infamous ancestors together with topical snippets of history.

To create such a place one needs a vision. The vision needs to be shared by others to realise it, and the physical and financial resources somehow must be found to nurture the dream. The bulk of the physical resource the timber was acquired from an area called Herniwi

Christian Guellerin
About New Zealand, Culture, identity and design…

Lyonel Grant
Wharenui ‘Ngakau Mahaki’

Keynote Lyonel Grant
Wharenui ‘Ngakau Mahaki’

by Dr Lyonel Grant
Kia ora koutou katoa nga hau e wha, nga Manuhuri tuarangi, Nauami haere mai ki te poho o tenetupuna whare Ngakau Mahaki. Koutou kua tae te koutou tinana ki te whakamana, ki te whakahapai, ki te whakamana ki tei iwi whakahirahira o tatau, noveira nau mai, haere mai, whakatau mai.

If you should ask me what is your mountain? I would reply, Ko Matawhaura toki maungo, ko te rata tuhauarero a Pukiao.

Should you ask me, what is the body of water you affiliate to? I would reply, Ko Te Rotoiti kite a Ihenga ko te rata moana pitaata.

Should you ask me, on what ancestral canoe did your forbears arrive to this land? I would reply, Ko Te Arawa toki waka tapuna o nehe ra.

Should you ask me what is the place you feel the right to stand and call your own, I would reply, Ko Hohowai toki turangawaewae.

Should you ask me, who is the principle ancestor to whom you trace your genealogy? I would reply, Ko Te Tukutuka Lyonel Grant toki ingoa, kia ora huia mai tatau katoa.

While the initial moment when you, the esteemed visitors from afar entered the wharenui I was personally moved to wonder, what where your initial impressions? For me this environment is the frontline of our culture, our history genealogy, our artistic expression in an ‘all welcoming’ embrace – in fact it is a moment of truth when all ‘bullshit’ is swept aside, when your ancestors and mine meet in a common place. Our ancestors are portrayed on the back wall of the meeting house. The forced perspective seemingly makes them melt into the landscape that terminates in a horizon. This space in the walls composition represents Te Ao Wairua or the spiritual world. The divider between the spirit world and the physical is delineated by a row of vertical figures I call them the ‘arai’ or veil that delineates the two worlds. From that point the chronology begins and the story of human occupancy in this area is recounted through the exploits of famous and infamous ancestors together with topical snippets of history.

To create such a place one needs a vision. The vision needs to be shared by others to realise it, and the physical and financial resources somehow must be found to nurture the dream. The bulk of the physical resource the timber was acquired from an area called Herniwi
some 300 kilometers to the south of Auckland. Large native timbers were retrieved from the cutover remains of commercially harvested exotic pine forests. Some of these trees were in excess of a thousand years old and ironically took less than ten minutes to cut them down. Be that as it may with the generous support of the local people, I was able to salvage enough material to build this wharenui. While this could be viewed as a good example of sustainability in a physical sense, many other sentiments, processes, and approaches were inherent in the project as a consequence. These elements further constitute the concept of Sustainability.

While the time of the initial training at the New Zealand Maori Arts and Crafts Institute in Rotorua, the meeting house models that were commonplace then were essentially a pre-prepared ‘box’ structure that basically allowed embellishment to be added retrospectively. The conscious approach I wanted for this house, my third, was that the artistic elements that comprised its configuration would also have structural integrity – thus returning to the ethics or initial approaches our ancestors utilised for their built structures. This approach was to challenge people’s perceptions, force rethinking of modern codes and consents as issued by local and municipal council bodies. Intrinsic in the process also were artistic portrayals and representations that importantly were key elements in the substance of the building – the ‘story’, mythology, and story were important in the narrative sequence that runs through the art. Not only does it acknowledge this man, who was a key part of the history of the land, it also is indicative of the time and its attitudes. Hardly a glamorous subject, but to me the resulting pou-pou has equal poignancy in a lineage of 29 others.

In addition to the tangible, oral histories and customary practice are also significant by virtue of the fact that traditional ceremony pervades all activity in the meeting house; themes that feature traditional songs and oratory flourish in the forum produced. It should always be the case that the first words uttered, especially in a traditional ceremony, are the words of a tupuna whare. Not only does it accommodate a large usually carved structure and increased dimension of the structure. Eclectic groups of staff, students, artists, management and professionals were required to co-exist for the success of the project.

One example from the 1990s features a person who was incarcerated in the mental institution established on the site of this educational institution. The hospital ceased to function around 35 years ago. It transpires that this man Rolf Hattaway had sustained head injuries in a fight that left him in need of care. His father had him committed some time after. An artist Theo Schoon was moonlighting as an orderly at the hospital, and observed this patient creating drawn compositions out in the exercise yard – he encouraged Hattaway to fill a scrapbook with his drawings, some he used in his own work, it is understood that he acknowledged the source – a close friend another well known modernist of the time Gordon Walters also was privy to the drawings. In 1996 a show was curated by Damian Skinner and art historian. The resulting catalogue became a rich source of stimulus for that particular carving in the whare. Not only does it acknowledge this man, who was a key part of the history of the land, it also is indicative of the time and its attitudes. Hardly a glamorous subject, but to me the resulting pou-pou has equal poignancy in a lineage of 29 others.

In a wider context, the establishment of such facilities serves to educate those who are largely unaware of the Tangata Whenua history imbued in this land. The Maori are now synonymous with the world’s perception of Aotearoa New Zealand. While many ethnic groups currently share our country, there has been a move in the last yo or so years to infuse Maori awareness into the consciousness of learning institutions, Hospitals, local councils and indeed at higher governmental levels. This awareness has created a fertile environment that allows the establishment of such initiatives as Ngakau Mahaki.

I believe that this situation nationally adds further to the international chorus of the indigenous cultures that face increased threat of extinction. May our mahaki meetinghouse here at Unitec work endlessly to bring cultures together. May we all long sustain those things that are important in our lives such as who we are and where we come from. To you who have bought your ancestors with you, who represent many and varied cultures, you honor us with your presence – May you take fond memories of our land and people back to you from here.

These are all areas that undoubtedly enhanced the concept of sustainability.

In a wider context, the establishment of such facilities serves to educate those who are largely unaware of the Tangata Whenua history imbued in this land. The Maori are now synonymous with the world’s perception of Aotearoa New Zealand. While many ethnic groups currently share our country, there has been a move in the last 30 or so years to infuse Maori awareness into the consciousness of learning institutions. Hospitals, local councils and indeed at higher governmental levels. This awareness has created a fertile environment that allows the establishment of such initiatives as Ngakau Mahaki.

I believe that this situation nationally adds further to the international chorus of the indigenous cultures that face increased threat of extinction. May our mahaki meetinghouse here at Unitec work endlessly to bring cultures together. May we all long sustain those things that are important in our lives such as who we are and where we come from. To you who have bought your ancestors with you, who represent many and varied cultures, you honor us with your presence – May you take fond memories of our land and people back to you from here.

Lyonel Grant PhD (honoris causa)
Master Carver and creator of the Unitec Marae
lyonel.mahi.whakairo@xtra.co.nz

Glossary of Maori words and terms:

Kia ora be well, thank you, hello
kia kaha very, curtain, metaphor, divider
To Noho Tatahanga Reside in unity
Marae Traditional customary space, now modified to accommodate a large usually carved structure and dining facility
wharenui large house
tupuna wharenui ancestral house
poho interior
Rotorua City 30 kilometers south of Auckland
Kia kaha strength
Owairaka Original name for Mt Albert
Koutou timana your bodies (physical form, in person)
Heuru topi there is no suitable building
Ngakau Mahaki Land block where the carving wood was procured
whakaherere to add intensity
Tangata Whenua People of the land
whakahapai elevate or intensify
toku my
Ngakau heartfelt
hui whakahiapapa auspicious gathering
Tatau katoa us all
haere mai come hither
whakahau mai welcome
Koutou You all
teni this
Motawhakaua Haere of a particular mountain
Nga ha oe the four winds
maunga mountain
kohatu rock
korero speak
Manuhiri tuarangi visitors from afar
Pikiao A famous ancestor
moana piatea shining lake
Naumi haere mai Welcome
To Rotokia ate a henga The small lake seen by Henga (another famous ancestor)
Te Ararau toku waka tupona o nohe ra The Ancestral Canoe called ‘Te Ararau’ from ancient history
Ko Hohowai toku turangawaewae The marae I have connection to called Hohowai
Ko te Takiinga toku tupona. I noho ai i te taura whenua Te takings (an ancestor) who has resided there for on a constant basis

Lyonel Grant Wharema ‘Ngakau Mahaki’
The moral of craft

1 Introduction
In this talk I make no distinction between art, craft and design as objects. I use the words as verbs. They are processes, and everything we make is the result of a creative process made up from all three. The relative balance of the processes might change from one object to another, but to be successful creativity must employ all three.

2 Lost sensuality
In the beginning we lived in the forests. Not just ‘in as in “I live in a house”, but totally in, immersed and connected to the environment – subjectively. We were a part of it in the same way that we now see animals as a part of their environment. We were tuned to every nuance of sound and movement. The wind in the trees, or calls of other animals, sent messages we understood. The sounds we made imitated what we heard, reflecting the environment around us – we were subjectively. There are forest tribes now who can still read bird calls and answer them. The only sense of time we had was not linear as we know it now but cyclical, day, night, day and the seasonal round. There was not the same sense of past, present and future. Hence our ancestors still lived around us, we felt their presence and connected to them.

What happened to change this? One key event was the introduction of writing (words, not pictorial hieroglyphics) which was first used by the Hebrews to record the history of the people they wandered handless. It replaced an oral tradition and had the radical effect of making our language objective. Now it was no longer sound all around us – it became a series of fixed objects on a page, things separate from us. It didn’t just live fleetingly as we flatted the sounds from our throats, but remained mute and immobile, disconnect-

As the words marched across the page there also entered a new sense of time as progression. Here was a visible written past, and an empty future full of potential. Time was no longer cyclical and became linear. Our ancestors moved into the past away from us. And again… and again, many hundreds or thousands of times. It is stored in muscles and nerves, not the brain. When you have learnt to ride a bike, it is not a rational thought that tells you how to turn a piece of wood on a lathe. But you will only become skilled in your instantaneous reflexes when you have practised it many many times. The hand itself needs to know, and not just the hand, but the whole body behind it. That is the essence of craft. It is the gesture that contains within it countless hours of experience, and knowledge of tool and material. And with that knowledge of material, traditionally comes a knowledge of place.

3 Art and culture
What is it that defines us as human beings? Some would say our intellect and our hands, but other creatures have been shown to have similar attributes. What uniquely defines us as humans is our making of art. The main criterion that archeologists use to separate the first homo sapiens from the preceding neander-

thals is their capacity to make art. Sapiens adorned their bodies with jewellery and painted on their cave walls. Throughout our entire existence as a species we would continue to define our identity with our culture through the things we make.

