ABORIGINAL KNOWLEDGE ON THE INTERNET

Presented to the Batchelor Institute, Researching our Practice

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1. INTRODUCTION

Aboriginal people have traditional ways of understanding knowledge: what it is like, where it comes from, how people make it, how it is remembered, celebrated, and made new, how knowledge belongs to people, and how secret and sacred knowledges relate to public knowledge.

At the same time, Aboriginal people in remote communities are beginning to use the internet to communicate with each other, to market their art, and for teaching and learning.

This paper is about my reflections (my research) on what Aboriginal philosophy teaches us about indigenous knowledge on the internet.

This paper is a contribution to the conference at Batchelor Institute 'Researching our Practice'. I want to say something about what I have learnt from Yolngu teachers about knowledge, identity and education. In cross cultural education there are always issues of language, knowledge and power to be considered.

At CDU, we are using computers more and more in teaching, communicating are research.

These issues need to be reconsidered in the context of the internet where Aboriginal knowledges and ways of knowing are beginning to find a place.

I used to work as teacher/linguist at Milingimbi and Yirrkala.

Now I work with Waymamba Gaykamangu at the School of Australian Indigenous Knowledge Systems, at the Charles Darwin University, in Darwin, teaching Yolngu languages and culture, and on research into indigenous resource management.

We also work on developing agreements with language owners and methods for teaching our language and culture units on line.

We also receive constant requests from around the world from people wanting to learn about Aboriginal life, language and culture on line.

2 ABORIGINAL PHILOSOPHY

Indigenous people in Australia and other places celebrate a story of the origins of the world which really holds true for all of us.

In this story, the world as we can know it, was provided for us by our ancestors, who talked and sung and cried and danced the shapes of the knowable world into being. Everything we know, we know always because our ancestors gave us the language to understand it.

In the Aboriginal versions of creation, the ancestors actually changed language when they moved from one place to another, and left groups of people and their totems in place.

Every language has its territory.

For other people of a non Australian Aboriginal background, we understand our life in Australia using a foreign language which though still the creation of our ancestors, has been transplanted and reapplied to Australia, and now provides for us here, our ways of understanding the world and each other.

Yolngu have often said: the land is made out of language, language comes out of the ground, and history stays in the place where it is made. Everything we can recognise is made out of language. Everything we say contributes to the ongoing creation of a knowable world, a world we can share together.

For Yolngu and many other Aboriginal people who have occupied the same areas of land and spoken ancestral languages for many thousands of years, the identity between the small bits of the knowable world which are your own, and the particular structures of your own specific language, is given, and continues to be an ongoing site of the work of Aboriginal philosophy.

But the Yolngu theory also holds for everyone, even for people who have never settled in the one place.

Our knowledge, whoever we are, can only ever be a function of both the totality of language which we have received, and the full history of our embodied experience somewhere on the planet.

We all learn our identity as we learn to know our own territory and to speak our own language with confidence.

All new experience must be interpreted through the old language which we have received from our parents and community: the stories, the songs, paintings, and systems of place names species names, people's names and totems.

Of course many new words and deas are added into languages all the time, but in Aboriginal society, new knowledge is not valued above old knowledge. New knowledge only has meaning and value through its ability to be tied to received knowledge and identity.

Traditional ways are used to understand and make use of new things.

Today, Aboriginal English like all Aboriginal languages, also takes part in this ancient reading and telling of the world.

For Yolngu, their knowledge belongs to them in the same way – and for the same reason – that their land and their language belongs to them.

People can tell you about their ancestors and their creation stories, songs, ceremonies and dances, but they are always careful not to tell you about those of other people. You need to go and ask them. Even if someone really knows another person's stories, when someone asks them, they would be bound to say 'I don't know' and refer you to the people to whom the stories belong. When people tell you what they know, it

The work that the community does in bringing up young children is to teach them their territory and the language together. It could be understood as a form of mapping. This link between language (as narrative) and material reality (our bodies in land) constitutes our identity.

 This is just as true for nonAboriginal people as it is for Aborigines. Every human being who has language receives a fundamental framework for their identity from the languages of their community.

