Working Paper

GIVING NEW VOICE TO ENDANGERED CULTURES
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"*When I am no longer here, and I die, I want it to be known in my language
that this was our land*". Anna Kassie, ‡Khomani San elder, South Africa[2]

This paper deals with one theme in the complex array of issues relevant to media and cultural diversity, namely: **mapping of cultural landscapes and knowledge systems with and by indigenous peoples**. We look at practical and theoretical aspects of using mapping as a technique to elucidate indigenous knowledge and for creating media that permit different voices and cultural systems to enter into dialogue with one another. The aim, as espoused by both UNESCO and the indigenous peoples' movement, is to both empower indigenous voices but also to fight against intolerance and ignorance through intercultural dialogue oriented towards peace, dignity and sustainable development.

2004 marks the end of the United Nation's International Decade on the World's Indigenous Peoples. Though some see the Decade as not having met its aims[3], it has created an opportunity for indigenous peoples of the world to come together and share their experiences and insights. Indigenous Peoples from across the globe have borne witness to their harsh marginalisation while also demonstrating to the United Nations that their cultures still have valuable perspectives relevant to conflict resolution, caring for the earth, healing the sick, educating the young, and keeping our intellectual and cultural heritage alive. The Decade has made indigenous peoples, particularly in Africa, Asia, the ex-Soviet countries and the Pacific become more visible and more vocal.

UNESCO is one of the most influential international bodies attempting to protect our diverse global cultural heritage. UNESCO, through its programmes and the General Conference, creates forums for dialogue about cultural tolerance, pluralism and equitable access to media. Recent initiatives inside UNESCO are creating new opportunities for indigenous peoples to defend their cultural self-determination and participate on an equal footing with dominant peoples.

The UNESCO Universal Declaration on Cultural Diversity (Stenou 2002) sets out a platform that links together issues of cultural diversity, economic development, the role of the state in managing diversity and valuing pluralism, and the promotion of diverse voices in national and international media and communications. The Director-General of UNESCO has also dedicated budgetary resources for supporting the use of Information and Communication Technologies (ICTs) by indigenous peoples. Effective mobilising of media resources by indigenous people is an essential strategy for addressing the political and economic marginalisation experienced by indigenous peoples.

Though the International Decade on the World's Indigenous Peoples has boosted the visibility of

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2. Anna Kassie is one of eleven people who can still speak N|u. She is assisting her community to map rare place names in her language. (Quoted in Duval Smith, 1999.)
3. A few western democratic countries have frustrated the efforts of Indigenous Peoples and human rights activists to bring the Draft Declaration on the Rights of Indigenous Peoples before the UN Commission for Human Rights (UNCHR) for adoption despite many years of negotiations.

indigenous peoples cultures on the international stage, the reality still remains that at home some of these groups are severely threatened by poverty, political and economic marginalisation, and sometimes even warfare and genocide. UNESCO estimates that of the world's 6000 languages, perhaps as many as half will not survive for another generation. As languages die, and indigenous peoples' societies collapse, we are losing rare and valuable elements of our global heritage (Wurm, 1996).

Walking through the streets of Geneva or New York, it is not hard to find images of indigenous people. There is an image of a Maasai *moran* in his red blanket with braided hair purportedly selling tourist holiday packages. A Greenlandic Inuk dressed in sealskin advertises a cellular telephone. The images abound. One of the features of the globalisation of media is that we can see more of the world's cultural diversity in electronic and print media yet for the most part this is still filtered through a narrow cultural lens determined by a small minority of people. The stereotyped images of indigenous people in advertising do not provide real insights into indigenous culture, identity and values.

Today's television viewer gets to travel to the Amazon, the Kalahari Desert, and the High Arctic or Pacific islands. But more often than not, the story we are told is one relevant to a western audience only. Rarely do we have access to media that indigenous peoples and minority groups in rural areas create about themselves, their languages, their worldview or their value systems. Western or dominant-culture filmmakers ponder issues of modernisation and other topics that are culturally relevant to the viewer (i.e. the consumer), but are not necessarily relevant to the people who are the subject of such media. Recent film projects for international broadcast have asked questions such as: do Bushmen[1] really exist? Is indigenous identity a myth? The conclusions are often similar. The dominant culture is fascinated by traditional ethnic dress and customs and the viewer is encouraged to feel momentary sadness about the inevitable passing of the first peoples; then the camera cuts away to an empty landscape with a beautiful sunset and we return to some commercial advertising. The moment of potential intercultural dialogue has passed too quickly.

