Lines and Criss-crossings:

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LINES AND CRISS-CROSSINGS: HYPERLINKS IN AUSTRALIAN INDIGENOUS NARRATIVES

Abstract

*The issue of an ethical approach to pleasure does not imply a religious or moral order, but a constant re-evaluation of how each image or representation of any contemporary culture (Indigenous, musical, professional, digital, etc.) impacts on social justice, equity, tolerance and freedom. Two attempts of anthropological restitution developed with Aboriginal peoples for a mixed audience are presented here. The first is a CD-ROM (*Dream Trackers: Yapa Art and Knowledge of the Australian Desert), *focused on one Central Australian community (Lajamanu in the Northern Territory), while the second is an interactive DVD (*Quest in Aboriginal Land) *based on films by Indigenous filmmaker Wayne Barker, juxtaposing four regions of Australia. Both projects aim to explore and enhance the cultural foundations of the reticular way in which many Indigenous people in Australia map their knowledge and experience of the world in a geographical virtual web of narratives, images and performances. The relevance of games for anthropological insights is also discussed in the paper. Non-linear or reticular thinking mostly stresses the fact that there is no centrality to the whole but a multipolar view from each recomposed network within each singularity, a person, a place (a Dreaming in the case of Aboriginal cultures), allowing the emergence of meanings and performances, encounters, creations as new original autonomous flows. Reticular or network thinking, I argue, is a very ancient Indigenous practice but it gains today a striking actuality thanks to the fact that our so called scientific perception of cognition, virtuality and social performance has changed through the use of new technologies.*

Since the 1980s, Indigenous peoples of Australia have extended their local tools of expression to global networks: exhibitions, festivals, press, radio, documentaries, short dramas, feature films and websites (Langton, 2001). Many deplore the abuses of the art market which, despite the stunning success of Aboriginal paintings, still seems to benefit economically the distributors more than the artists, whose lifestyle is often subject to the miserable conditions of the Fourth World. In the era of information technology, one key to the survival of Indigenous cultures is to find ways to control the circulation and the staging of the products of Indigenous creativity in old and new media, as well as these cultures' history and current affairs. In relation to such an Indigenous empowerment, the responsibility of anthropologists and other researchers is critical. Restitution of our research involves not just the return of data collected, but a 'reinterpretation' of this data in such a way that it can be used for learning, transmission and pleasure through aesthetics or entertainment, as well as for spiritual fulfilment, in a critical and ethical process.

The issue of an ethical approach to pleasure does not imply a religious or moral order, but rather a constant re-evaluation of how each image or representation of any contemporary culture (Indigenous, musical, professional, digital, etc.) impacts

on social justice, equity, tolerance and freedom (Trend, 2001). I present here two attempts of anthropological restitution developed with Aboriginal peoples for a mixed audience. The first is a CD-ROM focused on one Central Australian community, while the second is an interactive DVD film juxtaposing four regions of Australia. I developed both projects to explore and enhance the cultural foundations of the reticular way many Indigenous people in Australia map their knowledge and experience of the world in a geographical virtual web of narratives, images and performances. I conclude by discussing a number of issues relating to multiplayer online serious games.

Thinking in networks

When I first lived among Desert Aborigines at Lajamanu, I was struck by the strange confluence between their traditional way of thinking and the development of artificial intelligence: this interface of ideas made me title a 1983 article 'Tribes of the Cybernetic Dream'. Aboriginal people's perception of memory as a virtual space-time, and the way they project knowledge on a geographical network, both physical and imaginary, was beginning to echo with the network and hyperlink programs of the first computers — still in their infancy in those days. The application of reticular thinking has universally expanded through the development of the internet. It is probably not a coincidence that the contemporary art market has seized on the explosion of Aboriginal artistic forms which precisely transpose trails woven into networks. This phenomenon illustrates a universal linkage between forms and ideas, even though the connection has not been expressed by those who are seduced by such works of art. The surrounding environment indeed allows us to 'look at' and 'hear' cultural variations in a very different way to that used by Westerners a century ago. This is also one of the reasons for the current attraction of world musics, and especially the didjeridu — the ancestral instrument invented by Aboriginal people, and played for over a decade by thousands of fans worldwide, who are now building their own sites on the internet.

