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In February, IWGIA participated in the fourth Special Session of the Working Group established by the Organization of American States (OAS). The session continued the debates on the Draft Declaration on the Rights of Indigenous Peoples of the Organization of American States, notably the sections relating to economic and social rights, property rights, general provisions and human rights.

As part of IWGIA’s involvement in the activities of the Arctic Council, we have now involved ourselves in the drafting of an Arctic Human Development Report.

Project support at local level continues to be a major part of IWGIA’s work. A comparatively new field of work for IWGIA over the last two years has been that of providing project support for the empowerment of indigenous peoples in Russia, where we have been carrying out a number of projects with regional organizations as well as with the national umbrella organization.

Project support for indigenous organizations in Asia has grown considerably over the past few years, and the Asia Programme Coordinator will, for the next two years, be stationed in Chiang Mai, Thailand. In the meantime, Sille Stidsen has been employed as Assistant Asia Coordinator in the IWGIA office in Copenhagen.

The reduced funding from the Danish government has unfortunately meant that two people from the IWGIA secretariat have had to be made redundant. We are all sad to be losing Annette Mollech and Brijesh Stephenon, both of whom have done tremendous work for IWGIA and it will now be a difficult challenge for the remaining IWGIA staff to cope with the wide range of activities that IWGIA is involved in.
T his issue of Indigenous Affairs focuses on indigenous peoples and the new information and communication technologies. Access to information and tools for disseminating information are important preconditions for empowerment, and this issue of Indigenous Affairs therefore wishes to explore the extent to which the new information and communication technologies—in particular the Internet—can form important stepping stones for the empowerment of marginalized groups around the world such as indigenous peoples.

IWCA has not published on this topic before and we are grateful for the valuable assistance that we have received from Kyra Landzillus, who also is the author of the first article of this issue.

In her article "Paths of Indigenous Cyber-Activism" Kyra Landzillus gives an account of the many different forms that indigenous cyber-activism takes. This analysis shows that indigenous peoples make use of the Internet for a wide spectrum of activities, such as access to community services; cultural revitalization; reconciliation; pan-Indigenous networking; public relations; sovereignty campaigns; liberation movements and commonscause partnerships. In Landzillus' words, the Internet is the grand collective experiment of our day, and although it is too early to evaluate its emancipatory potential, it is definitely interesting to look at how indigenous communities are currently making use of the Internet.

Greg Young-Ing argues in his article "Perspectivew on the Indigenous Tradition/New Technology Interface" that indigenous cultures are not static and that they have continuously adopted new forms of technology. He demonstrates that new technologies such as multimedia can be adapted to indigenous cultures and can support indigenous political and social initiatives. This is exemplified by two web sites of indigenous peoples in Canada that provide information about indigenous knowledge and culture. Such websites demonstrate that "indigenous peoples are making technologies work both for the advancement and preservation of indigenous knowledge and cultures". Contrary to the printed media, indigenous peoples have far better access to multimedia and, if they manage it carefully, they have the possibility of being part of this new technological revolution.

In their article "Images/Cyber- Sovereignty", Frances Vitalli and Jean Whitehouse analyze how new information technology is being used by the Navajo Nation in the United States. Composed to the average level in the United States, Internet access and use in Native American communities is still low. However, the situation seems to be gradually improving through the combined efforts of local, federal and state levels and cooperation with non-profit foundations. The present situation of the Navajo Nation exemplifies such progress, which can make important contributions to empowerment and self-determination.

Obviously, indigenous peoples in the Western world potentially have much access to the new information and communication technology. To be able to use this new technology, basic infrastructure needs to be in place and you need access to computers and the basic knowledge to utilize it. Extremely marginalized and impoverished indigenous peoples in remote areas of Africa and elsewhere have, for instance, fewer possibilities than indigenous peoples in Scandinavia, Canada or the United States. Nevertheless, new information and communication technology is already playing an important role whereby a growing number of indigenous people are, for instance, Africa are enabled to communicate quickly and effectively with the outside world.

The article written by Nilda Bustillos Rodriguez gives an example of how poor- and to a large extent illiterate- indigenous Ayamara women in Bolivia are now learning how to use computers and the new Information and communication technology. These women are living in poor and remote areas and they have expressed a strong need to be able to access and use new information and communication technology in order to communicate with the outside world on issues such as how to improve the local economy and the standard of living in their areas; their culture and way of life; their particular situation as women; how they are organizing themselves locally; and discussions of national affairs in Bolivia. The Ayamara women's organization has developed an interesting and innovative communication and education programme that is designed to reach out to many local communities. By bringing access to and knowledge of information and communication technology to marginalized and impoverished indigenous women in Bolivia, this programme can potentially make an important contribution to local empowerment processes.
While information and communication technology is new to the Aymara women in Bolivia, the Zapastistas in Mexico are one of the groups that has most effectively used the information and communication technology to advance its struggle. This is described in the article "The Zapastista rebellion and the use of technology: Indian women online?" written by Marisa Belausteguiogorta. As Marisa Belausteguiogorta states: "The Zapastistas managed to generate a discursive terrain on the Net and in the flesh that not only appealed to different ethnic communities but also drew the attention of activists, intellectuals, academics and civil sectors of Mexican civil society interested in the rewriting of social contracts with the inclusion of diverse marginal sectors." This achievement is even more remarkable when one considers that access to the Internet is less common in Mexico than in richer Western countries. The article provides an interesting analysis of the Zapastistas' use of the Internet. However, while the Zapastistas have been very successful in unpacking racism and addressing their overall concerns, the voices of Zapastista women are not as forcefully communicated via the Internet. A major reason for this is that Zapastista women do not enjoy the "right to rest"—understood as physical rest from continuous hard work and rest from the obligation to ensure the preservation of culture. This lack of a "right to rest" hampers their empowerment in general and their potential use of the Internet in particular.

Indigenous peoples in the Caribbean archipelago have, over the past 20 years, become increasingly active. As described by Maximilien C. Forte in his article "Caribbean Aborigine Online: Digitized Culture, Networked Representation", the Internet has provided an avenue for indigenous peoples in the Caribbean to re-vitalize indigenous culture and to reverse previous neglect, invisibility and distorted representations: "The creation of websites, by and for the region's aboriginal communities and descendants, has helped to emphasize themes of cultural survival, online current organizational efforts and aspirations centred on revitalization of traditions on a regional level, and they have added to directly challenging age-old colonial stereotypes." However, there is far more information on the Internet about Caribbean aboriginals than there is by them. The majority of the Caribbean aboriginal websites have been produced by Caribbeans resident in North America and, despite the positive aspects of the Internet, it is thus true that in terms of both the number and character of indigenous Caribbean websites, representativeness still follows the centre-periphery divide of the world system.

Another interesting fact to be aware of is that among the indigenous population of the Americas as a whole, websites produced by indigenous peoples in the United States and Canada far outnumber those from Latin America and the Caribbean, although the latter have much larger indigenous populations. As pointed out by Forte: "This trend suggests that primarily North American representation of aboriginality, and issues and debates peculiar to North America, have become the dominant representations." As noted earlier, Internet access is still a luxury in many areas of the world, and the present representation of indigenous issues on the Internet is no doubt uneven and follows the usual division between the rich and poor parts of the world. If new information and communication technologies such as the Internet are to become a vehicle of empowerment driven by the indigenous peoples themselves, circumstances need to change on the ground. This includes computer literacy, basic infrastructure and access.

Finally, in his article "SameNet - the Sámi Information and Communication Network", Henrik Michael Kühnman describes the communication network that the Sámi people have created. The Sámi people are scattered over far distances and across several countries, and SameNet fills a long felt need for the Sámi people to be able to communicate. In a short space of time, SameNet has become an important complement to Sámi newspapers, radio and TV, and it has the great advantage of being a two-way communication media.

The debate on how indigenous peoples can use new information and communication technologies is only just starting and much still remains to be seen in terms of effects and achievements. Despite the obvious divide along the well-known center/periphery lines of the world system, new information and communication technologies can have great potential for the empowerment of indigenous peoples around the world. Documentation and exchange of the lessons learnt so far are important, and we hope that this issue of Indigenous Affairs can contribute to this process.
PATHS OF INDIGENOUS CYBER-ACTIVISM

KYRA LANDZELIUS
Searching the horizon

A view of the electronic frontier from the user's terminal clearly demonstrates that the information superhighway is well on the way to paving everyday work and play habits for mainstream citizens virtually everywhere. Interoperability, connectivity, universality, fluidity, transparency - such are the buzzwords of the digital age. But what do they mean for peoples outside the mainstream, for peoples - like indigenous peoples - on the fringes of power? Can the information superhighway form a fast track to greater empowerment for indigenous peoples? Or do they risk becoming road kill casualties of hyper-media and the drive to electronically map everything? Can indigenous peoples make a home in the global village? And will they feel at home there? Most essentially, can the internet be "indigenized": understood and assimilated into indigenous practices and beliefs, rooted in place and cultural tradition?

It is far too soon to settle such questions but at least we can venture towards an interpretive horizon by following some trails indigenous peoples currently travel online. In so doing, this essay charts signposts along the paths of indigenous cyberactivism.

The virtual face of indigeneity

Typing "indigenous", "aboriginal peoples" and similar descriptors into a major search engine yields hundreds of thousands of hits, spanning from tribal web pages to personal home pages to pan-aboriginal organizations to retailers peddling indigenous crafts. Taken collectively, we might consider these hits to be the online re-presentation of indigenous peoples. They give us a profile, if you will, of the virtual face of indigeneity. Most directly, the virtual face of indigeneity is a manifest expression of projects undertaken by indigenous peoples themselves, in accordance with their aims and wishes. In this essay, I mainly focus on these kinds of self-authored, or at least authorized, engagements, which I define as indigenous cyberactivism. At the time of writing (spring 2003), there are hundreds of websites designed and/or managed by aboriginal peoples, and thousands more indigenous peoples using chat, e-mail, Intranet and other web applications. As one might expect, much of this activity follows geographic trends in Information and Communication Technology (ICT) usage, with indigenous peoples resident in so-called developed (over-developed?) countries more likely to have online access. To facilitate their passage across the digital divide, many such "fourth world" communities in "first world" countries have ambitious schemes for ICT develop-

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ment in the pipeline or already underway. The elaborate mix of public and private sector financing that characterizes such projects—by bringing together government funds, investment capital and philanthropic donations—is itself a study in networking success. These initiatives are often led by indigenous leaders keen to plug into the perceived power and prestige of the Internet. The mission statement of Canadian First Nations Chief M. Ceen Ceen quite explicitly captures this sentiment: "We seized the Industrial Information Revolution. We will not miss the Information Technology Revolution." His words imply not only technological but also a politico-economic hop "forward", where cyberspace represents an historical opportunity to seize the future and simultaneously redress the past.2

Indigenous cyberactivism takes many forms, with diverse agendas and target audiences. These range from individual projects to collective endeavors linking indigenous peoples across the planet. At its most communal, the virtual face of indigeneity reveals itself in pan-indigenous networks organized around issues of shared concern: for example, in areas of indigenous health, international clout, resource protection, literature and the arts. My discussion here highlights the group of initiatives undertaken on the part of, orom direct behalf of, a specific indigenous society or wider cultural unit. However, it is of interest to mention a less public facet of virtual indigeneity, emerging person-to-person between indigenous networks, and between indigenous and non-indigenous peoples. At its most private, virtual indigeneity finds voice in personal home pages posted by individuals of aboriginal descent. Among the reasons such authors typically give for thus "home-staying in cyberspace" is the desire to "introduce" their culture to others. The guest book commentaries visitors tend to leave on these home pages give reason to be optimistic that, in their modest way, these informal "tutorials" are sparking a cross-cultural "awareness-raising" about indigenous issues.3

In considering the wider face of virtual indigeneity, it bears noting that it is also shaped by the countless number of websites that link more or less directly to aboriginal peoples and their concerns. These include: professional and educational institutions, library databases, museum archives, government documents, UN declarations, and the websites of countless non-governmental organizations working on behalf of indigenous heritage, land claims, legal rights, etc. In the best of cases, these sites are posted with the knowledge and permission of the indigenous group(s) in question, and are representative understandings, working on behalf of indigenous heritage, and representation and preservation projects. Virtual indigeneity is further demonstrated through a vast array of commercial sites doing trade in indigenous arts and crafts. Another single emerges in the numerous personal sites authored by individuals that involve indigeneity but who nonetheless exist in the World Wide Web to say something (often unorthodox) about indigeneity.4 Since most if not all of the sites mentioned above tend to hyperlink to online sources and resources covering "things" indigenous, to some extent they all figure in the ways indigenous peoples are being presented and represented online.

**Indigenous cyber-activism**

An inventory of indigenous cyber-activism might roughly be grouped into two broad categories: outreach and inreach. These could further be subdivided into genres based on their intended audience and objectives. Outreach initiatives are mainly directed at a global (hence non-indigenous) public, whereas inreach initiatives target indigenous peoples, whether as fellow members of a single group or as persons sharing an identity in a pan-indigenous international community. In the final analysis, however, all of the genres are implicated in the vital question of indigenous lifeways, and, as we shall see, their agendas regularly intersect and are mutually reinforcing. Accordingly, inreach and outreach might best be thought of in terms of a spectrum of orientations. Below, I highlight some signposts along the spectrum from inreach—overcoming geographical isolation, generating network and home-to-home connections—to outreach, including public relations and tourist management, sovereignty campaigns, liberation movements and cause-specific partnerships.

