

NATIVES ON THE ELECTRONIC FRONTIER: TECHNOLOGY AND CULTURAL
CHANGE ON THE CHEYENNE RIVER SIOUX RESERVATION

By

STEVEN MIZRACH

A DISSERTATION PRESENTED TO THE GRADUATE SCHOOL
OF THE UNIVERSITY OF FLORIDA IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY

UNIVERSITY OF FLORIDA

1999

Copyright 1999

by

Steven Mizrach

Dedicated to the Cheyenne River Sioux Tribe:
You taught me the meaning of the phrase "All My Relations"

ACKNOWLEDGMENTS

I would like to thank my committee members - Dr. Allan Burns, Dr. H. "Russ" Bernard, Dr. Norman Markel, Dr. John Moore, and Dr. Gregory Ulmer - for their advice and suggestions. Other UF faculty - including Dr. Susan Milbrath, Dr. Ricardo Godoy, and Dr. Jim Stansbury - also offered some input. The Electronic Intermedia Lab and Dr. Will Pappenheimer helped me to prepare the video portions of this research. I also would like to thank my friends and colleagues, George Mbeh, Michael McGinnes, Ken Sturrock, Brad Biglow, Tony Hebert, and Rebecca Gearhart for ideas and assistance. I also got some good feedback from CASTAC members such as Ron Eglash and Stefan Helmreich at the AAA meetings. And I especially want to thank Jim Picotte and the staff of the HVJ Lakota Cultural Center for making all this possible and constantly trying to keep me on the right path. Lastly, I cannot forget my family, especially my mother, father, brothers, and nephews, for offering me the material and emotional support I needed to survive in a new and novel situation.

TABLE OF CONTENTS

ACKNOWLEDGMENTS iv

LIST OF TABLES vii

LIST OF FIGURES viii

ABSTRACT x

CHAPTERS

1. INTRODUCTION AND SETTING 1

 Research Question..... 4

 Field Site..... 5

 The Cheyenne River Sioux Reservation 5

 CRST Telephone Authority 12

 The Harry V. Johnston Lakota Cultural Center 17

 Outline for the Dissertation..... 23

2. LITERATURE REVIEW 26

 Luddites and Others: Technology and Its Critics..... 26

 The Indigenous "Noble Savage" as a Trope 30

 Jerry Mander: There's Nothing Sacred about TV 33

 Steel Axes for Stone Age People..... 37

 The Effects of Television in Western Societies..... 42

 Toronto School-based Theories 47

 Non-Content Based Theories: TV as Cultural Artefact .. 52

 Previous Studies of TV in Non-Western Cultures..... 54

 Survey Articles 55

 Studies by Communications Researchers 62

 Studies by Anthropologists 66

 Toronto School Media Research in Anthropology..... 76

 Western and Electronic Frontiers..... 79

 Are Natives Ready for the Electronic Frontier?..... 84

 The Ideas of Indigenous Intellectual Duke Redbird 85

 The Internet and Indigenous People 89

 Native Ethnomathematics: To Compute is Human 93

 Examples of Indigenous Television and Media Production.. 97

 The Invention of Television in Aboriginal Australia .. 97

 Native Radio Broadcasting in the United States 102

 Inuit Satellite Broadcasting in Canada 106

 Indigenous Filmmaking and Videography 109

 Native Internet and Multimedia Projects 117

 Summary..... 121

3. THEORY AND METHODS 123

 Theoretical Perspectives..... 123

 Intra-Social Theories of Media Effects 123

 Cultural Imperialism Theory 127

 Technological Determinism Theory 139

Social Determinism Theory	147
Structure and Agency in Social Systems.....	159
Technology and Agency.....	162
First, Second, and Third Wave Civilization.....	166
What is Globalization and Why Worry?.....	174
Deconstructing Technology, Culture, and Nature.....	182
The Historical Processes of Culturicide and Renewal....	186
Ethnic Resistance and Renewal.....	190
Methods.....	195
The Seven Lakota W's	199
A Note on Quotes	205
 4. FINDINGS, RESULTS, AND OBSERVATIONS	 206
Survey Findings.....	206
Content Analysis of Oral Histories.....	212
Technology and Cultural Conflict among the Lakota.....	219
Lakota Acculturation: Observations.....	237
The Preservation of Cultural Characteristics	243
Performance and Public Culture.....	251
Curious Encounters with Technology among the Lakota....	264
The Tribal Bison Cooperative Project	265
Webbing up the Tribe	273
Institutions of Cultural Revival and Resistance.....	277
Lakota: Land of Survivors.....	299
 5. APPLIED MATTERS	 304
Applied Anthropologists and Natives.....	304
Some Basic Facts about Native Americans in the U.S.....	312
Applied Activities on the CRST Reservation.....	313
The New World Information and Communication Order.....	321
Indigenous Knowledge and Intellectual Property.....	329
Indigenous Emerging Media as Intellectual Property.....	337
Native Americans and Telecommunication.....	343
Optimistic vs. Pessimistic Scenarios	344
Ways in Which Technology can Assist Native Cultures .	345
Information Technology and Economic Development.....	351
Technology and Indigenous Identity.....	370
 6. CONCLUSIONS AND DISCUSSION	 378
Technology and Acculturation	380
Technology and Cultural Revival	383
Local Control over Technology	387
Technology and Agency Theory	390
Applied Anthropologists as Technology Brokers	393
Future Studies.....	396
 REFERENCES	 401
 BIOGRAPHICAL SKETCH	 426

LIST OF TABLES

TABLE 1. The Toronto School and the phases of communication technology evolution	49
TABLE 2. Discontinuities between the industrial and post-industrial modes of production	168
TABLE 3. R-Scores (Pearson's coefficient of correlation) between variables representing television and acculturation	207
TABLE 4. Types of shows most frequently watched.	209
TABLE 5. Linear regression analysis: technology score compared to other variables	211
TABLE 6. R-scores of correlation between technology scores and indices of acculturation	211
TABLE 7. Most frequently used Internet services	211
TABLE 8. Internet users and phone lines by region	323
TABLE 9. Cultural commodity exports in developed and underdeveloped countries - worldwide percentage of exports in various categories	323
TABLE 10. Phones, TVs, and computers per capita in selected countries from the First and Third world	324
TABLE 11. Data from the PANOS Institute study on "the Internet and the South"	324
TABLE 12. Global teledensity	325

LIST OF FIGURES

Figure 1. The four bands of the CRST	7
Figure 2. Arvol Looking Horse	10
Figure 3. The Indian myths of Devil's Tower	11
Figure 4. The HVJ Lakota Cultural Center	17
Figure 5. HVJLCC: cultural education and preservation	18
Figure 6. 25 th Anniversary Mug	21
Figure 7. Wakpa Waste on KLND radio	22
Figure 8. Cultural center videos for Wolakota Project	23
Figure 9. KILI Radio	103
Figure 10. Linear model of technological determinism	162
Figure 11. Cybernetic model of technology and culture	163
Figure 12. Global Distribution of Internet Users	174
Figure 13. The Seven W's	200
Figure 14. Qualitative Analysis of Relationships	219
Figure 15. Mural of the Sun Dance	222
Figure 16. Funeral ceremony for Sidney Keith	224
Figure 17. There are always plenty of cameras at powwows .	227
Figure 18. Oglala Tribal Powwow dancer	229
Figure 19. Lakota Concepts - an instructional video series	233
Figure 20. The image of the traditional Lakota warrior ...	238
Figure 21. Evangelical tent revival	247
Figure 22. C-EB Lakota artist mural	248
Figure 23. Star quilt adorning car	249
Figure 24. Black Hills powwow - electronic sponsor board .	251
Figure 25. CRST Labor Day Rodeo opening ceremony	252
Figure 26. CRST Labor Day Powwow, Fair, and Rodeo	253
Figure 27. Powwow drum group	254
Figure 28. Powwow vendors	256
Figure 29. Don't mix tradition with addiction	257
Figure 30. Powwows and technology	259
Figure 31. Pte He Kca, Inc. - mobile slaughterhouse	265
Figure 32. Bringing a bison to slaughter	266
Figure 33. Processing the bison	268
Figure 34. Kultur-Komfort-Funktion	271
Figure 35. Getting it all on video	272
Figure 36. The C-EB Adult Art Education	277
Figure 37. Wounded Knee mural	279
Figure 38. District 4 meeting	283
Figure 39. Colorful flags at Bear Butte	286
Figure 40. Looking for elders to teach youth	294
Figure 41. Veterans as modern warrior figures	297
Figure 42. Lakota Land of Survivors: poster	300
Figure 43. "Rez Car" - self-deprecatational humor	312
Figure 44. Cultural center computer station	316

Figure 45. Internet Hosts Worldwide	328
Figure 46. Cool Runnings - Indian-owned and operated	331
Figure 47. The Crazy Horse monument	339
Figure 48. Starting Tribally owned businesses (SBA)	351
Figure 49. CRST Bingo	357
Figure 50. Okaton, SD. Ghost town	359
Figure 51. Never stop questioning	400

Abstract of Dissertation Presented to the Graduate School
of the University of Florida in Partial Fulfillment of the
Requirements for the Degree of Doctor of Philosophy

NATIVES ON THE ELECTRONIC FRONTIER: TECHNOLOGY AND CULTURAL
CHANGE ON THE CHEYENNE RIVER SIOUX RESERVATION

By

Steven Mizrach

August, 1999

Chair: Allan Burns
Major Department: Anthropology

This dissertation examines the relationship between technology and cultural change on the Cheyenne River Sioux Reservation in South Dakota, home to 7000 Lakota Indians. Recently, a number of popular authors have suggested that technology, especially electronic or 'emerging' media technologies such as television and the Internet, is a primary causative force for acculturation among indigenous people. This study challenges the role often assigned to technology in the process of acculturation, and shows the ways in which media technology may be promoting the opposite phenomenon, cultural revitalization, among indigenous groups. It also offers a vision for the role of applied anthropology among Native Americans in the future.