Aboriginal people also have their own sites on the net. They use them to promote their art, their music and dance tours, or the organisation of festivals and bush trails for adventurous tourists. They also teach in various languages and place files about various political and legal matters online. Such a development has been possible because Australia has equipped its schools with computers and is funding a certain number of Indigenous organisations to install such technology and provide training in its use.

Nevertheless, many Aboriginal people still live in Fourth World conditions, and have no access to these services. As expressed by indigenous people all over the world, it is essential to facilitate the widespread usage of such means of communication. Computers seem able to facilitate, in their own way, the circulation of cultural knowledge systems. In order to be transmitted, these have always relied on oral and visual performances as well as the active practice of survival in the environment. Nowadays, such transmission is often threatened when new lifestyles dominated by writing, television and passive consumption are imposed. It is not enough to record, stock and put audio-visual data online or on digital media so that

it becomes a source of information and learning about a given culture. Databases and internet sites presuppose the construction of cognitive maps, which must respect and reflect the ways the different learning media in these societies relate to one another, and also the various levels of knowledge and expertise, some of which must remain secret. It is possible to *a priori* link everything; however, to understand the links that produce a meaning in a given social and cultural logic, it is necessary to know the rules of association that constitute the philosophy, the ethics and the imperatives of survival for a particular group.

During these last decades of audiovisual expansion and quasi-instant circulations of various information, we have had a paradigm change, particularly in relation to our understanding of the functioning of memory, the relation between matter and spirit, and the actual and the virtual. Such a shift forces us to consider differently what the so-called 'primitive' populations express about their relation to the world. Take, for instance, the debate about pre-contact Australian peoples being ignorant of the consequences of sexual intercourse, because they insisted on the necessity of the manifestation of a 'spirit-child' for the woman to be pregnant. The academic postulate which opposes sperm to spirit is part of the 'awe' of the Christian immaculate conception, which finds it difficult to reconcile the body with the mind.[1] For the Aborigines, it goes without saying that something of the man and something of the woman is needed to make a child, but it is not enough: a virtuality of life also needs to manifest itself, a desire to live which often announces itself in a dream, thus 'catching' the mother or the father. The Warlpiri of the central desert still say today that, to catch their future parents, the spirits of the children wishing to be born live a virtual existence in the land and use a dream propeller to actualise their birth.[2] This Warlpiri statement is enlightening and perhaps appropriate for people who today fight against sterility. Since psychoanalysis has accustomed us to accept the power of the unconscious on the body, we have everything to learn from the theories of dream and the relation between matter and spirit among Aboriginal peoples.[3]

Dreaming knowledge: Rhythm, links and memory

I used to have a 16 mm Pathe Webo camera — an antique today — with three turning lenses and a magazine for three-minute reels. It was mechanical, so you could only shoot 30 seconds at a time and then you had to rewind the tension spring with a handle to shoot again. I did not have a problem with that because, before I came to Australia, I made experimental films and was only interested in recording very short sequences to produce flickering effects between the information recorded on each still frame. Subsequently I brought my films to Lajamanu in 1979. After seeing a film presenting a fast flickering between different generations of my family photographed in different places in Poland and France, some old people said: 'Good one, that's your family, that's your country ...' So I filmed different Warlpiri women's rituals in a similar style and, after a month of fieldwork, I sent the footage to Sydney, where Ian Dunlop generously organised for it to be processed and sent back to me. I organised a screening with the Baptist mission projector and it created an uproar: 'Why do you make us look silly!' said the women. The film

showed women dancing at different rhythms, with superimpositions, multiple focal views of the landscape, sometimes upside down, an attempt to 'translate' the condensation effect of dreaming. I promised to film differently and then recorded the women's rituals in a more conventional way.

Image speed has considerably increased in film since the 1980s, and editing convention through the production of music clips has radically changed the audiences' cognitive relationship to film everywhere in the world. Video clips, for instance, use flickering effects to suggest different layers of subjectivity and to deconstruct space and time at imaginary levels. Nevertheless, beyond the convention of the tempo of film rhythm remains a question: what is the 'rationale' for this rhythm and the legitimacy to connect two images?