**Community services**

Many indigenous communities are situated in remote regions, tend to lack basic infrastructure and may encompass widely dispersed villages and homesteads. Given this, the communications reach of ICTs makes them particularly attractive to indigenous leaders looking to better organize social services. In the realms of e-health, e-justice, e-voting, e-commerce, e-jobs and the like, we find a range of indigenous projects underway. For example: distance learning is on offer for aboriginal communities in Australia; electronic voting is being implemented on Native American reservations; and an extensive tele-medicine initiative is being put into action across northern Canada. To illustrate this, I will: a few words about the Canadian Aboriginal Health Infrastructure, which has been researched by Valerie Gideon, a communications scholar of French Canadian and Mi'Kmaq descent from the GesGesgoggin First Nation community.5 Like indigenous peoples worldwide (especially those more tightly drawn into the global economic system), Canadian First Nations are faced with healthcare shortages
and poorer-than-average health status. Tele-medicine — which enables physicians to observe patients via high-definition, real-time links — points to an affordable way to "decrease distance" and deliver quality care even to outlying Arctic regions. Working together with Canadian officials, First Nations seek to balance advanced medical and information technologies, on the one hand, with indigenous healing practices and beliefs, on the other. To borrow computer lingo, we might say that such projects are challenged to "morph" tradition with high-tech.

Cultural revitalization

Cultural revitalization projects, in similar fashion, aim to "recover" tradition with the help of ICT resources. Indigenous cyberactivism as a path towards cultural revitalization reaches "inwards" in order to strengthen community members' knowledge about their own customs, history, folklore, etc. As discussed here in the essay by Henrik Micael Kuhmunen, one such project is SameNet, a members-only site catering for the Sámi peoples scattered across northern Scandinavia and Russia. Among its tasks, SameNet promotes the Lule Sámi language and offers distance-learning in reindeer-herding. In the case of SameNet, traditional knowledge traverses the borders of four nation-states in order to electronically "knit together" peoples who have long shared ethnicity and cultural patterns, but who have been arbitrarily divided by modern geopolitics. The Cherokee likewise are working at the interface of tradition and technology with a web-based project to collect legends from tribal elders and circulate them to the youth. A similar case involving the conversion of oral traditions into multimedia format is the Elders Project Website for several Native American tribes, and presented in this issue of Indigenous Affairs by Greg Young-Ing. Such projects engage a multimedia tradition in order to preserve, invigorate and even deliver it. At the same time, by frequently entailing the design of new fonts, sound files and software, they in turn push the technological frontier and influence the direction of innovation.

Pan-indigenous networking

Networking across indigenous communities is an intrinsic feature of much of the online activity undertaken by indigenous peoples. Alluded through a sense of common fate and a recognition that indigenous peoples everywhere experience misconceptions and discrimination, networks may strategically organize to share political strategies or may simply come about through a desire to exchange understanding. Alliances of these sorts intensify the connections and the perception of connections linking indigenous peoples across the planet. In here distinguishing a style of pan-indigenous networking, I further wish to emphasize cyberactivities that concertedly work to empower a transnational indigenous cosmopolitism and the emergence of what we might call "global indigeneity."
through the virtual banding together of local agencies with their counterparts elsewhere; or come about through solitarily building that starts from a global perspective. At play in all of these scenarios is the unparalleled capacity of ICTs to give structure and cohesion to a disparate, dispersed group of players—to create order and the appearance of order. Interns of content, pan-indigenous networking can be issue-oriented or open-ended. Issue-oriented networks include those that target a heated public-at-matter, like those represented by The Indigenous Peoples Biodiversity Network, or a topic of common interest, such as Indigenous Lit. Open-ended networks are characterized loosely-based. These include the many chat rooms and bulletin boards where Indigenous peoples are gathering virtually to converse about any and all issues of concern, including debating the role of tradition and what it means to be indigenous in today's world. Home-to-home connection between indigenous peoples in Diaspora and those still resident in the homeland ("staying in touch" via email) are open-ended alliances in personalized form. They bridge different worlds and contribute to ways of balancing between them.  

Public relations and tourist management

Thus far we have concerned ourselves with gauges of cyberactivism characterized by their reach to indigenous communities. Now we turn to genres that reach out to a global public. The most common outreach sites are those we might describe as tutorials, if you will, with the aim of selectively educating a non-indigenous audience about indigenous beliefs and lifeways—at a distance, around the clock and, to some extent, on indigenous terms. These sites often take the form of an official community home page and/or a tourist infostop posting guidelines for culturally-appropriate tourist behavior. In keeping with their pedagogical dimension (combined in some cases with a marketing angle), these sites tend to be descriptive and audio-visually rich. Logging on, the digital spectatorhalf a world awaycan click and download folktales and myths, dramatic scenery and portraits, anecdotes about indigenous life and the like. Their openness notwithstanding, it might be said that such sites do double duty: to protect indigenous cultures through the regulation of an official public face behind which more intimate or sacred traditions may be better safeguarded from outside trespass. They also fashion an indigenous contribution to "distance learning," a kind of reversal or counter to the authority of conventional knowledge. Of interest in this context is the frequency with which such sites seize a communications opportunity to present alternative versions of colonial history. Given that for centuries dominant majority societies have possessed the tools and commanded the rhetoric to "enlighten" natives in the white man's ways and values (e.g. the Christianizing mission, civilizing mission, development schemes, etc.), it seems that the temporary symmetry of computer-mediated communications is putting tools in native hands in order to "speak truth to power" from the indigenous perspective.

Sovereignty campaigns

In the kind of paradox associated with the age of virtuality, Indigenous peoples' sovereignty campaigns are appropriating the virtually unlimited terrain of cyberspace in order to safeguard local resources and lifeways in the name of self-determination. Sovereignty campaigns clearly rely upon some scale of pan-indigenous networking, by improving organizational capacity and the visibility of issues, ICTs are giving new charge to old movements, and promoting the mobilization of new ones. For a radical example of a sovereignty campaign getting a boost from the Net, we can cite that of the indigenous peoples of Hawaii, whose quest for autonomy borders on secession. For a "velvet revolution," we can cite the extensive ICT use by the Maori campaign for self-rule over local governance, education, health and social services. The Internet is proving an important ally for Native American campaigns seeking repatriation of indigenous artifacts from museums and universities in the United States. It is also a publicizing and behind-the-scenes organizing force for movements lobbying for indigenous copyright and ownership over cultural and biological property, including the products of indigenous science and indigenous gene pools.  

Liberation movements

Whereas sovereignty campaigns progressively challenge the status quo, liberation movements essentially wage war on it. By using the Net to boldly "take on" the Establishment, they access a (pressured democratic) global civil society in order to put corrupt regimes and power asymmetries on trial. The Zapatista uprising will likely go down in history as a classic example of "Internet insurrection," given their effective use of cyberspace as a strategic weapon to expose the injustices Mexican indigenous communities have been subjected to for so long, chivalric chivalry and improvement to military aggression. In the process, the Zapastas ignited a movement for the rights of indigenous peoples across Mexico. Their campaign was in large measure indebted to non-indigenous supporters, who mobilized in great numbers from grass-roots, university, democratic, non-governmental and feminist organizations with ready-to-go networks. As discussed here by Marisa Belausteguigilas, the assistance of women's groups to highlight the agenda of indigenous women from the Zapatista movement is particularly illustrative of the potential to create support webs that transcend, and may even be at odds with, the local status quo. I refer here to human rights framed in terms of
Indigenous women's rights: including the right to freedom from oppression within traditional social structures, where women are more constrained by their identities as "keepers of tradition". The nowhere/everywhere virtuality of cyberspace may mean that groups otherwise far apart can nonetheless communicate in real-time, forming digital communities and alliances to gain center stage, in geo- as well as local political.

Common-cause partnerships

Like sovereignty campaigns and liberation movements, common-cause partnerships are campaigns of resistance. They are distinctive, however, in forging instrumental solidarity between indigenous and non-Indigenous peoples on the basis of perceived interdependence. It is thus less an issue of adopting others' causes than one of recognition—of the mutual interest of shared burdens. A foremost example is the partnership between the U'wa of the Colombian Amazon and various grassroots environmental organizations, such as Rainforest Action Network. In 1997 they launched a joint attack on Occidental Oil, a multinational petroleum corporation known to drill in U'wa ancestral lands. The campaign included blow-by-blow cyber-coverage of the "U'wa Crisis" dramatized online. In 2002, after being declared deforested under governmental delusions, Occidental announced its intention to withdraw its claims. However, victory for the dispossessed can often be fragile and, at this time, U'wa lands are still not secure from petroleum exploitation. Moreover, when it comes to fighting multinational giants, there is a real risk that corporations simply "move downriver", where they may have greater success with less media-savvy groups. This not only means that activists must keep up the pressure through continued cyberwarfare. In worst case scenarios, it may mean pitting indigenous peoples against each other as co-competitors for public attention and support from a range of good causes.

Future directions?

The Internet is the grand collective experiment of our day. Not surprisingly, it has generated great speculation: spanning from Utopian visions of a 'global village' where for democracy, to dystopic nightmares of a "big brother" tool of dominance. So, what can we say about the first embrace of virtuality and indigeneity? Is the info-superhighway a promising path for indigenous heritage? Or is it a lie, following in a long chain of false 'emancipations' enticed upon generations of indigenous peoples? These are not rhetorical, academic questions; they foremost capture the lively debates taking place within indigenous communities across the planet. Proponents of indigenous ICT development make a strong case for the adaptive "indigenization" of new media technologies to fit indigenous agendas. Opponents argue that increased reliance on "Western" machines and modes of doing is ultimately bound to colonize indigenous cultural logics. As our discussion here and the articles in this issue of Indigenous Action show, we are reaching a crossroad. ICTs are already changing the fabric of everyday life and personhood—indigenous ways of knowing, doing, being. In this essay we have emphasized the pros and said little about the cons. Given that ICTs are still undergoing rapid evolution, and that we have seen issues of surveillance and server shut-downs elsewhere, perhaps it is simply wise to end on a note of caution. There is space and a place for hope but hope's most valuable ally may prove to be a healthy distrust and constant grassroots policing of the machinery of power and the power of the machine.

Notes

1. Over the past 30 years, the use of information-communication technologies by indigenous peoples has expanded exponentially, and relatively little has been written on the matter. A striking exception is the Zapatista 'Internet Insurrection' of the mid-90s, which received tremendous attention from activists and scholars from all academic backgrounds. For a few examples from this literature, see: J. Nash, The Fields of the Word: The Zapatista uprising and radical democracy in Mexico. American Anthropologist 2:243-274, 1999. P. Routledge, "Going Global: Spontaneity, embodiment, and mediaton in the Zapatista Insurgency", in G. Ó. Tuathail and S. Dulay (eds.), Rethinking Geopolitics. London: Routledge, pp. 240-260; 1998. M. Forno, 'The politics of representation: The Internet of the revolution and the Zapatista uprising in Chiapas', Journal of Latin American Cultural Studies 4:1(3) 55-71, 1995. D. Wood, 'Net Wars. Chiquis: The revolution will not be televised (but it will be online)', Jeds on Comoversity, no. 3, June 1995. H. M. Cleaver, 'The Zapatista effect: The Internet and the rise of an alternative political culture', Journal of Information Affairs 5:2(2) 625-648, 1998. See also the article by Balleauquagutin in this volume. My discussion of indigenous cyberactivism here is indebted to a workshop I organized on the topic (held at Gettystown, University, June 2001) and I wish to express my gratitude to workshop participants (some of whom are presented in essays here) and to members of the Gettystown chapter of WDDA for their vital organizational assistance. Here I adapt the phrase 'at home in the global village' from Miller and Blythe, whose work explores how Trindadeans are making themselves at home in cyberspace (D. Miller and D. Slater, The Internet: An Ethnographic Approach. Oxford: Berg, 2003). The quick about whether indigenous peoples might end up in sketchy or the Information Superhighway has been attributed to indigenous rights activist Randy Ross (see Youngblood this issue).

2. Vinal and Whitehorse, this issue, discuss a similar ICT development scheme on the Navajo Nation reservation. In like


6 In the best of cases, three personal sites are genuine ‘well intended’ attempts at cross-cultural diplomacy and easy, for example, come in the form of homepage narratives expressing admiration for indigenous culture(s) or information/advocacy sites seeking to broaden public support for indigenous rights. The worst of cases involve negative, unsubstantiated and unearned depictions of indigenous peoples put forth for purposes of profit, prestige, self-promotion, publicity or whatever-hy-pro. It is even possible to meet online a kind of indigenous presence masquerading as indigenous presence. Thus a word of caution is in order: given the ano-

nymity of cyberspace, coupled with the exotic appeal of indigenous cultures, indigenous identity may be particularly vulnerable to a kind of digital colonization or identity theft.


Sichuanhong is one such online task force, which plays a salu-

tory role in reviewing the Disko-Near Noise and Reconciliation Process: find it at http://sichuanhong.tripod.com. Unfortu-

nately, it is a non-Indian site and the publication of a handout of each of the ten inter-group discourses is under discussion. A. Pemberton, a Native American, has been identified as this group’s Net published on a Net forum, are clearly biased attempts to recruit sympathizers to ‘take sides’. In positively assessing Hopi/Navajo tribal relations, however, it is notable that concerned citizens from both tribes are organizing together (and making non-indigenous activists to lobby for water conservation, instead of the pristine underground aquifers that are being drained in oil and mining operations.

Find more at: www.wildangle.org/hopi.html


7 Such a community is not only real and symbolic, meaning that it brings together members-participants under a common un-

derlying concept, but among local cosmology and further that it holds some meaning of international civil law on the uniqueness of this identity. Indigeneity, especially in times past has often been homog-

enized with negative connotations: an identity formally im-

posed upon, and indeed invented for, New World peoples subjugated under colonialism and aboriginal inhabitants of the Old World who resisted or were denied assimilation into dominant society. In our ‘postmodern’ times, ICTs provide an opportunity to forge a new indigeneity that might help ‘burn the tables’ by publicly revoking indigenous identity.

8 With respect to post-indigenous networking, one example of a naturally prominent indigenous cyber-network is the Aus-

tralian Torres Strait Islanders’ Internet site www.cvc.internet.net.au/aboriginal.