CHAPTER 1
INTRODUCTION AND SETTING

Introduction

The research question posed in this dissertation is one that has been asked from a number of different perspectives in different disciplines. What happens when indigenous groups adopt new technologies from European or Western cultures? Are they assimilated to our culture by the technology? Many anthropologists today accept the implicit assumptions of a technological assimilation process without even realizing it. It is a common concern found among many anthropologists that Western industrialism and/or capitalism -- the modern world-system, in other terms -- is slowly diffusing throughout the globe and consuming indigenous societies in its wake. It is stated that this system is creating a homogenous monoculture which is replacing human diversity with human conformity, replacing the panoply of human languages, economic systems, cultural values, and lifeways with one least common denominator which looks mostly like U.S./North American modes of consumption and production. Again, the implicit assumption, at least with regard to technology, is that, given Western technologies, indigenous

people will take on Western cultural attributes. There is no doubt that a good deal of change is occurring around the globe, but is technology a primary cause?

The ways in which technologies are created, distributed, and adopted in a culture are cultural processes. The decisions about which technologies to employ and which ones to reject are cultural decisions, rooted in cultural values. Thus, we can find in numerous cases that a particular technology is used in one way in a given culture, and then used completely differently in another. So, to say that technology produces inevitable social change (or cultural destruction), without acknowledging that social forces drive and direct technological change and technological adoption, is a one-sided picture. The technologies focused on in this study, television, the personal computer, and the Internet, are interesting examples of this bilateral process. How these technologies are used in both Western and indigenous societies seems to demonstrate this. Before we can determine their socio-cultural effects, we have to know to what uses they are being put, and how indigenous cultures adapt them to their local needs and situations.

As a case study of emerging media technology effects, this dissertation examines these processes on the Cheyenne River Sioux Reservation in South Dakota, home to four bands of Lakota people. The Lakota people have always been an adaptable and open society. Like many native cultures they often used European inventions to reinforce certain lifeways,

or, perhaps, expand into new ones which increase their prosperity and power. For the Lakota, it was always believed that they should take the best of what the white man had to offer, while turning away the worst. Although the worst (alcohol, germs, processed foods, etc.) took their severe toll nonetheless, the best (firearms, horses, saddles) were used by the Lakota to build a grand empire in the Dakotas, stretching across several states. The white people's technology in the late 18th century and early 19th century helped them attain a golden age, where they could hunt bison more efficiently and subdue many of their traditional territorial rivals. A similar process may be occurring in the late 20th century. The Lakota may be taking the technologies of the Information Age and using them to create a second cultural renaissance.

The dying Lakota language is beginning to revive, as various educators strive to give it a more permanent written or electronic form. The oral traditions and oral histories, almost lost and forgotten, are beginning to be stored on video tape. Historical trends suggest that the first reaction when indigenous societies are confronted with alien colonizers is to form ethnic revitalization movements which are often apocalyptic, eschatological, and messianic in nature. When these movements fail (as they often do), these societies then usually turn to a secondary and more limited response of "cultural resistance." Rather than directly confront or repulse the colonizing society, they turn to more

local efforts to preserve their autonomy, language, and culture. This is what the Lakota people on the Cheyenne River Sioux reservation are doing today, and it is a pattern that can be seen on many reservations throughout North America.

One of the technologies most often blamed for bringing about the cultural disintegration of indigenous societies is "television." Yet, this very same technology, in the guise of "video," is also apparently helping bring about the cultural renaissance that some visual anthropologists have described. The problem is that these are the very same technology, but viewed from different lenses. Does television cause acculturation of indigenous people? Can the "stepchild" of television, video, be promoting the reverse phenomenon (cultural revitalization)? Could there be intermediate variables that determine what influences technology has on a culture? These are but some of the questions this study will try to address.

Research Question

Normally, in a research study, the researcher will state the hypothesis and what evidence they will use to support it. However, the primary goal of this dissertation is to falsify a hypothesis. The hypothesis is one suggested by work by people such as Jerry Mander (in the popular arena) and Lauriston Sharp. Briefly, this hypothesis is that *technology causes the acculturation and cultural dissolution*

of indigenous groups. In this study, I hope to present a case, that of the CRST Lakota, which falsifies this proposition. Since this is not a cross-cultural study or a comparative one, I cannot say with certainty that the proposition is not true elsewhere. However, in my literature review, I suggest that what is occurring on the CRST reservation is also occurring elsewhere.

Since technology does not appear to contribute to acculturation in this case and others, it's worthwhile to understand why. A secondary goal of this dissertation is to offer observations on how technology may contribute to the *opposite* phenomenon, what could be called "cultural revitalization" of indigenous groups. Findings from the CRST reservation will be presented to show that technology today may be a necessary, although not sufficient, condition for cultural resistance, survival, and revival. Since this study also aims to contribute to applied anthropology, the implications of these findings for applied work on Indian reservations are also suggested.

Field Site

[The Cheyenne River Sioux Reservation](#)

In South Dakota, there are eight Sioux Indian reservations: Yankton, Cheyenne River, Standing Rock, Rosebud, Pine Ridge, Lower Brule, Sisseton-Wahpeton, and Crow Creek. Some of the Indians on these reservations are Dakota

or Nakota Sioux. Most on the western Indian reservations are Lakota (sometimes referred to as "Teton Sioux"), a word in the Lakota language which simply means a "society of friends." (The Lakota, Dakota, and Nakota can be considered to be of the same ethnic and linguistic family, and collectively comprised "The Sioux" who met in seven council fires each summer.) The Lakota, who were themselves one-seventh of the Sioux 'council fires' each summer, consisted of seven bands -- four of whom were settled on the Cheyenne River Reservation in 1889: the Mnicojou (Water Planters), the Sihasapa (Black Feet), the Oohenumpa (Two Kettles), and the Itzazipco (Sans Arc) (see Figure 1). For this reason, the Cheyenne River Sioux Tribal (CRST) Reservation is also known as the Four Bands Reservation. In the 1950s, the Indian Agency for Cheyenne River Reservation was moved from the western boundary of the river to Eagle Butte, due to the flooding of that area from the construction of the Oahe Dam. Today, Eagle Butte is the location of the BIA building and tribal administration headquarters, as well as the HVJ Lakota Cultural Center, the Cheyenne River Community College, and the CRST Telephone Authority.



Figure 1. The four bands of the CRST

State sources indicate the Indian reservations in South Dakota cover somewhere around 5 million acres, around 10 percent of the total acreage of the state. However, only around 70,000 Sioux live in South Dakota, and Indians (including non-Sioux tribes) make up only 7.3 percent of the population. (Still, this figure is thought to be three times the Indian population of the state in 1790.) There are 9 tribal governments (one, the Flandreau Santee Council, has no reservation proper, and of the 8 who have reservations, only 6 have firmly demarcated boundaries - Sisseton-Wahpeton and Yankton Sioux do not.) The South Dakota state government declared a Year of Reconciliation between the state's Indian and white residents in 1990, and a Century of Reconciliation in 1991. However, many Indians do not like or trust the

current South Dakota governor (Janklow) (many believe him to be an anti-Indian bigot) and are skeptical of this reconciliation. The partnership between the state government and the Indian population is thought to be based mostly on mutual interest in drawing tourists to the state, which is one of the least populous in the U.S. (Since 1970, South Dakota has been losing population, adduced by the fact that it has only 1 House representative and numerous abandoned ghost towns.)

According to the 1990 census, the CRST reservation covers about 1.4 million acres, and had 8000 people (today I am told the figure is closer to 9000). The CRST reservation is the 2nd largest in the state, and combined with the territory of Standing Rock Rez, it covers an area larger than the state of Delaware. This means an average of about 175 acres of land per resident. There were 5100 Indian residents and 2600 non-Indian residents; of the Indian residents, approximately 4000 were tribally enrolled Cheyenne River Sioux, and 1000 were either Sioux of other reservations or other tribes (including Cheyenne and Mandan Indians.) The 1990 census also indicated that Eagle Butte had a population of 2,650 people (of which only 478 lived within incorporated city limits, and 360 were white, and 1,483 were over the age of 18.) The 1996 taxable valuation of all the agricultural and non-agricultural land on the reservation was \$73,584,000. Unemployment figures vary depending on whether you count temporary and informal sector employment, but in 1990 they

were around 60-70 percent. Although all Indians receive varying kinds of treaty and tribal trust benefits, somewhere around 40 percent were also on welfare (AFDC) and other kinds of government assistance. The major employer in the area is the CRST Tribe itself.

The Cheyenne River Reservation is also the home to Green Grass, which is the town where the Sacred Buffalo Calf Pipe of the Sioux Nation is kept. (It is enclosed in a medicine bundle and few people have ever actually seen or handled it. So there are many interesting legends about it. One person also told me, although I never heard this verified, that for some reason it is also kept in the bundle with a woman's ear.) According to oral tradition, the Pipe was given to the Lakota people by the White Buffalo Calf Woman, and represents in concrete form their covenant with *Wakan Tanka* and their promise to keep the laws and principles given by the Woman. If they follow the ways of the Pipe, their nation will be preserved. The current Keeper of the Pipe, Arvol Looking Horse, lives in Green Grass along with his family, and each year a major Sun Dance is performed in Green Grass because of its importance. He annually sponsors a Sacred Pipestone Run in Pipestone, Minnesota to protest the desecration of the area from whence comes the red mineral from which all Lakota pipes are made and has been invited to many pan-Indian religious gatherings.