For the Warlpiri, rhythm conveys as much valuable information as speech or dance movement. It is culturally meaningful: one cannot just 'play' with it. Similarly, connections produce meaning so you cannot edit two images together randomly. This was my first lesson of the complexity of an Indigenous system of knowledge which conveys a whole field of meanings and codes that are not only culturally relevant but that teach us about the effect of rhythm (produced by a linear repetition) and connections (organised in criss-crossing trails). Such Indigenous tempo codes and cultural hermeneutics are not just useful for interpreting dance or guiding well-being; they are also keys to memory and survival.

For example, tracks give you both space and time information. If the footprint of an animal is a day old, you will need to evaluate whether it is worth tracking, but if the print is fresh you have the choice of taking your time or moving on to get it fast before it hides. Conception and experience of time and space in the desert are relative, almost in a non-Euclidian way. For example, a pathway linking three waterholes spread over 100 kilometres is relatively longer than another 100 kilometre pathway crossing a country with no waterholes. This relativity comes from the speed at which you need to travel at in order to survive. You need to go fast to reach the next waterhole before being too thirsty, but you can slow down or stop if there is water on the way.

So when desert Aboriginal people sing a pathway known for its lack of water, they can sing it 'fast forward' in a ritual setting, as one way of learning how to survive in that land. People continued to perform that kind of interpretation and knowledge transmission through ritual even when they were located in government-run reserves. They continued to travel using rituals, reproducing an audio, visual and mental representation of the landscape. Thanks to these kinds of performances, embedded in a procedural and kinaesthetic memory, once the desert people moved back to their land to settle outstations, they were able to find their way.

In that sense, survival knowledge is not encyclopaedic but reticular. Data that we record from people's experiences are snapshots seen through the eye of the person who describes those experiences. It can never be a general description of a society, even if the society is holistic, because the holistic approach — accessing the whole from any part — is always related to singular places. It is like having hundreds of different eyeglasses that you change according to where you stand. Seeing the reality from this point of view is going to be different from what would

be seen from another one, but you need these two, or three, or many 'points of view' to make alliances, to perform a ritual, to regenerate the society. This reticular thinking, which evokes the *rhizome* of Deleuze and Guattari, is also experienced in navigation on the World Wide Web when users chat, meet, create and link up their sites. Reticular thinking seems to articulate the Aboriginal logic of myth, kinship and land ownership, even when it is woven through other structures and topologies (Benterrack et al., 1984; Glowczewski and Guattari, 1987; Rose, 1992; Rumsey, 2002; Glowczewski, 2004). Thousands of stories and songlines stage separate entities (a Dreaming, an ancestor, a group, a person, an animal, a plant), but they criss-cross one another and the meeting points produce singularities. They can be sacred places, encounters with conflict, or alliance and the emergence of new meanings. They can be new manifestations like a spirit child being born into a child, or a new song or painting being dreamt for that place. Non-linear or reticular thinking mostly stresses the fact that there is no centrality to the whole, but a multipolar view from each recomposed network within each singularity — for example, a person, a place, a Dreaming — allowing the emergence of meanings and performances, encounters, creations as new original autonomous flows.

Returning data: Storylines and linking sites

Back in Lajamanu in 1984, I opted for a still camera and an analogue tape recorder. Out of this data, 500 slides and three hours of sound in Warlpiri were selected for a digital project of 'restitution' that I developed ten years later. Restitution, for an anthropologist, is not exactly the same as repatriation. When people practise their ceremonies, their dances, their songs, they don't need them 'back'. What they need is the knowledge attached to them, which many see as 'stolen' by scientists because their expression is recorded on a material medium (paper, tape, film). Anthropologists face that everywhere in the world. What are they really taking away? They are taking away the right to speak in the name of the people from whom they received the knowledge. What should be returned? Not the content as such but how it is expressed: 'I've been there, I will tell you how they live, what they do, who they are.' People we 'study' ask us: 'What are you saying about us? Give it back, because we want to know the impact it has.' It is a legitimate claim for any group, any individual, but in the case of Indigenous people this claim is a political tool for empowerment.