They also sponsor Oiba, a list covering indigenous authors. The Indigenous Peoples Biodiversity Information Network is online at: www.ibin.org. Indigenous.

It is a moderated electronic mailing list, at www.anu.edu.au/~inacind/indigenous

For a handful of chat rooms, one can cite Native Tech, a collection of message boards and discussion lists, at: www.nativetechnet.org/natboard/index.html

Native Forum, a message board which offers ‘politics to poetry, jokes to chat, no limits here’ is at: www.voy.com/7994/

And Talking Circle, at: www.indians.com/TalkingCircle/MessageBoard

Ojibwe are numerous examples of information sharing boards that exploit ICT power to manage large volumes of data, and thereby make a strong contribution to the post-indigenous net-

working. Here we can include the many online archives of indigenous newspapers gathered around the world. For a focus on Canadian First Nations, see www.sbnubohywey.com and the WWIV Virtual Literature of Chronopolog Indigenous Resources: www.indlib.org/vli/cpl/index.htm.

For the ‘world’s largest repositories of native thought’ see the Native Press Archives at: www.nprg favourable. For a sev-er site see: www.nativeweek.com.

10 For a case in point, see the home page of the Eastern Cherokee, at: www.cherokee.net.com.


13 Indigenous well-being is taking up these debates. For a pro-


14 The policing of the internet is a documented instance (for starters, consider China, Saudi Arabia, and the U.S.), although its full extent remains unknown.

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PERSPECTIVES ON THE INDIGENOUS TRADITION/NEW TECHNOLOGY INTERFACE

GREG YOUNG-ING
While predominant Western perspectives have tended to view the indigenous/modernity interface as a paradox, indigenous peoples have shown through their adaptation of technology that their dynamic cultures do not remain encapsulated in the past, static and resistant to development. Indigenous theorists Randy Ross, Craig Howe and Melanie Printep-Hope, and Western theorists Andrew Feenberg, Lewis Mumford and Jacques Ellul have articulated theories on technology that can be applied to the interface between indigenous traditions and technologies. This essay will refer to some of these theoretical models as they pertain to the indigenous peoples’ adaptations of technology in general and, more specifically, transportation, print media and new technologies. The theoretical models discussed will also be applied to two indigenous websites: 1) Melanie Printep-Hope’s Haudenosaunee (Iroquois) Thanksgiving Prayer Website (1997), and 2) The Saskatchewan Indian Cultural Center’s Elders Project (1998).

In the ongoing discourse on technology, theories can be broken down into two main schools of thought: 1) the substantivist view that technology is so all-consuming that it has a form of hegemonic power to the extent that it can overtake and undermine the intent of its users; and conversely, 2) the related determinist and instrumentalist views that the users of technology maintain the ability to determine the outcome of its use, and that technology is an instrument to help achieve a desired purpose.

Randy Ross has contended that, “For Native people, the web of information networks and multimedia communications apparatus bring a new dimension to our future survival.” He refers back to the early 1800s when the inability to communicate across the nation was a key reason why Indian lands fell into the hands of the US Government, stating that, for the Americans, “the ability to communicate through telegraph to coordinate troops ... was all possible through rapid telegraph exchange via Morse Code ... for tribes on the other hand, the transfer rate was extremely slow.” In summary, Ross argues that indigenous peoples should take advantage of new technologies and use them for their own purposes, as he poses the question, “Will the late 1800s play themselves out again with regard to Indian access to the telegraph, but this time it’s called the Internet?”

Insofar as Ross contends that new technologies can support indigenous cultural and political initiatives, Mumford holds a similar determinist view with regard to technology and culture in that, “technology is responsive to the ideological and cultural situation into which it is introduced,” and further that, “culture can control the development of its tools.” 5 Indigenous Peoples have always proven to be adept at absorbing new technologies into their cultures. Cree hunters in Northern Manitoba, Canada, for example, found in the 1960s that pursuing moose by Ski-doo (snowmobile) can lead to significantly more successful hunting outings. Meanwhile, at the same time, they still practice such ancient traditional practices such as, thanking the Creator, bringing the animal through the doorway backwards, so that the animal’s spirit can leave forwards; and hanging the animal’s bones over the doorway to honor the animal spirit.

In opposition to Mumford and Ross, Ellul argues the substantivist view that technology is “uncontrolled and proceeding without plan” and according to “laws of development.” 6 According to Ellul then, the Cree hunters should have lost part of their traditional hunting practices with the invention of the Ski-doo and turned more towards hunting as an economic industrial activity. However, they clearly did not (have you seen moose meat in the cooler at the Superstore?). On the contrary, the Cree hunters continue today to practice their ancient ceremonies while hunting for sustenance, and, in fact, the Ski-doo serves to enhance the cultural practice of moose hunting in making it more productive and efficient within Cree cultural confines. The substantivist view would argue further that technology “adds something while taking something away.” (Ellul) but, again, in this case, nothing of any cultural significance has been taken away. The way in which the Cree hunters have incorporated the Ski-doo as a new technology into their traditional culture can also be held as a model for the incorporation of other technologies, including multimedia technologies, into indigenous cultural practice.

Indigenous experience with print media

Before examining indigenous peoples’ interface with multimedia technology, it is useful to consider the indigenous experience with print media. In the Canadian/North American historical context, early writings about indigenous peoples were produced by explorers, missionaries, anthropologists and literary writers from the 16th to mid 20th centuries. The vast majority of these texts referred to indigenous peoples as an inferior vanishing race in a manner that is degrading and offensive to indigenous peoples. Most of this literature provided little or no insight into cultural realities, yet it became part of the status quo and influenced the intellectual foundations of European-based society’s perception of indigenous peoples as basically under-developed. It has been further argued by indigenous intellectuals that these faulty images have impinged on the adverse colonial and legislative treatment of indigenous peoples.

As observed by Ward Churchill, “The current goal of literature concerning Indians is to create them ... from only the bare minimum of fact needed to give the resulting fiction a ring of truth.” 7 Here Churchill expresses a view commonly held that a review of contemporary literature reveals a persistence of subtle inappropriate stereotypes and faulty academic paradigms. Howard Adams goes further to point out that indigenous and non-indigenous people alike have been impacted by the status quo stating that, “Academia is slow to re-examine what has been accepted for centuries... These myths have been so deeply ingrained in the peoples’ psyche that even Aboriginals will have to go for great lengths to rid themselves of colonial ideologies.” 8

Beginning in the 1960s, indigenous authors had slowly begun to develop an indigenous literary voice, drawing on traditional knowledge and modes of expression, (such as oral traditions and storytelling techniques) and contemporary indigenous experience and perspectives. This body of literature, which has gradually continued to develop and increase in scope and cultural importance, now functions at three key levels: 1) as national...
bodies of literature building upon the traditional knowledge, and a continuance of the oral history of individual indigenous nations; 2) as a pan-indigenous body of literature that can be claimed and identified with by indigenous peoples within modern colonial nation states and/or throughout the world; and, 3) as an authentic indigenous voice that non-indigenous peoples can access to gain understanding and insights into indigenous cultural knowledge and perspectives — offering a more authentic alternative to the vast body of quota literature about indigenous people by non-indigenous writers. The emergence of indigenous publishing in the 1980s further contributed to the indigenous voice by introducing indigenous-controlled editing and publishing practices. An indigenous literary style is, therefore, emerging using these unique editorial guidelines that respect cultural integrity and complement the emerging distinct indigenous literary voice(s). Some of the culturally-based practices that are being or have been adopted in editing indigenous texts are: utilizing principles of the oral tradition within the editorial process; respecting, establishing and defining indigenous colloquial forms of English; incorporating indigenous traditional protocol when considering the appropriateness of presenting certain aspects of culture; and consulting and soliciting the approval of elders and traditional leaders in the publishing of sacred cultural material.

This brief discussion on indigenous peoples’ experience with print culture has been focused on the Canadian/North American example. However, the experience has been a similar one throughout the indigenous and colonial worlds — with the notable exception that indigenous publishing has not yet emerged in many parts of the indigenous world.

Indigenous cultural protocol and technology

It is important to have a clear understanding of how indigenous peoples perceive and contextualize their cultural experience and contemporary cultural reality. This has coincided almost exactly with the time during which Western society underwent its ‘500 years of print culture’ (as Gutenberg’s invention of the printing press and Columbus’ arrival in the Americas coincided occurring within the span of a decade).

Craig Howe contends that indigenous peoples should always “carefully consider the ramifications for the future of such institutions” before adopting universal participation in the digital revolution in cyberspace (i.e. new technology). Indigenous peoples have adapted their various unique and distinct contemporary forms by adhering to two important cautionary cultural principles: 1) that incorporating new ways of doing things should be carefully considered in consultation with the Elders, traditional people and community; and 2) if it is determined that a new technology or institution goes against fundamental cultural values and/or might lead to negative cultural impact, then it should not be adopted. These principles exist, in one variation or another, in most indigenous groups dating back to ancient times.

Indigenous peoples have found ways of incorporating traditional institutions and aspects of culture and new mediums into the contemporary context. The view that new mediums, such as print media and multimedia, can be adopted into indigenous cultures and can support indigenous political and social initiatives, is consistent with instrumentalist theorists such as Manford who has stated, “Technology is responsive to the ideological and cultural situation into which it is introduced,” and further that, “culture can control the development of its tools.”

Indigenous multimedia

A case in point of culturally appropriate indigenous multimedia is Melanie Prinet-Hope’s Haudenosaunee Thanksgiving Prayer Website (www.albany.edu/~prinet/index.html). The main elements of the site are Prinet-Hope’s scanned beadwork and the very lengthy, sacred Thanksgiving Prayer of the Haudenosaunee Six Nations people. The site features stylized beadwork depictions of the various sections of The Prayer, as separate screens are navigated through for each of the Spiritual Forces that are acknowledged including, Spiritual Forces of the Earth, as well as Spiritual Forces in the Sky and Spiritual Forces beyond the Sky. According to Prinet-Hope, The Prayer is, “the backbone of Iroquois (Haudenosaunee) culture that gathers the people together with one mind.”

Showering reverence for the natural world in the interest of maintaining its natural ecological balance, The Haudenosaunee Thanksgiving Prayer Website exemplifies the cautionary view that “part of the process of bringing the technological imperative in line with values of society (in this case, Iroquois society, or Aboriginal societies in general) and the concept of sustainable resources, involves risk assessment and the implementation of management of technology policies.” Prinet-Hope’s website and its message of respect for the Earth and the natural world, which is inherent in Haudenosaunee epistemology, is accessible online to Haudenosaunee and other indigenous people, as well as millions of other users worldwide, while it poses no negative environmental or otherwise cultural impact.

Pessimistic substantivist theory contends that “technology is an instrument of moral decay and compelling the qualitative to become quantitative,” (Elbull) sacrificing the quality (i.e. content, intrinsic value) for quantity (i.e. productivity, increased units of mass production, accessibility). Prinet-Hope’s use of new technology goes against Elbull’s qualitative-quantitative trade-off, demonstrating how The Prayer, as a pan-cultural icon that embodies Haudenosaunee morality and epistemology, is now exponentially more accessible (i.e. quantitatively) on the Internet. At the same time, it could be argued that the qualitative aspects of the Prayer are also enhanced through the scanned beadwork interface as the site reaches new heights of visual exploration through technology and traditional art forms. In Prinet-Hope’s own words, “I weave together traditional beadwork with electronic arts, I fill each piece with the wisdom of my ancestors, I use my own artistic expression to share with the viewer the story of where my ancestors began and how we must lead our lives.”
The Saskatchewan Indian Cultural Centre (SICC) has embarked on a project that tends to support the instrumentalist view. The SICC Elders Project web site (www.siccskc.ca/elders/) was initiated in order to preserve various aspects of Saulteaux, Dakota, Aminibine, Dene and Cree traditional knowledge that are held for the most part by the Elders. Recognizing that much of the oral tradition was in danger of disappearing with some of the Elders, SICC initiated the project in 1995 by recording hours of Elders telling stories and re-creating legends and traditional knowledge. The recordings of over fifty Elders were then edited, transcribed and re-purposed for the Elders Project Web site. Various subjects relevant to the respective aboriginal cultures have been codified and linked within the site so that, for example, a user can enter a search for "Eagle" and be linked to segments featuring various Elders speaking on the cultural significance of an Eagle. Conversely the site serves as a means of preserving and enhancing the oral tradition, while making it accessible and easy to efficiently research and learn. The Elders Project Web site then is a prime example of "leads and lags" as it brings the oral tradition online, while the essence of the cultural content remains intact and unaltered.

SICC's innovative use of the Web illustrates the optimis- tic instrumentalist theory that, "Man fashioned himself before he fashioned his tools" and, as such, "has to will and the resources to change the direction of modern technology, rather than being a passive victim" as stated by Mumford. Through the Elders Project, the SICC has shown that indigenous peoples can make new technologies work both for the advancement and preservation of indigenous knowledge and cultures.

Conclusions
Contrary to Feenberg's statement that, "once the progress of technology is established it becomes a way of life with no way of turning back" (1998), the work of SICC and Melanie Printe-Hepe illustrates that intelligent and carefully purposed multimedia can bring ancient traditions and cultural prac- tices into the technological age uncompromised and with cultural significance and integrity upheld. These indigenous peoples' use of the Web could serve as a model for Western society as it begins to confront the many complex cultural issues brought on by the onslaught of multimedia. Indigenous peoples, too, should take the work of Melanie Printe-Hepe and the SICC as a calling to enter the techno- logical age in stride lest they become, in the words of Randy Ross, "road kill on the Information Highway."