The themes explored in some of the mainstream television documentaries about indigenous peoples may not reflect what the indigenous people themselves discuss or debate. The dichotomies of 'modern' versus 'primitive' are specific to the dominant cultures, and do not translate into the lived experiences of people at village level. There are exceptions but overall indigenous people produce very little media about themselves. Without indigenous peoples having control of the resources which back up global media we are left with the question: how do indigenous voices and cultural systems become more widely available?

Cultural landscape mapping

'Maps have always been both symbols and instruments of power. After flag raising came the naming of places to express possession for the gratification of distant patron of exploratory expeditions. Now, a revisionist tendency is reasserting itself: indigenous peoples are using maps to re-name and reclaim their lands. Their maps remain instruments of power, but a creative and restorative power…'(Poole, 1995b).

Numerous indigenous groups around the world are using mapping for a myriad of purposes. Try naming the world's six thousand languages and you will realise how little we know about global cultural heritage.

One of the more famous mapping projects has been the *Maya Atlas* (TMCC 1977). This mapping project, conducted by the Maya of Southern Belize in co-operation with Toledo Maya Cultural Council - Toledo Alcaldes Association and University of California Berkeley Geography Department,

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1. 'Bushman' is a colonial term for San peoples who are indigenous to Southern Africa. Some communities still use this term.

involved various Mayan villages generating maps of their community land use and historical occupancy.

According to the website:

> The *Maya Atlas* was made by the forty-two Ke'Kechi and Mopan communities of Southern Belize. Maya village researchers and cartographers elected by the communities did the maps, texts, photographs, drawings and interviews. In their own words and with their own maps, the Maya describe their culture and rain forest, and their desire to protect and manage their own land.

(see the website:
http://geography.berkeley.edu/ProjectsResources/MayanAtlas/MayaAtlas/MayanAtlas2.htm)

Other projects have included place name mapping, mapping hunting territories, elders' knowledge of animal behaviour, cultural landscapes, archaeological sites, ethno-ecological knowledge, location of food and medicine plants, ethnic and language boundaries, isoglossic boundaries (where dialects differentiate), family territories, and other themes. Some examples are given in the 1995 Winter edition of *Cultural Survival Quarterly* (Poole, 1995a) and can be located on the Internet.

In South Africa, the South African San Institute (SASI) has worked in co-operation with Strata360 and Open Channels to assist the ‡Khomani San community to map land relevant to their land claim and reviving their cultural heritage (see case study below). One aspect of the mapping included identifying individual trees and landscape features that were relevant to understanding the cultural heritage and occupancy of the area.

Though there are quite a few trees in the Southern Kalahari, they are nonetheless precious in a desert environment. Each tree is an ecological zone of its own. It creates much needed shade, and traps moisture that can be used by animals, insects and even humans. We learned that each tree is a cultural space. Through recollections and memories, each tree carries with it stories of burials, of child rearing, of food gathering, and love affairs, etc. For these hunter-gatherers, there is no formal separation into natural spaces and cultural spaces. The natural world is painted by the brush strokes of stories, myths, values, dreams and rituals. The elders are the artists and though the canvases have survived for generations they can also easily be lost.

Mapping is not just restricted to the physical world. Hugh Brody relates in *Maps and Dreams* how the old people amongst the Beaver Indians of Northern British Columbia would dream maps of trails for hunting. A hunter would dream his prey and use this mental map to find the animal in the coming days. There were also other trails in the dream world; trails that show the way to heaven. Only the 'good people' were able to have these dreams, and it was very difficult to describe them to others and show them the trails (Brody 1988: 46).

Keith Basso, in his book *Wisdom Sits in Places*, engages in a type of cultural landscape mapping that takes us into the world of Western Apache values and morality. Basso explores how the elders in the community associate moral tales with the myths surrounding each place name in their territory. By reciting certain place names the elders reaffirm values and traditions in their society. The landscape itself is a moral paradigm and a source of wisdom to the indigenous people.

