PathScape

Pathways through an Australian Landscape

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Completion Funding Proposal

for an

interactive multimedia CD-ROM

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"The Australian people are mostly newcomers. They and their land must form a bond ....
otherwise we will always remain poor, confused strangers in our own lands."
Tim Flannery *The Future Eaters*

PathScape
Pathways through an Australian Landscape

An interactive multimedia CD-ROM which explores images and sounds from a part of the coastal plain of SE Australia, the location of belief and identity for both the indigenous and non-indigenous people who live there. Through a dynamic and interactive process of presentation, intersections are made with interpretations and mediations about The Land, its many appearances, its many histories.

Concept

Land is central to Australian culture and history. For indigenous people it is the source of spiritual as well as material nourishment and has been for more than 40,000 years. As a predominently urban culture much of what Australians experience and understand about the land is conveyed and interpreted to us by a whole range of media: cinema, television, painting, photography etc. This mediation process places a frame around the subject, whereby 'the land' becomes landscape, an object for distant appreciation. *"Landscapes are culture before they are nature; constructs of the imagination projected onto wood and water and rock."* Simon Schama

The series of narratives, commentaries and interactions which are encountered by the user explore the transitions that occur between people and the land, the individual and the landscape, place and memory. The interactive design allows each individual's cognitive and assimilation processes to operate in correspondence with what is experienced.

Interface: the Experience

The interface design approach is demonstrated in the prototype and based upon three principles:

• a rapid, experiential encounter with a familiar landscape, poetic to the senses, with different narratives and different voices speaking from various perspectives: it is vivid but unsettling.

• a more measured pace which, like a pause during a bushwalk or a break from a task, encourages reflective thought on conjective, even disputative, information: it is didactic but in the active sense, like absorbing a well constructed novel, or examining an archeological site.

• a text-based point of access which enables the narratives and the information and the images they contain to be explored using linkings based on sources, word associations, indexes and titles.

"I am before a moving image - it is an image of the sea, the horizon line bisecting the frame of the image, top to bottom - the surf rolls in, endlessly. "

Interface: the Audience

The user determines the degree of their involvment in this process by being able to identify and select different 'levels' of immersion. The experience can be about enjoying the sound and image which construct this multimedia landscape, and it can become a resource tool for gaining knowledge and insight into the contemporary and historic environment, an interactive documentary about this time and place.

Interaction

The prototype has been developed with an interface and navigation system which will enables the user to enjoy a rich visual diffusion of landscape images collected from NSW South Coast locations. The interface design provides a pleasurable experience and then as an option, provides intuitive access to knowledge and information related to that experience, via the path through the landscape or through the text-based 'sources' feature.
The many stories, both historical and contemporary, which lie hidden in the landscape, compel the user the piece together the real picture, often at variance with the image of landscape, a picture much richer than being simply the backdrop to events.

Content

The options for interaction offer a choice between the experiential, and a combination of the experiential and the knowledge-based. The choices are governed by the gestures made with the Mouse and may respond to questions such as:

What lies behind the beach?
What lies in the Bush?
What is obscured by what I see?
What is beyond more than the eye can see?

Motivation for the short-term encounter or sustained involvement over the long-term will rely on a compelling interactive process which leads the user through a series of remarkable encounters with short, narrative sound and image sequences, offering as an option to the user an engagment with areas of knowledge designed to intrigue and inform, linked together by the landscape in view.

The content will be conveyed through a series of discourses encountered at the various Nodes within each Zone. The two broad areas of knowledge arising from human interaction with the material circumstances of this country, the contemporary and the historical, part fact and part belief related to this landscape, will form the researched substance of this fully developed version.

Zones

The zones form the skeletal structure for exploring the land-scape, its appearances and its stories - each zone is signalled by colour-coded margins which frame the central image.
The number of zones traversed will expand from the six in the prototype to twelve in the full version:
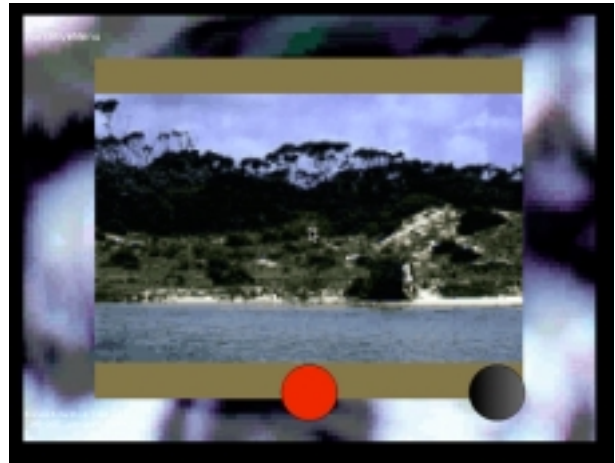
0	Sea and Headlands	Not in prototype
1	Beach	In prototype
2	Creek	"
3	Dunes	"
4	Light Bush	"
5	Wetlands	"
6	Rainforest	"
7	Highway	Not in prototype
8	Rainforest Gulleys	"
9	River Flood Plain	"
10	Ranges Slopes	"
11	Ranges Peaks	"