Every race, every society has its own culture which expresses itself, and reinforces its existence with its own sense of identity. If I say to you Aztec, or Egyptian, immediately visual images will come to your mind of their artwork and their buildings. Their cultures were achieved with a unique combination of collective imagination and bodily actions that tapped into the zeitgeist of the time. The bodily actions are called craft and the result art.

Craft is the interaction of body and material. As the available materials varied, so too did the results, which became a balanced synthesis of time, place and imagination. In the desert, houses were made of mud and stone, the scattered elements of the earth’s surface being gathered and assembled by skilled hands. The craftsmen allowed their imagination to flow in patterns of decoration in the mud plaster that told stories about themselves. In forest trees were cut down and carved and fitted together to create shelter. So, in all cases, the houses were an expression of time, place and people, all unique in their own way. No mud houses were built in the jungle or timber hous-

es in the desert.

4 Aboriginal art
I’ll give you what I think is the most perfect example of this synthesis of person, place, time and material: contemporary women’s Aboriginal art of the Australian central desert. This remarkable culture has survived for 40,000 years – longer than any other on earth – and in one of the most hostile environments. These wom-

en’s art is utterly contemporary and abstract in a west-
ern sense, but it is also one of the most finely attuned to landscape and tradition. How has this art of a tiny minority brought such a tenacious existence on the mar-

gins of the world, come to strike a chord with so many people in so many places? I believe that the key lies in the process by which they achieved their results – in their ability to connect so thoroughly to the landscape in a way that we can only dream about. They do this through their bodies, emphasising with the earth, feel-

ing it like another body because to them it is another body. They lose themselves in it, allowing the whole body to express a greater and more profound sense of self.

5 Craft
As I have shown, the skill of making is as old as we are. It is absolutely essential in the creation of culture, of finding and expressing our identity at any one time or place. But what is its essence? It is knowledge, but not rational knowledge. It is a knowledge that resides in the body. It is not learned by exercising the brain, by read-

ing or talking. It can only be learned by doing – again… and again… and again, many hundreds or thousands of times. It is stored in muscles and nerves, not the brain. When you have learnt to ride a bike, it is not a rational thought that tells your leg to move at a certain moment. That is too slow; it is a direct action from the muscle itself. There is no conscious thought directing the action. Similarly the lightning reflexes of some mar-

tial artists are only possible because they have trained themselves to cut out the brain and the time it takes to respond and send messages to the muscles.

As I have shown, the skill of making is as old as we are. It is absolutely essential in the creation of culture, of finding and expressing our identity at any one time or place. But what is its essence? It is knowledge, but not rational knowledge. It is a knowledge that resides in the body. It is not learned by exercising the brain, by reading or talking. It can only be learned by doing—again… and again… and again, many hundreds or thousands of times. It is stored in muscles and nerves, not the brain. When you have learnt to ride a bike, it is not a rational thought that tells your leg to move at a certain moment. That is too slow; it is a direct action from the muscle itself. There is no conscious thought directing the action. Similarly the lightning reflexes of some mar-

tial artists are only possible because they have trained themselves to cut out the brain and the time it takes to respond and send messages to the muscles.

As I have shown, the skill of making is as old as we are. It is absolutely essential in the creation of culture, of finding and expressing our identity at any one time or place. But what is its essence? It is knowledge, but not rational knowledge. It is a knowledge that resides in the body. It is not learned by exercising the brain, by reading or talking. It can only be learned by doing—again… and again… and again, many hundreds or thousands of times. It is stored in muscles and nerves, not the brain. When you have learnt to ride a bike, it is not a rational thought that tells your leg to move at a certain moment. That is too slow; it is a direct action from the muscle itself. There is no conscious thought directing the action. Similarly the lightning reflexes of some mar-

tial artists are only possible because they have trained themselves to cut out the brain and the time it takes to respond and send messages to the muscles.

As I have shown, the skill of making is as old as we are. It is absolutely essential in the creation of culture, of finding and expressing our identity at any one time or place. But what is its essence? It is knowledge, but not rational knowledge. It is a knowledge that resides in the body. It is not learned by exercising the brain, by reading or talking. It can only be learned by doing—again… and again… and again, many hundreds or thousands of times. It is stored in muscles and nerves, not the brain. When you have learnt to ride a bike, it is not a rational thought that tells your leg to move at a certain moment. That is too slow; it is a direct action from the muscle itself. There is no conscious thought directing the action. Similarly the lightning reflexes of some mar-

tial artists are only possible because they have trained themselves to cut out the brain and the time it takes to respond and send messages to the muscles.

As I have shown, the skill of making is as old as we are. It is absolutely essential in the creation of culture, of finding and expressing our identity at any one time or place. But what is its essence? It is knowledge, but not rational knowledge. It is a knowledge that resides in the body. It is not learned by exercising the brain, by reading or talking. It can only be learned by doing—again… and again… and again, many hundreds or thousands of times. It is stored in muscles and nerves, not the brain. When you have learnt to ride a bike, it is not a rational thought that tells your leg to move at a certain moment. That is too slow; it is a direct action from the muscle itself. There is no conscious thought directing the action. Similarly the lightning reflexes of some mar-

tial artists are only possible because they have trained themselves to cut out the brain and the time it takes to respond and send messages to the muscles.

As I have shown, the skill of making is as old as we are. It is absolutely essential in the creation of culture, of finding and expressing our identity at any one time or place. But what is its essence? It is knowledge, but not rational knowledge. It is a knowledge that resides in the body. It is not learned by exercising the brain, by reading or talking. It can only be learned by doing—again… and again… and again, many hundreds or thousands of times. It is stored in muscles and nerves, not the brain. When you have learnt to ride a bike, it is not a rational thought that tells your leg to move at a certain moment. That is too slow; it is a direct action from the muscle itself. There is no conscious thought directing the action. Similarly the lightning reflexes of some mar-

tial artists are only possible because they have trained themselves to cut out the brain and the time it takes to respond and send messages to the muscles.

As I have shown, the skill of making is as old as we are. It is absolutely essential in the creation of culture, of finding and expressing our identity at any one time or place. But what is its essence? It is knowledge, but not rational knowledge. It is a knowledge that resides in the body. It is not learned by exercising the brain, by reading or talking. It can only be learned by doing—again… and again… and again, many hundreds or thousands of times. It is stored in muscles and nerves, not the brain. When you have learnt to ride a bike, it is not a rational thought that tells your leg to move at a certain moment. That is too slow; it is a direct action from the muscle itself. There is no conscious thought directing the action. Similarly the lightning reflexes of some mar-

tial artists are only possible because they have trained themselves to cut out the brain and the time it takes to respond and send messages to the muscles.
ally I have thought I could, but the curves just didn’t look the same and the result became bland. Sometimes I scan my sketch and place the curve into the computer (essentially the same as using a tablet, or would be if the tablet were much larger and you could use your whole arm). This is where the body comes in. The body becomes the pencil, it is the line, it is inside it, pushing, moulding the line, feeling for the right point of intensity of the curve. It is an outflowing of countless years of training and experience which no machine can come close to replicating. It is also a result of eye-hand coordination, or the ‘thinking hand’.

But now having done this, the computer allows you to do some amazing developments, totally impossible in any other way. For instance, in my ‘Three Baskets’ lights, each quarter of the base basket part contains no repeated shape – every single shape is different, and asymmetrical on both axes. Yet, having drawn the original, I was able to generate all these shapes with one single click of the mouse! And then the cnc machine cuts them out – exactly while I have a cup of coffee – or do another drawing?

The point is that drawing is another craft, another form of bodily embedded knowledge. The skill does not come easily (though more so with some than others); it needs to be constantly practised and honed. The best practice is life drawing. It trains you to draw like no other way, because you can uniquely put your body into the same pose as the model. You can feel what that pose is like, and so draw from within. Your body tells you how the weight is being transferred, which muscles are loaded, and your same muscles can drive the drawing process. This teaches empathy, but it also teaches drawing as a bodily expression.

7 Craft education

This argument has an unavoidable implication for education. For some time there has been an approach in craft design courses that focused on teaching design and theory with the belief that the manual skills will be picked up as you go along. If the essence of craft lies in manual skill which takes time to acquire, then this cannot be true. I suggest that the students are primarily not being given the training they need either to be craftspeople or designers; and that skills training is reintroduced. In my studio we have quite a few interns, most of them from France, and they all have far better practical skills than local graduates.

So through the physical act of making, the bodily skill of craft, we have a way to re-connect sensually with our environment, with our time and place. This allows our non-rational attributes to develop – our intuition and our bodily empathy. What are the wider implications of this?

8 Craft and care

When I worked as a furniture maker I always found it very difficult to throw away wood or to waste it. I would spend far longer than it was worth, trying to fit all the bits I wanted out of one plank rather than quickly using two planks. This is a common trait of craftspeople. It is because we care. Care is a fundamental component of craft. We care about what we are doing. We are not just making something as quickly as possible. We want it to be as well made as we can, using the best materials and to last as long as possible. All this because we care. Mass produced items have the care taken out of them; they are made to be as cheap as possible and to last a short time so that you can come back and buy another soon. Anybody who cared would not make, or buy, these, because in doing so they are squandering limited, precious resources.

In his book ‘The Craftsman’ sociologist Richard Sennett argues that another aspect of this care – and fundamental to craft – is doing a job well, purely for the sake of it. The result matters you care about and prefer to spend what time it takes to get it right. By contrast the prevailing attitude in business values speed – it is more important to get the job out fast, than it is to get it right. You are penalised if you focus on resolving details. Windows Vista is a typical, badly resolved, unfinished product that is thoroughly uncraftsmanship. It is also a question of respect for the worker. If the craftsmanship and craft knowledge of builders is valued as much as their efficiency, they will be more content and the outcome will be better for everyone.

9 Empathy

Care is directly linked to empathy. If you don’t care about something, you disconnect from it, if you care, you are connected. That connection is empathy. Because the essence of craft is within the body, the connection of caring is bodily. We feel through our bod- ies, not our minds. Our minds can be manipulated, our bodily knowledge cannot. The ultimate bodily connection is mother to child. That is why the mother cares so passionately about her children; she has such a strong bodily connection, such empathy. That is why women care so much more than men, why they bond more so- cially, why they don’t go to war. Soldiers are trained to shut off their feelings, to disconnect from the enemy as a person, in order to kill them instantly. To empathise is to show weakness and hesitation.

Empathy cannot lie; it is an ultimate moral truth. I can create a strong rational argument why a business should undertake certain operations, and convince the board to pursue them, even though some of the means might only be justified by the ends. But if you empa- thise with the outcomes of those means, if you become connected, then you cannot allow it to happen. If you put yourself in the place of those who are suffering, how can you continue to inflict the pain?