Basso's main informant, Dudley Patterson, recounts the advice of his grandmother many years earlier:

> 'Wisdom sits in places… You must remember everything about them. You must learn their names. You must remember what happened at them long ago. You must think about it and keep on thinking about it. Then your mind will become smoother and

> smoother. Then you will see danger before it happens. You will walk a long way and live a long time. You will be wise. People will respect you.' (1996: 127)

Basso elaborates:

> … the Apache theory holds that 'wisdom' – *igoyá'í* – consists in heightening mental capacity that facilitates the avoidance of harmful events by detecting threatening circumstances when none are apparent. … Knowledge of places and their cultural significance is crucial in this regard because it illustrates with numerous examples the mental conditions needed for wisdom as well as the practical advantages that wisdom confers on persons who possess it. (1996: 128)

Substantial work has been done in Australia to help to explain the complex relationship between topography, toponymy and mythology[1]. Derek Elias, a consultant with the Local and Indigenous Knowledge Systems (LINKS) Cross-Cutting Theme Project at UNESCO, has done a PhD on the mythology of place in Warlpiri culture in the Tanami Desert, Australia. Here landscape maps connect with songs, stories and dreams:

> … the significance of sites to Warlpiri people requires investigation of how such physical sites are culturally constructed and ordered as places. The knowledge of the spatial organisation of sites is primarily coded in song cycles, and materially manifested in sacred paraphernalia and associated designs (Meggitt 1966, Munn 1986). This knowledge is also passed on through sand mapping and drawings (Munn 1986, Nash 1998)… The cultural structuring of the landscape involves Warlpiri understanding of how places came into existence, the resulting classification of place and the naming of place as a result of this, and the linking of places to each other. (Elias 2001)

Elias recounts the interaction between the activities of ancestral heroes, *jukurrpa*, and the landscape. According to the Warlpiri, their landscape was formed by the deeds of jukurrpa who shaped and moulded the landscape.

These *jukurrpa* also often traverse the entire length of the Tanami Desert with neither a beginning nor an end, such as the *Marlujarra* (Two Kangaroos) *jukurrpa* which is tracked in an erratic manner much like the way real Kangaroo tracks are encountered on the surface of the earth. Perhaps even more evocative is the swirling motion of the flight of birds and subsequent links established between far-flung sites such as those recounted in the *Ngatijirri* (Budgerigar) *jukurrpa*

Not only is the toponymy intimately derived from Warlpiri oral culture, but also the mythology is itself structured by the indigenous knowledge system of the hunting people of animal behaviour and tracking. As the Beaver Indians map dream trails to heaven, the Warlpiri people also have a sacred aspect to their topography which involves the subterranean world. This topic is however not open for research consideration.

Mapping can express many types of relations. It is about peoples, the land, water, the night sky, memories, the world of the ancestors, this life, the spirit world and the lives of those still to come. Moreover, maps are a place where people can meet. One landscape may have very different meanings for different cultures[2]. It is often this lack of cultural dialogue and understanding that causes such sharp conflict between indigenous peoples and dominant cultures.

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1. Topography is the naming system of general geographical features, like hill, river, dune. Toponymy is the naming of specific places. Myths are the stories passed down by generations about meaningful and symbolic events.
2. Derek Elias recommends Harold Conklin's Ethnographic Atlas of Ifugao as a classic in this discipline of exploring cartography, ethnography and culture.

What are the benefits of mapping?

Perhaps the more important question than *what* is to be mapped is: *why map at all*? It is this question that shapes the types of maps being produced, the methodology behind them and most importantly the role of the holders of intangible heritage knowledge.

In the case of the ‡Khomani San and other groups, the aim is related to protecting land rights or reclaiming land. The maps serve as testimony to prior land use and occupancy. These representations help to show the expertise of the elders, and some have been used effectively in court proceedings (see for example *A Sto:lo-Coast Salish Historical Atlas* from British Columbia, Canada[1]). A tangible expression of intangible heritage may be considered as stronger evidence than oral testimony or recounting of oral history.

Some people emphasise that maps are a way of 'preserving culture'. It is important to know that even though maps make knowledge visible, they are poor representations of the sophisticated knowledge of the elders. Indigenous knowledge systems are like spider webs. The navigation of knowledge is done through mentoring over a lifetime, through the use of songs, myths, stories and the particularities of the language. Indigenous knowledge is a living thing and is not likely to be captured in one dimension.