Content Threads Summary

1. Anecdotal and contemporary evidence:
   a) 'Living on the land' : indigenous and non-indigenous anecdotal accounts.
   b) representations through Popular Culture; movies, publishing, advertising etc.

2. Historic and other empirical description:
   a) Historical: local, national and international archives including official recorded colonial history, recorded personal history both indigenous and non-indigenous, reports by media both local and national.

b) Geographical: topographical, flora and fauna, farming and mining, industry and commerce, settlement, etc

3. Ideas and Analysis and the authorial presence: the function of the chorus or benshai - comment, conjecture, and projection - moving scale outwards from the local and the specific to the global and the general. This will be effected in part by the use of the Web search engine feature to deliver links that will stay current with issues raised by the interactive.

Development from Prototype

Content development will affect three aspects of the production:

- the density of material within the already established zones 1 - 6; For instance, expanding the numbers of stories in the beach zone could include further 'first sightings' narratives based on imaginative interpretations of entries in the diaries of the crew of the Endeavour during their three-year expedition in the Pacific - dreams of riches, of salvation, of the erotic. These would be set with narratives dealing with the lives of the Yuin and Thawal peoples who would have lived in these places at that point in time, stories based on oral histories and upon reports made by anthropologists and archeologists.
- further collaboration with the Budamurra Aboriginal Corporation to develop narrative sequences (such as above) that describe the land as 'country' from the perspective of indigenous people in this region who are its traditional custodians and who have the authority to relate stories and lore.
- the gathering of fresh images and sounds to represent the landscape zones up to and including the coastal ranges. To characterise this development, the non-indigenous narratives encountered in zones not covered in the prototype will include:

The Road Builder's Stories - like the surveyor, measuring and cutting the bush to liberate it from the 'chaos' of underdevelopment, without reference to traditional owners or proposed users, linking one urban centre to another.
The Story of the Bitumen Thread that circles the continent and the stories of the travellers who use it - the truckers, the tourists - where are they going? Why are they on the move? What will they find at their destination? These are stories which bind this region to other parts of Australia and the rest of the world - the Easter Show and the Reconciliation March in Sydney, the AFL Grand Final in Melbourne, the woolens factories of Korea, Italy and Britain.
The Motorcycle Cop's Stories - several narratives from a retired magistrate who sat with the first Aboriginal JP in NSW and in his younger days was a patrol officer covering the whole of the South Coast.
The Marketer's Story, the grower of beans, other vegetables and fruit, the employer of indigenous people and the itinerent swagmen in the early days of colonisation, who is now part of agribusiness and using modern technologies.
The Bloodstock Breeder's Story - the horse enabled the settlers to colonise the land, to work and exploit it and then, as motor transport and road-making replaced animals, the horse became the focus of the new industries

of pastimes, hobbies and gambling.

The Riverboatman's Story - using the inland waterways for the movement of settlers and their goods to and from the interior during the 19th Century. River navigation changes to farming fish and oysters and meeting the demands of tourists during the late 20th Century.

The Logger's Story - set in the coupes of the State Forests, the struggle for sustained employment and a sustained ecology are fought out between timber workers, biologists and greenies.

The Grazier's Story - the dairy for Sydney, and grower of beef, lamb and wool for the world.

As in the prototype, these stories would be examined from the different viewpoints of historical and contemporary polemics - see Content Threads Summary.

Indigenous People

A meeting with the Ulladulla Land Council and the Budamurra Aboriginal Corporation in Ulladulla at which the prototype was demonstrated has led to the Land Council expressing a desire to contribute stories to a full version. A non-exclusive licence to include these stories would be purchased. In addition, we are currently researching ways in which Budamurra could become the producers of the narrative sequences through a related custom-ised training program designed with advice from Metro Screen, Sydney. Should Budamurra not be in a position to produce all sound and image material then the project producers will provide copies of material collected during Budamurra sequences and the final production, to present to the community and to the archive of the AIATSIS library.