Making reference to Ross' (unpublished) note stating that indigenous peoples should, "use cyberspace to access and dissemi- nate information on their own terms and for their own purposes (because) one can get connected and have a voice in the global village or be neglected and become roadkill" (13) just as there are phases of misrepresentation of indigenous peoples through print media and Hollywood films, there is also misrepresentation and exploitation of indigenous peoples and knowledge in multimedia. However, just as with the indigenous experience of print media, misrepresentation and exploitation can be avoided through indigenous crea- tive control and awareness and respect of indigenous cul- tural protocols. The key difference between the indigenous experience of print media and multimedia is that, due to technological misrepresentation in earlier colonial periods, indig- enous peoples were denied access to the print media technological revolution. However, as Ross has said, indig- enous peoples are now able to be in the vanguard of the current multimedia technological revolution.

Western society is in the midst of a major paradigm shift whereby the documentation, dissemination and acquisition of knowledge is moving from a print-based to a multimedia model. The impact of this radical shift has caused deep stress around fears that society and the human condition will change dramatically along with it. Perhaps indigenous peoples' interface with technology can serve as an example that intelligent and cautious management of technology is possible.

Notes
1 Native American Culture and the Emerging Internet Technol- ogy (First Nations Development Business Alert, September- October 1998)
3 Ibid., p. 8
5 Adams, Howard (1990), A Terrible People: The Politics of Collection, Vincent Books Ltd. Peterson, p. 35
6 Howe, Craig, Cyberfame is No Place for Trivialism, Winzaw SA Review, Fall 1996
7 Printe-Hepe, Ron (1996), Defining Technological Determination: The Role of Technology in Society, unpublished, p. 11
8 Aboriginal Voices Magazine, October 1998
10 Aboriginal Voices Magazine, May 1997
11 Printe-Hepe, Ron (1996), Defining Technological Determination: The Role of Technology in Society, unpublished, p. 10
12 Ibid., p. 7
13 Howe, Craig, Cyberfame is No Place for Trivialism, Winzaw SA Review, Fall 1996, p.35

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THE ZAPATISTA REBELLION
AND THE USE OF TECHNOLOGY:
INDIAN WOMEN ONLINE¹?

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Zapataista women in Yalkuitz, Atzalaáehuata municipality, Chiapas, April 4 1993. Photo: Christiante Rodríguez
This article seeks to make visible the ways in which the Internet has disseminated, shaped and constructed the image and discourse of the Zapatistas and especially the indigenous women in the Zapatista movement. Specifically, I shall analyse the "line" of media, spokespeople, voices, resources and strategies that have been involved in the Zapatista struggle for equality. One question emerges vis-a-vis successful examples of the use of computer communications by the Zapatistas: what is the specific place and role of the Internet for Zapatista women in terms of a tool for communication, solidarity and dissemination of the struggle for equality and representation?

The Zapatistas managed to generate a discursive terrain on the Net and "in the flesh" that not only appealed to different ethnic communities but also drew the attention of activists, intellectuals, academics and wide sectors of Mexican civil society interested in the rewriting of social contracts with the inclusion, in their own terms, of diverse marginal sectors. Nevertheless, in August 2001, Congress rejected the San Andrés Accords and approved an alternative proposal for Indian rights and culture that fundamentally erased the capability of Indian communities to govern themselves autonomously, to be considered subjects of public law and to have access to land rights. After this disregard for the San Andrés Accords, the Zapatistas remained silent until January 1, 2003, when more than twenty thousand Zapatistas demonstrated in San Cristóbal de Las Casas, demanding a revocation of the San Andrés Accords. One of the main speakers was Comandante Esther, who has been one of the most visible Zapatista leaders since her appearance before Congress in March 2001. This shows a shift in the forms of Zapatista representation, as they now include Indigenous women in their leadership.

Irreplaceable within the Zapatista struggle was the discourse and form of representation of the Indian struggle created by their main spokesperson, subcomandante Marcos. The immediate, humorous and multi-layered discourse he succeeded in creating was instantly and massively broadcast around the Net. Sites like "La Nota," "Ya Basta, Chiapas!" and "Chiapas!" were immediately created after the uprising to disseminate subcomandante Marcos' communiqués and other events related to the struggle. None of these sites or the many others that were created during the rebellion are official sites of the Zapatistas. They respond to the call made by the Zapatista leadership to create links and bridges between themselves and civil society.
Communication strategies; masks, postscripts and the Internet

Due to the collaborative strategy of both the form of Internet technology and the content provided by subcomandante Marcos' seductive and comprehensive discourse, the Zapatistas' reason for rebellion began to circulate around a huge number of websites and list servers to the extent that we could say that cyberactivism only consolidated in Mexico after the Zapatista uprising. Parallel to the construction of websites, and other forms of cyberactivity, alternative actions (in the flesh) were organized by activists and students in collaboration with the Zapatista leadership.

These activities gathered together a "masked" citizenship, a civil society that either symbolically or practically adopted the alternative uses that the Zapatistas introduced around the "mask." The Zapatistas use the mask as a device that reveals while concealing. By covering their faces, they expose what is a common view in Mexican society with regard to indigenous peoples irrespective of geographical, ethnic or political location: all Indians look alike and are alike. In other words, the mask is a device that "highlights" a prejudice based on racist thinking, which homogenizes all Indians such that every Indian is a suspect, a child, an inferior. Similar to the economy of the "mask," the Internet – a relatively accessible, widely-disseminated communications media – emerged as a vehicle of central significance, a site of circulation of the voice without the body. Racist prejudice against Indian features and "tongues" forced the strategic intervention of three communications devices: a charismatic leader in the form of Marcos, a traditional device, the mask, and a charismatic technology in the form of the Internet. The mask, subcommandante Marcos' "tongue" and the Internet all perform the same tasks: to intercept the body, mask the Indian face and circulate the voice and its demands.

Another important strategy and device emerging in the Zapatista struggle was the use of postscripts. Marcos inaugurated a practice of writing "from below," from a space beneath: the postscript. Posted below many of the communiques delivered to the public; shortly after the inception of the Indian rebellion, the comment is a fragment, a reminder – as are all postscripts. Postscripts are residual thoughts located at the bottom of a letter, in the margins. They refer to what cannot be said in the main body of the text, parodying and reproducing what the main national body cannot signify. As a strategy of representation developed by the Zapatistas, Marcos' postscripts speak not from the main body of the nation but from the margins, from the site of Indian voices. Masks and postscripts are interconnected, and both may be deployed for a similar purpose: to underline what lies below, below the mask, below the letter or below the discourse of modernity in which everybody is supposed to be treated equally by the state. In short, Zapatista cyberactivism recognized and strategically came to exploit the semiotics and ambiguities of masks, postscripts and the Internet.
Zapatista women and use of the internet

Great attention was drawn by the introduction of Indian women's rights and the ways in which their rights were addressed within the San Andrés Accords, since they altered the equilibrium that Indian women hold between modernity and tradition. Indian women guarantee a "dose" of tradition in tongue and body that allows for the transformation of Indian culture without losing traditional practices (such as weaving, cooking and the presence of religious traditional practices) completely.

The collaborative paradigm is further sustained by Indian traditions in which women are especially important in reifying traditional culture. Inside traditional culture, Indian women do not profit from the collaborative and community-based nature of liberation movements. Indian women are generally the bearers of tradition in "tongue" and in body. The way they dress, the way they cook, the native languages they speak, their knowledge of traditional medicine, their adherence to the arranged marriage system — all represent practices that preserve Indian ways of living. These activities make indigenous women the holders of memory and tradition. In consequence, the position of women — both practically and symbolically — has not favoured contact with new technologies. Rather, new technologies to a large degree have appealed to contrary impulses of modernity: mobil-
military and to hold political office, and women's rights to education and healthcare (especially in the area of maternal and reproductive health). These laws represent the emergence of the voice of indigenous women from below. There was an additional right, not specified in these laws but stated repeatedly by Indian women at meetings with other mediators. This right was the "right to rest," to have time "outside" of work time, to have time enough to reflect and to think. The "right to rest" demand was not phrased inside the movement nor was it included in the Revolutionary Law. It was located even lower, below the postscript and below the surface. This is one of the reasons why we rarely have indigenous women in front of the screen learning how to use technologies such as the Internet. There is no time to rest, to learn, to demonstrate online. Below the letter and behind the "face" of the Zapatista movement there have been mainly male Indian faces and male-authored postscripts. Despite the multivocality of the Zapatista mask, behind it stands an Indian man, not an Indian woman.

Websites related to Zapatista women

Below, I review a few of the websites related to Zapatista women. The only one that focuses strictly on women is ZapWomen, an English-language site designed by graduate students of the University of Texas in Austin. It refers specifically to indigenous women in Mexico. Full of references to women's organizations, essays, publications, art, etc., this site has been the most accurate in its presentation of the concerns and demands of Zapatista women. The site is filled with references of all kinds: papers, books, artists' work, photographs, and women organizations (in Chiapas, Mexico and internationally). It also hosts chat rooms. Inside the link "Chiapas and their Women," we find the book Chiapas, and what about the Women?, a very important book written by Rosa Beja, a Mexican journalist, and translated from Spanish. One of the most relevant publications related to the Zapatista rebellion and the role of women, it captures women's testimonies. The site also presents the first CD-Rom project created by Tamara Ford, "The Revolution will be Digitized," with the first imprint of the voices of female commandants. It is important to mention that the Zap Women web page has not been updated since 1999. This means that the cyber attention being given is in decline.

A second site worthy of note is Causasidad Feministas, a site that rallies a call for an end to repression for all women. The call is made by numerous people (and is translated into Spanish), including women activists and authors such as Laurie Anderson, Alice Walker and
Adrienne Rich, and the actresses Susan Sarandon and Jane Fonda, campaigning in support of the cause of Zapatista women. What does it mean, for Zapatista women, that American actresses and public figures speak for them? In what ways does this support their struggle? It is evident that popular figures addressing marginal issues bring into the spotlight that which was previously invisible, but as long as Zapatista women do not have a correlative "subcommandante", their local issues are going to function more to empower other local struggles than to resolve their own problems. Comandante Echevaría is proving to be a worthy representative. Nevertheless she has to resist three prejudices, which work against the efficiency of her leadership inside the nation, the ones that are attached to being poor, being Indian and being a woman. Yet another website, Plataforma de solidaridad con Chichas en Madrid, was created in Spain with a focus on woman and not only Zapatistas. It presents current information not only related to local Zapatista issues but it also links Zapatista discourse to European events addressing marginalized populations, such as the problems Spain is facing through African migration. A gain female specificity slips below the more visible events that lay on the surface. On this site we find a catalogue of photographs that claim to represent visually the Zapatistas’ position on women. However, of 50 images, 8 portray Zapatista women and female activities and scenarios, and 3 show Indian girls. Of the remainder, 17 refer to male scenes, 7 to mixed representations in which female and male appear alike, 11 refer to demonstrations, 7 to views of Zapatista towns. One photograph may stand as paradigmatic of the forms of representation of the actors and voices of the struggle, forms and representations in which women are absent. The image is of a mural with the faces of Zapata, Marcos and Che Guevara 21. This image is the basis of the Zapatista struggle. It is, however, impossible to find a mural in which a Zapatista woman shares representation with such popular leaders and heroes. Zapata, Che Guevara and Marcos continue to be the most popular leaders who may provide platforms of struggle identification for marginal groups and communities. These web pages represent some of the ways in which an international cybercommunity has been “making sense” of indigenous women’s struggle.22 In the words ofGENEVE Gil, creator of the Zap Women site:

My hope is that this can be a space of collaboration and dialogue, even contention, perhaps, in which we may still discover something we may have missed in our attempt to understand what kind of feminism and revolutionary action may or may not be unfolding in the minds and hearts of women in the conflict zone.
The problem is that "women in the conflict zone," need to overcome the barriers of language, military occupation and also the complications that a lack of mediation represents. The intention of the Zapata Women site to understand feminism under Indian women's terms is precisely what is needed, but also what is extremely complex given their circumstances.

Both sites represent the Indian female question such that it can be read as a concerned by a cosmopolitan Euro-American cyber-audience. Websites dedicated to Zapata women are often not updated. They generally recycle the same issues and do not address the current debates and situations that directly impact on Indian and, more precisely, Zapata women. By and large, these web pages are constructed in ways that are more likely to empower the vision of a "Western" modern user from a so-called developed country than to actively struggle for the specific demands of Indian women.

The "right to rest"

Since the Zapata women do not have a strategic media- tor such as subcomandante Marcos devoted to their spe- cific demands and capable of translating and concentrat- ing their political strategies on the Internet, it seems that the centrifugal nature of cyberspace takes over and spreads out a wide range of political resonance related to oppres- sion and globalization. Here, the tenous voices of Indian women largely fall into the more structured discourse of the Zapata movement, this being the fight against racism. Indian women need a more intense, focused and spe- cific mediation than the one provided by subcomandante Marcos, whose media skills are intensively devoted to unpacking racism. It is the conceptual context of the Zapastas is the composing of messages and struggles from below, the deployment of Indian women's post- scripts lays almost untouched. There are the beginnings of the development of Indian women's postscripts in the San Andrés Accords and also inside both the Zapastas military organization and its leadership, but much more is needed. Maybe a first step would be to work through one of the rights, the one that was not phrased inside the Revolutionary Women's Law, the one that lays below: "the right to rest." Not only physical rest, but also a break from the gender-based requirement to carry the "casual- ties" of modernity, traditional languages and traditional practices. Only when the preservation of traditions is disseminated via schools or institutional autonomy will women's bodies and tongues be free to speak out on line, "in line" and off line, beyond their tendency to be the preserve of what is lost due to modern practices. While indigenous legislation, in their own terms, continues to be refused, we are condemning women to remain the foundational preservers of memory and tradition, with reduced opportunities to represent their voices through the flesh or through the Net.