Figure 2. Arvol Looking Horse

Adjacent and to the north of the reservation is Standing Rock Reservation (part of which is in North Dakota). The southern boundary is the Cheyenne River, the eastern the Missouri River, and the western is essentially I-73. To the south is I-90 and south of that are the Badlands and the Rosebud Reservation; to the southeast is the South Dakota capital of Pierre; and to the west are the Black Hills, Rapid City (about 3 hours drive away), and the sacred mountains of Bear Butte and Devil's Tower. The major highways crisscrossing the reservation are Route 63, which runs north-south, and Route 212, which runs East-West. All the other roads on the reservation other than these two paved two-lane highways are dirt and gravel roads. Other major towns on the reservation include Iron Lightning, Cherry Creek, Dupree,

Timber Lake, Isabel, and Whitehorse, each of which have fewer than 500 residents. It is divided into 10 tribal districts, which elect the 15 representatives of the tribal council (some districts are multi-member). Geographically, the area is somewhat hilly but mostly flat with not a lot of trees or large vegetation. Climactically, the area has hot, humid summers with a lot of mosquitos and cold, dry winters which can reach 50 degrees Farenheit below zero (and lower). Most farmers grow sunflowers or wheat, and are active in ranching (mostly cattle).



Figure 3. The Indian myths of Devil's Tower (source: Devil's Tower National Park Museum graphic)

Figures seem to vary, but most estimate only around 30 percent of the Indian population is fluent in, and can

read and write, the Lakota language. Most of the white families settled on the reservation in the 1910s and 1920s, being allowed to settle the unallotted lands that resulted from the Dawes Act. Many of the surnames in the area are French (Dupris, LeBeaux, Garreau, etc.) demonstrating the large impact of (and intermarriage with) the French fur traders in the area in the 1800s. There are a number of active churches in the area, including the Catholic, Mormon, and Presbyterian Churches. However, while people identify themselves with one denomination or another, almost all practice at least some elements of the traditional Lakota religion as well. The reservation is of great interest to paleontologists as well as anthropologists because a nearly intact *Tyrannosaurus Rex* was found and excavated there in the early 90s. Historically, the CRST reservation is well known for being where Minnecojou (or Hwokoujou) chief Big Foot and his band of followers settled; he was killed, carrying the white flag of truce, at the Wounded Knee massacre. Although it lacks a gaming casino or many tourist spots, the reservation is popular with summer tourists because of the large amount of hunting and fishing available.

[CRST Telephone Authority](#)

The Cheyenne River Sioux Tribe is one of the few tribes in the U.S. that owns and operates its own local telephone cooperative. Historically, the penetration of

telecommunications into indigenous reservation communities has been very slight. In the 1990s, 90% of white American rural households have telephone lines, but only of 55% of the Indian populace living on reservations do. On some areas of the Navajo Nation reservation, only 26% of the population have phones. This is the lowest for any ethnic minority group in America. Today, the CRST Telephone Authority has managed to reach 75% phone line penetration in just a few short years, even to the remotest parts of the reservation. The CRST Telephone Authority began in 1958 when then-Tribal Chairman Frank Duchenaux decided to purchase the West River Telephone Company owned by Eagle Butte resident Henry J. Harding. This was due to the transfer of the old tribal Agency from areas that were being flooded by the construction of the Oahe Dam to its new location in Eagle Butte. However, it mostly provided service only to the towns of Isabel, Eagle Butte, and Dupree. Many towns went unserved until the Telephone Authority received a Rural Electrification Association (REA) grant in 1977. This grant allowed the cooperative to modernize its services, add new exchanges, and expand into many new areas of the reservation.

Many of the other reservations receive telephone service from one of the "Baby Bells" - for most of the reservations in South Dakota, the provider was Golden West Telecommunications, broken off from AT & T in 1984. However, the tribe had always felt underserved in the area of telecommunications, and decided that autonomy in the area of

communications was key to autonomy in other areas of economic development. The cooperative has since branched out into providing cellular, paging, datacomm, and other communications services. It owns five local exchanges all with digital switching. When I was leaving the reservation, it was already considering starting its own ISP. Since its founding, the CRST-Telephone Authority has also played a large role in the economic development of the community and in the provision of capital for the start-up of other tribally owned and operated businesses, including Cheyenne River Gas, Cheyenne River Cable TV, the Lakota ThriftyMart supermarket, the local Super 8 Motel, and the CRST Bison Cooperative. They had provided assistance to the Habitat for Humanity "blitz" of 1994 which led to the building of several homes, and were working with the local high schools in setting up facilities for Internet access and distance learning programs.

Shortly before I left Eagle Butte, the Telephone Authority was planning on setting up an Internet "learning center" and training facility in its basement. They were going to begin putting in the physical plant for providing ISDN service within 2 years. Most importantly, they were holding discussions with the tribal administration about starting up a community data processing center. The data processing center would provide an important source of employment for young people, and many felt it would give them the "high tech" skills they needed to make it in the

larger society. It could reverse the "brain drain" of highly educated Indian children leaving the reservation. There also was some negotiation about providing high-speed T1 data line services for the Tribal Building itself, the Community College, and other agencies in town. The local Indian Health Service (I.H.S.) hospital already had a T1 line from the authority, which it was mostly using for telemedicine and consultation with physicians elsewhere in South Dakota. While the telephone cooperative was a tribal entity, it was also a semi-autonomous corporation, and felt no obligation to offer reduced or low-cost service to other tribal entities. This caused quite a bit of dissension among other tribal officials, who wondered why the authority would not do so, considering the annual subsidies it received from tribal funds.

The CRST Telephone Authority is, in some ways, as significant from the view of this research as the Cultural Center. Each represents one aspect of the CRST reservation's attempts to take technology and apply it for economic development and greater cultural and political autonomy. The Telephone Authority's successes in providing the startup capital for numerous other locally tribally owned businesses shows the CRST's emphasis toward entrepreneurship. Although the tribe pursues economic development as a goal in and of itself, the success of local businesses like the Telephone Authority also provides "symbolic capital" because the reservation is further able to assert its independence from

the BIA and the federal government - "look, we can do it on our own without your help" - the same ideology that drives the reservation to make sure that its locally operated (non-BIA) school (*Tiospaye Topa*) can educate successfully using all tribal teachers, and that it can manage its own wildlife and natural resources without state intervention. All of these help the CRST to assert its claim to sovereignty as an independent - not a "domestic dependent" - nation.

Throughout my fieldwork on the reservation, whether working for the CRST MIS Department, the HVJ Lakota Cultural Center, the Cheyenne River Community College, the Cheyenne-Eagle Butte High School, or visiting other community businesses and institutions, I constantly encountered employees of the Telephone Authority. In many ways, the Telephone Authority represents the only meaningful way the tribe will be able to enter the electronic frontier, although there seemed to be a growing consensus that as a rural area, the best electronic data path for the reservation may not be through the wired cables of the telephone system, but instead through some type of wireless (most likely satellite-based) technology. Still, because it also is the holding company of the tribal cable television system, all efforts to carry locally-produced video programming to the reservation (by the tribal council, the cultural center, etc.) have also had to go through them. Any efforts to improve the telecommunications situation on the reservation will, by necessity, involve their input.

[The Harry V. Johnston Lakota Cultural Center](#)



Figure 4. The HVJ Lakota Cultural Center

I came to Eagle Butte at the invitation of the [HVJ Lakota Cultural Center's](#) director, James Picotte, where I worked as an unpaid intern, helping the center edit videos, create web pages, tape radio programs, and upgrade its technical equipment. Fortuitously enough, the Cultural Center was celebrating its 25th Anniversary the year that I arrived. It also had completed the first series of video interviews for its federally funded (through the National Park Service) Wolakota Oral Histories Project.



Figure 5. HVI Lakota Cultural Center: cultural education and preservation

The tribe first had discussions about constructing a cultural center toward the end of the Vietnam War. The Tribal Chairman at that time was T.O. Traversie. Largely because of President Nixon's passage of the Indian Self-Determination Act, many of the Plains tribes started thinking about actions they could take to preserve their culture. Early plans for the cultural center, whose planning board was mostly composed of members of the then-active Mnicojou Historical Society, included a historical documents archive, a research center, and a community college. These did not quite materialized as planned. In fact, the center would not have become a reality

were it not for the funding of a non-Indian businessman, Harry V. Johnston.

Johnston was a white businessman and philanthropist who had a lot of business dealing with Plains Indians. Due to the close friendships he made with CRST members, he became very interested in aiding the community. He decided the best way he could make a contribution to his Indian friends was to help them build a cultural center; quoting the Lakota chief Crazy Horse, he declared, "A people without history is like wind in the buffalo grass." So, he gave a large amount of the seed money for the founding of the center which is his namesake. The groundbreaking occurred in 1973; Johnston himself would pass away days before it occurred.

The late Indian artist Sidney Keith and his nephew, Raymond Uses the Knife, painted the large murals that are a hallmark of the center. The importance of the center increased with the passage of the NAGPRA (Native American Graves Repatriation Act) and in response it created the *Wotakuye Wicagloku* (Bringing our Relatives Home) Project. There was some tension on the cultural center's board of directors as to what to do with returned artefacts. Many of the members of the board favored immediate reburial; some wanted at least documentation (photographs or replicas made) before the artefacts were placed back in the ground. Only one member agreed with the idea of taking some of the artefacts and curating them (putting them on display in a museum.)

Some of the other functions that the Cultural Center provided for the community included Wolakota Productions (creating films about the community's traditions and oral histories in the center's video archive), the Lakota Arts N' Crafts Gift Shop (which sells craftwork by local Lakota artists to tourists and others), a photo archive of historical photographs, and a sound studio for recording traditional songs and chants. While I was there, the center also hosted the Healthy Nations Program (which focused on promoting healthy lifestyles among tribal members - in particular focusing on alcoholism prevention programs for youth.) It also was where the nightly CRST bingo games were played (with the exceptions of Wednesdays and Sunays) and where many community groups held their meetings. It began sponsoring a series of planned Cultural Tours beginning in 1992, as well as a Spring *Wacipi* (Powwow). And, for at least all of 1997, it was the home of the tribe's Cultural Preservation Officer.