In their contribution to the *Geomatics* edition of *Cultural Survival Quarterly*, Bill Kemp and Lorraine Brooke, of Strata360, note that:

> 'The most important lesson learned from the Nunavik (Quebec) experience is that the indigenous peoples must first and foremost control their own information. It has also become clear over the years that the knowledge base of indigenous peoples is vital, dynamic and evolving. Merely "collecting" and "documenting" indigenous environmental knowledge is in fact counterproductive. These knowledge systems have been under serious attack for centuries and the social systems that support them have been seriously undermined. … It is not a question of recovery and recording indigenous knowledge, it is one of respect and revitalisation.' (Brooke & Kemp, 1995: 27).

There are several important points to draw forth here. Mapping for the sake of it does not necessarily empower indigenous people. Mapping done in a western intellectual framework may further marginalise indigenous voices. Mapping should not be an extractive process. With regard to the UNESCO Universal Declaration on Cultural Diversity, the purpose of mapping and the related media should help to reinforce indigenous knowledge systems, affirm dignity and strengthen community control over cultural resources. Mapping can help to empower a community in its knowledge and cultural heritage management, particularly if it is being used to stimulate inter-generational and intercultural dialogue and learning. The maps should be seen as handmaidens to oral culture and oral transmission. No map is going to successfully reflect the complex analytical capacity of even a single elder.

In the Southern Kalahari, SASI developed experimental teaching material for San youth. We identified one item in the knowledge network, the porcupine, and asked various elders to draw forth all of the knowledge and the web of information around this one animal. Elders were able to discuss myths, family stories, animal behaviour, eating habits, habitation, hunting techniques, food value, and three different types of medicine associated with the porcupine. The porcupine has a place in a larger environment and knowledge system. The maps in our minds are three dimensional and sometimes latent or intuitive to the holder of the knowledge. The end purpose is not the map, per se, but the intergenerational dialogue about the knowledge, how the indigenous knowledge system used to be transmitted, and finding new ways for the transmission today. In the end, the elders have

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1. http://www.washington.edu/uwpress/search/books/CARSTO.html

made decisions about what information they want on maps, what information they are willing to share with the youth who are learning about their heritage, and what information they discuss between themselves and will only be transmitted to those in the next generation who earn the right to access the information.

In the ‡Khomani example, we can identify different audiences for the maps, and different beneficiaries of the knowledge. Some maps are for the general public, the government and parks' staff. Other maps are for internal community dialogue and learning. Overall, the purpose has been to help the elders to structure their cultural resources management in the new context of a land claim, and to help youth to have a handle on how to understand knowledge and culture that was born in a hunter-gatherer context, a context that is quite different from their own. The ‡Khomani experience is perhaps not unusual. There are two steps in the application of maps (one form of Information and Communication Technology): an internal dialogue and then an intercultural dialogue. Many San youth have been alienated from their heritage and want to explore this before they engage the dominant cultures around them about the legacy of racial discrimination and economic marginalisation.

Conceptual tools

There are conceptual and practical tools necessary for mapping of cultural landscapes. I have extracted some of the concepts we developed in a previous joint UNESCO-SASI report, *Written in the Sand* (www.sanculture.org.za). Mapping, in the Kalahari context, was embedded in an overall strategy to help the ‡Khomani community to audit and manage its vulnerable cultural resources. Part of this work involved the community reflecting on its own intangible heritage, indigenous knowledge systems, and what would be required to manage cultural resources. Here are some of the principal concepts:

Cultural heritage: our cultural heritage is that which our ancestors have achieved, experienced or handed down to future generations. Usually our cultural heritage is infused by the experiences and interactions of different cultures and languages beyond the boundary of one group. A cultural heritage may be a living thing, or it may be preserved but not in daily use.

- **Tangible cultural heritage**: A tangible heritage is one that can be stored and physically touched. This includes items produced by the cultural group such as traditional clothing, utensils (such as beadwork, pottery, weapons), or vehicles (such as the oxcart). Tangible heritage includes great monuments such as temples, pyramids, and public monuments. Though a tangible heritage can perish, it is generally more obvious how it can be safeguarded than intangible heritage that is at greater risk and can be lost for all time.