Notes
1 This article was written with the efficient cyber ethnography that my assistant, Lilliana Salgado, has helped me to carry out. I thank her for her work and for the conversations we held in regard to the uses of cyberspace in Mexico by young activist students such as she.
2 The name Zapata is a derivation from the name of the most important peasant and Indian leader during the Mexican Revolution (1910-1921), Emiliano Zapata (1879-1919). For more on Emiliano Zapata and the Zapastas of the nineties, see Lyn Stephen, Zapata Lives: History and Cultural Politics in Southern Mexico, Berkeley: University of California Press, 2002.
3 The San Andrés Accords is the name given to the document on culture and indigenous rights that was negotiated by indigenous and government representatives in order to reform the way in which Indian rights and culture were represented in the national constitution. Negotiations were held from 1994 to 1996. To access the content of the "San Andrés Accords" document see: www.sipaz.org.mx/~florites/FLZ/isisa/isisa-saco.pdf
4 La Nota server has been particularly important in disseminat- ing information regarding the Zapastas' struggle from the beginning. Yo Basta, like all the other sites, is not an official one. It was one of the first sites created after the uprising and has received more than 3 million hits. The page is updated and functions mainly as an information site. See http://www.edln.org. Claparo85 is an Internet "bot" called from other lists on the Internet, such as PeaceNet and others. It
WEAVING TAPESTRIES OF SOLIDARITY WITH VIRTUAL THREAD

INFORMATION AND COMMUNICATION TECHNOLOGIES AT THE SERVICE OF GRASSROOTS INDIGENOUS WOMEN IN BOLIVIA

NIDIA BUSTILLOS RODRIGUEZ
In a conversation held during a survey of OMAK (The Organisation of Aymara Women of Kollasuyo, Bolivia) centre leaders, one of them commented: "When I was a girl, my parents wouldn’t let me go to school. I cried so much, it was my greatest dream to learn to read and write, and look at me now, illiterate and thinking how much more I could have achieved in my life if I had had such an opportunity."

Another leader commented, "Now we let our girls gain an education, and learn more than we were able to..." and yet, with all their limitations, both women are leaders in their respective communities.

OMAK is organised as a network of grassroots women’s centres in eight communities, coordinated from a central office in El Alto (La Paz) in Bolivia. The OMAK centres are located in the mountainous areas of Bolivia, in the Aymara regions, regions that are quite inaccessible due to the scarcity of road and telecommunication infrastructure (www.aymaranet.org).

The situation of the women, young people and children who are involved in OMAK’s work is not an easy one. They form part of one of the poorest and most disadvantaged groups. The fact that they live in rural areas means that these women have few opportunities to gain an education, or to access information and job opportunities. They are isolated and their position on the job market is weak. The women members of OMAK generally cannot read or write. Many are illiterate and those that do have a little education are not able to read Spanish. Many of the women do not dare speak in public for fear of making a fool of themselves. The public environment is more hostile to women than it is to men due to their illiteracy, their lack of public speaking practice, their limited knowledge of Spanish and deliberate intimidation on the part of the men.

One of the most common ways of accessing information in the communities in which the OMAK women work is by word of mouth. The biggest problem the women have is their lack of time for extra activities beyond their daily tasks and, in addition to this, their isolation. They often undertake their domestic chores alone and the only opportunity they have to gain information is when gathering firewood and water, or at fairs and festivals, or through what is told them by friends and family.

**The right to information**

Article 19 of the Universal Declaration of Human Rights recognises the right to freedom of expression as well as the right to receive and impart information. This right is fundamental in a democratic society and essential to the inherent dignity and development of every human being. Access to information is recognised as a prerequisite to empowerment because it plays a critical role in achieving socio-economic and political development, as well as in democracy and human rights. Moreover, the right to information is crucial to the right to freedom of expression and it is necessary for the protection of all other human rights.

To speak of communication indicates that we form part of a society in which knowledge and information now play an essential role. Information and knowledge are now the central themes of social development, even in less-developed countries. And yet, there is nothing more difficult than obtaining information because a monopoly over this continues to be synonymous with power. In developing countries, information is a luxury item or simply a state secret. A lack of information accessible to the majority of the population and available to those working in development at community and district level is the result not only of illiteracy or the lack of a reading habit but also of political intent: to monopolise power, the information has to remain in the hands of a few."
Corruption in Bolivia also involves creating a confusion of information, resulting from the provision of misinformation. A crucial aspect of poverty is the poverty of information. Concealing information means that crimes go unpunished and it is impossible to take decisions. When this happens, responsibility is not taken for actions, democracy is weakened, corruption increases and the freedom and dignity of individuals is violated. In this way, the justiciabilidad, ICC (International and communication technologies) become of utmost importance as they can be used as an instrument of denunciation and monitoring, as well as a tool for social development.

What is the interest of indigenous women in new technologies such as the Internet?

The women members of OMAK have a firm desire to use the possibilities offered by ICT to improve their position, both in their communities and within Bolivian society as a whole. So much so that, once classes began in the EIALO offices, they created a small computer institute, to teach computer packages to their own members initially and then to the general public. Their experience of this way of working is already giving results and, at least in El Alto, the computer centre has proved to be self-sustaining.

The mere fact of attending the courses has opened the eyes of many women leaders. They have realized that their organization can standardise its documentation, that everyone can work on the same documents simultaneously, etc. A survey was carried out among the leaders and this trend was clearly reflected. On being asked whether they would like to learn computer skills, 94% responded in the affirmative, saying that it would enable them to gain training, would help as a means of communication, would help in presenting projects and in teaching their children. Only 6% said they were not interested, because they did not know what it was all about.

A survey undertaken in OMAK showed that the women mainly felt a need for exchange of information on issues such as credit and training possibilities; production and education projects; marketing possibilities; traditional medicine; family planning; information on racism and violence.

The survey furthermore showed that the OMAK women want to pass on the following information to the outside, to their sisters:

- To ask for help in production projects,
- To talk about what is going on in Bolivia,
- To "talk about how they feel",
- To talk about traditional medicine,
- To discuss handicrafts,
- To discuss agriculture,
- To inform about their experiences in OMAK.

Major recommendations

OMAK has been carrying out important work with Ayamara women, training them in the use of computers so that they are able to use word processing packages and the Internet.

In the training centre in El Alto, the women have had to spend an initial period simply familiarizing themselves with the computers, which most of the women had previously only glimpsed from a distance. Now the women have got the possibility of finding work, for example in the public sector, and they have got an extremely important communication tool. The EIALO centre has combined the training of the OMAK women with similar activities for other local people, thus ensuring its self-sustainability.

OMAK is presently embarking on a new ICT education/information programme for women. Prior to the establishment of the programme, research work was carried out by OMAK on important factors to take into consideration. These include:

Addressing poverty

Poverty is not only related to the collective and not only to access to resources but also to political power. So an ability to face up to poverty and reverse the situation requires action on three levels: on a personal level, in order to achieve self-esteem as individuals; on a collective level, to develop processes of solidarity and group hegemony and, finally, to develop negotiation skills with the aim of finding alternatives for emancipation. A methodological proposal is required that will enable women to access information for themselves and to gain ownership of information.

Empowerment

Access to information is a vital element of empowerment, knowing what rights should be questioned along with how to question the general state of affairs and presenting possibilities for solutions. A strategic information plan has to be outlined over the long term with the aim of training trainers.

Another decisive element in the use of ICTs and in constructing interactive material for the empowerment of OMAK women is the Ayamara language. OMAK will do well to use the Ayamara language to develop their information sources. This language is the medium for excellence for empowerment and for the application of oral history.

Participation

Motivation for their empowerment already exists among the OMAK women. In addition to the discrimination and exclusion they suffer, they are also proud to be Ayamara women and they are aware of their capacity for self-management. Nobody knows more about their needs than the women themselves, this is why it is important to ensure their participation (the leaders) in the construction of the
Self-organization
There is a felt need to coordinate work between the centres internally and with external work networks. Indigenous women must develop the capacity to organise themselves around the promotion and use of the appropriate information and communication media.

Networking
OMAK is not in a position to develop multimedia or interactive materials but it can encourage processes to create a body to coordinate and develop such material. There is a need to create a space for development and experimentation with this material, in line with the women’s own interests and with a critical vision that respects their cultures. The development of a network in which the organisations would be in a position to share experiences and materials with each other should be supported because the tasks are too large for one organisation alone to handle.

Advocacy
An ICT programme has to make concerted efforts to influence communication policies and to safeguard the rights of indigenous peoples. For, if not, identity, culture and access to sources will be lost. An ICT project must be used to denounce abuses and violations of the rights of indigenous peoples, women and children and to promote international solidarity.

A new type of education/information programme
In light of the above, OMAK has started an education and information programme for women, which will use the potential of ICTs combined with traditional information methods. The project is called Infotambos for Interactive Training. The word infotambos comes from a combination of INFO – Information and TAMBO – a meeting and rest place for travelers in the Andean world. The result is INFOTAMBO = a common meeting place where educational and informational activities can be carried out. The difference between a normal educational centre and an infotambos lies in the fact that the infotambos will be directly managed by the grassroots indigenous women’s centres in the communities. They will offer educational and informational services for their members and for the wider community.

To organise an infotambos is appropriate to women, it is necessary to have a safe place accessible to the women, where they can work at their own pace and with materials that are appropriate to them. In the actual design of the infotambos, it will be possible to create a space in which, on the one hand, the women from the centres can undertake their production project activities quietly and, on the other, a space they can visit at times suitable to them to, first and foremost, receive sustained literacy training. Time is also a valuable resource, as women have on average only 8 hours a week to devote to any educational activities.

The project will combine these two needs: firstly, that of a space in which to implement women’s production projects and, secondly, a space in which educational/informational activities for the community can be undertaken. The idea of a kind of multi-purpose community centre run by the grassroots women’s organisations has thus begun to take shape. The general idea is to develop processes by which to master ICT in order to improve the quality of life of grassroots indigenous women’s (and youth and children’s) groups. To democratise information and create spaces that enable the development of new proposals for social participation and for the creation of new leadership.

Methodology
A Participatory Action Research approach will be used in the programme. In all activities, 70% of those directly involved will be women. This is because a gender approach focuses not only on women but also on seeking to create an awareness among the men. The issue of gender is an issue of living life equitably and justly. A gender approach will be the focus of the programme’s work. The programme will also have a young people’s approach as young people show the greatest facility for learning ICTs. They will thus become the allies of the grassroots women’s organisations in the use of these technologies. The programme will be based on respect for indigenous knowledge. Local knowledge is of vital importance to the survival of indigenous communities. The use of combined technologies is a serious alternative with which to strengthen the knowledge already existing in the communities, knowledge that risks becoming impoverished. Now more than ever, indigenous people are vulnerable to the way their knowledge is handled by outsiders, particularly in relation to plant knowledge. The holistic nature of indigenous knowledge needs to be borne in mind, and support given to an increased appreciation of women’s knowledge.

The stages of development of the work
A three-year pilot project will initially be implemented, probably in two communities, depending on the financial and staff capacity. After this, expansion will gradually take place, based on local technical teams trained in the communities. It is not possible to give the final number of infotambos at the moment because the women themselves
will need to decide their scope, limits and potential.

In summary:

What do ICTs concretely contribute? The aim of this article is not to defend or justify them per se. However, information and communication technologies do have immense potential (notwithstanding their cost, which is in another matter).

- ICTs can be a key tool in the democratization of information provided, obviously, it is used appropriately, given that "information is power".
- The Internet can enable a cultural reassertion. The dilemma lies in the extent to which new technologies affect the way of life of the peoples. That if one considers that radio and television have brought about a change in communicative behaviour, without delving any deeper than this, it can be said that these two media have influenced changes in people's vision of the world. "Communication media are here to stay and no one can escape their influence, unless you shut yourself up in a dungeon. So, if this is going to happen either way, how much better if we ourselves determine how these media should be used?".
- ICTs have great potential for work in rural areas, precisely because of their capacity for dissemination.
- Perhaps the greatest contribution ICTs can offer to rural areas will be in the area of education.
- The new ICTs can create a new way of thinking, more interactive and less repetitive and passive.
- Relevant information can be channelled to community mobilization and communication. As it has already been noted, ICTs can be used for concrete applications in the distribution of information and training via, among other things, the use of CD-ROMs to overcome illiteracy and for distance learning.

Notwithstanding the immense possibilities of ICTs, they are still only used primarily as instruments of rapid profit by large companies and elite groups when they could also be used in projects/initiatives focusing more on social rather than financial issues, with a high level of integrity and commitment. One step in this direction would be the creation, support and promotion of community spaces for accessing new technologies within the indigenous communities through mutual collaboration and solidarity "from the bottom up". This would involve a new communication model based on respect for ideas and acceptance of members. Once these spaces have been created, the community will be able to exchange and promote alternative practices for their development, community strengthening and improvements in quality of life. A good basis for this is the work of the grassroots women's organizations, which includes work with young people and children. It has been demonstrated that it is possible to promote real development "from within" on the basis of the women's groups, for if you truly want to train new leaders, educating the young people is the best investment.

However, information costs money. You have to consider the programming aspect, database maintenance, etc. The higher the conditions you place in terms of confidentiality and speed of information, the higher the costs of the information system will be. Vital information needs to be managed and distributed appropriately, it is too important to put at other people's disposal or to leave to others to manage and organise, the women themselves have to do this according to their own needs.

So the current trend is a clear one for OMAK's leaders: either the indigenous women decide to take their future into their own hands or they leave it to others to decide for them.