Figure 6. 25th Anniversary Mug

As part of its 25th Anniversary, the Cultural Center was making plans for an expansion of its facilities, to include multimedia kiosks that would provide tourists with information about the reservation, a museum with displays on cultural history and significant events, and a studio for forays into TV broadcasting and production. It also started doing a weekly talk radio show, "Wakpa Waste" (Good Day CRST), featuring interviews with local tribal leaders and music by the tribe's Attorney General, who was also an accomplished musician. The radio show was broadcast on station KLND, based on the Standing Rock Reservation to the north, through a "radio modem" over the phone lines.



Figure 7. Wakpa Waste on KLND radio

The Wolakota Oral Histories Project involved a series of interviews with local tribal elders, especially people who could remember the early days of life on the reservation. Wolakota means "living in balance" and part of the goal was to revive the intergenerational transmission of knowledge from youth to elders. The idea was to produce short videos for the local Cheyenne Eagle Butte high school, to be used in Lakota language and other classes. However, some of these oral histories were also used in another production of the Cultural Center, which was to be the first of a series of films that the Center would do on Lakota history. There was also collaboration between the Cultural Center and the Cheyenne River Community College on producing multimedia CD-ROMs for Lakota language instruction.



Figure 8. Cultural center videos for Wolakota Project

Outline for the Dissertation

In this dissertation, my goal is to address this central hypothesis: does technology, especially 'emerging media' technology, cause the acculturation of indigenous people? As part of the Popperian tradition, social science, like any other science, attempts to falsify hypotheses, mainly by looking for negative cases that falsify propositions. I present my data from the Cheyenne River Reservation as evidence that falsifies the idea that technology causes acculturation (at least in this particular case), and to further suggest (without definitely proving the

proposition) that it contributes to the cultural revitalization of indigenous peoples.

In Chapter 2, I discuss the literature regarding such things as the intellectual origins of anti-technology sentiments in Western society (and how they use indigenous people as proxies for those criticisms), the basis of critiques of technology within anthropology by figures such as Edmund Carpenter and Lauriston Sharp, the current consensus on TV effects in Western and non-Western societies, arguments concerning the technological capacities of indigenous societies, and examples of indigenous media productions. Chapter 2 introduces the reader to the work of Jerry Mander, who might be seen as the archetypal holder of the stance that technology jeopardizes the survival of indigenous people.

In Chapter 3, I deal with the methodology of the study as well as some of the theoretical issues raised by the literature review in chapter 2. Chapter 3 helps clarify for the reader what the salient intellectual debates in this field are, in anthropology, in communications sciences, and other areas. The origin and relevance of such theoretical ideas as globalization, the post-industrial society, cultural imperialism, and agency theory are discussed, as well as what the relevance of these debates are to the central question of technology effects on indigenous societies.

Chapter 4 presents my quantitative and non-quantitative findings. The initial presentation of data comes

from statistical analysis of a survey instrument and content analysis of oral histories and other qualitative data. The remainder of the chapter consists of basic descriptive observations of technological effects on the reservation, based on my field notes and participant observation. Data are presented that suggest that television and other technologies may not be a major cause of acculturation on the CRST reservation, and observations in the chapter suggest that the opposite outcome may be occurring.

Chapter 5 is the applied section of the dissertation. Although this was not an applied project conducted on anyone's behalf (other than the Graduate School of the University of Florida), for various ethical, strategic, and methodological reasons, it included an applied component. This chapter presents some basic data on the condition of Native Americans in the United States, discusses the shaky relationship between applied anthropologists and native communities, and discusses data that suggests that "technology brokerage" may be the best client service applied anthropologists can provide for native communities.

Chapter 6 presents the five basic conclusions of the dissertation, summarizes some basic points, and presents some directions for future study and research. Although this format does not strictly follow that of a dissertation in the physical sciences, since the author does not take the position that social science studies should duplicate that format, a reader will probably note certain similarities.

CHAPTER 2 LITERATURE REVIEW

Luddites and Others: Technology and Its Critics

There has been a longstanding tradition of opposition to technology in Western civilization, and it has for a long time used indigenous people or "noble savages" as an exemplar to show a human group which has attained moral or other perfection through its lack of corruption by technology. In many ways, therefore, the 'activist' position today which presents indigenous people as threatened by new electronic technology represents a new note on an old composition. People like Jerry Mander (1991), however, present the indigenous people-technology relationship in an unrealistic light, and in using natives as surrogates for their critique of technology, people like him are unconsciously replicating a strategy which was favorable to colonial domination.

Although attempts to critique, slow, obstruct, or destroy technology in Western civilization are far older, the first concerted effort to target technology as a deliberate threat was the organized campaigns of Ned Ludd and the weaving craft guilds of England in the 17th century. Ludd and his men went around smashing mechanical weaving looms because

they threatened to make skilled craftsmen like the members of the weaving guilds obsolete. Ludd's may have been the first blow against the industrial era, and the first warning cry that automation was a threat to employment and livelihood. Ever since then, technology opponents, such as Kirkpatrick Sale (1995), Jerry Mander (1996), and John Zerzan (1988), have identified themselves as neo-Luddites.

There have been several religious groups, the most well-known of which is the Amish, which have placed restrictions on technology for devotional reasons. Among the Amish, there is a give-and-take process. Most Amish still refuse to allow technological devices such as televisions, telephones, automobiles, computers, or utility devices (such as washing machines and dishwashers) inside the house, although some Amish have started placing such things as communal telephones outside the home, and there has been some willingness to accept some labor-saving devices. Still, the Amish cannot be said to be totally anti-technology, for most Amish communities still use many of the technologies of the 19th century: horse-drawn carriages, churns, kilns, and so forth. It seems to be more the case that they have frozen European technology at a particular point in development.

Neo-Luddites in America draw on more than a century of technological criticism coming out of the political activist movements of deep ecology and social anarchism. Many people are familiar with the Unabomber, Ted Kaczynski, but they do not know the roots of his ideas, which lie in older

attacks on technology. Although environmentalism and deep ecology really only made the political scene in the 1960s, they have their roots in the older ideas of the conservationist movement and transcendentalists such as Thoreau. Anarchist resistance to industrialization, on the other hand, dates back to European thinkers of the 19th century such as Kropotkin, who felt that technology drained life of its vitality, individuality, and freedom: mechanical devices such as the assembly line, the punch clock, and other devices for increasing labor "efficiency" in fact reduced human existence to that of an automaton (Zerzan 1988). Instead of forming voluntary communities of mutual aid and sufficiency, technology isolated people into 'atomized' and fragmentary beings under the control of mechanical taskmasters.

The ecological critique of industrialism, on the other hand, arises out of technology's effluvia: waste, pollution, and depletion of natural resources. Many environmentalists approach technology from the point of view of its impacts on human health and well-being. They suggest that industrial chemicals and other pollutants may be diminishing human fertility and quality of life. Still, there is another skein within the ecological critique of technology, and it's rooted within Rousseauian ideas about human nature. Essentially, this critique states that it's only within wilderness and untamed nature where human beings are most free and most authentically human, and therefore

city life and civilization are corrupting influences on human beings. (It is curious and often frightening how much these ideas match the German Nazi valorization of the rural peasantry in their country over the degenerate cosmopolitan urban folk.) This belief, which merged with the anarchist critique of technology in the 1960s, eventually became the basis of the Unabomber's Manifesto of a war against technology.

Deep ecologists often proclaim that technology is what separates humankind from nature - as if casting off our use of tools would somehow allow us to magically return to our lost place among the Great Chain of Being and restore our unity with the continuum of nature. They point to a mythical Neolithic paradise, prior to agriculture, domestication of animals, and the creation of cities, as an ideal state for human life. Although some environmentalists focus on the development of green or appropriate technologies (such as renewable energy sources, recycling plants, and solar cooking and heating devices), the deep ecologists see no alternative toward eliminating technology altogether, ignoring the fact that humanity is not the only species in nature to use tools or build things. They proclaim the Internet to be the nervous system of the industrial West which is engulfing the globe.

The most recent (and perhaps most pragmatic) group of technology critics have been what could be termed the *new essentialists*. They draw somewhat on cyberpunk science fiction literature, and a little bit on the deep ecology-

anarchist critique of technology, but their approach is ultimately different. These authors, which include people such as Neil Postman (1992) and Mark Slouka (1995), feel the main problem with technology is its increasing isolation of people within virtualized simulations of reality, cutting them off more and more from the real natural world. As people more and more live their lives within technological simulations of reality, with all their artifice (and worse their entertainment industry proclivity to turn everything into harmless fun), they lose sight of the real processes of the natural world. They fear a world where people retreat more and more into virtual reality, shunning their commitments to the real physical world in which they live, and where humans lose the ability to survive on their own terms in the real world.

The Indigenous "Noble Savage" as an Activist Trope

Beginning with Montaigne and others, the indigenous peoples of the world (emptied, of course, of their own ideas) have served as surrogate mouthpieces for critiques of political institutions and of technology. As Sioux author Ward Churchill (1992) has suggested, the Indian has always been used as a sort of plastic mouthpiece for whatever the cause *du jour* has been foremost in American society. At various times, white authors have cast Indians as marvelous Ayn-Randian figures of objectivism, individualism, and self-sufficiency or as perfect exemplars of 'primitive' Marxian

communism and collectivism (depending on their starting perspective.) Feminists, deep ecologists, fascists, anarchists, and utopians of all stripes have often held up Native American societies as exemplars of their ideals. Critics of government, technology, or even the use of drugs and controlled substances have pointed to the Indian as an example of how much better life would be without those things - as if native people never had them.