10 The moral of craft

Thus, at the core of craft is a moral truth. This moral is a paradigm for how we live. The paradigm is based on connection, on empathy. The reason why there is so lit- tle care for the environment, why we have caused so much damage, pollution and suffering, is because we are disconnected. If we saw the results of our actions we would continue to pursue them? Would Asian din- ers continue to consume shark fin soup if they saw the suffering and destruction in the oil-produc- ing Niger delta?

The University of Rochester recently did an exper- iment which proved that people who are connected to nature (even by large photos of forests and mountains inside their living spaces) become more empathetic, generous and community aware. Those in dense ur- ban environments become more focused on personal wealth and fame. So empathy (in this case with nature) actually changes the way we are. In that case the same must be true for craft. It is not just a coincidence that craftspeople tend to be more community and environ- mentally aware. Probably the profession attracts more sensitive people, but this research now shows that em- pathy also increases those qualities.

And if surrounding ourselves with nature makes us sensitive and generous, then surely so also does sur- rounding ourselves with art and craft? We live in in- dustry designed environments that are increasingly homogenous, bland and impersonal. There is less and less cultural nourishment and stimulation, such as past civilisations had. We carelessly and frantically consume un-nourishing products which are like junk food. In the process we destroy the environment. Nev- er have people been as privileged as we are, but have all these material benefits improved our humanity? Through a greater sensuality – through connection back to nature via our bodies – I believe we can gener- ate a greater empathy which will improve our human- ity. Through art, craft and design we can create more personal spaces in which we can immerse ourselves, in which we can feel a sense of bodily connection, identity and spiritual nourishment. That would make us more fulfilled and better people.

I believe that connection and empathy are keys to realising greater care, both for other humans and all other life forms on earth. The processes of craft are one way to that empathy.

David Trubridge
Adjunct Professor
Department of Design and Visual Arts
Unitec, Auckland
office@davidtrubridge.com

References
‘The Craftsman’ by Richard Sennett
‘The Spell of the Sensuous’ by David Abram
‘The Thinking Hand’ by Johanna Fatouma
‘The Alphabet versus the Goddess’ by Leonard Schain
Roger Bateman

BioChair – Adding Value to the Biomaterial Story

Where does New Zealand design come from? It is debatable whether there is something that you can definitely call New Zealand Design. There is design from New Zealand and things that have been designed made or manufactured in New Zealand. One could argue that it is illogical to try and distinguish between designs from different countries as many companies sell their products in a global market and therefore cannot afford to design just for a home market.

Many New Zealanders would say that there is something special about New Zealand design that a product from New Zealand can be identified as such, that a building has a certain ‘New Zealandness’ about it. But what is it that we mean by New Zealand feeling, aesthetic and sense of place?

In his book ‘Looking at art in New Zealand’, Peter Tomory suggests that:

‘the New Zealand aesthetic was different to that else-where. This statement is based on the premise that aesthetic appreciation is determined by visual experience. We respond to urban environments through day to day life, we acquire a visual vocabulary of the natural and man-made forms that surround us’ [1]

Tomory used the term ‘totem’ to describe these visual contacts in New Zealand:

‘with its few cities and fewer architectural landmarks, the land still provided a great number of the ‘totems’ by which New Zealanders developed their aesthetic measurements. The lack of European masterpieces, and the impress of the landscape, he concluded, produced a unique New Zealand aesthetic’ [2]

Travel around New Zealand and you will see kilometre upon kilometre of green landscape, pastures, rolling hills, volcanic terrain, flora and fauna, off-shore islands and sea. It is probably this landscape and life within that landscape that has, over anything else, contributed more to forming a New Zealand aesthetic. It could be said that New Zealand design comes from the landscape.

In 1999 leveraging of the landscape and its natural beauty that New Zealand tourism New Zealand uses images of the landscape to reinforce it’s brand story. But this is the kind of image contemporary New Zealand should be portraying?

In January 2007, New Zealand design, innovation and business magazine Idealog published an article called ‘New Zealand Meet the New You’. In this article author Jake Pearce argues that New Zealand needs to portray itself in a far more innovative and contemporary manner:

‘the ‘100% Pure’ campaign plays to this stereotype. Its panoramic spreads of white mountains and whitest beaches reinforce the perception that we do little more that raise cattle and run up mountains for kicks’ [3]

New Zealand is struggling to live up to the ‘100% Pure’ image economically, environmentally and socially. Business pundit Rod Oram states:

‘economically: we’re fast losing our competitiveness in the commodities that dominate our exports; our current account deficit equals ten percent of GDP environmentally: our urban lifestyles and rural farming and living practices are putting unprecedented pressure on our natural resources’ [4]

Jude Hooson director of market strategist The Provi- dence Report believes that ‘the defining issue for New Zealand’s economic future is our ability to apply our best minds and creative talents to our environment’ Hooson suggests:

‘we have a deep biological economy with 70% of our exports traceable back to our industries of land-based innovation. The bottom line driver of our wellbeing and competitive advantage is our ability to make na- ture work for us and land-based innovation is our version of Finland’s Nokia story’

‘Brands with global interest will carry the New Zea- land value of sophisticated simplicity’ [5]

Undoubtedly, if New Zealand is to remain competitive in the global market place and not see the ‘100% Pure’ image become its Achilles heel, it must manoeuvre itself into a position to fully realise and capitalise upon its brand built upon the purity of its products, exports, landscape and tourism.

Furniture Design and Sustainability.

In their book 1000 Chairs, design writers Charlotte and Peter Fiell argue that:

‘Beyond matters of function and structure, the funda- mental worth of chairs, past or present, lies in their communication of attitudes, ideas and values.’ [6]

The Fiells go onto say:

‘over the last 5 years, the evolution of the chair has paralleled developments in architecture and technol- ogy and reflected the changing needs and concerns of society to such an extent that it can be seen to encap- sulate the history of design.’ [7]

In his book The Eco-Design handbook Alistair Fiadl- Luke suggests that the ultimate design challenge of the 21st Century is to avoid or minimise the adverse impact of all products on the environment. The us market for office furniture in 2008 was an estimated 12 billion dollars and within this sector, few office furniture manufacturing companies were exploring sustainable design and production as a means to tackle the challenge posed by Fiadl-Luke. Furthermore, furniture manufactur- ers that were investigating eco sustainable furni- ture production tended to focus on the recyclability of high-energy embodied technological materials rather than on the utilization of renewable sourced biopoly- mers that have a wider range of ‘end of life’ options.

To this is research into ‘sick building syn- drome’. Whilst many companies develop better performing, more ergonomically refined chairs few are taking into consideration the health of the office worker. One aspect of sick building syndrome focuses on indoor air pollution from gassing volatile organic compounds (VOCs) of particular plastics and man made materials commonly used in office components. There exists the need for new design solutions and material develop- ments that will lead to improved ‘healthy’ indoor environments.

BioChair – Out Of The Landscape.

The BioChair project began in early 2009 and is colla- boration between Unitec and the Government owned Crown Research Institute Scion. Scion is focussed on research for the benefit of New Zealand and the formu- lation of bio based polymers forms one of Scion’s key research areas. Within the broad area of bio based polymers Scion’s research focuses on understanding the interactions of polymers with wood and pulp fibres, and how these interactions impact on processing and performance. In the past Scion have produced a biodegradable biopolymer that is used in the manufacture of small weed matt pegs. Even though Scion have worked on a number of small-scale biopolymer items there has been limited commercial uptake of biopolymers in New Zealand.

The idea of combining wood with natural bio based polymers in the design of a piece of exportable commer- cial furniture was seen to offer the opportunity to bring together the ‘naturalness’ of New Zealand with indus- trial design to create an innovative and original product that could express the new contemporary country brand those such as Pearce and Hooson argue is needed. Fur- thermore, the BioChair project aims to create and com- mercialise the first furniture design made from New Zea- land formulated biopolymer in a ‘sophisticated/simple’ product. New Zealand, like most other countries, is begin- ning to see a growing introduction of bioplastic and biodegradable plastic materials within the plastics in- dustry. The market penetration of bioplastics in the glo- bal plastics industry is expected to grow from less than 100,000 tonnes a few years ago to a level approaching 1 million tonnes by 2010. [8]

From the researchers perspective, the area of com- mercial furniture production provides an excellent ap- plication for the new bio based materials as it is a spe- cific example, yet material characteristics required are common to many other applications.

Wood is a natural resource with qualities that are in-de mand by an environmentally aware society. It is renew- able, biodegradable and has a green image not enjoyed by other materials (such as metals, concrete and plastics). The challenge is to enhance the value of wood by pro- viding uniform performance with compatible qualities.

By combining wood or wood fibres with polymers, the renewability and biodegradability can be retained while improving the variability and stability in service. [9]

In recognising the importance of sustainable furni- ture and the contributing elements of ‘Design’ and ‘Materials’, the researchers developed a framework for a sustainable chair [10].

From experience gained in the furniture industry the lead researcher was able to define the initial focus of the chair project. It was decided that the target prod- uct would be a fixed height, 4-leg ‘visitor chair’ which is traditionally used in waiting rooms or client facing rooms to be brought out for special functions or a more
Element | Work Content
--- | ---
1. Market research | • Internet & literature searching.
• Determine important parameters for chair design and sustainability features.
• Determine mechanical/engineering requirements and Standards to be met.
• Results input to material selection and design.
• Interviews with manufacturers and users.
• Review existing formulations.
• Manufacture and test new formulations.
• Determine optimum formulation to target the spec’s of glass reinforced FRP.
• Results will input material selection and LCA analyses.
2. Formulation | • Define the different materials to be used in the chair, including indicative formulation for thermoplastic components.
• Results input to LCA analyses.
• Search for existing data on materials to be used.
• For new formulation(s) undertake LCA studies where data missing and develop environmental footprint for components and then final chair.
• Initial outputs will help in material selection/ refining.
3. Material types | • Multiple design concept development including cad models.
4. LCA (see Fig 2) | • Visit to furniture manufacturers to discuss design, materials, route to market.
• Visit to injection moulding company to discuss mould making.
• Selection of chosen design concept. Further development of concept including model making and CAD.
5. Design and Model Making 1 | • Sketch out a manufacturing pathway to assist LCA assessments and allow social impact assessment to be done.
7. Base design | • CAD drawings of the selected concept chair.
9. Component design | • CAD drawings of components for engineering calculations and future manufacture.
10. Engineering design | • Use FEA analysis (or other) to determine physical dimensions of components to meet performance requirements.
11. Full family concept drawings | • Concept drawings of other furniture items that would augment the chair in the market place.
12. Pull package together | • Collate relevant research outputs to be able to present ‘sustainable chair’ to commercial parties and those with vested interest (eg Govt agencies).
13. Commercialisation plan developed
---

**Figure 1.** (next page)

*Stages 1–12 as shown in Figure 1 have been completed. Figure 2 shows the initial results of the LCA study undertaken by SCION and as presented at the 5th International Conference on Industrial Ecology in Lisbon from 21st to 24th of June 2009.*
TEST: Development of the BioChair: Data capture, Statistical Analysis, Material Development and Characterisation: that of task office seating.