Notes

5. Ibid.
6. Invented word, meaning community and information centre.
7. The initiative to design infokiosks and the research carried out in it actually fact a continuation of work undertaken over several previous years, work that was undertaken on the basis of the Know How Conference, organized by MAV in Amsterdam in 1998 www.iaw.nl/knownhow/doc/and at which the Indigenous Women's Congress was organized, which resulted in the production of a Manifesto. It was also underta ken in the basis of activities at the Beijing +5 www.ox.org/ womenwatch/issue/billion/2000/beijing/5.shtml. To all these reports, the clear importance of indigenous women using ICTs so that they can serve as tools for their development was highlighted. All this was corroborated during the Know How Conference held in Kampala in May 2002. www.iaw.nl/eng/ie/knownhow/Enactement/index.html

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Indigenous women
CARIBBEAN ABORIGINALS ONLINE: DIGITIZED CULTURE, NETWORKED REPRESENTATION

MAXIMILIAN C. FORTE

A view of the Atlantic Ocean from the shore of the village of Friendship in northeastern Trinidad, reputed to have been a village for Caribs. June 16, 1975. Photo: Maximilian C. Forte

Members of the Santa Rosa Carib Community assemble for the Grand Procession through the streets of Arima during the Santa Rosa Festival in August of 2002. Photo: Maximilian C. Forte
Indigenous peoples in the Caribbean archipelago have received scant attention in much of the social scientific literature on the contemporary Caribbean, with some of the dominant assumptions being that they have suffered extinction, or nearly so, or that they have had little impact on the cultural development of the post-1492 Caribbean, or that they have largely been assimilated and have lost their identity. These are not the only problems facing previously under-represented aboriginal descendants in the island territories of the Caribbean. Low incomes, limited political clout and societies with a colonial legacy of prejudice against non-European cultures have all impacted negatively by distorting, marginalizing or simply erasing aboriginality from the modern Caribbean landscape.

Yet, for at least the past twenty years, communities and organizations representing self-identified indigenous peoples in the Caribbean islands have become increasingly active, vocal and visible, receiving new attention from scholars, the media, state institutions and indigenous organizations from outside the region. In 1988, the Caribbean Organization of Indigenous Peoples (COIP) was formed, and by 1992 its membership included Amerindian-descended communities in Dominica, St. Vincent, Trinidad, Guyana, and Belize. In addition, three international gatherings of the region’s indigenous peoples were held in Arima, Trinidad, in 1992, 1993 and 2000, with several other meetings and gatherings taking place in Belize, Dominica and Guyana. Canada’s Assembly of First Nations, the Federation of Saskatchewan Indian Nations, and the Assembly of Manitoba Chiefs have all organized hemispheric conferences or local meetings attended by Caribbean delegates and at which they could meet each other or, in other instances, have helped to establish COIP, sponsored Caribbean American students to study in Canada, or toured the region. The Assembly of Manitoba Chiefs went as far as announcing provisional plans to build an international indigenous assembly in Trinidad itself. Vehicles for wider regional coordination of aboriginal groups have come, thus far, in the form of conferences requiring travel, telephone contact and postal correspondence.

With the advent of the Internet, one can already witness a considerable degree of reversal of the previous neglect, invisibility and distorted representations, along with a certain increase in inter-group communication. The creation of websites, by and for the region’s aboriginal communities and descendants, has helped in emphasizing themes of cultural survival, outline current organizational efforts and practices centred on the revitalization of traditions on a regional level, and they have aided in directly challenging age-old colonial stereotypes of the “cannibalism” of the Caribs, or the “extinction” of the Tainos.

Cyber-activism

Who are some of the main actors, institutions and locales at the centre of online Caribbean aboriginal representation? As it is not quite accurate to claim that Amerindians in Guyana and other mainland territories of the Circum-Caribbean region have long been under-represented – their continued presence never eliciting expressions of surprise or disbelief from sceptical audiences – one shall restrict the focus of this survey to the Santa Rosa Carib Community of Arima, on the island of Trinidad at the southernmost end of the Caribbean archipelago, the Caribs of St. Vincent, the Carib Territory of Dominica, and the revivisal Taino individuals and organizations in Cuba.
Puerto Rico and the Dominican Republic along with their diasporic extensions in the United States.

There is a fairly clear dividing line between those individuals and groups located within the U.S. and those within the region itself. These differences influence both the degree of threat organization and the nature of the organizations, plus the degree of direct access to the Internet as well as knowledge of how to engage the Internet.

Direct and indirect access

There are at least three different situations in which Caribbean aboriginals find themselves, as organizations, and as Internet participants. There are those groups established as territorially-based entities, formalized by law, with their own residential communities and their own official political structures, such as the Caribs of Dominica. These are the groups that are least represented on the Internet. This is most likely due to the socio-economic situations of the given populations, which result in their restricted access to information technology, and possibly also due to their not perceiving the Internet as a valuable or crucial component of their political and cultural practice "on the ground," which may itself be the result of restricted access to, and thus knowledge of, the opportunities afforded by global Internet communication. In those cases where they are represented, it is the result of cyberbrokerage or the independent efforts of others, often not members of the given populations and often situated abroad. In the case of Dominica's Carib Territory, there are at least three key ways in which the Caribs are represented online.

Delphis Ltd. is a Dominican Web design firm that maintains Dominica's sole Internet portal, called "A Virtual Dominica". Delphis also hosts pages on the site of Dominica's most notably pertaining to the Go-Gli Carib Cancer Project of 1997, which involved a much publicized journey from Dominica to the DR, researching Carib communities along the way.

The Dominica Caribs are also featured on a website produced by a Dominican émigré in Canada. A German NGO, Kollinge e.V., describing itself as consisting of "19 interested parties who are committed to the preservation of the culture and traditional knowledge of the last remaining indigenous people of the Caribbean, the Caribs, or, as they call themselves, the Kollinge", also maintains the other major website representing Dominica's Caribs.

Another situation involves those groups that have been recently reorganized, such as Trinidad's Carib Community, which, though it lacks a separate land base or an autonomous political structure, has built upon previous communal bases and achieved a measure of state recognition and support. The Trinidad Carib Community has embarked upon efforts to obtain a greater degree of recognition at national level by reviving and promoting Carib traditions for a wider national audience and by seeking greater exposure and validation through appealing itself with indigenous bodies abroad, including U.S.-based Taínos. Members of Trinidad's Santa Rosa Carib Community currently lack any independent access to information technology or the Internet. Instead, they have attained an online presence as part of my own collaborative cyberbrokerage. Subsequently, they have also achieved online visibility via an independent Trinididian cultural tourism site, Amerindian Trails.

The final situation involves the many Taíno groups based amongst Puerto Ricans in the U.S., whose presence dominates the Internet as far as Caribbean American sites are concerned. Most of these groups were formed in the 1990s and lack an independent, collective hold on resources. They are still very much engaged in the struggle for recognition, not just as organizations but as Taínos, given the predominant perceptions that the Taínos are extinct in Puerto Rico. Unlike the previous two situations, Taíno groups are often distinguished by not being located within their homelands. The dominant feature of these groups is their access to information technology and their active networking on the Internet, a fact that also distinguishes them from their previous categories. In addition, a large majority of these groups have their own websites and thus design and maintain their own websites, or have an exclusive and direct say in what is posted on their behalf. In all cases, what few resources are individuals and organizations engaged with relatively underrepresented self-representation, demonstrating often advanced Internet design and networking skills. For example, the majority of sites are those of the Jaboono Taino Tribal Nation and Bizana.

Digital divisions

The fact remains that there is more information on the Internet about indigenous or aboriginal groups than there is by them. In addition, amongst the indigenous population of the Americas as a whole, there is differential representation on the Internet, with websites from Latin America and the Caribbean far outnumbered by those from Canada and the United States, even though the latter two nations have an indigenous population that is only a fraction of that of South America. This trend suggests that primarily North American representations of aboriginality, and issues and debates peculiar to North America, have become the dominant representations.

Another fact to be aware of is that a larger proportion of Caribbean aboriginal websites have been produced by Caribbean people resident in North America, such as Taíno individuals based in New York. The Caribs of St. Vincent, who are the most numerous of those in serious poverty, do not have a single site on the Internet, and were not the least Caribbean relatives of Belize, many of whom reside in places such as New York, might have been virtually invisible to them at all on the Internet. Guy-
ana, with one of the largest indigenous populations of the Circum-Caribbean, a population up to 500 times larger than that of Trinidad’s Caribs, has only a single website belonging to its Amerindian peoples, an even that is a product of involvement between the Government of Guyana and the United Nations Development Programme.

It is still true, therefore, that in terms of both the number and character of Indigenous Caribbean websites, representability still follows the centre-periphery divide of the world system, or the North-South divide as others have called it. One of the reasons for this is that Caribbean aboriginal groups’ access to the Internet is conditioned by the wider socio-economic context of the societies in which they are situated. In the poorest countries, Internet access is still a luxury to some degree. In addition, we need to take into account the required degree of literacy needed to effectively participate on the Internet, the degree of urbanisation given that services tend to be concentrated in cities, and the degree of disposable income needed to afford private Internet access since information is still treated as a commodity and not as a right. Basic physical infrastructure, such as the number of telephone lines, is also a vital factor, not to mention the impact of topography on the costs of installing communications infrastructure. Recent statistics compiled by the World Bank give us some indication of these tendencies (see Table 1).

On the other hand, even in cases where individuals and groups have no direct access to the Internet, and may even possess limited knowledge as to what the Internet is, this does not mean to say that the Internet has not impacted on them in some shape or form. For example, in the case of members of the Carib Community of Arima, Trinidad, some individuals receive “snail mail downloads” from the Internet: packages of printed Web pages mailed to them from friends overseas. For three years, I personally acted as an e-mail intermediary for one of the members of the Carib Community, so that he could receive messages instantly, and then dictate his responses. In other cases, the Internet may work behind the scenes, amongst academics and activists who plan and coordinate conferences and meetings that, in turn, include those individuals and bodies without Internet access.

**Network representations**

Most websites by and about Caribbean aboriginals stress cultural and biological survival, and the need for wider recognition. Webmasters have been active in networking with other Caribbean and non-Caribbean indigenous websites to gain greater recognition, by reciprocal linking and by participating in various
A number of the cyber-activists associated with Taino websites, in particular, have been successful in lobbying other online information resources and academic specialists with the aim of getting them to modify, correct or withdraw statements consisting of assertions or suggestions of Taino disappearance. Essays by academics, or newspaper articles, are circulated in various discussion lists operated by Caribbean aboriginal sites, inviting debate and discussion within the list, and then pointing to the e-mail address of the original author of the given article so that members of the list can contact him or her and argue that he or she should alter their statements to reflect the reality of continued Taino presence. The results are mixed, of course, but already some information resources, including those with an established offline history and reputation, such as the Encyclopaedia Britannica, have amended their content to acknowledge the survival and presence of contemporary Tainos.

**Prospects**

The prospects for the growth of Caribbean Amerindian participation in the Internet, especially for peoples and individuals located within the region itself, appear dim if circumstances remain unchanged on the ground. Issues such as computer literacy, basic infrastructure and knowledge about the Internet and what it can offer all

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**TABLE 1: COMPARATIVE INTERNET ACCESS & RELATED FACTORS**

<table>
<thead>
<tr>
<th>Country</th>
<th>Gross National Income Per Capita</th>
<th>Adult Literacy</th>
<th>Urban Population</th>
<th>Telephone Lines per 1,000 People</th>
<th>Personal Computers per 1,000 People</th>
<th>Internet Users</th>
<th>Internet Uses as a % of Total Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUERTO RICO</td>
<td>—</td>
<td>93.9%</td>
<td>75.6%</td>
<td>332</td>
<td>400,000</td>
<td>10.0%</td>
<td></td>
</tr>
<tr>
<td>AND TOBAGO</td>
<td>$9,080</td>
<td>94.0%</td>
<td>74.5%</td>
<td>231</td>
<td>100,000</td>
<td>7.69%</td>
<td></td>
</tr>
<tr>
<td>BELIZE</td>
<td>$5,350</td>
<td>93.4%</td>
<td>48.1%</td>
<td>149</td>
<td>15,000</td>
<td>6.00%</td>
<td></td>
</tr>
<tr>
<td>ST. VINCENT</td>
<td>$5,250</td>
<td>55.9%</td>
<td>220</td>
<td>105.8</td>
<td>5,000</td>
<td>2.92%</td>
<td></td>
</tr>
<tr>
<td>DOMINICA</td>
<td>$5,040</td>
<td>71.3%</td>
<td>294</td>
<td>71.3</td>
<td>2,000</td>
<td>2.86%</td>
<td></td>
</tr>
<tr>
<td>DOMINICAN REPUBLIC</td>
<td>$5,870</td>
<td>84.0%</td>
<td>66.6%</td>
<td>105</td>
<td>55,000</td>
<td>0.64%</td>
<td></td>
</tr>
<tr>
<td>CUBA</td>
<td>$3,750</td>
<td>98.6%</td>
<td>38.7%</td>
<td>79</td>
<td>4,000</td>
<td>0.52%</td>
<td></td>
</tr>
<tr>
<td>GUYANA</td>
<td>—</td>
<td>98.6%</td>
<td>36.7%</td>
<td>79</td>
<td>4,000</td>
<td>0.52%</td>
<td></td>
</tr>
<tr>
<td>Latin American &amp; Caribbean Average</td>
<td>$7,070</td>
<td>88.7%</td>
<td>75.8%</td>
<td>148</td>
<td>19,096,000</td>
<td>3.65%</td>
<td></td>
</tr>
<tr>
<td>United States of America</td>
<td>$34,870</td>
<td>77.4%</td>
<td>700</td>
<td>585.2</td>
<td>95,354,000</td>
<td>33.57%</td>
<td></td>
</tr>
</tbody>
</table>
need to be addressed. Local libraries, schools and colleges can of course play a critical role in widening dissemination of computer literacy and providing for direct access. Otherwise, the continued commodification of information, the lack of any rights to access, coupled with eco-

nomic underdevelopment, will continue to enslave the Internet's persisting frontier: The digital divide between information have's and information have-nots. It seems that the only immediate way in which this situation can change for the region's indigenous peoples, who tend to be the poorest sector within their respective nation-states, will be through the generosity and invest-

ment of outside agencies, whether private, not-for-profit, or intergovernmental. If the wider world wants to see these indigenous minorities document, preserve and re-

present their own cultures, from the inside out, then there is little question that significant amounts of external assistance will be required. Ethnographers in particular should find that it is incumbent on them to place as much information online as possible. Indigenous groups shall, perhaps, insist on this form of collaboration and ex-

change, which can only redound to the benefit of both indigenous groups and their researchers.