The aim of the project is to retain and develop the methods of consultation and collaboration with the Budamurra Aboriginal Corporation that has existed amongst the crew and copyright holders during the making of the prototype. This will preserve the integrity of stories licensed to the produc-tion, and their context, within the structure of the overall work.

Content Research and Copyright

The 'content assets' database has been established during Phase One of PathScape as a production and project management tool. It enables efficient storage of 'raw' material both images, sound, graphics and text, (complete with source and copyright information), prior to selection for useage. For the Sources level of PathScape, text is transferred directly from the database into the authoring tool. The tracking of potential rights payments to, and permissions from, copyright holders will be further developed in this sytem though it is envisaged that much of the historical material will be outside copyright. The active collaboration of scholars in the field, (Healy, Carter, Goodall et al), will also be sought.

Kathryn Wells, the researcher, will liase and develop with Budamurra, cultural protocols and a contract for the production or joint-production of suitable material based on the non-exclusive rights to stories. The project will respect Budamurra's desire for overall product integrity and benefit, including in the process of production, the contribution of multimedia production knowledge and skills by crew members to Budamurra commu-nity members.

Interface Programming

Following adjustments and improvements to the programming from the first prototype (Sontel), further improvements to the second prototype (PathScape phase 1 - see attached report) are proposed:

• the 'speed' at which the image in the central screen moves will be made variable in relation to the position of the mouse cursor viz. starting movement slowly and then accelerating as the mouse is moved progressivily toward the edge of the screen. This will assist in the 'capturing' of margin images and the launching of narratives.

• a sample of sound from a narrative corresponding to a margin image 'captured' will be looped, before clicking to launch that narrative.

• margin images will indicate narrative options in the 360° morphing pans.

• the colour-coded buttons which offer options at the end of each narrative will 'grow' from dots to almost fill the screen - see images above and below.

Index Menu amendments will include:

- fully functioning keyword index - each narrative sequence will have between 1- 5 keywords associated with it. After a keyword or phrase is selected, a list of Stories will be displayed which share that same word or expression - see illustration below. Stories can then be launched by clicking on an item in the list;

- improvements to the appearance of screen layout, use of font and colour, design of scroll bars, print option, etc;

- pre-scripted Web Search options may include the ability of the user to amend the recommended boolean search string;

- the ability to print material from the Transcript screen - see illustration above.

Sound

A stereo track will be introduced to the sound design, running in conjunction with parallel mono tracks and 'spot' effects to provide a richer sound presence tied closely to zone character and ecology - volume level could also become relational to location within a Zone. Budamurra and Bruno Koenig the sound designer have both indicated a desire to collaborate closely in this respect. Stereo sound design will also considerably enhance the sense of place during the morphed pans, for instance.
In close collaboration with the interface programmer, sounds to indicate sequence transitions and to confirm option-taking, together with the creation of silent spaces will extend the dynamic operation of sound throughout experiencing the process of interaction.

Spoken Text

Describing the natural world, ie a geological setting, or relating the events of the past, ie the development of the timber industry, will be communicated through the use of the narrative form rather than that of the lecture as is current in both prototype versions. The Geologist's Story, The Timber Worker's, The Sawyer's Story etc. will be related in the first person or as a dialogue between two or three people and will be broken into shorter sections - thus the user will have the option of discovering more about the off-screen character by using the 'circles' menu at the end of each story in addition to being directly accessible through the index/content section. A greater variety of voices will read the prepared texts than was possible in the prototype, in order to create more surface and expression and convey the sense of many players who pass through the landscape.

Exhibition, Distribution & Marketing

The audience will have a broad set of interests in art, ecology, history, social relations, media study, communications theory, etc. They are most likely to be working in industries such as visual art, multimedia, education, conservation, tourism, government, publishing etc.

The complete version of PathScape is regarded as having several objectives for how different audiences may use it and thus has a full range of exhibition and marketing options available including:

- installation in a gallery or museum with large screen projection and surround-sound to enrich the experiential aspect. Software design would enable migration to a high end platform to improve performance and image and sound quality and with further funding and research could enable a sensing system to be developed based on spatial zone proximity sensors or ultrasonics and thus remove the need for mouse control of the interface.