BioChair – Adding Value to the Biomaterial Story
Roger Bateman

Design:

Figure 3. Illustrates CAD development work on the chosen design concept. Initial drawings constructed using SolidWorks have been transferred into STL files that are now being used to make 1:1 moulds in Objetâ€™s basic meeting room chair. The market is large and the requirement of visitors chairs, less demanding than that of task office seating.

Methodology:

The following methodology has been used in the development of the BioChair:

Test:

Data capture, Statistical Analysis, Material Development and Characterisation:
- Formulate a range of biopolymers and compound extrude followed by injection moulding to make samples for testing physical properties.
- Test for: Strength, stiffness, impact, cyclic fatigue and durability.
- Compare with properties of a reference polymer (20% glass reinforced polypropylene).
- Define key properties for design considerations.

Design:

- Design Data, Material Selection, Product Design.
- Research and analyse existing commercial furniture market with particular emphasis on ‘visitors’ and ‘meeting room seating’ (Define target market).
- Investigate performance and safety standards and the articulation of this project demonstrate possibilities in interdisciplinary practice. The relationships between fine art practice and the articulation of “sense of place” has always been evident in map making, and it is in this cross-over that I hope to find a usefulness to Landscape architecture within my work. In this paper I describe my methods and findings from this project so far.

Methodology:

One of my first observations of making the transition from fine art practitioner to Landscape Architecture student was that I would have to understand normative site analysis practice, and place my work in context with that.

References:

Methodology:

One of my first observations of making the transition from fine art practitioner to Landscape Architecture student was that I would have to understand normative site analysis practice, and place my work in context with that.

What I had to do was establish at what level my site analysis artwork was to operate within the managing and developing of public open space, and what aspect of site analysis if any is not currently being utilised.

I started by selecting a site that I had known as a child, Centennial Park on Auckland’s North Shore. There are projects such as the Common Ground movement in the uk, and the Bright Sparks funding scheme also from the uk that explore the relationship of artist and industrial environmental design. The former is engaged in preserving local distinctiveness and empowerment in the face of insensitive development. This is done through advocacy and the publication of guide-lines and strategies that are designed to promote sense of place. One of the methods employed is to use local artists to conduct mappings of their towns and villages, thus giving a counter view to the authorities town planning data collection that is often done without the benefit of intimate local knowledge and experience.

This process enables artists and craft people to talk to Town Planning and Landscape Architectural practice through a complimentary creative process, this has been a distinguishing methodology for the Common Ground projects, for the reason (Kanarinka, 2006, p.44) suggests, “It is possible to think of a map not as a representation of reality but as a tool to produce reality”.

The Bright Sparks funding scheme offers a different approach, it explores public space potential through creatively led research that is achieved through partnerships between artists and public realm professionals.

This scheme was set up by Haring Woods Associates, and Landscape-Arts Network as (Woods, 2009, p. 26) describes: “The scheme champions the role of the artist in the development of the public realm, and the their intuitive response to spaces, places and wildlife.”

These two differing ways of achieving similar goals offered me two methodologies from which to use as a model, I had to try the Common Ground approach first as such a scheme as Bright Sparks was available to me, unless I created one myself, not easy.

After my second workshop when I had presented explorations through producing artwork based on locations within my site, it became clear that only through the use of my own fine art methodology could I produce work that could offer Landscape Architecture something that was not already available through existing practiced site analysis techniques, or too heavily coded. The aspect of site analysis I identified through research that is currently under explored was narrative, and as (Potterie, 1998, p. 12) observes, “narrative offers ways of knowing and shaping landscapes not typically acknowledged in conventional documentation, mapping, surveys, or even the formal concerns of design.”

What was also evident from my second workshop was that the artist should not abandon the poetic in order to come closer to the scientific, it is the dreaming and the poetic qualities of the artwork that the scientific data collection requires. The necessity for the partner-
Park puts this quote into context for us, “But an interpreting a place through symbol and imagination, they heighten our own perceptions in ways that are rarely permitted by ordinary process of seeing.”

As (Girot, 1999, p. 95) states, “The central question today is whether we are capable of returning to a site-induced vision.” and the key word for me in that quote is “site-induced”, and that is where my work could be of value, to explore the genius loci and to work complimentarily to the council planners, managers and landscape architect. And in order to help me to identify what method I could use for a categorising of the elements within a landscape I turned to (Relph, 1976, p. 5) “The central question today is whether we are capable of returning to a site-induced vision.” and the key word for me in that quote is “site-induced”, and that is where my work could be of value, to explore the genius loci and to work complimentarily to the council planners, managers and landscape architect. And in order to help me to identify what method I could use for a categorising of the elements within a landscape I turned to (Relph, 1976, p. 5)...

This impressive landscape feature had now become a hybrid memorial, one designed to celebrate the inceptions of nationhood signed at Waitangi in 1840, and to celebrate the courage of the men who had volunteered to fight for that nation. The hopeful possibility of partnership and nationhood that the cartoon from the Herald of 1940 endeavoured to create had been captured in this double row planting of Pohutukawa...

But by the beginning of the 1960’s the origins of the memorial had been lost to all but a hand full of locals who had an interest in the park’s history or witnessed the original construction.

The artwork made from researching images from various time frames from the life of the avenue of trees, and the findings of the site made through this process was presented to the council. The result from this presentation was that the council changed the draft management plan of the park to recognise the avenue of trees known alternately as Memorial Avenue or Avenue of Remembrance to locals, as a listed historical site. In recognition of this work, the Council agreed to a partnership arrangement with me in the form of 120 hours of expert advice from the specialist council staff, as I required it. I now had something resembling the Bright Sparks model to work with.

As (Girot, 1999, p. 95) states, “The central question today is whether we are capable of returning to a site-induced vision.” and the key word for me in that quote is “site-induced”, and that is where my work could be of value, to explore the genius loci and to work complimentarily to the council planners, managers and landscape architect. And in order to help me to identify what method I could use for a categorising of the elements within a landscape I turned to (Relph, 1976, p. 5) “The central question today is whether we are capable of returning to a site-induced vision.” and the key word for me in that quote is “site-induced”, and that is where my work could be of value, to explore the genius loci and to work complimentarily to the council planners, managers and landscape architect. And in order to help me to identify what method I could use for a categorising of the elements within a landscape I turned to (Relph, 1976, p. 5)...

In the absence of an expert partnership, I needed to find an example of where perception and the use of imagination to unlock aesthetics could have made a difference to an industrial landscape development. And I have here an example of where the collaborative work of artist and industry in conducting site analysis might have assisted in preventing an Environment Court case.

This Environment Court decision went in favour of the Respondent, the nsc, who opposed the coastal development plans of the Appellant.

In the case of Baywater Marina Holdings v North Shore City Council, Environment Judge J.A. Smith (Smith, 2009, p. 29) when delivering the decision began by saying, “At the heart of the difference of opinion on natural character was the perceived naturalness of the...
reclamation. “This issue was at the heart of the dispute, and it is my contention that an artist could have been in a position to express variations of “naturalness” in this case, and could have provided the valuable site analysis dealing with this problem of perception.”

The Judge (Smith, 2009, p. 30–31) also commented, “How we assess and address landscape issues depends on how landscape is defined.” And more pointedly on this subject went on to say, “Neither is it simply a total of bio-physical elements, patterns and processes occurring over time, even though these are regarded as formative factors.”

Is it this kind of case that possibly can answer the question of why fine art practice should be used to assist in solving industrial landscape design problems? I believe what this Environment Court document represents, is an acknowledgement that the qualities of a landscape, are not to be defined simply by a scientific collection of data, or by a photographically representational rendering of a site. Possibly what is asked for is a site analysis that is able to express values and perceptions through an exploration of a site’s meaning, and to assist in defining the cultural basis to the definition of landscape.

My conclusion so far is that the positioning and relevance of using fine art practice in conducting site analysis for Landscape Architecture relies on the structure put in place for analysis and development, macro or micro, a district, neighbourhood or a specific site of importance. The artwork, even though intended only for site analysis requires a standard of presentation that enables it to have authority, and should also be available in a format that enables it to be distributed to all interested parties in a clear and accessible manner. One way of making fine art practice more useful to industrial applications like Landscape Architecture would be to present a wide variety of rendering media and methods of composition were used when producing artwork, and multiple pieces of artwork for a site are produced, this would maximise the machine-like qualities that artwork can bring to analytical discourse, and bring a less pre-determinate site analysis to the design process.

As (Joliet, 2001, p. 40) states, “Landscape incontestably involves aesthetics, we could even go so far as to say, aesthetic motivation, as regards the land.” I believe it is in this aesthetic motivation that the place for fine art in Landscape Architectural site analysis resides. Fine art’s capacity for aesthetic discovery becomes a vital tool for ensuring the best interests of the environment and society in the early stages of town planning and open space development. But I also believe that currently the Bright Sparks model for funding and artist/public space professional partnerships is the optimum methodology for an artist practitioner like myself, to maximise the interdisciplinary process and to contribute useful knowledge through site analysis. I also propose that a working partnership between open space design management and fine artists in exploring “sense of place”, is vital to preserve identity and uniqueness in communities.

Leslie Haines
Auckland’s Urban Forests, Functions and Designs

Introduction
The Landscape Architecture programme at Unitec, Auckland, New Zealand, is increasingly incorporating ecological components into urban designs and some students are addressing issues of landscape ecology where interventions at the local scale are intended to have positive ecological outcomes at the wider scale where ecological functioning often occurs e.g. pollination and seed dispersal, population sustainability. In fragmented urban landscapes these landscape designs have an important contribution to addressing the issues of urban biodiversity conservation. This paper overviews the current patchiness of the vegetation in urban Auckland City, and introduces a range of Bachelor of Landscape Architecture student designs that focus on landscape ecology issues.

Auckland context
If you are a visitor to Auckland, you may have been taken to the top of Maungawhau (Mt Eden), one of the 48 volcanoes in the Auckland region one of the tallest and the closest to the Central Business District (CBD). You may notice from here the harbour and the gulf islands, other volcanoes dotted around the isthmus and beyond, and, despite being within a couple of kilometres of the city, the greenness of the surrounding urban and suburban landscape – the threads of urban forest.