To return my research to the Warlpiri, I decided in 1995 to design a multimedia tool linking images of rituals and landscape, photos of acrylic paintings, and sound recordings of myths and songs. The original structure was developed in HTML, but later we converted it to Macromedia. The idea was to constitute a sort of 'mind-map' — what I call a cognitive map — that would give an insight into how elements of knowledge connect with each other in the learning process of the Warlpiri themselves. My conviction was that to invite the users to link images, dances and songs with places, storylines and trails in the way the Warlpiri do should help anybody to understand how these connections worked as a meaningful network: hyperlinks could ideally suggest how to criss-cross storylines and layers of meaning.

I drew a schematic map with 50 toponyms and superimposed 14 ways of linking some of these sites according to Dreaming stories I had recorded. Thus 14 Dreaming lines would show, but never at the same time. This virtual map — made of 14 layers of connections — became the interactive gateway to some 14 hours of audiovisual data. The user can click on any of the sites or lines to enter into the relevant constellation of Dreamings and explore them from the point of view of hundreds of proposed hyperlinks, some opening as small windows and others taking you on new pathways.

The map is an invisible web, as the criss-crossings between the lines do not show simultaneously. The links are only discovered when the narrative of a storyline which indicates links to other pathways is unfolded. In other words, each line is autonomous and each crossing or hyperlink requires the user's interaction. The *Dream Trackers* CD-ROM (Glowczewski, 2000) includes a short morphing, a photo of a sacred hill, Kurlungalinpa in the Tanami Desert, and turns into a Dreaming painting of that place by Warlpiri artist Margaret Nungarrayi Martin. The painting is showing the same place as a network of lines connecting that sacred site to five other places of the same songline, Ngarrka or 'Initiated Men'. The Warlpiri artist and other custodians of other Dreamings loved the idea that the animation conveyed the 'same' identity and power of transformation of one image into another. They were pleased because it was the right painting for the right place. A morphing with a painting of another place would not have worked. The multimedia reticular script writing has allowed me first to test with the elders (who do not read and write) whether the audiovisual links I had designed were appropriate and then to invite the users themselves to link the elements gathered through their exploration.

To respect the Warlpiri system of meaningful connections, every Warlpiri word leads to other Warlpiri concepts, every painting links to songs and stories, every artist links to other artists of the same Dreaming, and certain places link to other places. When the user travels on one storyline and arrives at a site where the heroes of one Dreaming line meet heroes of another Dreaming line, they can change the pathway by clicking on the name of the place. Multimedia allows the experience of reticular travelling as a learning process. Many things can be connected, but it should be done in such a way that every time the cultural reason for that connection is learned. Songs, dances, stories and paintings all relate to places, so the *Yapa* or *Dream Trackers* CD-ROM became a Warlpiri mind-map inviting us — as well as the young people in the Lajamanu school — to explore some of these connections. We also had to develop a device to be able to hide images showing the recently deceased and to make it adaptable over time. As pointed out by Warlpiri artist Jimmy Jampijinpa Robertson: 'The Yapa CD-ROM brings everybody to the mind.' (Glowczewski, 2001)

Yapa, meaning Aboriginal, Indigenous people in Warlpiri (as opposed to *kardiya*, 'non-Indigenous') was the working title of this multimedia restitution process. UNESCO Publishing, after signing a partnership of distribution and intellectual copyright with the Lajamanu Art Centre, Warnayaka, asked for a more descriptive title. I chose *Dream Trackers* because tracking is really the core of most Aboriginal philosophy. A place marked by a track does not mean that the track is just a

metaphor: it is an access to the whole, a key to investigate past, present and future actions. A track is like the imprint for a prototype — from that track you can reconstitute the performance. The track is not just a fixed moment in time, it is the trace left by something that is moving, dancing or walking — an essential dynamism in Aboriginal culture. Often the interpretation of Aboriginal art is limited because it is reduced to the semiotic view of the signs, the content and the form. It misses what is most important: the trace as the proof of the passage of something else, somewhere else. The virtual world of mythology and ritual is established in such traces. The proof of that physical track relates to all the narratives you can build out of it, which express the real relations of people to the land.