The Internet, with its diverse multimedia capabilities, ends up being the densest and most compelling medium for preserving and transmitting cultural knowledge across barriers of time and space. In addition, it is an excellent medium for language learning and preservation. Moreover, it can provide venues for wider, international inter-

indigenous networking and coordination. Without sub-

stantial assistance in the form of funds, infrastructure and computer training, these opportunities will largely be lost to Caribbean aboriginals who, for the most part, still remain offline.

Notes


3 Dr. Joseph Palencia, a Carifish ("Black Carib") anthropolo-

gist from Betero was the first chair of COP. He also doc-

umented and analyzed its emergence. See, for example: Pa-

tena, J. (1992) "The Sixthem Toward Self-Discovery Among Caribbeans: Indigenous Peoples" Caribbean Quarterly 38(1-


ples’ Journey Toward Self-Discovery" Cultural Survival Quar-


4 There is, of course, a persisting debate over the geographic definition of what people consider to be the "Caribbean".
NAVAJO CYBER-SOVEREIGNTY

FRANCES VITALI AND JEAN WHITEHORSE

Cyber-sovereignty may be a perspective from which to view the emerging communications technology within the Navajo Nation. Collaborative partnerships at the tribal, state, federal and non-profit levels are advancing the effects of the digital divide on the Navajo Nation. This article addresses some of the specific initiatives and partnerships, along with issues, shaping the design and progress of this Southwest tribal nation in the United States.

The Navajo Nation is an economic, cultural, educational and technological front-runner in terms of building a technological infrastructure that will sustain and promote economic development, ensure educational and community access to modern multi-media computers with high quality software, and preserve language and culture.

The Navajo Nation of today

One need only drive from Window Rock to Tuba City and see satellite dishes next to hoghorns to know that the Navajo Nation is changing.1 Navajo and Dine are interchangeable terms referring to Navajo people, Navajoland or the Navajo Nation.

At present, the Navajo Nation encompasses 25,000 square miles, the land sized of West Virginia, extending through New Mexico, Arizona and Utah, with a resident population of approximately 172,000. The Navajo Nation has a three-branch system of government, consisting of 88 council member delegates who represent the 110 chapter houses, divided into five geographic agencies.2 Contemporary issues facing the Nation share a basic resemblance to those of thirty years ago: sovereignty recognition, economic solvency, misuse of natural resources, tourism, unemployment, health, alcoholism and education. The Navajo Nation recognizes its sovereign and independent status as a state exercising “all governmental powers and authority which [it] does not specifically give up to another nation or government with consent of the Navajo People.”

The Navajo Nation first language is spoken in most homes with a figure of 82 percent. Navajo culture and religion beliefs are still dominant. There still is a lack of resources to provide infrastructure. Examples are, 51 percent of all residents do not have indoor plumbing, 48 percent lack complete kitchen facilities, 54 percent still use wood as their major heating source, with natural gas as a second. 77 percent of the residents at the Navajo Nation do not have telephone service.

Ray Baldwin Louis (personal communication, August 19, 1998) emphasizes that one of the greatest economic development concerns within the Navajo Nation is the protection and preservation of the Diné culture and way of life. In the context of technology, he acknowledges:

The world is all over the reservation now. And we have to, instead of running away from it, we have to use these to our advantage in some way. It is quite a big challenge.

Navajo culture and technology: Digital Diné

Historically, Navajos evolved in their migration through the Four Worlds. In the Fourth World, the Earth Surface People, or Niibaa'á Tsá Diné, were given this name to distinguish them from their ancestors by their five fingers and use of DINÉ. In the shortened 'slang' version of this appellation. The use of these fingers has played an integral part in the history of the Diné to the present day. Digital Diné is a pun and a working metaphor that reflects a persistent association with technology, the current use of communication technologies and historical self-image.

Navajo culture is an amalgam of traditional culture, non-Naavage culture, majority culture, modern education and technology while at the same time preserving its basic cultural heritage. This observation has become accepted common knowledge by Navajo and non-Naavage alike. Historically and culturally, the five finger people, or biłdí' áshį́į́, are technologists.

Navajo storyteller and artist Larry King uses humor to reflect technological changes within Navajo culture:

We do have a lot of problems ... one of the vital issues is a sense of self-esteem. ... The stories I tell do not deal with the classic mythical stories ... [I deal] with new technology and new elements coming into Navajosociety. ... We have to learn whole new ways of doing things and we cope with it through humor.

Navajo historian Bill Acrey claims: "Today, this mixture of traditional culture, modern education and technology is bringing the Navajo Tribe rapidly towards its goals of self-determination and progress without totally destroying their basic cultural heritage."

This interweaving of technology to maintain Navajo traditional epistemology is further explained by Acrey. "This ability to combine the traditional with the new to arrive at a workable solution to their problems attests to the endurance, pride, and strength of the Navajo people."

Technology and culture are inextricably connected. Technology is a part of and not apart from culture. New technology reshapes the culture by creating new contexts and environments, and language evolves from this interaction of culture and technology.

Cyber-sovereignty

In a tri-sovereignty alliance of federal, state and tribal citizenship rights, telecommunications in Navajoland involve Diné cyber-sovereignty, tribal telecommunications and sovereignty issues confounded with state and federal regulatory authority. The emerging technologies on the Navajo Nation are happening within a concert of cooperation, which includes tribal, federal, state and non-profit levels. In 1992, during Navajo Nation President Peterson Zah's administration, the Navajo Nation council members passed a significant piece of legislation relating to information technology:

Mandating the creation of an open information environment among the governmental entities of the Navajo Nation Government, to assign responsibility to parties to coordinate the use and development of computer technology to complete the open information sharing environment.
The Navajo Nation, as a tribal sovereign, is responsible for providing basic, accessible, affordable educational telecommunications services for those who wish to use them. Former Navajo Nation President Kelsey Begaye (1996-2002) made technology and economic development priorities within his administration.11

Infrastructure building

The Navajo Nation local telephone provider, Navajo Communications Company (NCC), invested $56 million in the laying of fiber optics throughout the Navajo Nation thirteen years ago and, in 2001, NCC began providing fee-based Internet services.

Developing the infrastructure of water, sewage, power lines, telephone lines and roads must come before developing any telecommunications infrastructure. The one is contingent upon the other. Technology infrastructure building is realized in economic development potential. The more advanced the telecommunications infrastructure—fiber optic cables, satellite, microwave relays—the more opportunities for economic development. The vicious cycle of a lack of capital to invest in infrastructure building is caused by the lack of capital generated by economic development opportunities.12 Without the infrastructure in place, economic development opportunities will not materialize. Technology is a long-term investment that requires continual updating.

According to Navajo Communications Telephone representative Francis Mike, "only 22.5 percent of homes on the [Navajo] reservation have phones, and 70 percent of those phones are located in seven communities. Those communities are Window Rock, Chinle, Tuba City, Kayenta, Crownpoint and Shiprock."13

Federal level

The 1999 "Assessment of Technology Infrastructure in Native Communities" report revealed a technology infrastructure trend in Native communities that is worsening instead of improving, in many cases because the poor economic base is unable to generate infrastructure investment, and is thus unable to sustain successful economic development.14 A Native American Telecommunications Act of 1997 was introduced in the U.S. House of Representatives to specifically define and implement universal service for Native American communities.15

In 1999, Federal Communications Commission (FCC) public hearings were conducted in New Mexico and Arizona to address obstacles to and issues regarding telephone service in Indian communities. These resulted in two significant Notices of Proposed Rulemaking (NPRM): Promoting Deployment and Subscription in Unserved and Underserved Areas, Including Tribal and Insular Areas and Extending Wireless Telecommunication Services to Tribal Lands.15 These two FCC NPRMs are specifically concerned with alternative ways of solving the underserved, inadequately served and under-served population in Indian country, and of eliciting comments and responses on how to implement effective strategies and solutions.

At the 1999 FCC hearing, Senator Leonard Tsosie reminded the participants that building the infrastructure within tribal communities was a federal trust commitment:

I would argue that extending the Internet services and fiber optics is a federal trust responsibility. Because what you do is... you are going to do health care service through this. You are going to do local service through this. You are going to get legal information through this. And many other things. This is a federal trust responsibility.

If we don't take this federal trust responsibility seriously, nothing will get done. We will contribute to the digital darkness in Native American communities in the next millennium, and along with that, we would contribute to depriving Indian people of their precious rights.16

In March 2000, former President Clinton, in his New Markets Tour from Digital Divide to Digital Opportunity, focused on issues related to the digital divide and encouraged profit and non-profit collaboration in providing telecommunications opportunities to lessen digital inequality. One of the named goals in bridging the digital divide included addressing telecoms issues affecting Native American communities.

Clinton visited the Navajo Nation in Shiprock, New Mexico and conducted a webinar via satellite with two students at Lake Valley Navajo School.17 Following his visit, Clinton reduced the rate of the Lifeline telephone service from a discounted monthly fee of $4.30 to a $1 monthly fee for eligible recipients.18

State level

The New Mexico State Library, through legislative funding, currently provides library development services, Internet connectivity, computer training and technical support to tribal libraries and chapter houses in New Mexico's Apache, Pueblo, and Navajo communities. The New Mexico State Library (NMSL) Tribal Libraries Program began as a legislative initiative of Senator Leonard Tsosie in 1994. The mission of the New Mexico, Tribal Libraries Program is to promote and support access to information for tribal communities in New Mexico, emphasizing use of current and developing communication technologies. Legislative initiatives continue into 2003.

The NMSL Tribal Libraries Program, dedicated to providing library development services to tribal com-
Non-profit Gates Foundation’s NAATP

The Benton Foundation reports that telecommunications and computer technology are "no longer a rarity", and "technology is becoming more common in Native American communities, although many still lack the resources to acquire and use it." The Bill and Melinda Gates Foundation recognizes that tribal communities have unique information needs. The Native American Access to Technology Grant Program (NAATGP) is a 3-year grant project (2000-2003) developed to meet the information and technology needs of local chapter communities on the Navajo Nation in New Mexico and Arizona. In developing the program, Jessica Dorr acknowledged the importance of tribal input in the design.

During the year we developed our grant programs, we also met with American Indian library leaders and others working with tribes and technology to get advice and to gain perspective on how best to design our grant programs. Tribal leaders spoke of their desire to use technology to interest their children in their Native language, and artists described creating art with digital tools and marketing their work through the Internet. Educators expressed interest in culturally appropriate software and online resources. Students wanted the opportunity for quality educational experiences without having to leave their reservations. Patrons hoped for hands-on training at a comfortable pace.

One constant that is shared by both Gates’ Native American Access to Technology Grant Program (NAATGP) and NMSL Tribal Libraries Program is the stipulation that computers must be accessible to the community, for community access is a priority.

Partnerships and advocacy

Partnerships are emerging to assure the effects of the digital darkness on the Navajo Nation. Now, there is no excuse for rural Native American communities not to take advantage of the increasing available opportunities.

Former Navajo Nation President Kelsey Begay reports that, "Our partnership with the Bill and Melinda Gates Foundation is helping to educate Navajo communities. Two years ago, having access to this type of technology was unimaginable. Today, realizing the potential of these new tools, I have to say we are proud to do all we can to advance the Navajo Nation technology project." 25

The Benton Foundation26 indicated that the private sector, an array of non-government entities including non-profits, must be the builder; communities are key to access and learning; government has a critical role as catalyst; and individuals must take charge in the deployment of universal access. The high cost services needed to support rural Native American communities, such as the Navajo Nation, in universal access cannot be driven solely by commercial and profit gains.

Non-profits and state agencies are coming to the rescue trying to equalize the inequitable deployment of telecommunications in Indian Country and Navajoland.27

Conclusion

"We don’t use planting sticks and grinding stones anymore. But I think our ancestors would be proud of the way we’re learning to use the tools of the future."28

This interplay of technology on the Navajo Nation is analogous to the weaving of a Navajo rug. The technology of weaving seems fitting since “da’li” in Navajo literally means “progressing from the ground up” with the thoughts, attitudes and style of the weaver incorporated into the weaving and weaving process.29 Navajo sensibilities, along with partnering and collaboration initiatives from
tribal, state, federal and non-profit levels, are driving communication technology into the hands of DigitalDine
- "Information technology is essential to the future growth and
strengthening of tribal life. Correctly introduced, it can bring significant advantages to tribal financial, social,
political, healthcare and educational systems." 14

Former FCC Office of Communications Business Oppo-
nunities, E. Jensen, concludes:
"Given the risks, challenges, and potential of the com-
munications technology, for the most part, Native American communities have decided it's too important not to have it." 15

The telecommunications landscape has an impact on the
political, economic and cultural dimensions of sover-
eignty for Native Americans and, in this case, the Navajo Nation, as a nation existing as an independent state.
Developing the infrastructure of water, sewage, power
lines, telephone lines and roads precedes developing any
telecommunications infrastructure. The one is contin-
guency on the other. Building the telecommunication is not without the need; it is here, and as part of the
merging of nation, state, federal, profit and non-profit organizations to en-
force economic development within the Navajo Nation.
Recognizing the importance of the new communica-
tion technologies for their people, Navajo tribal leaders
will need to continue to assert tribal cyber-sovereignty and
self-determination when deciding issues of cultural
policymaking concerning; information access, infrastruc-
ture building, cultural resources and cultural tradition.
In so doing, they will ultimately contribute to building an
information and economic infrastructure to work and
communicate as tribal entities with tribal identities.