Auckland’s Maori name is Tamaki Makaurau ‘place of the Pohutukawa, a symbol desired by many’, and the city is the most populated in New Zealand. It was relatively heavily populated by Maori more than 800 or so years ago and provided rich kai moana (seafood) and good quality horticultural soils. The vegetation in urban Auckland City, and introduces a range of Bachelor of Landscape Architecture student designs that focus on landscape ecology issues.

As (Joliet, 2001, p. 40) states, “Landscape incontestably involves aesthetics, we could even go so far as to say, aesthetic motivation, as regards the land.” I believe it is in this aesthetic motivation that the place for fine art in Landscape Architectural site analysis resides. Fine art’s capacity for aesthetic discovery becomes a vital tool for ensuring the best interests of the environment and society in the early stages of town planning and open space development. But I also believe that currently the Bright Sparks model for funding and artist/public space professional partnerships is the optimum methodology for an artist practitioner like myself, to maximise the interdisciplinary process and to contribute useful knowledge through site analysis. I also propose that a working partnership between open space design management and fine artists in exploring “sense of place”, is vital to preserve identity and uniqueness in communities.

As (Joliet, 2001, p. 40) states, “Landscape incontestably involves aesthetics, we could even go so far as to say, aesthetic motivation, as regards the land.” I believe it is in this aesthetic motivation that the place for fine art in Landscape Architectural site analysis resides. Fine art’s capacity for aesthetic discovery becomes a vital tool for ensuring the best interests of the environment and society in the early stages of town planning and open space development. But I also believe that currently the Bright Sparks model for funding and artist/public space professional partnerships is the optimum methodology for an artist practitioner like myself, to maximise the interdisciplinary process and to contribute useful knowledge through site analysis. I also propose that a working partnership between open space design management and fine artists in exploring “sense of place”, is vital to preserve identity and uniqueness in communities.

References
2. Cameron, Hayward and Murdoch 2008.
3. Ibid.
4. Business Week
5. Cameron, Hayward and Murdoch 2008
of the export trade. Patches of these logged areas have regenerated after timber extraction while some areas were farmed and later were either abandoned and regenerated, or were developed for housing. The expansion of the city has impacted on the percentage of forest remaining. While most remnant regenerating forest has protected reserve status, some patches of regenerating forest are awaiting a designated use, (e.g. the now rare gumland manuka forest in the city’s cemetery), and are therefore likely to disappear unless their importance is prioritised.

Despite the centuries of disturbance there are populations of large trees surviving in inaccessible places such as steep cliffs or in deep moist gullies on the urban isthmus. Within one kilometre of the CBD, Grafton Gully forest survived until the motorway development in the 1960s leaving only a few individual native trees amongst exotic plantings. As well, some of the lava flows, such as that from Mt Eden, were very rocky and fairly inaccessible, allowing forest to survive there while the city was built around.

The 50ha rock forest beside Mt Eden is thought to be similar to what Maori may have experienced on their arrival. Large titoki (Alectryon eurca), puka (Griselinia lucida), and putangirua (Viter lucen) trees grow tall in this rock that is the result of Mt Eden eruption 19,000 years ago. Only a portion of this 50ha forest remains and two small patches of about 0.1ha each are reserved. The remainder of this forest exists across the suburban landscape. The largest patches are: Titirangi (11ha), where there are hongi action on tall trees that can been seen by birds and lizards, some tall trees that can be seen by birds from a distance and used for perching, and some common younger forest reserves often don’t provide enough food, and are not tall enough, or are too distant to attract woodpigeons. It may be a century or more before the trees which provide rich food sources mature.

In the urban context, the reserves are not sufficient habitat and food sources without the support of the urban matrix—such as street trees or tall trees on private property. The biggest threats to both native plants and birds are from mammalian pests, lack of seed dispersers such as the woodpigeon (which are also affected by mammalian predation), and urban intensification where large trees are seen as problematic. Landscape design has a role to play in enhancing habitat and connectivity for local biodiversity.

Landscape Design Models
Meurk & Hall have developed a spatial model for increasing biodiversity and ecological health in the New Zealand urban context. They suggest a configuration incorporating three forest patch sizes with the largest patch at least 6ha, large enough to provide some habitat for many indigenous species such as kereru, and have those placed at 5km intervals. Between these are medium-sized patches of 0.1ha at 1km spacings with clumps of tall trees every 200m. A significant views from the site. The size and location of this significant habitat patch within the site is a strategic intervention for functional ecology at the landscape scale, while providing a variety of experiences for the park users. Jane’s aim is to connect the Mt Eden forest to the gully forests adjacent to the site in relation to the large patch patterns existing in the broader landscape, and has incorporated a 0.1ha patch into his design in order to fill a gap at the 5km scale, while still retaining social connectivity and significant views from the site. The site and location of this significant habitat patch within the site is strategic intervention for functional ecology at the landscape scale, while providing a variety of experiences for the park users. Jane’s site incorporates a large forest patch amongst the retail and commercial buildings on the site with habitats for small birds and lizards, some tall trees that can be seen by birds from a distance and used for perching, and some common younger forest reserves often don’t provide enough food, and are not tall enough, or are too distant to attract woodpigeons. It may be a century or more before the trees which provide rich food sources mature.

1 Smale and Gardner 1999.
2 Auckland City Council 1999.
3 Millener (no date).
4 Dumbleton 2008.
5 Scott 2006.
6 Meurk and Hall 2006.
7 Smale and Gardner 1999.
8 Auckland City Council 1999.
10 Meurk and Hall 2006.
11 Scott 2006.
12 Parlane 2003.
13 Dumbleton 2008.
clusters of food trees such as kowhai (Sophora chathae-
miana). It is also intended to provide some consciousness
of the indigenous biodiversity to residents and shop-
ners.

Jane* tackled biodiversity right in the cao – a high-
ly impervious landscape. The objective was to apply
the Ecological Greenway concept to an intensely built
space. Her focus was on identifying the existing rud-
eral ecology building on this to create new wildlife habi-
 tats. She designed a hierarchy of categories appropriate
to the scale and character of the site (e.g. fringes, ribbons,
veils of vegetation), that could provide stepping stones
for indigenous species to move through the city be-
tween existing patches of large trees [figure 8]. New
technologies for green walls (e.g. central London [fig-
ure 9]) and roof gardens are examples to make her de-
sign a reality.

Joseph* has chosen a more challenging design. He
lives in Ponsenby, on the periphery of the Auckland cao,
where the preposed mixed use development has been
controversial. The hole in the ground has been aban-
doned due to the recession, and local ‘urban guerril-
las’ broke into the site and staged a beach party beside
the collected stormwater. Joseph used the ecological con-
cept of ruderality in relation to ecological and social out-
comes. He follows the principles of Chris Reed’s work
which ‘establishes seeds, catalysts, and agitators that in-
stigate change and transformation, be it ecological suc-
cession, urban adaptation, interim occupations ‘‘gen-
erators’’… that evolve and adapt to new circumstances.” 14

How could this abandoned site be colonised by ecol-
ygy and people, and provide a temporary landscape
for, amongst other things, birds that in turn affect the
broader landscape? A component of his design incor-
porated bird feeders strung across the site, which dou-
ble as lights at night [figure 10 & 11]. As well, a recipe
for making ‘seed bombs’ would be delivered to locals to
accommodate the ‘guerrilla’ in all of us. These interven-
tions are intended to not only provide an interesting
interactive temporary landscape, but through Reed’s con-
cept of ‘agitators to instigate change and transfor-
mation’, influence any future site development.

So, the trends are positive for urban biodiversity.
Each ecological design intervention contributes to
the urban matrix and, in conjunction with remnant and re-
generating ecosystems, aims to enhance the long-term
viability of the indigenous biodiversity.

References
aucklandcity.govt.nz/council/documents/district/De-
fault.asp Retrieved October 2009

Business Week http://images.businessweek.com/sv/op/
04/sp08_best_places_to_live/6.htm Retrieved Febru-
ary 2010

Cameron, K., Hayward, B. and Murdoch G., 2008. Field guide
to Auckland: exploring the region’s natural and historic
heritage. Auckland, New Zealand: Godwit

Dumbleton, J., 2008. Ecological Transparency expos-
ing and re-introducing ecosystems through design for
transparent ecology at the Lion Breweries site. Un-
published Unitec Landscape Architecture Negotiated
Studies Project

Forman, R. T.T., 2008. Urban Regions: ecology and plan-
ing beyond the city. Cambridge, MA: Cambridge Univer-
sity Press

the city. Unpublished Unitec Landscape Architecture
Negotiated Studies Project

Unitec Landscape Architecture Negotiated Studies
Project

forest diversity across New Zealand’s managed land-
scapes based on ecosystems modelling and spatial de-

Millenber LW, 1979. Forest, scrub and fresh-water com-
munities. In PJ Brook (Ed), Natural History of Auck-
land: and introduction. Auckland War Memorial Mu-
seum Handbook

Parlane, J. 2009. Watatere’s Gateway: creating connec-
tions beyond those that can be seen. Unpublished
Unitec Landscape Architecture Negotiated Studies
Project

Snook.U, Seoul, Korea C’y Publishing

Scott, DJ no date. Waipuhoi Western End. Unpublished
Presentation

Smale, M.C., Gardner R.O., 1999. Survival of Mt Eden
Bush, an urban forest remnant in Auckland, New Zea-

Swainson, W., 1835. Auckland, the Capital of New Zea-
land. A facsimile edition Auckland, New Zealand: Wil-
son and Horton

aucklandcity.govt.nz/council/documents/district/De-
fault.asp Retrieved October 2009

Business Week http://images.businessweek.com/sv/op/
04/sp08_best_places_to_live/6.htm Retrieved Febru-
ary 2010

Cameron, K., Hayward, B. and Murdoch G., 2008. Field guide
to Auckland: exploring the region’s natural and historic
heritage. Auckland, New Zealand: Godwit

Dumbleton, J., 2008. Ecological Transparency expos-
ing and re-introducing ecosystems through design for
transparent ecology at the Lion Breweries site. Un-
published Unitec Landscape Architecture Negotiated
Studies Project

Forman, R. T.T., 2008. Urban Regions: ecology and plan-
ing beyond the city. Cambridge, MA: Cambridge Univer-
sity Press

the city. Unpublished Unitec Landscape Architecture
Negotiated Studies Project

forest diversity across New Zealand’s managed land-
scapes based on ecosystems modelling and spatial de-

Millenber LW, 1979. Forest, scrub and fresh-water com-
munities. In PJ Brook (Ed), Natural History of Auck-
land: and introduction. Auckland War Memorial Mu-
seum Handbook

Parlane, J. 2009. Watatere’s Gateway: creating connec-
tions beyond those that can be seen. Unpublished
Unitec Landscape Architecture Negotiated Studies
Project