- duplication and inclusion as part of an existing teaching kit for secondary and tertiary students or within the development of a new teaching kit.

- distribution and marketing on-line and through Websites concerned with the related themes and issues - ecology, tourism, social history, indigenous affairs etc.

- marketing as consumer item at point-of-sale in tourist retail areas.

Careful design of the software has also make it possible for different data sets of sound and image files to be substituted and thus enable other landscapes, (both the 'real' and the metaphorical), to be explored. Thus the project can in effect be used as a third-party software tool with full functionality enabling navigation of different kinds of 'content' - this would be achieved through a licensing arrangment and contracted management and programming services.

Summary of Interface Design Features in Prototype

Navigation in the prototype is centred on:

gesture, to control direction of travel through the landscape (Level One)

- the movement forward with the mouse to cause the central image 'go' forward;
- a movement back to centre to stop the image still;
- a movement backwards, (with the cursor to the bottom of the screen) to 'turn' through 180° and look backwards;
- a further movement backwards to make the central image 'go' backwards;
- a movement to centre to stop the image still.

selection, to take a branch from the pathway to listen to a short story or music or watch a movie (Level Two)

- a movement of the mouse to left (or right) to provide a 360° panorama of the zone through which the user is passing;
- by 'capturing' one of the images that appear to the edges of the frame (by halting the movement on the central moving image that conceals their central section) and then clicking to launch a story.
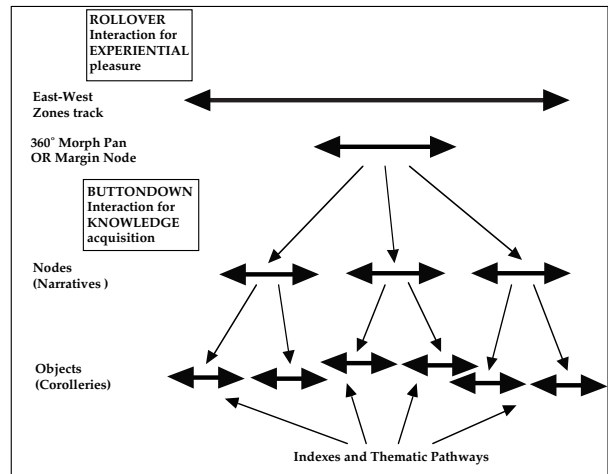
options, to move deeper into a story (Levels Three and Four), or return to the pathway

- the blue, yellow and green buttons colour code to correspond with Anecdotes, History and Commentary/Analysis - delivered as movies, slide shows, or audio with user control of picture framing - which develop, extend or provide background on what has gone before;
- the red button moves back to the previous level. This ability is also possible at any point in a narrative sequence by dropping the mouse/cursor to the bottom of the screen. Time out periods likewise move back through levels to the Surf screensaver movie.

resources, that enable the material assembled for the interactive - the 'content' - to be accessed from the 'backend' (Level Five)

- the black button provides access to data about picture and sound sources, story contents, transcripts, keyword index, Web search option and bibliography.

The various levels which the user can explore can be summarised with the following diagram:

ROLLOVER
Interaction for
EXPERIENTIAL
pleasure

East-West
Zones track

360° Morph Pan
OR Margin Node

BUTTONDOWN
Interaction for
KNOWLEDGE
acquisition

Nodes
(Narratives)

Objects
(Corolleries)

Indexes and Thematic Pathways

Technical Development

The project has developed several innovative uses of the authoring software during Phase One of PathScape, including the use of .xml and .dcr files. The re-design of the folder layout and linkings has not only improved the handling of the interface but extended its ability to respond to input from the user - for instance, the desire to know about sources of material seen and heard and the ability to access material from a text-based content/indexing vector.

In addition, by thereby defining resources as external media, the project is provided with great flexibility when it comes to means of delivery. The interactive could besides functioning as a one-to-one CD-ROM in the home or classroom, could be re-purposed at modest cost to be accessed on the Web, with different components on seperate servers to improve performance. A forum or listserv function could be incorporated.

By developing its visual quality and user interface, ie spatial sensing, and utilising projection and multi channel sound, the immersive and experiential aspects could be amplified in a large open space or gallery, for the art and museum market. This could include, given its external media design, the migration of programming and content to high-end platforms.

Production methods will continue to develop more efficient means of assembling narrative sequences from component assets including a move away from resource hungry Quicktime movies made in labour intensive Premiere, towards rapid assembly in Director of more efficient .dcr file formats.