Thus, Native people have functioned as templates for other peoples' causes. Among the Luddites, they have been used to represent a prior, ideal, pre-technological "golden age" state. If the ideology of technological progress in Western society posited a utopian future, then its counterpart was the Luddite vision of a fall from a perfect past (which, in fact, was more clearly descended from the original medieval Christian notion of the Fall). Ironically, today, many Native people carry these notions of being apart from the technological world as part of their own self-image, unaware of the history of their own peoples' involvement with adapting technology from other native cultures or from European colonial powers. As part of their campaign for valorization and recognition, many native people have allowed this trope to go forward, presenting themselves in the Romantic light which the Luddites have wanted them to be seen in.

However, many modern neo-Luddites such as Mander are unaware of the extent to which this trope serves the

interests of colonial power, which from the outset tried to deny the transfer of technology to indigenous groups. Historians have documented the ways in which colonial governments such as the Spaniards deliberately worked to keep technology out of the hands of indigenous people. Since the Spanish colonial authorities felt that the indigenes of America were too childlike to handle metal weapons, and more importantly, were concerned over the fact that their domination of the Indians depended on military and other technological inequalities, they made giving Spanish technology or training to the Indians a punishable offense (Browne 1996). Indian people were not supposed to be taught writing or given a formal education, since this might lead them to challenge their enslavement and relocation by colonial authorities.

This view of native people as childlike - unable to make mature decisions for self-governance, to manage their own affairs, or to handle new technologies and new influences - is, in fact, a survival of the colonial mindset. Matters have indeed turned full circle when conservationist groups like the Sea Shepherd society tell Makah whalers that they are no longer "truly" Indian when they hunt with mechanized harpoons, or other indigenous groups are no longer "authentic" once they use fishing nets to capture fish. While these groups proclaim themselves ardent defenders of indigenous rights, the only rights they cannot allow indigenous people to embrace is to adapt or evolve

technologically or to participate in the global market economy. Indigenous people are protected only as idealized curiosities of a prior world, not as people adapting to new conditions just as we are.

Unfortunately, indigenous groups are only doing themselves a disservice in allowing themselves to be refigured by Luddite groups. Doing so denies themselves agency in their own history and development. Rather than being seen as adaptive people with control of their own destiny, they allow themselves to be refigured as defenseless children in need of adult protection. While this may serve the political objectives of Luddite opponents of technology, it does not help their own need to deal with the emerging technological, economic, and political challenges of the 21st century. By casting indigenous people in this light, the Luddites are unwittingly following a political programme first began by colonial authorities who did not even see the Indians as fully human.

Jerry Mander: There's Nothing Sacred about TV

Jerry Mander, who was once president of an advertising firm, suddenly woke up to the evil people do through television in the 1970s. He quit his job and subsequently published Four Arguments for the Elimination of Television. Today, he is involved in a number of ecological groups and activist organizations. Beginning in the 1980s, he

became particularly concerned with the plight of indigenous people worldwide, and in 1991 released the book In the Absence of the Sacred: the Failure of Technology and the Survival of the Indian Nations. The book serves up two parallel themes: that "megatechnology" in the West is ruining all that is sacred or significant in life, and that it is also swallowing up the planet's remaining indigenous cultures, which seem to be the only remaining repositories for a sense of the sacred and reverence for nature. The title of the book suggests that indigenous people have survived for 500 years precisely because they have continued to exist in a pre-technological pristine state - when nothing could be further from the truth.

Mander (1991) suggests that a number of technologies are currently devastating indigenous cultures, including computers, automobiles, telephones, and genetic engineering. However, not surprisingly, he saves his most potent wrath for television:

The idea that communications technology, particularly television, can have a role in destroying diversity within the *human* realm is rarely noted. By its ability to implant identical images into the minds of millions of people, TV can homogenize perspectives, knowledge, tastes, and desires, to make them resemble the tastes and interests of the people who transmit the imagery. In our world, the transmitters of the images are corporations whose ideal of life is technologically oriented, commodity oriented, materialistic, and hostile to nature. And satellite communication is the mechanism by which TV is delivered into parts of the planet that have, until recently, been spared this assault... the effects of this one-way communication into the brains and hearts of people living in jungles and tundras is devastating. It paves the way for the technological juggernaut, while destroying native culture, economy, and political viability. (1991:97)

Mander argues that satellite TV in Canada among the Dene and the Inuit has caused devastating consequences. He suggests that there has been a decline in traditional storytelling, a negative change in the values and behavior of children, a rise in consumerism and a decline in survival skills, and a loss of interest in native languages and traditions. In essence, that television has become an *acculturative* force - causing indigenous people to lose their existing culture and become 'homogenized' into the Western 'culture' of selfishness, greed, apathy, and subservience to corporate power. Sort of like the Borg Collective in Star Trek, what Mander calls Western "megatechnology" is like a giant monster constantly assimilating anything different into our way of life. Mander argues that since things like computers and television were originally designed for corporate and military purposes, it's ridiculous to think that they could be used in any way that would be sustainable and useful for the planet. Interestingly, whereas other more optimistic authors have touted the rise of a global 'brain' or mind through the Internet, Mander believes the same phenomenon is occurring but greets it with shock and horror.

Mander binarizes the world in the very way that Haraway (1991) and other 'cyborg anthropologists' reject: indigenous peoples = state of nature = pretechnological state = innocence = essentiality = unchanged for thousands of years. He presents indigenous people as victims of

technology, rather than agents of its deployment. For example, he suggests that the Canadian government literally had to force the Dene and Inuit to accept satellite dishes. He ignores the role that Inuit activists had in bringing satellite television into the Northern territories, and distorts the historical record by failing to point out that in many cases, broadcasters refused to transmit to those areas since the advertising audience was so small. He also somehow seems to believe that people are powerless to resist the messages communicated to them by TV, and that it is economically impossible for indigenous people to use the medium for themselves and for their own purposes.

In many ways, Mander is the archetypal representative of the Luddite position this study attempts to critique. Mander thinks that the old saw, that "there are no good or bad technologies since all technologies are only neutral tools," is wrong: technologies, he says, are created by corporations for purposes of social control and to advance their own social and political interests. This may be true, but what Mander still fails to recognize is the human ability to *repurpose* technologies, and use them in ways that their creators did not originally intend. The Luddites like Mander have the wrong goal: instead of bringing technological production to a halt, they should be putting the power to produce and control technology in different hands. Contrary to Mander's manifesto is the Hacker Ethic, which suggests that activists should try and increase public access to

technology and information about technology, the transparency of technological processes, and the capacity of technology to create humanistic, pro-social outcomes (Sterling 1990). Our flaws lie not in our technologies, but ourselves.

I discuss the work of Mander and the Luddites for two reasons: a number of notable authors in anthropology confidently agree with or accept the neo-Luddite position or even identify with the Luddite label (I have been on AAA panels with them); and although Mander writes primarily for a popular audience, he is occasionally cited by academics. I write *contra Mander* because even though he is not part of the academy, his position is one that many academics take, although none have stated it as explicitly as he. Thus, in a sense, he must serve as a surrogate for their position. I should note that I am not hostile to Mander - I think some of his environmental writing is quite sound, and I admire his efforts to save indigenous groups from ill-thought development projects - so this is a critique borne of "constructive criticism" - I hope writers like him will carefully reconsider their positions. There are sounder critiques of technology, such as those of Jacques Ellul, which involve a less rejectionist stance.

Steel Axes for Stone Age People

Much of the anthropological thinking about the impact of technological change on indigenous groups came from Lauriston Sharp's (1952) seminal article, "Steel Axes for

Stone Age Australians." Although Sharp could be held accountable for leaving his Yir Yoront aborigine informants in the Stone Age (as Fabian and others have noted, anthropologists always seem to construct Otherness by putting their Others in previous epochs), as if they were relics from a bygone epoch, it's what he says about the impact of machine-tooled steel axes on their culture that is more important. According to Sharp, missionaries began presenting steel axes as gifts to the aborigines as instruments for their "progress" around the 1930s. Sharp notes that the steel axes presented some marginal improvement over the stone handaxes that the village had used before -- but it was what followed in their wake that was far worse.

Sharp detailed how the steel axes caused the Yir Yoront culture to unravel from within. Stone axes were part of the aboriginal constructions of masculinity, and the giving of stone axes by men to their families or other men was a key part of the kinship networks of the village. Further, trading for stone axes with other groups helped maintain trade networks up and down the coast of the Cape York peninsula. And the creation of the stone axe by the ancestors was a central element of the Aboriginal cosmology - it was an artefact legendarily born in the "Dreamtime." Yet, when presented with the new steel axes, Sharp claims, the culture was unable to adapt. There was no origin myth for the steel axes, so how could they fit in the Aborigine mythos? Men did not make or possess exclusively the steel axes, and

so one of the central elements of masculine identity unraveled. And people began hoarding the precious steel axe gifts of the missionaries, refusing to share them in the way that the stone axes had been shared with the community.

Sharp's predictions for the future of Yir Yoront were pretty grim:

"The most disturbing result of the steel axe... was a mental and moral void which foreshadowed the collapse and destruction of all Yir Yoront culture, if not indeed the extinction of the biological group itself... the steel axe, shifting hopelessly between one clan and the other, is not only replacing the stone axe physically, but is hacking away at the supports of the cultural system."
(1952:213)

I think that Sharp may have been more responsible for the idea of the cultural destructiveness of new technologies for indigenous people than any other figure in cultural anthropology. In our field, he may have been more responsible for this than extra-academic figures such as Mander.