Snook.U, Seoul, Korea C’y Publishing

Scott, DJ no date. Waipuhoi Western End. Unpublished
Presentation

Smale, M.C., Gardner R.O., 1999. Survival of Mt Eden
Bush, an urban forest remnant in Auckland, New Zea-

Swainson, W., 1835. Auckland, the Capital of New Zea-
land. A facsimile edition Auckland, New Zealand: Wil-
son and Horton

aucklandcity.govt.nz/council/documents/district/De-
fault.asp Retrieved October 2009

Business Week http://images.businessweek.com/sv/op/
04/sp08_best_places_to_live/6.htm Retrieved Febru-
ary 2010

Cameron, K., Hayward, B. and Murdoch G., 2008. Field guide
to Auckland: exploring the region’s natural and historic
heritage. Auckland, New Zealand: Godwit

Dumbleton, J., 2008. Ecological Transparency expos-
ing and re-introducing ecosystems through design for
transparent ecology at the Lion Breweries site. Un-
published Unitec Landscape Architecture Negotiated
Studies Project

Forman, R. T.T., 2008. Urban Regions: ecology and plan-
ing beyond the city. Cambridge, MA: Cambridge Univer-
sity Press

the city. Unpublished Unitec Landscape Architecture
Negotiated Studies Project

forest diversity across New Zealand’s managed land-
scapes based on ecosystems modelling and spatial de-

Millenber LW, 1979. Forest, scrub and fresh-water com-
munities. In PJ Brook (Ed), Natural History of Auck-
land: and introduction. Auckland War Memorial Mu-
seum Handbook

Parlane, J. 2009. Watatere’s Gateway: creating connec-
tions beyond those that can be seen. Unpublished
Unitec Landscape Architecture Negotiated Studies
Project

Snook.U, Seoul, Korea C’y Publishing

Scott, DJ no date. Waipuhoi Western End. Unpublished
Presentation

Smale, M.C., Gardner R.O., 1999. Survival of Mt Eden
Bush, an urban forest remnant in Auckland, New Zea-

Swainson, W., 1835. Auckland, the Capital of New Zea-
land. A facsimile edition Auckland, New Zealand: Wil-
son and Horton
Outside culture

– the curious Kiwi custom of taking interior furniture outdoors

Abstract
This paper presents a photographic documentary of the curious New Zealand habit of taking interior furniture outside. When placing indoor furniture items outside, the context gets altered, giving the photographic works a surreal aesthetic. Often placed in front of houses or gardens, the chairs and couches beckon the viewer to come and sit down, to relax in a ‘homely atmosphere’. The quirky characteristics of this relocations of furniture are often connected to the way furniture begins to break down where the effects of wind, rain and extreme sun take their toll.

Introduction
My project started in 2008 when I spotted several couches and armchairs that New Zealanders had put on their porches and in their gardens in Wellington. Coming originally from Germany, where only homeless people have indoor couches outside, I was fascinated by how comfortable and inviting this furniture looked and wanted to capture this impression. My first photographic series “outside culture” was exhibited at the Toi Pōneke gallery in Wellington in September 2008. The response from the audience was in general extremely positive. Most people said that they experienced déjà-vu, that it famous for its high couch-rate and burning of couches. This high percentage of students is an exception and cannot be found within the whole population.

Early pictures
Those pictures are an excerpt from the exhibition at the Toi Pōneke gallery in Wellington in September 2008. They represent furniture in nature, furniture in family homes, thrown-out furniture and furniture left in public places.

Facts about the phenomenon
Survey responses confirmed that the boundaries between interior and exterior are blurred in New Zealand culture, allowing the threshold to be easily crossed. 49% agreed that the boundaries are blurred, while only 20% did not agree and 24% could not make up their mind.

Are the boundaries between interior and exterior blurred in New Zealand

A lot of people (42%) consider the door as the boundary between interior and exterior. However, there is also quite a high number of people (29%) who would say that there is no boundary at all. Most people (37%) said that there is no boundary 20% regard the end of porch or veranda and 19% the end of balcony (5%) as the boundary.

Where people set the boundary between interior and exterior

People who place indoor furniture outside are mainly families of lower and middle income groups. The graph below shows who places indoor furniture outside. In this graph students were represented by 43%, followed by families with 29%. The reason why the student numbers are so high is that nearly all of them were from Dunedin. If I did not include questionnaires from Dunedin, the percentage for students in the whole population in the South Island would only be 2%.

Who places indoor furniture outside

63% of all indoor furniture that I could find outside was situated at homes from Pākehā (New Zealanders who are not of Māori blood lines): 27% were found at Māori, homes and 1% at others.

Participant’s nationality/ethnicity

When asked why people place their furniture outside, the reasons given varied. Most people (37%) said that there was not enough room inside. A few people (16%) could not afford to buy outdoor furniture, others put their sofas outside when they become too scruffy (24%)
or just because they were available (29%). Many just preferred the comfort of upholstered furniture (38%).

Why do people place indoor furniture outside

While the preferred times when people like to sit on their furniture varied, the time when the furniture is placed outside is nearly the same. 85% responded, that their furniture was placed outside all the time and once it got placed outside, it would never make its way back inside again.

When is furniture placed outside

57% responded that they sit daily on their furniture, 31% only on a weekly basis. Only 3% are never sitting on their furniture because it is unusable.

How often do people sit on their furniture

The value of old furniture

In places like Dunedin people chain their couches and take seat cushions inside so that they do not get stolen. However, if asked, the majority (65%) stated that they do not value that furniture. Most people (74%) do not care about the condition of this furniture. Interestingly, more than half of them (55%) consider their furniture as having a shabby chic or rustic charm. [Pictures 11, 12, 13, 14]

Next steps

While this article presented a summary of raw survey data and related photographs from the South Island of New Zealand, it represents only half of the country and only the opinion of those people who have indoor furniture outside. In order allow broader generalisations, a survey from the North Island still needs to be completed and a survey of people who do not put indoor furniture outside could be included in order to interpret people’s everyday lives and understanding of spatial relations and material culture.

Other popular places and objects

New Zealanders also tend to take their furniture to places other than their gardens. Very popular in this regard are beaches, roof-tops and public places. [Pictures 5, 6, 7]

Other objects from inside that are frequently taken outside include mattresses, rugs, bathtubs, shelves and heaters. [Pictures 8, 9, 10]
Joanne Drayton
Vikings of the Sunrise

In the spring of 1891, a remarkable discovery was made in the Bay of Uig on the west coast of the Isle of Lewis in the Outer Hebrides. A kiln-like structure was uncovered from a sandbank by a herder tending his cattle. According to anecdotal accounts the herder believed he had stumbled upon an ‘assemblage of echoes or groaners’ or ‘the pigmy sprites of Celtic folk-lore’. Overwhelmed with fear, he ‘flung down his spade, and fled home in dismay’. It was only the ‘bolder curiosity of his wife’ that induced him to return to the spot and properly excavate the site. What was unearthed was a kind of time capsule containing an exquisite collection of 93 pieces of carved ivory.

No one knows how long the Lewis chess pieces sat inside their strange kiln-like chamber, described as ‘vaulted ... about six feet long with a quantity of ashes on the floor’, but they were immediate interesting. ‘[T]hey are the most curious specimens of art I ever remember to have seen,’ wrote Frederic Madden, the Assistant Keeper of Manuscripts in the British Museum, after an hour-long session with Sir Walter Scott ‘looking over ... a set of very curious and ancient chessmen brought to the Museum this morning for sale’.

Frederick Madden believed the British Museum had been offered the whole board, but ultimately 11 additional gaming pieces ended up in the National Museum of Scotland. The original find is thought to have consisted of 78 chess pieces, 14 tablemen or draughts counters and an intricately engraved belt buckle. At least four partial sets can be made up from the hoard. When the British and Scottish museums’ collections are added together there are 8 kings, 8 queens, 16 bishops, 15 Knights, 16 warders or rooks, and 19 pawns. They have been carved almost entirely of walrus ivory with just two or three pieces perhaps being made of whale’s teeth. What makes this collection remarkable is that with the exception of the pawns, which are geometric shapes, all the pieces are tiny sculpted human figures.

Art historically, the Lewis chess pieces are orphans, with no known provenance. Everything about them, everything about the objects themselves or guessed. How they arrived there are 8 kings, 8 queens, 16 bishops, 15 Knights, the pieces are tiny sculpted human figures. They are an enigma, yet at the same time they tell us so much. If you took a selection of Lewis chess pieces and held them in your hands you could see the effects of tiny termites that have chewed minute channels across their surface. None of them have been worn by wave action: some have resisted dampness and temperature change better than others. Today they are the same aged-brownish to creamy off-white colour, but in Madden’s time he records that some were stained hort root red. Chess is a war game and opposing sides are miniature armies that need to be easily distinguishable. The colours of engagement in the case of the Lewis chess set seem to have been red and white. The fading of natural dye or pigment has happened subsequent to their discovery.

If we look deeper we discover a game with an ancient Eastern pedigree. Chess began modestly in India in the 6th century AD, and spread through Asia, Persia, and from the Islamic territories into Spain, France, the British Isles and Scandinavia. Chess pieces, boards, illuminated instruction books travelled along with the courtly and aristocratic mores associated with playing the game.

As chess spread through the Islamic territories its pieces became abstract. It wasn’t until they were anachronomorphized that the game took off in Europe. In Scandinavia the playing of chess was widespread throughout the whole population and it may have been from here that the game moved to the British Isles. It is in Scandinavia in the twelfth century that scholars believe the Lewis chess pieces were carved. Initially the field of possibility for the origination of the Lewis chess set encompassed much of Western Europe. Stylistic links and recent discoveries have narrowed the parameters of probability to Norway and specifically to the international port of Trondheim.

A convincing argument can be made for the fact that the Lewis chess pieces were executed in a single workshop in Trondheim and transported to the Isle of Lewis by merchant ship. There is a family likeness or homogeneity between the Lewis pieces. Every figure is individually conceived, yet they come from the same gene pool with their protuberant eyes, downward sloping mouth, pronounce upper lip and hair that falls straight in cord-like strands.

Although small in scale (the largest piece is 5.5cm x 10cm high) the Lewis chess pieces are commanding, and appealing, especially to a modern sensibility not imbued with Celtic folk lore. I first saw the British Museum’s Lewis collection during the Christmas break of 2000–2001. They left an after image in my mind. When I became more adept at surfing the internet I discovered them again. It was after a subsequent trip London, and the British Museum that I decided to carve, a chess set in been bone in response to the Lewis pieces. Susan Stewart’s book On Longing provides some provoking ideas around the notion of the souvenir. She writes:

The souvenir speaks to a context or origin through a language of longing, for it is not an object arising out of need or use value, it is an object arising out of the necessity insatiable demand of nostalgia. The double function of the souvenir is to authenticate a past or otherwise remote experience and, at the same time, to discredit the present. The present is either too impersonal, too looming ... The antique as souvenir always bears the burden of nostalgia for experience impossibly distant in time: the experience of the family, the village, the firsthand community. The souvenir must be removed from its context in order to serve as a trace of it, but it must also be restored through narrative and/or reverence.