There is no progressive enlightenment. There is just working together in and with the world as we find it. When new perspectives come into a community – as when white Australians come and introduce new systems, new ideas or new technologies – these are assessed and valued and embraced in the context of community sharing and working together.

Knowledge seen as performative implies knowing 'how' rather than knowing 'that'. A common Yolngu word for 'know' is marnggi. This word doesn't so much mean to know *about* something, as to have embraced the experience of something. If someone says they are marnggi for 'horse', they are not merely stating that they know what a horse is, but rather that they know how to ride one. This position can be seen to step around the difficult problem which is nearly always lurking behind European philosophy, of the split between mind and

Nothing else.

Much of the language learning in Yolngu society is understood as learning the place names, and names of totemic objects and links between groups which share them. Your embodiment in time and place, and your language – your stories, place names and species names, songs, designs, dances, gestures etc – together produce your identity. This also involves encouraging them as they grow to adulthood, to switch from speaking their mother's to their father's language.

For a discussion of the Yolngu philosophy of language, see Christie, M.J. 1993 *Yolngu Linguistics* Ngoondjook #8 pp58-77 and Christie, M.J. 1994 *Grounded and Ex-centric knowledges: exploring Aboriginal alternatives to western thinking* in J Edwards (ed) Thinking: International Interdisciplinary Perspectives Hawker Brownlow Education 1994, also abbreviated in Education Australia #21, 1993.

From this perspective, we understand knowledge to be a function of the performance and embodiment of history.

Its performative nature ensures its embeddedness in narrative.

Truth emerges like a tangent to a narrative - momentary and structured like a fiction. The post structuralists insist that, all truth claims are embedded in a metanarrative. Dependence on metanarrative in Western science is hidden, in Yolngu science it is foregrounded and celebrated, leading to particular knowledge practices which are both socially and ecologically

will be in the context of a story which is shared with others.

This is very different from the western notion of knowledge, which is represented as abstract, universal, value-free, not belonging to anyone in particular.

3 MAKING KNOWLEDGE TOGETHER

It would be very unusual, and wrong, in fact, for a Yolngu to live all his life on his own land, hunting in his own grounds, and singing his own ancestral songs. Yolngu have to deal with different people from different places and different language groups for all sorts of reasons. For example a Yolngu must always marry someone from a different group, different language, different moiety, different totems.

When a ceremony is held, there will be different language groups represented, all working together to dance, sing, perform a single story together, woven together from a whole lot of different perspectives.

In common Australian English, this is called corroboree, in Yolngu languages the bunggul.

Every ceremony has its beginnings in a story, which belongs to people, links them to history and country.

When talking about Yolngu curriculum for Yirrkala school, Yolngu elders pointed out a parallel between ceremonial practice and school education. They use the bunggul as a metaphor for the process of education through 'rom' or law.

body (theory and practice). Knowledge cannot be seen as a function of the intellect as divorced from the body.

In any setting where language and materiality are assumed to entertain the same structure, knowledge must be theorised as performative.

In this theory, there is a difference between identity, and knowledge.

Identity can be learnt within the context of your own family, your kin, your traditions, your language and your land.

Knowledge production takes place as a result of negotiation between people of different backgrounds. their languages differ because their backgrounds differ. Even when they share the same words, they need to negotiate what those words refer to, in the same way that any two people do their best to thrash out an agreed meaning when they have a conversation. The ceremony is a key setting where connections between people, and groups of people are made and maintained, where history is celebrated and reworked, where art is produced and displayed, and where songs and associated dances reproduce the ancestral work in the here and now.

The metaphor of the ceremonial rom was first used in the context of education by the elders at Yirrkala community who were concerned that a curriculum without a real balance between Yolngu and balanda perspectives would turn young people

sustainable.

Christie, M.J. 1991 *Aboriginal science for the ecologically sustainable future* Australian Science Teacher 1991 Vol 37 #1 26-31, also in Ngoondjook #4 1990

When we think about sharing our knowledge with other people on the internet, or when we think about intercultural education – like between Aboriginal students and white teachers – we are dealing with the unpredictable relation between the signifier (the words, movements, images) we use, and the signified (what you or I understand to be represented by the signifier). Through the judicious use of ambiguity and metaphor, Yolngu ceremonial leaders have a long tradition of negotiating complex situated agreed meanings from the raw materials of quite divergent and potentially antagonistic sources.