Therefore, it's worth focusing on what he said happened at Yir Yoront in close detail. I am particularly fascinated by his choice of the word "hacked." (Maybe it's not surprising in an article about axes.) According to Steven Levy (1981), among hackers or the 'computer underground', the word *hack* refers to a creative or unusual use of a technology that tries to transcend its apparent limitations. An example of a hack was the programmers at MIT using the rudimentary tone generator built into their PDP-10 system to create computer music; the tone generator was not designed to do anything

other than to play warning notes when an error in a program was executed.

Interestingly, among more destructive members of the computer underground, the word "hack" has acquired a different sense, closer to the way in which Sharp used the term: as some kind of attack which compromises the integrity and security of a system, such as a computer network. But it's the earlier sense that I want to focus on. Levy makes clear that hacking, in its original sense, was an effort on the part of the hackers to demonstrate mastery over technology, and to show that the technology belonged in their own hands, not that of the technical 'priesthood' of IBM and the university. Could the steel axes have been destructive for Yir Yoront for precisely the reason that they were *not* given a true chance to "hack" with them? If the missionaries had *taught* the aborigines how to make and fix their new steel axes, rather than given them away to favored (read obedient) members of the society in traditional colonialist fashion, I think they would not have been experienced as such a disruptive alien imposition.

I think given the chance to make steel axes themselves, the Yir Yoront aborigines would have been able to create new myths for their new tools. Men might have been able to reassert their traditional role (which, Sharp seems to tell future feminists, was not 'patriarchal' but instead 'androcentric') as steel axe-makers. And steel axes could have been traded with other aboriginal groups. They would not

have been such a massive economic drain on the community (although they were given away freely, aborigines had to pay with cash to repair them when they broke.) Sharp's article was a corrective at the prevailing ideology of modernization theory, then prevalent in development anthropology - the idea that there were no social problems in 'primitive' societies that could not be fixed with better, more 'progressive' technologies. Modernization theory assumed that what was "wrong" with societies like Yir Yoront was their 'retrograde' technological status. Sharp was trying to warn that not all new technologies are unmitigated improvements.

Indeed, many studies since Sharp's, examining the failures of crop transfers during the Green Revolution, which created greater impoverishment for the peasant farmers they were given to, have sort of vindicated his position. However, I think the problem with Sharp and other authors is that they focused on the technologies as "things-in-themselves," instead of looking at the social processes of *how* the technologies were introduced into the community, *who* was given them, and *to what extent* the community was involved in, and participated in, the acquisition and implementation of the new technology. While modernization theory was not wholly correct, Sharp was also not correct in suggesting what in effect was its polar opposite: that, like developed societies facing 'Future Shock,' indigenous cultures given modern tools would be unable to cope with the introductions and would simply give up the ghost and disappear. He

underestimated the resilience and the *agency* of indigenous groups in charting their own future.

It's worth noting a coda to Sharp's work: I looked in recent works on aborigine history to see how the Yir Yoront culture was faring in the 1990s, considering how he had predicted their physical extinction. I could not find anything specific to the Yir Yoront village, but I found that Mitchell (1993) mentions the Cape York peninsula aboriginals as doing quite well in the 1990s, having won back a large amount of territory through the power of a new technology - the music video. Perhaps the Yir Yoront village was 'hacked' to death by the new steel axes. But an all-aboriginal rock group, using a new and different kind of mechanical 'axe' - the electric guitar - seems to have 'hacked' quite a bit of land back into its own hands.

The Effects of Television in Developed, Western Societies

Before we consider what effects TV has on indigenous cultures, we should consider what the literature identifies as television's effects on culture and behavior in modern Western industrial societies. Leaving aside the question of whether indigenous people may or may not bring a unique aesthetic or perspective to the understanding of film, video, TV, and other audiovisual productions, most anthropologists concur that examining how TV affects non-native cultures will

probably provide insights on how it affects indigenous groups, especially those like the North American Lakota, who have already been targeted by termination acts and other assimilation programs.

Concern with the effects of TV content on people have been a concern since it first began broadcasting as a medium. Interestingly, some of the concerns that people raise about TV are the same ones that have been raised with the advent of every new technological medium - including, recently, such media as comic books, radio programmes, motion pictures, and today, the Internet (Bianculli 1992). Does the sexual content, violent content, antisocial content, or other elements of TV programmes cause people to engage in misogynist, abusive, violent, or antisocial behaviors? Do these media promote juvenile delinquency? Early studies focussed primarily on what could be called the *magic bullet* or instantaneous effects theory. The magic bullet theory suggested that people would see antisocial behaviors on TV and then decide to carry out those behaviors in real life.

Most of the data from early TV studies suggests that magic bullet effects are rare, and are almost only found among the very young, and in rare circumstances. For example, the 'Bobo' clown doll experiments showed that if very young children see on TV that other children will be rewarded for beating up on a clown doll, those children are very likely to engage in the same behavior. Adults who are not of unsound mind do not in many cases demonstrate similar behaviors.

Contrary to simple behaviorist models, most normal adults do not instantly imitate, copy, or demonstrate behaviors that they see on TV, and in most cases will demonstrate revulsion toward behaviors they dislike when these are enacted by television characters (Gauntlett 1995)

Due to the failure of the magic bullet model, many mass communication scholars began turning to other theories of *latent effects*. They began suggesting that the effects of TV on people might be more subtle, more delayed, and more dependent on repeated stimulation and exposure. Further, they would also depend on existing predispositions based on the person's socialization and peer groups, and would likely only affect certain audiences. So, other theories began to be developed such as the *information filtering* theory - that televisual representations filter out certain kinds of information which then cause changes in how the viewer then views the real world. Exaggerated portrayals of levels of crime and violence might cause what media scholars call *scary world syndrome* - the paranoid assumption that the world is a violent and unsafe place because of all the violence that appears in the media. Misrepresentative depictions of racial groups might also reinforce existing racial stereotypes (Grossberg 1998).

Thus, while TV could not be isolated as the cause of any one given specific behavior or action, over the long-term, it might cause changes in a person's outlook or worldview which would lead to different behaviors. In a

similar vein were *social learning* theories that suggested that peoples' behaviors might change due to "role modelling" the behavior of people who are seen as popular on television. For example, if a person repeatedly saw characters on TV who were seen as popular and well-liked lighting up cigarettes, they might assume that this is a behavior worth copying. Similar theories propose that TV might subtly shape peoples' norms about reasonable or expected behavior, "prime" them for certain behaviors, or influence unconscious or unreflected-upon attitudes about themselves and other groups (Potter 1998).

Clearly, there must be some fairly demonstrable media effects, because if advertising did not have some statistically significant effect on consumption behavior, no one would spend any money on it. Likewise, if there were no media effects on people, propagandists, political campaign directors, public relations officers, and public information campaign managers would have to give up their jobs. All these people assume that media must have some effect on behavior. But the very fact that they increasingly target different media messages at different ethnic groups, 'market segments,' or 'demographic sectors,' suggests a realization that the use of media messages to change behavior may fail if they are not specifically directed.

The difficulty in all these theories lies in the simple fact that the effects they predict do not seem to be universal. Not everyone who watches large amounts of violent

programming decides to behave more violently toward their neighbors. Not everyone who sees popular celebrities use cigarettes decides that this is a good behavior to imitate. Not everyone who is exposed to pornography necessarily develops negative misogynist attitudes toward women or becomes a rapist. Not everyone who watches the six o' clock news assumes that the world is a horrifically violent and dangerous place. Several variables seem to influence the media effect on people - such as their level of education, their level of *media literacy* (which does not always increase with formal schooling), and basic factors in their personality such as level of self-control and inhibition (Potter 1998).

Still, one other factor has raised itself to the forefront in these media studies. It now seems that not everyone gets the same understandings from having watched the same media programmes. The mysterious variable of 'culture' seems to intervene. Rather than passively reacting to TV shows, engaged viewers will often debate the meaning of the show among themselves and seek to interpret it within their own personal, familial, and cultural contexts. This has led to a new generation of *audience response* theories which begin at their root with the idea that people do not all perceive media messages the same way, and thus could not possibly react to them the same way. Drawing on *reader response* theories in literary criticism, these televisualist theories suggest that no two people see the same TV show

quite the same way. One person may see a character's violent behavior as justified, appropriate, and proper. Another may see it as improper, out of line, and wrong based on the situation (Kepplinger 1989).

Audience response theories suggest that viewers construct meanings around the things they watch in an effort to relate them to their own lives. Some active agency is involved in the otherwise 'passive' activity of TV watching. Whatever behavioral changes arise from these people stem out of these constructed meanings. Of course, doing these types of studies often requires doing active ethnography, because it means meeting with your informants and watching how they watch television, and what meanings they build around the things they see. In watching a show where characters demonstrate certain behaviors, a person may often try and relate those things to situations in their own lives and compare whether the fictional character deals with the situation in the same way.

Toronto School-based Theories

These are the main media *content effects* theories that exist today, that is, ones that suggest changes in behavior result from peoples' reactions to the content of televisual programming. However, there is another school of

thought about how media might change human perceptions, culture, and behaviors - the Toronto School of Harold Innis (1964), Marshall McLuhan (1989), and Walter Ong (1982). The Toronto School suggests that media may change people not so much through their content as through their *form*. As technologies of communication change, the very structure of the channel of communication may force people to adopt new behaviors. As McLuhan (1988) put it, "the medium is the message." Thus, oral cultures will have different values, worldviews, and behaviors than cultures that use writing, print, or electronic media. Just the very adoption of the new technology changes the primacy of where people focus their attention and emphasis, and this causes the cultural change.