Notes
policy and the emerging Indian network marketplace. Journal of
Navajo Education 9(2), pp. 47-53.
2 A chapter in a political unit comparable to a municipality or
city hall. Each chapter reflects the community in which it
exists and is, therefore, quite unique. Chapter officials shall
deal with issues of land rights and management, health, education and
welfare for their community, like any city council. Each
chapter has a Council Delegate who represents their chapter's
interests in the Navajo Nation Council. The number of Coun-
cell representatives is determined by the size of the chapter's
voting populate.
3 The Navajo Nation is divided into five areas: Eastern Navajo,
Western Navajo, Fort Defiance, Shiprock and Chinle agencies.
5 Navajo Nation Council Delegate George Arthur at the FCC
public hearing: Overcoming obstacles to telephone service to Indians on reservations. (1999). (NRMF FCC 99-24) Al-
buquerque, NM, January 29. Available at: www.fcc.gov/edtv/Discussions/TeleServe/reservations
land, USA: Wilson Amshill.
7 The emergent and seemingly ever-changing communication
technologies of the Net or Internet and World Wide Web (WWW) are described as a "multi-sensory panoply of non-
linear communication options (text, audio, video, animation, graphics, real time, and virtual reality)." McLellan, H. (1997). Cyberspace song lines: Building trails to learning communi-
8 Azayi, B. (1988). The land and the people: Shiprock, NM: Depart-
ment of Curriculum Materials Development of Central Consolidated School District No. 22, p. 29.
9 Ibid.
10 Navajo Nation Council Resolution, (CIY-34-92) 1992 Open
Information Environment, p. 1.
11 The Navajo Nation Design & Engineering Services (NNDDES) at
http://wwwnndes.org has designed web pages for the 110
local municipal communities referred to as chapter houses on the
Navajo Nation. Kelsey Begaye was the first Navajo presi-
dent to cast his dewetsewa ballot vote via the Internet
12 Evans Craig (Navajo). The Native Digital Divide: A Review of
Online Literature. Available at: www.eoe.hcprc.unm.edu/Community/Reports/NativeDigital-
Divide.html reports that over the past decade the most common
obstacles to integrating technology into Native American com-
unities are: lack of Native American infrastructure de-
vopment, tribal cooperation and collaborative government policies.
13 Watson, Nancy. (20 April 2002). S1 telephone now only for low
14 The Assessment of Technology Infrastructure in Native Com-
conducted by New Mexico State University.
15 The Office of Technology Assessment’s (OTA) Telecommu-
nications Technology in Native Communities report called for
remarkable enthusiasm in telecommunications use by Native Americans. This publication was the first federal report on
American Indian telecommunications representing grassroots
efforts of American Indian activists, advocates and research-
ers who realized the potential, as well as the risks, of the new
communication technologies. Since the OTA’s publication, two follow-up resources, in particular, have built on the work
of their landmark predecessor. Native Nations: Telecommuni-
cations and Information Technology in Indian Country (Casey, Rons, & Warren, 1999), published by the Benton Foundation,
serves as a comprehensive reference work on Native American
telemcommunications and information technology. The Assess-
ment of Technology Infrastructure in Native Communities (1999) was a four-month survey by researchers at New Mexico State
University to determine the problems in infrastructure build-
ing in Indian country.
16 This publication focuses on the trends of the 1995 OTA's Telecommunications Technology and Native Americans. Ca-
17 FCC to Explore Ways to Extend Terrestrial and Satellite Wireless Services to Individuals Living on Tribal Lands. (1999). FCC 99-205. Available at:
26 Ibid.
28 The Benton Foundation specializes in communications pol- icy, public affairs programming and communications capac- ity building for nonprofits. Available at www.benton.org.
29 The Education Technology Improvement Plan Project (ETIP) is an initiative of the Navajo Nation school communities.
30 Microsoft Grant pinpoints the Navajo Education Technology Consortium (NETC). Available at: www.microsoft.com/presspass/features/1999/08- 09.html.
31 American Indian Education: Navajo Education Technology Consortium (NETC) tutorial. Available at: www.laphab.com/NETC.htm.
35 The official Navajo Nation web site is: www.navajo.org
36 Communication technologies are becoming a vehicle for more people to tell their own stories in their own way. Websites, such as Navajoland at: www.redatolas/navajoland
37 navajo.com
38 and Harry Laphab’s Navajo culture resources at: www.laphab.com are recognized not only for their aesthetic layouts but also for their content and how they are establish- ing a virtual community by and for the Navajo community inside and outside of Navajoland.

Frances Vitalli, Ph.D., is an educator and librarian at Lake Valley Navajo School (Bureau of Indian Affairs) on the Navajo Nation. Frances is an adjunct faculty at Diné College Crowpoint and University of New Mexico-Gallup. She wrote her dissertation, "Navajo Cyber Sovereignty: Digital Diet Wearing the WorldWide Web into oral Culture" (Emporia State University, 2002), as a case study of the emerging communication technologies in the Lake Valley community. Mailing address: Frances Vitalli, P.O. Box 3528 Farmington, NM 87409, USA.

Jean Whitehorse is currently the New Mexico State Library Tribal Libraries Outreach and Training Center Coordinator. As a former member of the American Indian Museum (AIM), she remains actively involved in political, legal, and telecommunications issues locally, statewide, and nationally. Jean is also the secretary for the Navajo Code Talkers Association representing her father, who was a code talker during WWII. Jean is also a storyteller who shares traditional Navajo stories during the winter storytelling months.
The Sámi people live in four countries: Norway, Sweden, Finland and Russia. It is a vast area, in which distances are long. Most Sámi people live in the centre of this big area and fewer in the outer parts. A lot of Sámi people have moved to areas outside the traditional Sámi area. There are no precise figures on the total Sámi population; however, some estimates say around 80,000. For the Sámi people, there are no borders. The Sámi Cooperative statement in the Sámi political program of 1986 says:

"We, the Sámi, are one people, united in our own culture, language and history, living in areas which, since time immemorial and up to historical times, we alone inhabited and utilized."

**Importance of a communications network**

It is a very important process to build up a communications network for the Sámi people. Network thinking is not new for the Sámi people. However, now they have electronic tools to keep in contact with each other from far distances. This makes the Sámi cause stronger, and Sámi people can discuss things with each other, and strengthen the bonds between them. At the same time, it is important that people working on Sámi-related issues have the possibility of being a part of this network. These may, for instance, be people working in state governments and so on. For example, Sámi organizations and parliaments can use SameNet for member information and as their own intranet. SameNet is a good tool for Sámi democracy, because every SameNet user can ask questions and discuss things. SameNet is often the first step into the Sámi world for people looking for Sámi identity. In a short space of time, SameNet has become one of the most important Sámi media.

**The Sámi Educational Centre**

The communications network “SameNet” is hosted by the Sámi Educational Centre, which is a school situated in the centre of Sápmi, in a beautiful place called Jokkmokk, in the Lule Sámi area of Sweden. To the north of Jokkmokk is the north Sámi area, and south of Jokkmokk is the south Sámi area. There are differences in language, clothes and so on. A south Sámi can have trouble understanding a north Sámi.

Often, the school has students from all four countries in the Sámi area, and offers education in Sámi culture, languages, handicraft and Sámi occupations such as reindeer herding. The target group is the adult Sámi population.

The school was started in 1942 and several of the Swedish Sámi organizations were initiated at this school by students and teachers. The school has played and continues to play an important role in Sámi society, although the school is trying to find its specific role in modern times.

**Background to the SameNet**

Some years ago, the school had some problems. There were few students, partly due to the fact that the target groups live in such a vast geographical area. The school had limited Sámi educational material, it was slow at using modern IT and so on. There was a great need for further development.

With funding from the E.U., the school initiated a big IT project in 1998. The school needed a communications tool, and it built up the SameNet, which will be further described below.

The school made big investments in IT, computers, a network and so on, and promoted the education of teachers in new education methods and IT. In the autumn of 1999, the school started experimenting with long-distance education, and the candidates to the school increased.

Together with other collaborative partners, the school started the Sámiasta project, which is a Lule Sámi language project. The project has produced books, radio programmes and a large web page.

Another big IT project hosted by the school is the @stahppa project, which includes management and development of the SameNet. The project comes from the Sámi words astahp and oahppa. Astahp means “time” and oahppa “learning”. This implies that the students can study across far distances when they have the time and opportunity.

SameNet was started by the Swedish Sámi Organisation (SSR) in 1997. SSR wanted to have a communication system with their members, the Sámi reindeer villages and Sámi associations. In 1998, SameNet had 300 mem-
bers. It was at this time that the Sámi Educational Centre was looking for a communication system, and SSR and the school agreed that the school should continue the development of SameNet, and take over responsibility for it. This proved to be very good for the school.

The nature of SameNet

The aim of SameNet is that every Sámi organisation, school, museum, media and private person should be connected to SameNet. There are no borders in SameNet. Sápmi has no borders so why should SameNet have any? SameNet can be perceived as a Sámi intranet with opportun-
tunities for education, information and communication. Today, SameNet has increased to over 5,000 users compared to the 300 users in 1998.

In the spring of 2001, the project leaders of SameNet travelled around the Sámi area on the Finnish, Swedish and Norwegian sides. The purpose was to visit secretariats, schools and museums to inform them about SameNet. They were not able to visit the Russian side at that time. The team visited 44 secretariats and they were received very well. It is hoped that this trip will help make SameNet even more widely known and used. The team learned about a lot of Sámi organisations, strengthened the network, and made SameNet even more well-known. A lot of important users signed up.

SameNet is based on the Canadian First Class system. You use e-mail and conferences to communicate. Conferences are public mailbox boxes with certain purposes. First Class is a very good two-way communication tool. It is easy to use, and the system has the capacity for several hundred users at the same time.

The web address is www.same.net. The page is mainly in Swedish but there will be more information in English soon. SameNet has a lot of Sámi web links, an online manual and a great deal of information. The SameNet users can publish information directly on the web page. You can log into the system and read your email, partici-
pate in conferences and chats and so on. The web page is continuously being developed.

The main SameNet conferences include: Culture, Media, Organisations, Sámi Parliament, Education, Reindeer Matters, Calendar, News, Vacancies, Addresses, Discussions and Network Conference.

The users get an email address, calendars, chats, space for a homepage, access to a great deal of information, debates, conferences for many purposes and so on. The system is easy to use for beginners. The users can build up their own network or intranet in the system. You can easily search for people and names in the system. You do not need to know their email address if they are registered users.

SameNet is the virtual Sápmi, a joint Nordic meeting place run by the Sámi and founded on fundamental Sámi values. Since the start, in 1997, SameNet has grown from 0 users to over 5,500 users. This indicates an immense need for a network area to keep in contact. SameNet fills a long-felt need. It is a Sámi right to get a personal email address. It is also important that a Sámi network is operated by Sámi people, and that SameNet is based on Sámi values. There is great symbolic importance in the fact that the server is placed within the facilities of a Sámi institution. SameNet is important in breaking down the borders across the Sámi area. The layout, domain name and so on show a Sápmi without borders.

In a short space of time, SameNet has become an important complement to Sámi newspapers, radio and TV. The other Sámi media is one-way communication, in contrast to SameNet, which is a pronounced two-way communication media. Every user can publish information, and this leads to very rapid communication, faster than radio, TV or newspapers. When great Sámi events occur, there is a need to debate and write about them. SameNet serves its purpose in Sámi democracy.

For children and young people, SameNet is a safe place to be in. No user can be anonymous. The youth meet others who are in the same situation as they are. This is particularly important for Sámi youth in bigger cities and towns, where it is difficult to meet other Sámi people. This strengthens their Sámi identity.

For people looking for their Sámi identity, SameNet is often the first step into the Sámi world. This is a big network area to keep in contact with SameNet at the same time. SameNet facilitates contacts for employment in county administrations, local authorities, departments, as researchers, journalists and so on. At present, SameNet is financed by EU project resources. The problem will be once this project period comes to an end. Who should then pay for this? The Sámi Education Centre is trying to increase their state-financed budget to include SameNet.

We warmly recommend other indigenous peoples to build up their own network. It is a lot of work to build one up, to find local dedicated people, to produce courses and to develop. But when you see the many resulting meetings and processes, it is worth the price!

Web links and contact information

SameNet - www.same.net
Demo - www.sapmi.net/demo/index.htm
Pictures from presentation - www.sapmi.net/sajte/bilder.

Henrik Michael Kahlmann is the leader of the project of which SameNet is a part. At the moment he is acting headmaster of the Sámi Educational Centre in Jokkmokk, where the SameNet is hosted. He is a trained teacher, and is interested in new education, methods, communication and IT. Henrik Michael Kahlmann can be contacted at: hmk@sam.net

46 helpdesk@ghn.114

[Image 38x445 to 612x1201]
IWGIA’s aims and activities

The International Work Group for Indigenous Affairs - IWGIA - is a non-profit, politically independent, international membership organisation.

IWGIA co-operates with indigenous peoples all over the world and supports their struggle for human rights and self-determination, their right to control of land and resources, their cultural integrity, and their right to development. The aim of IWGIA is to defend and endorse the rights of indigenous peoples in accordance with their own efforts and desires. An important goal is to give indigenous peoples the possibility of organizing themselves and to open up channels for indigenous peoples’ own organizations to claim their rights.

IWGIA works at local, regional and international levels to further the understanding and knowledge of, and the involvement in, the cause of indigenous peoples.

The activities of IWGIA include: publications, international human rights work, networking, conferences, campaigns and projects.

For more information about IWGIA’s activities, please check our website at: www.iwgia.org

Publications

IWGIA publishes a yearbook, *The Indigenous World/El Mundo Indígena* and a quarterly journal *Indigenous Affairs/Asuntos Indígenas*. Furthermore, a number of books thematically focusing on indigenous issues are published each year.

Suggestions for and contributions to IWGIA’s publications are welcome and should be submitted to the editors in charge.

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