Yunupingu, Mandawuy 'Yothu Yindi - Finding Balance' in Voices from the Land Mandawuy Yunupingu.(et al.) Sydney : ABC Books, 1994 pp 1 - 11

Marika-Mununggiritj, Raymattja. 'Some notes on Principles for Aboriginal Pedagogy.' Ngoondjook, December 1991, pp33 - 34.

'Rom' is the word in many Yolngu languages which means 'law' and also 'proper traditional practice'.

For more discussion on the application of Yolngu metaphor to education, see:

Marika-Mununggiritj,

In a bunggul people who share some aspects of ancestral history come from different lands to a central place to work together. People who are important to the particular ceremony must be invited, and they must be made welcome. They will all have their jobs to do, and will be carefully supervised by particular others whose task it is to make sure things are done properly.

Ceremonies are not easy things to arrange and perform. Things must be done by the right people in the right order.

4 GARMA

To keep it fair and balanced, and available for public scrutiny, an open ceremonial ground is provided for the community celebration and production of history and knowledge – a space where people come together from different parts of the land, and perform the ancestral stories in song, dance and art in a designated public forum.

This site is called a garma by Yolngu, and according to the Yirrkala elders, the first necessary condition for a true Yolngu education. Schools and classrooms must be like that.

What is knowledge like when it is produced by people from completely different cultures working together?

The Yirrkala elders used as a metaphor a special process of interaction between two systems of water in a specific place. In the mangroves, there are certain places, sites where the tidal influences of the sea water meet and interact with the seasonally fluctuating freshwater streams

away from their ancestral lore.

They were concerned that their young people should learn the skills of western mathematics, western science and lliteracy in a way which kept them in tune with their own culture.

They knew that all knowledge, including balanda knowledge, is important and useful for Aborigines in the modern world. But it must be treated carefully, through rom.

The garma always actually belongs to a specific group of course – its neutrality is culturally defined.

It has a history, and that history is relevant to the work performed there.

There is no such thing as a place that doesn't belong to someone, but the garma is set aside for a forum – away from the sacred business, and in a place where people know they are welcome if they treat the place and its history and its visitors with respect.

This is one interpretation of the mangrove metaphor: (The elders had many important points to make; this is just what I took from their teaching.)

When indigenous and nonindigenous people sit down and talk to each other in an agreed place, and with a spirit of mutual respect and negotiation, the knowledge they produce is new, and fresh, and true.

This knowledge is different

Raymattja 'Workshops as Teaching Learning Environments' Ngoondjook November 1990, pp43 - 54

Marika-Mununggiritj, Raymattja, 'How can Balanda (White Australians) learn about the Aboriginal World?' Ngoondjook July 1991, pp 17 – 25

Christie, M. 2000 Galtha: The application of Aboriginal philosophy to school learning. New Horizons in Education, 103, 3-19.

There are two types of people here: those who share the totem in some way – because their own territory is on the same 'dreaming' track as the ceremonial hosts – and those who have some managerial or supervisory or facilitatory responsibility to fulfil, through their mother's people. There are other people whose specific role is to sit quietly in a group and watch.

There are also sacred and secret aspects of ceremonials to be negotiated carefully in private before and during the ceremony.

In the example of mathematics teaching, this notion was evoked to ensure that western mathematics was to be unpacked, explored, and utilised alongside the Yolngu system of formalising and mapping structure and value on to the known world. Yolngu do through gurrutu (kinship networks) what whitefellas do through number, and in the context of the garma, students and their teachers speak and perform

coming from the land. In these places, things are always changing. Froth and leaves circulate on the surface, and beneath the surface, the mixing of different waters produce something both very fruitful and unique.

from what either of the two (or more) contributing parties began with.

In the context of Aboriginal education, it no longer represents an assimilation of the Yolngu mind to the imagination of the coloniser.

themselves both within and against each of these two practices. That's how they create new knowledges together, while still growing in the strength of their identity invested in their own land, language, and kin.