Learning through playing with an interactive fiction

To try to reach further into the narrative flavour of Aboriginal storytelling and its multidimensional potential for multiple connections, I wanted to construct an interactive DVD, a film drama whose full display would require the viewer to play a series of games connected to different episodes. Each of these drama segments was to invite the user to explore an Aboriginal community from a different region of Australia in terms of landscape, art, culture and language, colonial history and the current situation. I spent weeks drawing various mind maps to test the contents and links appropriate for the narrative of the film. The first draft was very complex, designed like a road movie criss-crossing all of Australia with built-in variations taking the user of the DVD to different places and events in the storyline. The story was constructed like a network of virtual connections which would actualise themselves according to the way the player would play a game. For instance, if the users scored well in relation to the survival quest involving recognition of animals, plants, seasons and mapping, they would be invited to explore the desert. But if the score was better in relation to the museum quest, involving identification of local art, cultural artefacts and history of urban art, the user would be invited to explore another region. If you succeeded in identifying different forms of dancing, singing and language, you were invited to go to Arnhem Land, and so on. There were also different options offered according to the choice of gender as a player. As these various options were taking into account the user performance and learning process through games; they would require the writing of a complex series of dramas in such a way that the different localised episodes could be edited in a different order without losing the continuity of the stories and their relevant meaning.

The Aboriginal Dreaming songlines can be experienced in any given performance with similar adaptation to context. For example, segments of stories are omitted when a person dies, sometimes the same episode is repeated in two different places or more, and at other times the order of action is reversed, like a loop, even though there often is a chronology and an evolution in the characters who are the heroes of the songline: Snake or Wallaby ancestors, Rain or Plum people. The question was how to represent both human and Dreaming agents? The use of animation can unfold stories based on today's reality, but also on some aspects of

the Dreaming world. Animation can integrate such elements in the learning process of a game — for instance, the help of totemic animals or the dealing with spiritual forces manifested through wind, fire and rain. But producing such a project was (and still is) incredibly expensive, especially if a team of Aboriginal people comprising experts of the different domains (art, music, dance, survival, kinship) was to be involved on location.

I thought at the time that filming with actors might be a better option than an animated film. We formed a small team contributing voluntarily to the project over three years. We selected five regions — the Western Desert, Eastern Arnhem Land, Gariwerd Park in Victoria, the City of Perth in Western Australia, and Laura in Cape York — and five topics — art, festivals, culture centres, family history and bush survival. My husband, Aboriginal filmmaker and singer-composer Wayne Jowandi Barker, wrote a one-hour drama script in 2000 that intertwined the five regions and the topics.[4] The film was conceived as five episodes, each of ten minutes, which required the viewer to achieve a task in order to be able to continue to view the story. This option seemed the easiest for the user as it allowed understanding of the complexities of Aboriginal history and the cultural and personal dilemma by following one storyline. We went to Arnhem Land with a small digital camera and brought back statements from a Yolngu family from Bawaka that made us modify the storyline so to emphasise spiritual presence as an agency animating the characters (Barker and Glowczewski, 2002). A further five educational game proposals were written as interactive tools connecting the film storyline. The involvement of the user in theses games aimed at helping the main two actors of the drama to learn how to identify art, dance, music and cultural issues, family history archives and language groups, landscapes and their resources. The first game, designed by Laurent Dousset (2000–05), an anthropologist and webmaster with a long experience of the Western Desert people and kinship analysis, consisted of learning how to search family history archives to identify a given language group and kinship system. The second game, developed by John Stanton, Director of the Berndt Museum of Anthropology in Perth, invited the player to organise an Aboriginal exhibition, either by choosing from a series of topics or by focusing on one of the five regions and their people. The third game, created by Jessica de Largy Healy (2004), who was then working with the Aboriginal Brambuk Cultural Centre of the Gariwerd National Park, explored the different functions of a culture centre, from a simple safe-keeping place to a big heritage and tourist precinct. The fourth game was proposed by Fred Viesner, who did fieldwork with the Anangu people for his doctorate; its aim was to introduce the user to some Indigenous systems of knowledge in relation to bush survival: tracking for hunting, identifying edible or medicine plants, facing drought but also dealing with the current economy related to mining, protection of places, management of outstations or art centres. Rosita Henry (2000), an anthropologist who has studied the Laura dance festival process for over 20 years, suggested a virtual tour of different types of cultural festivals for the last game, introducing the viewer to ethical protocols to be respected by performers and audiences.