- **Intangible cultural heritage**: An intangible heritage is that which exists intellectually in the culture. It is not a physical or tangible item. Intangible heritage includes songs, myths, stories, names, place names, ceremonies, customs, beliefs, superstitions, oral poetry, as well as various forms of traditional knowledge such as ethno-botanical knowledge. See also the UNESCO website:

http://www.unesco.org/culture/heritage/intangible/html_eng/index_en.shtml

Cultural resources: a cultural resource is an element of knowledge gathered from daily context in a particular cultural setting that can be mobilised to positively impact on the quality of life of the individual or group. This could be, for example, the celebration of girl's first menstruation. The ceremony helps to affirm the value of young women, helps to commit her family to advising and supporting her, and giving her self-confidence during her adolescence. Cultural resources include traditional indigenous knowledge systems, but also song, dance, knowledge of community history

and experience, the ability to interpret events from a particular, culturally-informed position, etc. (For a useful summary description of indigenous / traditional knowledge see Grenier, 1998: 2.)

A cultural resource is distinct from cultural heritage artefacts as the latter may or may not have a current application. For example, a headdress in a museum collection is a tangible cultural heritage item, but it is not in practical use, so it is not being used as a cultural resource. However a group that is concerned with managing its cultural heritage might re-introduce the museum piece into a healing ritual. At this point the heritage item has become a resource for the community to draw on; in this case they are seeking good health and the blessing of their ancestors. Some examples of cultural resources include: knowledge of medicinal plants, myths, topographical knowledge.

Cultural resources management: CRM consists of the various processes whereby cultural resources (derived from tangible and intangible heritage) are evaluated and managed to maintain and maximise their benefit to the community and individuals. In particular, this involves the communication of information from one generation to the next. In a stable society, these processes are taken for granted. There are social institutions in place to ensure this transfer and maintenance of information, such as schools, meeting spaces, places of worship, work habits, work songs, competitions, story telling, etc. With displaced peoples many of these institutions have broken down or become dysfunctional, or they have been taken over by the institutions of the dominant culture, therefore ensuring cultural resources transfer of a different kind. Through a process of awareness raising, and sometimes training and support, communities can rebuild social institutions to revitalise their management systems (e.g. a community can work with the government to create schools that assist in the learning of traditional skills, use museums as heritage learning centres, etc.)

Mapping as part of cultural resource management: Mapping provides an opportunity to identify intangible heritage, such as knowledge of place names or myths and beliefs about the landscape. This intangible heritage had a value for the community at a particular time, but changes in the relationship to the land: e.g. displacement may mean that those stories and knowledge are not passing from one generation to the next. This is sad but the situation is unlikely to change unless the younger generation identifies the value that the cultural heritage holds for them – i.e. how does this heritage become a resource for them.

Maps can serve as a method of auditing the knowledge and sharpening the awareness of young people to the resource value inherent in the knowledge. Maps can sometimes give youth a point of access into ancestral knowledge that is otherwise not apparent to them. The tangible map is a guide to the intangible universe of their parents' and ancestors' culture.

Pluralism and intercultural dialogue: UNESCO puts emphasis on the concept of managing pluralism. This means that the state and other bodies responsible for governance at different levels need to actively cultivate a dialogue between different cultures. This dialogue may be between indigenous peoples and settlers, between minorities and majorities, between foreigners and citizens. We know from history that tolerance is not hard to achieve in times of prosperity and peace. However, when there is competition for scarce resources and social instability, ignorance about the cultural systems and values of more vulnerable peoples can rapidly transform itself into human rights violations and in some tragic cases, war and genocide. Mapping and the management of cultural resources need to be seen in the context of building tolerance, peaceful co-operation and respect. Access to media and the ability to express one's own cultural heritage is a crucial aspect of successful pluralism.

(See UNESCO website: http://www.unesco.org/culture/pluralism)

Case Study: The Southern Kalahari experience
In 1996, the South African San Institute (SASI) was faced with the challenge of helping a displaced,

socially fragmented indigenous people to reclaim their land under a new South African law. The community members had to prove that they were the original owners of the land that had become a national park. The elders had many stories about this territory, passed down over generations. Yet, the opponents of the land claim challenged the indigenous people to provide convincing evidence that the land once belonged to them and that they were in fact the original people of the territory.

SASI received the help of anthropologists and mapmakers from Canada who had done similar work in other places around the planet. Dr Hugh Brody, an anthropologist, and Bill Kemp, a geographer, assisted SASI and the ‡Khomani San community to understand how the experiences, stories and knowledge of the old people could be rendered into a textual / visual form. By using maps, the intangible heritage of the ‡Khomani San could be transformed into a medium that would be meaningful to the owners of the knowledge and also to the other stakeholders, such as the lawyers, government officials and Parks Board representatives.