5 TWO WAYS OF LOOKING AT KNOWLEDGE

Here I talk about metaphors for knowledge used by Yolngu elders talking about school curriculum.

All epistemology depends upon metaphor. To define our knowledge about knowledge we need to make a step away, and use an example.

5.1 KNOWLEDGE AS PERFORMANCE

People come to the garma with the knowledge of their own history, language, place and kin connections, and work together to negotiate a performance where each person remains faithful to their own identity, but works cooperatively with others to develop a shared narrative performance which links all the people together for this time in this place.

Using the example of the turtle hunter which Raymattja Marika-Mununggiritj develops in her paper, in ceremonial occasions throughout the year, when groups of people are gathered together, and at moments of great joy or grief or trouble, the turtle hunter may sing his song or dance his dance as a way of both becoming who he is, and proving to others who he is.

The turtle hunter becomes himself here in a negotiated way – unlike the way he is himself when he is out hunting on the reef with his own people.

This public, shared, negotiated community knowledge is the sort which, according to the Yirrkala

The dancer here becomes himself in an enacted and negotiated context of ancestral history. In his dance he can both exercise, and claim and legitimate his closeness to ancestral power, and by doing so, influence others towards his own vision of the world. The performances become rich through the multiplicity of contributions. This multiplicity is thoroughly encoded in Yolngu languages through terms which specify links which hold between groups by virtue of their totemic (historical) connections. These articulating or connecting terms are chanted by ceremonial leaders at significant moment in the proceedings.

Marika-Mununggiritj, R. & Christie, M.J. 1995 *Yolngu metaphors for learning* International Journal of the Sociology of Language Vol 113, 59-62, Fall.

For a discussion on what happens through dance, see Tamisari, F 2000 *The meaning of the steps is in between: dancing and the curse of compliments* The Australian Journal of Anthropology, 11:3, 36-48

Dancing in this context can be fraught and lead to bloodshed. See *The Australian* newspaper, Nov 25, 2000, page 1.

The ceremonial metaphor emphasises two things:

First the performative nature of knowledge with its links with the spiritual essence of the ancestors of your own and related groups – whatever it is you have inherited through biology and through culture which makes you who you are.

And second: its inter-subjective nature through which anyone can join to collectively explore that which to some extent is held collectively, and to some extent individually, and able to be shared, represented and celebrated outside of the constraints of language.

This deep knowledge can never be commodified. It is intersubjective – it can't be the function of one single

While the structure of the world may be identified by other scientists through rational and empirical

elders, schools are supposed to produce. It is different from what you learn from your elders at home, and also different from the secret and sacred knowledge which is made and remade in different ways, and has no place in the garma or in the school, or on the internet. We are talking about public knowledge, made by people in the spirit of respect, cooperation and celebration.

5.2 KNOWEDGE AS CONTAINED IN OBJECTS

There is another way of understanding knowledge: as somehow stored or contained inside a book or a painting or video or sound recording.

This metaphor is typical of the Balanda approach to knowledge and education where teachers hand out text books and students copy the knowledge from the books into their heads.

This is quite different from community negotiation. In the ceremonial context, when it is all over, the Yolngu leaders usually bury the artefacts which they have produced, or wrap them up so they can only be seen by the right people. Truth must be produced and presented in its narrative context.

We can use the example of Yolngu art to talk about what happens to Aboriginal knowledge where it is made into an artefact: a text, a picture, a video or sound recording.

Many groups of Australian Aborigines have a long tradition of sharing their cultural products with each others and with newcomers.

For example, Yolngu have been selling their art on sheets of bark

person, it has to be shared before it can exist.

It is distributed – it lives in objects and practices and structures as much as inside peoples heads.

It is extralinguistic – some of it can never be told because it is unable to be expressed in language – so it is sung or danced or painted.

Whenever as part of a ceremonial procedure, an artefact is produced, a painting, a carving, or a sacred bag or string for example, the production of these works (as with performance of ancestral songs and dances) provides a direct access to ancestral power, a mode for the education of a younger generation, and a political statement to observers.

These objects are mostly carefully buried at the conclusion of a ceremony, or if they are kept, they are wrapped up and kept safe from the gaze of others. The notion of the artefact as the ongoing bearer of commodified knowledge, is guarded against.