I approached Australian and French funding agencies — in film, multimedia, science and culture — in vain: that 'interactive DVD thing' we wanted to collectively create was neither a film, nor a game nor a database, so there was no funding corresponding to its requirements.

A small grant was eventually released by my institution in Paris, the CNRS (National Centre for Scientific Research), and the Musée du Quai Branly to do a one-hour demo to showcase an interactive cultural film project. As we could not afford to shoot a new film, we used footage previously recorded by Wayne Jowandi Barker for other projects. Together we edited a 10 minute film organised in 16 sections, simulating long journeys across four regions of Australia: the Dampier Peninsula, Kimberley Plateau, Tanami Desert and Northeast Arnhem Land. There was an emphasis on the relation between different landscapes, as well as the relevant art, dance and singing. I designed a new interactive script allowing the viewer to select at any time an interactive map from which other short films could be screened with Aboriginal testimonies in relation to four themes: art, storytelling, survival and dance. This 50-minute demo, called *Quest in Aboriginal Land*, was awarded and presented in many places, but lack of further funding prevented the completion of the original project.[5]

Curiously, even though the DVD medium has taken over the video market, there are very few interactive documentaries available on DVD. Only big production companies and TV channels can afford to pay the costs of such digital productions, including the copyright payments for distribution. This financial limitation is very damaging to the future of visual anthropology and ethnographic films because interactive DVD is the perfect format for documentation and analysis. It allows one to include on the same medium different edited versions, of different lengths, with or without a soundtrack, a comment, a subtitle in one or several languages, including thousands of pages of written files, photo displays, and even internet links for further information or updates. Furthermore, it can offer cultural teaching based on simulation games to construct small events and evolving contexts based on archaeology, mythology, history or contemporary life.

Multiplayer role games

3D quest games on CD-ROM or DVD and multiplayer role games on the internet have evolved considerably, both in scope and in terms of copyright. Apart from the software owners who sell licence rights or subscriptions online, players who create their own tools as part and parcel of playing such games are today recognised copyright owners of their digital creations and can sell — sometimes for an incredible amount of money — such virtual artefacts. Millions of fantasy characters and guiding hybrid creatures occupy the internet today, with imaginary weapons and various magic tricks. Many inventors take inspiration from legends and myths, mixing all periods and regions. Some games — like *Civilization* — are based on several historical figures who provide some historical strategies as options in the playing of the game aiming at 'developing' civilisation in such a way that cities expand with enough food, money and entertainment. Such a model is very much

based on an evolutionary idea of this virtual world which, in a reductive fashion, simply mixes different periods of history but very little cultural diversity. So far, the Indigenous people of Australia have not been used as an example of a digital 'civilisation'. But the trend to develop so-called 'serious' games is growing.

In 2002, I received an email from an African American student who, as part of his degree with the MIT Comparative Media Studies Department, wanted to develop an internet multiplayer game based on his perception of the Dreaming in an Aboriginal community from Central Australia. He entitled his project *Dream Trackers* like my CD-ROM (Glowczewski, 2000), from which he had drawn ideas and data along with data from another anthropologist (Meggitt, 1962), and from a linguist and a Warlpiri storyteller (Cataldi and Rockman, 1994). The student's main preoccupation was to develop a game that would prove that you could learn about a culture through a gaming approach. The players were to evolve into different stages of 'initiation' to learn about Aboriginal culture. The framework of the game was MMORPG (Massive Multiplayer Online Role-Playing Game) like *Dungeons and Dragons* or other quest type games where hundreds to thousands of players can join online disguising their personas as avatars facing different trials, trading information and virtual tools among themselves. In his written presentation, the student acknowledged the colonial history of Indigenous people, the importance of ethics, the respect of secret knowledge, the balance of gender and the specificity of Aboriginal 'Dreaming culture'. But the script of the game itself, constructed around stages of initiation, included secret rituals that should not be talked about publicly. I wrote back with strong criticism in relation to the use of the different data and insisted that no game should be developed from this project without the negotiation of a signed partnership with the relevant Aboriginal people who held the intellectual copyright of the use of their cultural information and practices applied to the game. This ethical principle was accepted both by the student and his supervisor.[6]