We piloted different methodologies for collecting the stories and views of the elders. We interviewed them about their lives and created timelines to show their movements and historical land occupancy. We did genealogies that we could connect up with genealogies done in the 1930s. We took down affidavits and recorded oral history. Of these various efforts, it was the mapping that opened up for us a new dimension where the indigenous people's voices and cultural framework could be converted into a meaningful medium.

Brody and Kemp have both done extensive mapping in Northern Canada. But those communities were living on their land and had maintained a tradition of hunting and land use. They could generate highly complex maps showing the migratory patterns of animals and marine life. Hunters were able to map hundreds of kilometres of their territory from memory. But would this also apply to a people who had been forced off their lands decades ago? Do memory and culture carry sufficient information through time and space to make meaningful maps?

All of the elders with whom we worked were illiterate in the western sense of being unable to read and write. One part of the community had been displaced from the Park in the 1930s; the other managed to hang on until the 1970s. The mapping often required people remembering back to the 1920s, '30s and '40s. Throughout the project we trained young people in the specific methods we were using. Though we were accessing memory for a specific purpose, we recognised that this cultural heritage was fragile and was an important resource for the next generation.

We started by working with government maps of the territory. Despite being illiterate the elders were able to discern dry riverbeds and the general shape of the Park. An important event was seeing Jacob Malgas trying to count sand dunes on the map. The sand dunes were just symbolic representations on the government map but were significant to the elders. Later we used our own maps where the permanent dunes were represented faithfully based on satellite images.

By making excursions to the Park and then sitting with the maps we began to understand how the elders navigated the hundreds of kilometres of desert landscape without getting lost. The topographic and toponymic systems of the San elders were in part different from those of English or Afrikaans speakers. There were different terms for the heights of the dunes, rivers were divided into primary, secondary and tertiary sizes, and there were other features like wide stony flats that hunters considered significant. All of this information featured either as place names (see maps on www.sanculture.org.za) or in relaying land use and occupancy information.

While making the maps, we learned that the elders had their own type of literacy that was new to us. Just as we read maps, place names and books, they were reading the land. The marks in the sand, the shape of the terrain, the vegetation, and the stories attached to all of these created texts that could only be read by one who was highly literate in this cultural and natural language.

Our exercise of mapping the Park revealed that there was a folk-scientific system in use1. But we also learned that this knowledge was dying out since the people had been pushed off the land. Elders had to debate their recollections and reach a consensus on what they had learned from their parents and grandparents. The loss of the old place names was obscuring the intellectual heritage of the indigenous people and either replacing it with meaningless bastardised terms or imposing a foreign cultural framework on the landscape. For the Afrikaans speakers in the area, the old names with their clicks and subtle vowels were meaningless, alien, and undesirable. For the indigenous peoples, each name carried information about the place, the quality of the water, the animal behaviour, or stories of their ancestors and relatives.

The maps of the southern Kalahari helped the ‡Khomani San to secure their title to a land claim. Between 1999 and 2002 the government of South Africa restored 65,000 ha to the community, both inside and outside the Park. The maps now have a new function. First they were testimony and evidence, now they are tools for helping a new generation of San to learn about their culture heritage and mobilise this for livelihoods.

Today, with the support of the Northern Cape Provincial Library Services and the Carnegie Foundation, ‡Khomani youth are making a book about their own culture. The book is an effort to bring the cultural audit to the young people living across the district and to challenge the stereotypes of San culture that other people may have. The book, the first media produced by the community itself, includes myths, maps, interviews, archival research and oral history. A people whose very identity was under threat ten years ago are now telling their story through print media. Many films have been made about the San, this is their first occasion to shape their own image in media. Similar initiatives are being taken in Botswana and Namibia. San leaders are calling for a mapping of their entire territory and the building of an atlas of their lands and cultures.

San youth are also being trained in various ICTs. Within the coming year they will start to construct their own websites to help to enter into dialogue with the world and to market their craft and tourism opportunities. UNESCO supports a number of these ICT-related initiatives including the groundbreaking CD-ROM: *Dream Trackers: Yapa art and knowledge of the Australian desert*. CD technology, even where Internet connections are poor, allows various desert-based peoples to enter into dialogue with each other.