At the local level Yolngu art is used to educate people, both painters and those who are allowed to see the painting, and also to make claims of authority, ownership, and knowledge. Like the stories they illustrate, they make representation at different levels – some specific to the time and place, some shared by people from other places, some secret and sacred, some available to anyone. If a painting can

processes, the *values* of practices, places, or symbols, and what they mean to people emerge only through narrative – through the situated histories of a people. Narratives produce truth in a way in which objective science can't. They reveal the particular experience of people in a social historical and geographic locatedness.

On a similar note, when Yolngu teachers gain control of classrooms, they change the role of the artefact.

The text book becomes relegated to the sidelines, and knowledge once again comes out of people's interactions between language, history and land.

The fantasy of a book as a container of knowledge subverts this so it is subtly done away with.

See: Christie, M.J. 1995 *Drawing the Line: a history of Yolngu literacy* in D. Myers (ed) Reinventing Literacy: The Multicultural Imperative Phaedrus Books also abbreviated in Fine Print, Winter 1995, pp14-17

See Howard Morphy's book 'Ancestral Connections' for an excellent analysis of the history of Yolngu art as 'symbol, commodity, and propaganda'. The artwork fulfils these fuctions both within the community of production, and as it is exported from its original context and is received within a foreign frame.

Morphy, H 1991 Ancestral connections: art and an Aboriginal system of

for more than fifty years. Today bark paintings have a high place in both balanda and Aboriginal culture.

Within the community of production, a painting or a song will be judged within a commonly held frame. The turtle hunter for example, will paint his ancestral turtle against a crosshatched background which represents his claim to land.

When he dances, the other performers and observers know the creation narratives from all around the coast which frame his performance in this place enacting this aspect of his history. They read his style, the particular way he moves or uses his voice for example, through which he demonstrates a particular feature of his land or history. They see the artful way in which he sings or dances his part within the communal celebration, and works with others to foreground the links between his own totem, song and land, and those of others.

But when he does his ancestral painting, and it is sold to an art lover in London, it is now looked at from a foreign scene. There is no frame shared with the Yolngu community which will help him read its meaning.

People who look at the art, or hear the song or the story, don't know about the history and the land and culture and ceremony of the people who make them. so their imaginations are allowed to run wild.

They don't imagine real Aboriginal people because they have never met them. They don't know what Aboriginal people are really like,

be seen it will have some level of public meaning, and then underlying meanings at different levels of esotericism and secrecy.

Of course, most performers in the garma are not in their own space. We nearly always have to make our representations and negotiations away from home, we need an agreed process whereby we can do so, and we need to focus on defining and formalising the connections between these representations.

Yolngu are always negotiating among themselves the boundaries between the art and artefacts for public exposure, and those to be kept for private negotiation, production and display.

For example, the archetypal Yolngu painting has fine cross-hatching fleshing out the totemic designs. This crosshatching produces the effects of ancestral power.

The signified here, is a long way away from its contextualisation in community history and place, so it becomes framed by a fantasy of some exoticised other.

The consumer of Aboriginal art or music or narrative wants to believe that this work comes from some authentic cultural location among the people who produce it. If they thought it was just more text, or just pretty designs, it wouldn't be worth anything to them.

So when there is no real access to the connectednesses of Yolngu performance, there is a fantasy at work, which

knowledge. Chicago; University of Chicago Press.

The range of art is from shlock sold in airports to the million dollar paintings.

Some groups of Yolngu artists have recently decided that the link between the human hand and head (paintbrushes are made of human hair) and earth (ochres) is lost when the work of is reproduced mechanically. This crosshatching should not feature on the designs which are produced through mechanical means, like lino and lithographic prints. (Will Stubbs, Buku-Larrnggay Arts, Yirrkala, pers comm.)

This concern for the integrity of the ancestral 'aura' is precisely parallel to Walter Benjamin's argument about the loss of the 'auratic function' of 'the work of art in the age of mechanical reproduction'.

Benjamin, W. 1938 *The work of art in the age of mechanical reproduction* in Illuminations ed H Arendt 1968 New York: Schocken Books

Morphy defines the frame as the encompassing set of cultural practices and understandings that defines the meaning of an object in a particular context.'