Nostalgia, longing, a desire to participate even virtuously in the various hierarchies of society, royalty, ecclesiastical and knightly.

I drew directly onto the bone, discovering almost immediately that my eye was classically, and the wonderful simplicity of Romanesque sculpture was lost. I decided to use a photographed image. The Lewis rooks (the word coming from the Persian rokh or hero) most-
may explain why the left side of one of the queen's thrones has been mended with a separate piece of walrus-tusk being pinned into position.

The Lewis kings are warlords. They are warrior patri-
archs with long trefid-crests, and swords drawn ready across their knees. They have large spoon-shaped
beards, moustaches and their hair falls down their backs in plaits. Long hair was a symbol of strength and prow-
ess on the battlefield. Their dress consists of an upper
and an under robe, which in some cases is pinned at
the left shoulder to keep their sword arm free.

The queens by comparison, are less aggressive. Their characteristic pose is chin resting in hand, which is
often supported by the left. The exception is where
the left hand clutches a horn, which may be a drinking
or money horn. A modern interpretation of the queen's
gesture might be anxiety, but this has been discount-
ed. The gesture has iconic links to images of St
Joseph beside the crib at Christ's Nativity and to the
grief stricken Virgin Mary at the cross, and was prob-
ably intended to under-score the significance of the
Queen's role as confidant and adviser to the king. The
Arabic equivalent piece was called the vizier or coun-
selor. The queens wear veils under their crowns, a sign
of rank, and a mantle that hangs from the shoulder to
the foot covering another under-gown. Their sleeves
are plaited from the elbow to the wrist.

Beef bone is narrower in circumference that a wal-
rus-tusk so I decided to make my thrown out of sepa-
rate pieces of bone and pin them as the early carvers
did. It is in the execution of the backs and
margins of manuscripts with lush, twisting foliate pat-
terns, interlaced arches, tracery, scrolls, and a verita-
ble bestiary [a medieval collection of stories providing
physical and allegorical descriptions of real or imagi-
nary animals along with an interpretation of the mor-
al significance each animal was thought to embody] of
creases biting and fighting each other. It was here that
strong stylistic links have been made to the carv-
ing of Norwegian stave churches, especially at Trond-
heim. Royalty seated on ornate thrones required a rel-
atively broad piece of walrus-ivory as they were carved
out of a single piece. The difficulty of this challenge

not only being to respond to my own tradition, but to that
of my partner whose mother’s family are Tainui Maori.
My methodology and approach has yet to be estab-
lished. What I know it will give me though, is an oppor-
tunity to look in detail at both Maori and Scandinavian
carving traditions and establish relationships and dif-
ferences between making, iconography and myth. In
a way a game of strategy, skill, intelligence and sadly
sometimes cruelty has been played between Maori and
Pakeha since their arrival in Aotearoa / New Zealand.
What better way to symbolise this complex hicultural
relationship of give and take than with a game of chess
that brings our ancestors together on one board.

References
2 Ibid., p. 4.
5 Neil Stratford, The Lewis Chessmen and the enigma of the board.
6 Frederic Madden, ‘Historical Remarks on the introduc-
tion of the game of Chess into Europe, and on the an-
cient Chess-men discovered in the Isle of Lewis; by Fre-
deric Madden, Esq. F.R.S. Secretary Royal 16th February , 1832’, Archaeologia XXIV (1833), p. 219.
The milk packaging design concept is some proof that New Zealand cultural vernacular. Milk signs have been enmeshed in the visual culture since their inception pre-1900, when dairying became the backbone of New Zealand’s economic growth. Milk is a product of nature, yet one that has been increasingly altered and mediated by industry. As the relationship between milk and nature change, the history of milk signs is a graphic narrative about the changes in broader cultural attitudes to nature.

Introduction

Milk packaging signs signify contemporary culture in the same way pre-industrial tribal myths were stories that contained implicit meaning which defined and re-enforced cultural identity. The New Zealand consumer is a textualised, connote meanings of a New Zealand story, that contained implicit meaning which defined and re-enforced aesthetic references attributes from nature, cultural allegory and repackaging to address the central issues – findings explored and exposed, and how nature is used in marketing.

Early New Zealand milk signs

Semiotic analysis of New Zealand milk signs and packaging, from 1860 to the present day provided the necessary framework for deciphering the underlying relationship between culture and nature. The historical context of New Zealand milk signs and what they signified, and the signification of contemporary milk signs, gave context for the development of the design brief and resulting milk packaging artefact. By applying the theoretical frameworks of Strauss, Baudrillard, Barthes, Williamson and Pierce early signs provided a paradoxical relationship of domination by culture over nature – its right to do so unquenchably. Early New Zealand milk signs reflected a transposed culture fearful of untamed nature and nature battling against it. In an emergent, largely regionalised industry nature was re-signed as symbols for culture. The raw product was inferred, rendered not visible and presented as something natural with remnants of past signs; still visual threads of containment, ease to fill, transportation, and display of milk. Extending the design brief involved addressing the challenge to re-signify the Nature and Culture of New Zealand milk signs and packaging paradoxic relationship between nature and culture.

Contemporary New Zealand milk signs

Deciphering contemporary New Zealand milk signs revealed a culture still overwhelmingly expressing a domination over nature; nature now re-assigned as ‘the natural’ with remnants of past signs; still visual threads in a new time context. Semiotic analysis of contemporary milk signs also included the wider context of competitive commodity artefacts and signs simulacra when taken out of the retail environment, becoming indecipherable from toxic substances to non-readers.

Contemporary milk signs and packaging paradoxically also reflected culture with a new desire to merge with nature through signs signifying raw nature in people, authoritative anthropomorphised cows, wild children, cartoon characters that infantilise the culture – the new expression of raw nature moving beyond natural to organic.

Milk packaging artefacts do little more than contain the milk, and are constituted (‘standardised’) ‘fresh’ products for transportation and display. The packaging materials, from a non-renewable resource, are non-biodegradable and unable to protect the promoted nutritional values of the milk beyond a few hours of being displayed for sale. The new milk, renders the consumers’ association with nature even more distant and alien.

The consumer

1 in 6 New Zealand children do not get enough to eat (Oranges. R 2004) and the poorest children are the primary purchasers of their own food (Scragg, R. et al. 2001).

A possible design solution

In response to the research, new design was to denote attributes connoted in contemporary milk packaging signs, with secondary meaning, signifiers pertinent to the nature of the product and not to infer too close an association with the nature. The milk packaging design concept became a physical object with an industrialised aesthetic, yet merged culture with the experiential of nature first hand in the context of industrial realism.

Design direction

Referencing pre-industrial packaging design provided direction for a new generic approach to mass-produced packaging artefacts as signs. The functions of the milk packaging artefact extended beyond the industrialised aesthetics of contemporary packaging functions of containment, ease to fill, transportation, and display of milk. Extending the design brief involved addressing the challenge to re-signify the Nature and Culture of New Zealand milk signs and packaging paradoxic relationship between nature and culture.

Physically the packaging artefact needed also to be ergonomic, accessible and safe for consumers. It needed to carry and contain the milk, protect it from light and air, be stackable, be easily and safely disposable, perhaps infuse the product with added dietary benefits and tastes, it also needed to display the milk, and communicate the content in a persuasive manner. Avoiding any connotations of rawness. It’s form needed to be an obviously manufactured object, understood and acceptable to mediated culture, yet would also re-ignite the consumer relationship with nature, to inspire an instinctual response to touch, odor, colour, size and shape, first hand. To nurture the nature within the consumer – but not infantilise.

Social and environmental consequences

Research into the social and environmental consequences of the economic scale of milk packaging uncovered a series of design dilemmas that threatened my optimism to create a worthwhile design other than more toxic packaging for the landfill. The packaging design that resulted from the research came from conceptualising nature as a separate entity proclaiming its superiority by abusing the very nature culture depends on for survival. A primary function of the new milk packaging was to serve the consumer, as did pre-industrial packaging, be as a utilitarian mediator between the cooked (consumer) and the cooked (milk).

Materials

Inspired by pre-industrial Japanese packaging, I was excited to find a material developed by Tara Mc Hugh, a chemist for the United States Department of Agriculture (Rojas-Grau, 2006) who whilst researching new ways to use fruit and vegetable produce otherwise unsuitable for individual sale, made a thin film by drying pureed fruits on Teflon plates. The film forms without incorporating air, be stackable, be easily and safely disposable, and air, be stackable, be easily and safely disposable, ergonomic, accessible and safe for consumers. It needed to carry and contain the milk, protect it from light and air, be stackable, be easily and safely disposable, and air, be stackable, be easily and safely disposable.

Contemporary milk signs and packaging paradoxically also reflected culture with a new desire to merge with nature through signs signifying raw nature in people, authoritative anthropomorphised cows, wild children, cartoon characters that infantilise the culture – the new expression of raw nature moving beyond natural to organic.

Milk packaging artefacts do little more than contain the milk, and are constituted (‘standardised’) ‘fresh’ products for transportation and display. The packaging materials, from a non-renewable resource, are non-biodegradable and unable to protect the promoted nutritional values of the milk beyond a few hours of being displayed for sale. The new milk, renders the consumers’ association with nature even more distant and alien.

The consumer

1 in 6 New Zealand children do not get enough to eat (Oranges. R 2004) and the poorest children are the primary purchasers of their own food (Scragg, R. et al. 2001).

A possible design solution

In response to the research, new design was to denote attributes connoted in contemporary milk packaging signs, with secondary meaning, signifiers pertinent to the nature of the product and not to infer too close an association with the nature. The milk packaging design concept became a physical object with an industrialised aesthetic, yet merged culture with the experiential of nature first hand in the context of industrial realism.

Design direction

Referencing pre-industrial packaging design provided direction for a new generic approach to mass-produced packaging artefacts as signs. The functions of the milk packaging artefact extended beyond the industrialised aesthetics of contemporary packaging functions of containment, ease to fill, transportation, and display of milk. Extending the design brief involved addressing the challenge to re-signify the Nature and Culture of New Zealand milk signs and packaging paradoxic relationship between nature and culture.

Physically the packaging artefact needed also to be ergonomic, accessible and safe for consumers. It needed to carry and contain the milk, protect it from light and air, be stackable, be easily and safely disposable, perhaps infuse the product with added dietary benefits and taste experiences, it also needed to display the milk, and communicate the content in a persuasive manner. Avoiding any connotations of rawness. It’s form needed to be an obviously manufactured object, understood and acceptable to mediated culture, yet would also re-ignite the consumer relationship with nature, to inspire an instinctual response to touch, odor, colour, size and shape, first hand. To nurture the nature within the consumer – but not infantilise.