Culture and development of livelihoods

One of the important principles in the UNESCO Declaration on Cultural Diversity is that culture, cultural knowledge, and intangible heritage all have a role to play in alleviating poverty and creating livelihood opportunities.

Though there are threats to indigenous cultures and languages arising from the sociological forces of cultural and economic globalisation, it is still the case that a greater threat comes from being in a vulnerable economic and political position. Many indigenous peoples around the world find themselves at risk to diseases such as tuberculosis and AIDS; their land base has been eroded or taken away; they do not have food security and the fabric of their societies is unravelling. Diversity of world cultures and intellectual systems cannot be maintained in such a climate. Management of pluralism for the good of the people concerned, for national benefit and for the safeguarding of global heritage cannot be divorced from the issues of poverty and vulnerability.

In the Southern Kalahari example, youth from urban areas had the opportunity to resettle on

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1. Louis Liebenberg has written extensively on the relationship between tracking and the foundations of human science. (Liebenberg, 1990 and 2000. See also http://www.cybertracker.org/ArtOfTracking.html). For a more detailed discussion on science and traditional knowledge see the International Council for Science (ICSU) and UNESCO joint publication for the World Summit on Sustainable Development (WSSD).

ancestral land. However, they did not have the skills and knowledge of their ancestors. The Kalahari is now criss-crossed with farms and fences, so there is not an opportunity to live as hunters-gatherers even if people preferred such an option. The auditing of indigenous knowledge and the mapping of cultural landscapes helped the ‡Khomani youth and the development organisations in the area to understand how the elders' intangible heritage and knowledge systems were resources to the young people.

Today, young people in the ‡Khomani community are learning to apply old knowledge in new ways. Traditional animal tracking skills are being used to train people in conservation, farm management, anti-poaching, game counting and tourism. Traditional arts and crafts knowledge is feeding into a creative process of craft production, sale and marketing. Oral history is the basis for training tourist guides and community educators. The maps that were used to help to elicit the information are used to assist with training, and as tools when introducing outsiders to the Kalahari.

The Southern Kalahari is just one example of where culture and knowledge are being put to work to create sustainable livelihoods. There are numerous other examples of good practices which need to come to light and to inform both governmental and non-governmental practices. For more than a decade there has been a dialogue about the role of culture in development but this still does not manifest itself in the policies and practices of most UN Member States. Part of the challenge of creating media, which reflects realities of indigenous peoples, is to bring the issue of culture for living into a medium that decision-makers and communities can easily understand.

Conclusion

Mapping cultural landscapes is a powerful tool for mobilising indigenous peoples' voices and knowledge in land claims, in community development, for intercultural dialogue and for creating new livelihood opportunities. With the wrong methodology and motivation, the mapping process can violate people's sacred beliefs and leave people vulnerable to further exploitation and marginalisation. Mapping with a good methodology, that empowers communities and helps them to come to grips with the challenges of cultural resources management, can help to fight poverty and associated pathologies.

Maps make the invisible become visible. Dominating settler societies are challenged to think about their impact on indigenous cultures and to accept that we share planet earth. People become visible, history becomes visible and heritage becomes visible. The map is the site of an intercultural dialogue about who we are, our relationship to the land and to each other.

The use of Information and Communication Technologies (ICTs) by indigenous peoples is one way to explore, affirm and re-empower indigenous languages, cultures and knowledge systems. The interaction of new technologies with the ways of the ancestors puts young indigenous people in a more powerful position to negotiate the future of their people. This in turn creates new ways to build peace, to understand what is meant by sustainable development, and to recognise that the management of pluralism is ultimately in everyone's interest.

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***Samples of related Internet sites*:**

The Aboriginal Mapping Network, Canada: http://www.nativemaps.org/index.html

The Ashkui Project, Canada. Understanding the landscape of Labrador from Innu and scientific perspectives: http://www.stmarys.ca/administration/gorsebrook/ashkui.htm

The Centre for Cross-Cultural Research, Australia:

http://www.anu.edu.au/culture/activities/sixpack/ethnoscapes.htm

Gooreng Gooreng Cultural Heritage Project, Australia: http://www.uq.edu.au/ATSIS/current-research/gooreng-gooreng.html