The Toronto School thinkers, for example, suggested that the adoption of writing or literacy causes dramatic changes in an orally based culture. Old sources of authority are discarded, new talents or abilities are developed, the primacy of various senses in apprehending reality are reordered, and even consciousness itself is assumed to change. The suggestion is that as oralist societies become literate, the importance of oral traditions decreases, the growth of talents in the areas of mathematics and calculation and reasoning increases, as does the ability to contextualize events as occurring in linear (historic) time. Conversely, the importance of myth and legend decreases, as do traditional charismatic or rhetorical modes of authority, and peoples' orientation toward group-feeling or group-

participation. A new sense of "interiority" is created through the experience of private reading and writing.

TABLE 1. The Toronto School and the phases of communication technology evolution

<u>Channel/Medium</u>	<u>Mode</u>	<u>Innovation/Result</u>	<u>Formats</u>
Primary Orality	speech	language	oratory
Literacy	writing w/pictograms	writing	cuneiform, hieroglyphs
Alphabetic Literacy	writing w/phonemes	phonetic writing	alphabets, <i>scripta continua</i>
Silent Literacy	writing w/punctuation	silent, private reading	books
Print Literacy	movable type	mass literacy	periodicals
Teleliteracy - Phase 1 'secondary orality'	electronic, audio-visual	mass communication & broadcasting	TV, radio, film
Teleliteracy - Phase 2 'hypermedia'	multi-modal	nonlinearity, 'netcasting'	Internet, WWW, DVD-ROMs, CD- Is, etc.

However, McLuhan and Ong were interested in more than just the replacement of oral cultures by the cultures of writing, alphabets, and print. Really, they were looking at this phenomenon as a proxy for a technological/media change that was occurring in their own time - the transition from the "Gutenberg Galaxy" of print to the new world of broadcast electronic mass media - television, radio, and film. Ong's (1982) contention was that the emergence of the electronic media would mean the return of a 'secondary orality'. Why?

Because he noticed that TV and radio revived some of the old elements of oral communication - the truth and veracity of communicators were judged by things such as appearance, paralanguage, and rhetorical skill rather than content; emotive response was appealed to more strongly than logical reflection. TV was more of an immersive, participatory, "cool" medium that tended to draw in the viewer (McLean, 1996).

Many of the recent critiques of television's effects on behavior come from academics who draw on the insights of the Toronto School. For example, scholars like Sanders (1994) and Marc (1995) suggest that TV creates negative social behavior in young people (joining gangs, short attention spans, risky sexual behavior, other pursuits of instant gratification) because basically it starts to replace and eat away at literacy. Students stop reading, start tuning in to TV, and the textual traditions of the humanities and the liberal arts 'melt down' and disintegrate. As a result, the cool logical hermeneutic mind of textualism becomes replaced with the shallow, jump-cut, stimulus driven mind of the moving image. Further, the deep sense of interiority or self (conscience) that is a product of literacy gets replaced, according to Sanders, with a hollow stimulus-seeking ego.

Meyrowitz (1985), in contrast, does not necessarily see TV as acidic to literacy, but he does feel it does help collapse the social distance that normally exists in a print-based society. He suggests that TV has these (mostly

negative) effects: it removes the connection between social situations and physical space; blurs the distinctions between the private and public sphere; de-emphasizes the denotative function of language in favor of the connotative and 'expressive' function; and erases the lines between different 'knowledge communities' in society since now everyone can tune in the same channel. Thus, Meyrowitz also predicts the return of some aspects of oralist or 'hunter-gatherer' behavior, including the loss of a sense of attachment to space or place, an undifferentiated social sphere with no formal authority, and no distinctions between work and leisure.

Perhaps the final vein of scholarship in this area is found among scholars like Neil Postman. Postman (1992) notes that TV news stories are always more shallow and less detailed than print news stories. Also that TV shows always blur the functions of entertainment and information into a seamless mode of "infotainment." Like Bill McKibben (1992), Postman thinks that very little of the major electronic mass media actually inform people of anything: in fact, they 'delete' much of the information that people previously got from their own experience. He believes that exposure to television actually weakens peoples' critical thinking skills because TV too easily blurs the line between what *might* have happened (through dramatic recreations, and so forth) and what did happen. People become socialized to reject information that requires contextualization, reflection, or

worst of all, discomfort and shock because it can't be condensed into a happy, singable sound bite on television.

Non-Content Based Theories: TV as Cultural Artefact

Morley (1995) points to a different school of thought about television's effects. Instead of the content theorists or the Toronto School, who focus on what information the television is a conduit for, Morley is more interested in TV as an artefact. Morley feels that TV is not "mini-cinema": people do not sit and gaze at it intensely as they would a motion picture in a theatre. Instead, it becomes a kind of "radio with pictures": something that is turned on for background noise and listened to (and maybe even occasionally looked at, but infrequently) while people engage in other domestic activities. Thus, Morley is skeptical even about the premise that people "watch" television. Since they don't, he's also skeptical that anything they "see" (such as violent murder) influences how they feel or behave. He argues that the early TV pioneers realized it was going to be a heavily auidial medium, hence their insistence that commercials be played at a louder volume than the regular program.

Morley wants to argue that an understanding of TV's influence on society arises out of its existence as a physical object. This seems like a trivial observation, but what Morley notes is that the most interesting aspects of television are the ones that even the academics who pay attention to television often ignore: where are TV sets put

in the home? How does TV become a "companion" to the family who lives there? Does the "place" of TV within the home change over time as it becomes more and more "incorporated" into the rhythms of domestic life? What objects, furniture, or activities does the TV displace? How do people use TV as a "background" for other things in their life? (One of Morley's informants told him that she often turned on her TV at the same time as her lights when she came home at night.

"Lighting" the TV was as much a declaration of her "reclamation" of her homespace as turning on the lights or the air conditioning.)

I believe that Morley's statement that people do not really "watch" television is an interesting observation that may lead to more careful ethnography of TVs as objects and TV-use as an activity... but it also strikes me as a dangerous over-generalization. I have a strong suspicion there may be deep class differences here that Morley skates over needlessly. Stereotypes about "couch potatoes" aside, there may be some social groups that do in fact "plop" in front of television and watch it for hours. Morley may not know those people as part of his social setting, and he may be more familiar with the literate, busy, go-getter types who are multi-modal, able to read, talk on the phone, and listen to TV all at the same time... but are they representative of the entire population? And what about the families who do use TV as a babysitter, leaving the children sitting in front of it for hours? I would feel safer if Morley declared that some

groups do not really "watch" TV, instead of suggesting that no one does.

Morley is representative of a slightly different perspective on TV which is fairly recent. This perspective does not really consider it as a visual medium, or as an information channel, but instead as a technological object which brings changes in its wake because of the way it reorders the domestic sphere. Although I am a little cautious of this school's declaration of TV as an unwelcome "invader" in social life, and their avoidance of looking at TV in non-Western, non-middle-class settings, their insights were valuable in influencing me to consider the question of how long people had TV in their homes... since this seems to be a determinant of to what degree TV becomes an invisible "incorporant" into their domestic existence. But I did not do Morley's thorough "ethnography of television" although such an examination might make a good follow-up study.

Previous Studies of TV and Acculturation in Non-Western Cultures

The research on television's impact on culture has produced some mixed results. Most researchers of the impact of television on culture have either belonged to the cultural imperialism or technological determinism paradigms. Much of the work by *anthropologists* has tended to discount either framework. As with a lot of other anthropological research, the answer of anthropologists to the question of how

television transforms indigenous or other cultures is, "it depends."

Survey Articles

Roach (1997) has provided a good survey of the cultural imperialism debate as it has mutated in the 1990s. According to Roach, the technological determinism thrust of McLuhan and the Toronto School largely faded out in the late 1970s, mainly because of critiques that it was totally ahistorical, and because McLuhan tended to rely more on aphorisms and mythopoetic 'probes' than on well-articulated arguments and empirical evidence. Today, the main forces supporting cultural or 'media imperialism' come out of a political economy orientation, itself descended from the "dependency theory" which originated alongside world-systems theory and the critiques of modernization theory in development among intellectuals in "the global South" in the 1960s and 70s.

Roach suggests that 'unrepentant' cultural imperialist theorists like Herbert Schiller (1992) point to statistical data that continue to suggest that global information flows in the world are very unequal. The major multinational media corporations, while now more diversified and based throughout the globe, are still headquartered in the North (Japan, Europe, etc.), and not the South. So are the major news service (Reuters, Associated Press, etc.)

While satellite television delivers signals across the globe, most of the programming carried on those transmissions originates from the developed world. Due to their lack of telecommunications infrastructure, the South or developing nations cannot develop the media institutions needed to reply to the Western "cultural monologue," and thus become dependent on Western media.

However, she argues that modern 'cultural imperialist' theorists, while able to demonstrate with considerable evidence the inequality of global communication flow, have been less able to demonstrate that this has resulted in acculturation of non-Western societies, or functioned in the service of Western cultural domination. She suggests the opposite perspective is found in the other major school, that of 'audience response' researchers, who largely come out of a 'cultural studies' (i.e., more postmodern) approach. These researchers, she says, believe that audiences construct oppositional narratives of resistance out of Western media, and in a sense come up with a wholly different 'reading' of the Western video "text" which for them bulwarks their resolve to maintain difference.

Curiously, Roach notes, the empirical data seems to be on the side of the 'audience response' researchers, because the 'cultural imperialism' theorists have never been able to present much empirical evidence that Western media cause acculturation or change peoples' fundamental identities, beliefs, and norms in other societies. However,

Roach concedes, while some 'audience response' researchers do use a rigorous statistical (positivist) 'media effects' methodology, many of them rely only on the somewhat 'less rigorous' (as she sees it) practice of ethnography. Unfortunately, the only counter-response of people such as Schiller to the new research trend has been to question the political commitment of the questioners.