Social and environmental consequences

Research into the social and environmental consequences of the economic scale of milk packaging uncovered a series of design dilemmas that threatened my optimism to create a worthwhile design other than more toxic packaging for the landfill. The packaging design that resulted from the research came from conceptualising nature as a separate entity proclaiming its superiority by abusing the very nature culture depends on for survival. A primary function of the new milk packaging was to serve the consumer, as did pre-industrial packaging, be as a utilitarian mediator between the cooked (consumer) and the cooked (milk).

Materials

Inspired by pre-industrial Japanese packaging, I was excited to find a material developed by Tara Mc Hugh, a chemist for the United States Department of Agriculture (Rojas-Grau, 2006) who whilst researching new ways to use fruit and vegetable produce otherwise unsuitable for individual sale, made a thin film by drying pureed fruits on Teflon plates. The film forms without incorporating air, be stackable, be easily and safely disposable, ergonomic, accessible and safe for consumers. It needed to carry and contain the milk, protect it from light and air, be stackable, be easily and safely disposable, and air, be stackable, be easily and safely disposable.
stacked in a zig-zag limiting (expensive) airspace. The internal structure of the package may be cell-like (similar to inside an orange), making consumption easier. Or, it could be a spiral (similar to the structure inside a shoebox) making the process unlikely to spill. More fruit packaging would be beneficial in providing more favourable dietary fibre (the sugar content modified) and although there is perhaps too much for a child to consume, it is biodegradable waste.

### Manufacture

To manufacture, the fruit wrap would be made as a continuous tube, similar to the technology of sausage ‘skin’ packaging acts as a hygienic barrier. The biodegradable glassine film (www.communisis.com) is similar to sweet wrappers. It is noisy and shiny, a contrast experienced when the outer glaccine is divided into information about the milk contents are described.

The glossy brand sign at around 20ºT on the matt surface of the product was a decision made as part of the design process. It is an intrinsic part of the product, and cannot be removed, providing an infallible identification that protects pride and authenticity – “hits” is a reassurance, instructing consumers as to what to do when faced with this new product. The brand offered identification should there be line extension such as yoghurt. The brand is on the product. It was also considered as a potential marketing tool for promotional strategies.

### Redesign summary

The design solution is unmistakable to decipher, even to the non-readers. It provides additional nutrition by protecting milk from light and air degradation and providing additional nutritional value, appealing taste and odor. It is one possible solution to the central issues – findings explored and exposed, and thus its aesthetic references – attributes from nature, culture and industry. It comes from a renewable resource. The milk packaging design concept is some proof that it is possible to not dominate nature. A packaging object that signifies what it is, through an industrialised aesthetic, by breaking the allegoric inferences, enables consumers to decipher the product as it is – industrialised milk with a twist of nature.

### In many areas designers must learn how to re-design

(Papanek. p. 81)

### Bibliography


Fortner Co-operative group (2003). Working with a fair value contract. From a renewable resource. The milk packaging design concept is some proof that it is possible to not dominate nature. A packaging object that signifies what it is, through an industrialised aesthetic, by breaking the allegoric inferences, enables consumers to decipher the product as it is – industrialised milk with a twist of nature.

### In many areas designers must learn how to re-design

(Papanek. p. 81)

### Tulla Moss Lecturer

Director of Student Achievement & Retention Member of sure Sustainability Research Network

Institute of Communication Design
College of Creative Arts
Massey University

V: +64 800 2794 x 64532
F: +64 4840 2799
k: t.moss@massey.ac.nz
w: www.massey.ac.nz


Tulia Moss

The Jesus Under Dairy and Other Stories

The Down Under Dairy and Other Stories


routes flowing up through the Panama and Suez Canals and across all of the oceans were umbilical cords connecting us with our ‘mother country’. Those lines and connections were comforting linkages, yet they reinforced the great distance and our isolated position at the bottom corner of the world. When my grandparents went by boat ‘back home’ to England, I understood just how very long those trade routes were.

The map in my primary school atlas was unusual in that it showed the Pacific in a central position, rather than the usual Euro-centric view Britain therefore appears twice, and even though it was a New Zealand publication, exaggerates the size so that it is as big as France; a graphic portrayal of the way that Britain still loomed very large in our world.

Now New Zealand’s developing sense of nationhood has grown into an acceptance of its geographical position in the southern Pacific and has cemented the simplistic way of representing a country is through its cartographic expression. For artists and designers maps offer a base of enormous emotional potency upon which to communicate a wide range of concepts. The map is a more neutral and political umbilical cords have dwindled in importance as our eyes shift towards Asia and closer neighbours rather than Europe. However the transport lines still hold resonance and most New Zealanders still head to London to begin their ‘Overseas Experience’.

One reason for the map’s power is that the simplest way of representing a country is through its cartographic expression. For artists and designers maps offer a base of enormous emotional potency upon which to communicate a wide range of concepts. The map is a more neutral and political umbilical cords have dwindled in importance as our eyes shift towards Asia and closer neighbours rather than Europe. However the transport lines still hold resonance and most New Zealanders still head to London to begin their ‘Overseas Experience’.

Much of New Zealand’s sense of identity derives within and outside New Zealand and its neutral symbolism in terms of New Zealand’s multicultural reality. The Red Cross appeal poster from 2008 emphasises the smallness of the country and highlights it comparatively isolated position. But in this image there is a sense of celebration and even comfort as New Zealand floats, small and white, in a heart-shaped blue sea. It’s an image of our islands devoid of any umbilical cords.

Much of New Zealand’s sense of identity derives from seeing itself as an island nation isolated at the bottom of the world. What was once a disadvantage is now seen as a positive expression of uniqueness. This is increasingly reflected in a wide range of visual representations that celebrate New Zealand’s position on the ‘edge of the world’ in a way that can be seen as a culturally creative position. Although the bottom right hand position is a construct forced upon New Zealand by the European world, it is now adopted, embraced and proudly used in a huge variety of forms.

The map’s adoption as part of our visual language has led to a high level of recognition that allows it to be used in extremely abstracted forms. These rely much less on geographical realism than on proportion and alignment. In many cases the shape is constructed from other elements, and sometimes its form is so abstracted that it becomes a symbol of the map, rather than a map in itself.

Increasingly the outline map is coming off the page and appearing in everyday items. It’s used in popular culture as a comforting decoration that reminds New Zealanders of who we are – on everything from coffee cups to pillowslips. Its broad acceptance as an icon of the country has made the map more popular than ever as an adornment, on T-shirts, jewellery and as tattoos, that allows individual New Zealanders to signal to others who they are. The map is now something that symbolises a point of difference – and therefore pride in what is a more and more homogeneous world. On T-shirts the map is sometimes connected with phrases such as ‘Home grown’, ‘Born here’ or ‘Made in NZ’.

The changing use of New Zealand’s distinctive geographic outline charts the country’s changing view of itself and its place in the world. It reflects a growing sense of confidence and a striving to define its developing identity. The map’s early use was as a ‘realistic’ symbol of New Zealand, and a marker for geographical position relative to other (implicitly more important) places. However, this has given way to more flexible use of its distinctive shape and political and cultural neutrality. Depictions of the map now frequently refer to New Zealand’s position to symbolise a sense not of isolation but of independence and uniqueness. The very broad acceptance and recognition of the outline map allows it to be used in increasingly abstracted ways, and yet still be a base upon which to express ideas about New Zealand as a country and about what it means to be a New Zealander.

Donald Preston
Lecturer
Institute of Communication Design
College of Creative Arts
Massey University
Y 64 4 801 5799 extn 64417
e: D.B.Preston@massey.ac.nz
www.massey.ac.nz
Private Box 756 Wellington
New Zealand

References

<table>
<thead>
<tr>
<th>Country</th>
<th>Members</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUSTRALIA</td>
<td>2</td>
</tr>
<tr>
<td>Austria</td>
<td>1</td>
</tr>
<tr>
<td>Canada</td>
<td>4</td>
</tr>
<tr>
<td>Chile</td>
<td>2</td>
</tr>
<tr>
<td>China</td>
<td>6</td>
</tr>
<tr>
<td>Croatia</td>
<td>1</td>
</tr>
<tr>
<td>Denmark</td>
<td>2</td>
</tr>
<tr>
<td>Estonia</td>
<td>1</td>
</tr>
<tr>
<td>Finland</td>
<td>3</td>
</tr>
<tr>
<td>France</td>
<td>10</td>
</tr>
<tr>
<td>Germany</td>
<td>4</td>
</tr>
<tr>
<td>Greece</td>
<td>1</td>
</tr>
<tr>
<td>India</td>
<td>4</td>
</tr>
<tr>
<td>Ireland</td>
<td>2</td>
</tr>
<tr>
<td>Israel</td>
<td>1</td>
</tr>
<tr>
<td>Italy</td>
<td>1</td>
</tr>
<tr>
<td>Japan</td>
<td>5</td>
</tr>
<tr>
<td>Korea</td>
<td>1</td>
</tr>
<tr>
<td>Latvia</td>
<td>1</td>
</tr>
<tr>
<td>Lithuania</td>
<td>1</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>2</td>
</tr>
<tr>
<td>Mexico</td>
<td>1</td>
</tr>
<tr>
<td>Netherlands</td>
<td>3</td>
</tr>
<tr>
<td>New Zealand</td>
<td>5</td>
</tr>
<tr>
<td>Norway</td>
<td>1</td>
</tr>
<tr>
<td>Poland</td>
<td>1</td>
</tr>
<tr>
<td>Portugal</td>
<td>2</td>
</tr>
<tr>
<td>Qatar</td>
<td>1</td>
</tr>
<tr>
<td>Russia</td>
<td>1</td>
</tr>
<tr>
<td>Schweiz</td>
<td>2</td>
</tr>
<tr>
<td>Singapore</td>
<td>1</td>
</tr>
<tr>
<td>South Africa</td>
<td>1</td>
</tr>
<tr>
<td>Sweden</td>
<td>2</td>
</tr>
<tr>
<td>Switzerland</td>
<td>2</td>
</tr>
<tr>
<td>Taiwan</td>
<td>2</td>
</tr>
<tr>
<td>United Arab Emirates</td>
<td>1</td>
</tr>
<tr>
<td>United States</td>
<td>10</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>10</td>
</tr>
<tr>
<td>United Nations</td>
<td>1</td>
</tr>
<tr>
<td>United States</td>
<td>10</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>10</td>
</tr>
<tr>
<td>United Arab Emirates</td>
<td>1</td>
</tr>
<tr>
<td>United States</td>
<td>10</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>10</td>
</tr>
</tbody>
</table>