It is possible that young Aboriginal people, as well as other users searching the internet might enjoy playing with avatars that have to survive in the Central Australian cultural space of the Dreaming rather than in the suburban contemporary environment. But the question that needs to be asked relates to the image such a game would circulate about Australian Indigenous peoples. A digital venture in Central Australia has just started to develop an internet game with young Aboriginal teenagers who came to attention for their creativity in retooling bikes from recycled waste. This sounds like a 'real' cultural survival game — to learn how some Aboriginal youngsters today survive and look for fun in their ancestral environment, completely criss-crossed by the global world.

Epilogue

The main question to address in a multimedia product or a learning game about a culture is what the users or players have to 'learn' about this culture. On the *Dream Trackers* CD-ROM, I proposed an experience of Indigenous reticular thinking through navigation on the Warlpiri web of criss-crossing Dreaming stories

and songlines. In the interactive *Quest in Aboriginal Land* DVD drama project, we tried to produce virtual conditions of drama, suspense, challenge and fun, for a motivated exploration of facts presented directly on the DVD or through proposed links to existing websites with Indigenous resources like the AIATSIS library, the Family History Project in Adelaide, the Native Title Unit, the DOCIP Indigenous Centre in Geneva, other NGOs and Aboriginal organisations. The idea of both projects was to encourage exploration so the users could understand how to negotiate existing knowledge using a reticular method. Non-linear or reticular thinking mostly stresses the fact that there is no centrality to the whole, but rather a multipolar view from each recomposed network within each singularity — a person, a place, a Dreaming — allowing the emergence of meanings and performances, encounters and creations as new original autonomous flows. Reticular or network thinking, I argue, is a very ancient Indigenous practice, but it gains today a striking actuality thanks to the fact that our so-called scientific perception of cognition, virtuality and social performance has changed through the use of new technologies.

Acknowledgments

Notes

1 The immaculate conception refers to the mandatory Catholic dogma (1854) stating that Mary was born free of 'original sin', and the belief that she was a virgin when Jesus was born — that is, that there was no sexual intercourse necessary for conception. The 'Virgin Mary' paradigm has informed — often unconsciously — a Western anthropological bias which continues to oppose the spirit realm and the physical one, while many Indigenous cultures combine the two.
2 Spirit children are *ngampurrpa*, 'desirous' of life, agents in their coming into being as humans (Glowczewski and Guattari, 1987).
3 Aboriginal cosmologies can inform psychoanalytic theory and medicine in showing, for instance, more holistic ways to address sterility and other bodily or mental disorders.
4 A young woman from Perth searches for the family of her mother, who was taken away as a victim of the stolen generation. She meets a Yolngu dancer from Arnhem Land at the Gariwerd culture centre. The two young people follow a different quest but they both travel through Australia and meet again in other places: a museum in Perth, the Garma festival in his home country and at the Balgo desert community, where the young woman finds her family.
5 Awarded as 'Best illustration of science for a wide audience' at the Festival of Researcher Film (Nancy, 2003), displayed in a loop on two huge floating screens as part of the Aboriginal art exhibition *Rêves Arc-en-Ciel* at the National Museum of Natural History (Lyon, 2004), International Union of Anthropologists Conference in Florence, 2003. The *Quest in Aboriginal Land* demo is included on the DVD accompanying this issue of *MIA*.

6   The student's scholarship was part of a funding package for the Games-to-Teach Project that Microsoft i-campus was sponsoring at MIT in exchange for prototypes to develop out of the proposed scripts of 15 students. The *Dream Trackers of the Dream Time Community* (2002– 04) game proposal was the only one in the area of cultural anthropology, www.educationarcade.org/ gtt/proto.html

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