The task is to create a web presence in which these erasures of local and national and colonial economic and political history are not automatic, where a viable Yolngu frame for the interpretation and interrogation of cultural performance is available, and users have the choice of whether or not to enter the specified arena.

To some extent this is achieved through a return to narrative as a basis for

they imagine something more like what they have seen on the television or video.

When knowledge is wrapped in objects and sent away from home, it can never properly represent the people who made it. This is the basic problem of knowledge on the internet.

6 THE INTERNET

We have found at NTU that there are people all around the world who are interested in Australian Aboriginal life, history, culture, language, art, and ceremony. They contact us by e-mail, and visit the Yolngu Studies website.

In some ways, these people are like the art buyers who look at the art and just use their imaginations to dream about what aboriginal people and their history and culture are like.

To begin with, multimedia allows Yolngu to represent themselves in ways they have always used. They are no longer trapped by the hurdle of reading and writing text.

For thousands of years, Aboriginal people have been making representations to each other, through singing, talking, dancing, artwork, and oratory.

Now with internet and multimedia technology, people can express their perspectives without depending too much on the printed text which was brought from Europe and carried with it a particular angle on language and truth and the real world which would Photographs, paintings, videos, multimedia, and animations can all be integrated in one person's representations.

Secondly, the internet is gradually

involves a sort of aestheticising of Aboriginal culture, and a stripping away of aspects of Aboriginal history and culture which are much more complex and more interesting and confronting – the very things which the artists see as central.

Knowledge production becomes polyvocal and supervised and ordered forums and groups enrich the collaboration of workers. Now on the internet, and in multimedia, there may be a chance for people to make a much richer representation of themselves, and to do it using their own traditional rules about how to go about it. We can look to using Aboriginal rules for making knowledge together.

Webbased and multimedia technology facilitates the self expression of those who generally live and understand their lives outside the linearity and univocality of text. With this move the paralysing dislocation between the flesh-and-blood performance and the artefact as detritus is undermined and ultimately blurred.

When the printed text and the technologies of writing arrived in Australia Aboriginal communities, the old ways of making representations and producing knowledge were swept to one side. The internet may allow the primacy of text to be undermined as the performance of knowledge through images, and sound becomes easier.

When people are working

knowledge production and truth claims.

In the next two sections, we'll look at how internet technology may help Aboriginal people represent themselves, and what the theory of garma suggests for knowledge on the internet.

Nathan, D. 2000 Plugging in Indigenous Knowledge: Connections and Innovations Australian Aboriginal Studies #2

David Nathan's paper draws out a number of important points about internet and multimedia technologies in the context of Indigenous knowledge.

See http://learnline,cdu.edu.au/yolngustudies

There is much to be hoped for there, with Aboriginal kids completely fearless in their interactions with computers, Aboriginal artists always already freed from the tyranny of text in their digital art work, and Aboriginal elders long experienced in providing and reading multiple layers of representation and meaning in art work.

There is an easy transfer of skills from Yolngu culture to the use of multimedia bypassing the distractions of print literacy: like reading GIS images for example, unencumbered by the expectations we bring from map reading; and expecting and exploring the metaphor of multiple layers of images in multimedia which reflect the multiple layers of meaning in Yolngu art and representation.

The imbalance between the

allowing more and more people to speak for themselves. It is important that people tell their own stories. It is always hard to get books published, but now and in the future, anyone who has a computer and can understand the software, can publish their own ideas, the art, their songs, their stories on the internet for anyone to look at.

Finally, and most importantly, the different points of view and ways of expression of different participants can be linked together in networks on the internet, through hypertext, like the individual performances which act together in a garma ceremony.

7 THE VIRTUAL GARMA

There are different ways of making stories, pictures, videos and sound recordings available on the internet. What is the best way to do this so that Yolngu can control their own knowledges? The metaphor of garma would suggest that an agreed site controlled by the knowledge owners would be a good place to start.

We don't know what it would look like, or how it would work, but we can begin to imagine it. The real garma is flat and open and soft under foot - sandy or on salt or clay pans. The virtual garma, is not a real place in the world, it is a place in cyberspace – made from people's work on the internet.

Like any site, whether virtual – as on the internet – or real, this site becomes a 'place' through human performance which make it meaningful.

Instead of just putting artefacts of Aboriginal knowledge - stories,

together to create knowledge, the more perspectives that become available, the richer the knowledge will be.

The technology allows anyone who is a gatekeeper for the representations of others, can learn how to pass the skills of 'publishing' on to others.

Hypertext – the use of computers to make links between texts and bits of text - has given ordinary people enormous control over how texts –, song, painting, dance and stories as both text and audio - can be linked together to create networks.

The creation of a virtual garma would concern itself with the creation of a space – a site - on the internet in which the routine practices of production and communication which reflect Yolngu protocol can be worked out. Such a web presence is yet to be created.

The virtual performance of garma on the internet need not be in real time, but it must be ordered.

The site must be approached through agreement and with good will and respect.

The site becomes a garma through the careful implementation of protocols for performance, and the provision of rich networks of (hypertextual) linkages among these performances.

The virtual garma needs to be first of all a space into which all people are invited

few mighty authors and the multitude of readers is undermined in internet technology. Anyone can publish, knowledge production becomes polyvocal.

Supervised and ordered forums and groups enrich the collaboration of everyone involved in the production of knowledge.

David Nathan, in his paper mentions how hypertext was once the privilege of the priestly class. With internet technology, this power is available to all of us who work cooperatively with others, for the enrichment and contextualization of our work.

Insofar, as all knowledge is essentially performative, we transform sites and locations into places through action. This is as true of Cyberspace as it is of Batchelor, or Darwin or Sydney.

Batchelor is performed as an Aboriginal place by Aboriginal people from all over, and also performed as a balanda place, with its obvious mining history, and then again as a technoscientific place through the routine practices of institutional cartography, resource planning, demographic research etc. Space becomes place through performance.

The Garma site on the internet would be an Aboriginal place, made Aboriginal by the Yolngu structuring of the ongoing performance of the Aboriginal life, culture and history which gives it its meaning.

That look of the virtual space – the colours and designs used, and the ways in which

pictures, videos, photos, sound recordings etc - on to the internet simply as web pages unrelated to each other, and each unconnected to its authors and place of origin, we must work towards developing a site where people could come and observe what is happening, participate if they were invited to do so, and see a range of performances which can be read together to create a richer perspective.

The garma is 'owned' – maybe in this instance not by a particular clan group, but by Yolngu participants who work together to develop and maintain a Yolngu site.

People are invited to participate in the performance space of the site, if they do so, with respect and good order.

Land owners (totem holders, story tellers,) make their representations first, and publicly, and others – Yolngu and others alike - are welcome to perform themselves or to sit at the edge and observe.

The knowledge here belongs to everyone who has shared in its production, and who acknowledge that it was produced through the goodwill and guidance of Yolngu teachers.

to enter, and observe, and do their thing under supervision.

It is not a community, it is a space to be created as a place through performance.

The quality of richness of our knowledge is a function of the number of different informed perspectives which can be brought to bear on an issue.

Complex web site designs, interactive and collaborative software, and thorough and considered use of hypertext, are therefore central to the creation of a virtual garma. Access of indigenous people to internet and other information technologies is fundamental to developing the complexity of performance on which Yolngu knowledge production depends.

Within that virtual garma we must work to produce what Barthes called 'healthy' signs – representations which bear within them the signs of their own partiality, constructedness, and historical location. And these signs would best be performed as narratives – stories of how we ourselves fit into the larger story we work to articulate together.

it might work - must not be preempted by graphic artists and nonIndigenous programmers and artists representing their private fantasies of the exoticised other. Their generic postmodern representations of the primitive other aesthetic work powerfully to discredit, marginalise and erase the authentic self-representation of indigenous people.

Ultimately, we can only guard against the commodification and debasement of any knowledge on the internet insofar as we can enjoy access to a negotiated space where we engage as much of our creative energy in our negotiations over how to produce and link our cultural artefacts together in a cooperative, meaningful reflective way, as we work to represent our individual selves through the stories we perform about ourselves and our histories, and our places.