Roach concludes her study by noting that the debate between the 'political economy approaches' and 'cultural studies approaches' in the area of media research is not quite so polarized as both sides make it out to be, and she claims that even 'unrepentant' figures in the cultural studies camp such as Fiske (1996) have shown a more recent openness to considering the global political economy of media production. She maintains that both sides agree that "culture matters," that a desired applied outcome of either theoretical perspective is to increase local self-determination and origination of media in the developing world, and that Western media often contains hegemonic narratives, although they might disagree about their effectiveness.

Another important survey article is that of Salwen (1991), which references a large number of previous studies in and of itself. Salwen mentions a number of previous research projects on television and acculturation. Tsai's 1960s study of TV viewers in Taiwan showed no evidence of different fundamental attitudes toward the U.S. or Western

cultures, or of preferences for "Occidental" (individualistic) solutions to problems over "Oriental" (collectivistic) ones, as compared to nonviewers. Payne and Peake's 1977 study of children in Iceland found that childrens' exposure to Western television did not influence their attitudes toward the U.S. or its way of life, and Salwen mentions their conclusion that their findings indicated the "tenacity with which people hold on to their cultures." Sparkes' 1977 work in Canada found that Canadian viewers of American TV did not alter their attitudes toward the U.S., and were not more likely than nonviewers to think of themselves as "American" rather than "Canadian."

Boyd and Najoi's work in Saudia Arabia in 1984 suggested a *differential effects* model - that different subgroups within a culture might respond to the stimulus of foreign media in different ways. The main differences seemed to be between the genders. Females tended to prefer Saudi-produced arts and entertainment programming, whereas males tended to produce foreign-produced sports and films. This seems to stand in curious contrast to the typical observation that women consider Saudi culture more repressive than men. Kang and Morgan's 1988 work in South Korea also found gender differences between how much TV programming Koreans watched from AFKN (the Armed Forces Korean Network, broadcast for U.S. forces in Korea, but also picked up on Korean national transmissions). Men tended to watch slightly more AFKN shows than women. However, the key difference was in how they were

affected by it. Heavy female viewers of the AFKN shows were more likely to have 'liberal' (i.e., foreign) values on social issues than light viewers; but male viewers showed no change in their attitudes regardless of whether they were heavy or light viewers.

The differential effects model suggests some caution in the way television effects on culture are approached. According to Salwen, the only differential variable that most people have looked it is gender. He opines, however, that class, education, ethnic identification, and other factors may influence how much foreign TV a person will watch, and what effects this television viewing has on them. He suggests a conflation or hidden variable problem in that wealthier people are more likely to have televisions capable of picking up foreign signals (since they can afford generators, aerials, satellite dishes, VCRs, imported videocassettes, etc.) and also more likely to be acculturated than their peers. However, their level of acculturation could also be based on the fact that they travel more and lead a more 'cosmopolitan' life than their peers and are more in direct contact with 'foreign' culture, rather than the 'mere' fact of their exposure to television.

The one example that Salwen mentions which is most relevant to my own research is the one study that actually deals with indigenous people. However, it should be noted that the indigenous group in question had been far more isolated from the dominant society than the Lakota that I

worked with, when television had been introduced. Granzberg's (1982) study of the introduction of TV among the Algonquian Indians in Canada showed that TV disrupted their traditional life, altered their values, made children who were TV watchers more likely to identify with Canadians (rather than other Indians) as role models, and caused the increased consumption of processed or prepackaged foods and more fighting among children. Unfortunately, Granzberg did not return to the community to see if the long-term effects of television followed the short-term effects of this introduction; other studies have hinted that the initial social disruptions of TV tend to decline over time.

Salwen also notes that Granzberg mentioned, almost as an afterthought, that television actually helped revive the Algonquian practice of storytelling. It caused renewed interest in the Indians telling some of their old traditional narratives which were becoming forgotten. Salwen comes to the following conclusion: "We can readily discard the broad claim that exposure to Western media will cause foreign peoples to shed their cultural identities and values and then adopt Western values." He recommends that media researchers discard the traditional 'bullet theory' (stimulus-response) of media effects and instead use either 1) a *limited effects model* which suggests that media users or consumers selectively expose themselves to mass media, accepting those in concert with existing values, and rejecting those in conflict; thus also suggesting that mass media has a severely limited

ability to change attitudes and values, and instead tends to reinforce existing values; or 2) a *cultivation effects model* which suggests that some elements of a person's perception of the world (as opposed to their beliefs about it) (such as the number of old people in their society or the level of violent crime) is influenced by how information is filtered to them by the media.

As a final addendum, Salwen points out that media technology has changed dramatically since the "cultural imperialism" theory was first put forward. In the 1960s, there were no personal computers, faxes, desktop publishing systems, VCRs or consumer videocameras, micropower radio transmitters, or global communications satellites. The means of information, he notes, have become cheaper, easier, and less technologically complex, and thus more available to people in the developing world. He maintains that while the West continues to dominate in the area of the more 'globally reaching' mass broadcast media technology, the developing world has had an 'explosion' of local, regional, alternative media ranging from pamphlets to xeroxed newsletters to shortwave radio stations. Thus, he feels that the even the 'state' of the global 'monologue' which cultural imperialists complain about is changing.

Studies by Communications Researchers

Straubhaar's (1991) approach comes from within the political economy or dependency theory orientation. In it, he suggests that 'simple dependency' of media in many developing nations has given way to 'asymmetrical interdependency.' Because of the growth of independent national and regional forms of media production, and the promotion of native 'cultural industries,' many developing societies are less dependent on Western media than they were 30 years ago. Straubhaar suggests that audiences today are inclined to seek media programs with more "cultural relevance or proximity" from the range of international TV, so they are less likely to tolerate American shows. There appear to be deep class divisions in many developing countries, with national elites continuing to favor U.S. or other foreign programming. Straubhaar feels that there is still an asymmetry in global media flows, but it is declining.

Perhaps the most interesting and relevant studies in this vein have been conducted in Israel. Katz, Haas, and Gurevitch (1997) present a survey of their work on TV and culture research in Israel from 1970-1990. During that period of time, there was only one monopoly, government-run station in Israel. They found the following definitive changes during that time period: a drop in the attendance of public 'spectacles' (theatre, sports, concerts, etc.) and a rise in participation in peer-based, 'time-flexible' leisure

activities (i.e., tennis, going to clubs); a change in values from a more 'collectivist' to a more 'individualist' orientation (although, as they note, the programming on Israel's station tended toward 'collectivism' in tone, so the effect may have had more to do with the 'atomist' nature of the medium than the message); and a subsuming of the function of other media (especially print and newspapers) by television. One of their conclusions stands out above the rest: "The safest thing to say about the long-run effects of TV on the changes in Israeli culture and society is that it's an impossible question to answer."

Weimann (1996) added to the picture by describing the diversification that began to occur in Israeli media in 1991. Due to the coming of cable TV to Israel, for the first time, Israelis were truly 'barraged' by a whole array of foreign programming that they had never been exposed to before. Weimann's approach, however, totally ignored media content effects on culture, values, or behavior, and instead focused on reactions and adjustments to the medium itself. His "uses and gratifications" approach suggested that Israeli viewers were an "active audience" which approached the new medium with the goal of fulfilling needs previously unmet by the state-run TV service. He found that within one year after the introduction of cable in Israel, Israelis changed their perceptions of TV, their social contexts of viewing, their feelings toward the medium, and their attitudes toward leisure activities. Content preferences for different kinds

of shows changed rapidly, but this differed sharply among different subgroups. Weimann noted that reaction to the medium followed a course of initial excitation, followed by disappointment, and then later, renewed appreciation once over-optimistic expectations were surrendered.

Sardar and Ghaffari-Farhangi have both looked at the advent of electronic communication in the Islamic world. Sardar (1993) discusses the "historic mistake" of previous Moslem rulers banning the use of the printing press, especially their refusal to do anything but handwrite the Koran and its associated commentaries. He believes that this meant that the Islamic texts were isolated from the masses, and allowed Islamic clerics to develop narrow, insulated readings of the Koran which did not evolve over time. In contrast, Sardar thinks that technologies like the compact disc will lead to changes in Islamic religious structure - not necessarily the decline of Islamic fundamentalism, but certainly a new openness to debate the interpretations of the text outside of narrow 'interpretive communities'. This, he says, will actually lead to a more dynamic, vital Moslem world.

Ghaffari-Farhangi (1998) reaffirms this position by noting that the Islamic world views the new era of global communications as a promise, and not as a threat. He discusses the "Golden Age" of Islam during the Middle Ages, when Moslem scholars translated Classical works of Aristotle, Plato, and others, and when Arab thinkers devised the basis

of modern mathematics and geometry. He thinks there could be a 'second era' of such a 'knowledge explosion' within the Moslem world due to the new technologies. He thinks a re-engagement of Islam with the world of science, reason, and scholarship will cause a 'revitalization' of Islam similar to this earlier period. In short, both scholars feel that rather than causing cultural decline in the Moslem world, the electronic media will lead to cultural revitalization. Rather than being "assimilated" by the "decadent" West, the Islamic societies will only grow stronger.

Lastly, Gillespie (1995) attempted to test the 'homogenisation hypothesis' among ethnic Punjabi youth in Southhall, London. She wanted to know if other scholars were correct in predicting that 'globalisation,' and especially Western television, were forces causing the disappearance of ethnic identity and the rise of a homogenized global consumer culture. However, as she says, "The tendency toward homogenisation is also countered by opposing tendencies toward differentiation and pluralisation. The powerful revival of ethnicity and the politics of identity ... is calling into question the homogenisation thesis." Her Punjabi teenage subjects, rather than becoming 'free-floating' members of global youth consumption culture, simply 'positioned' themselves within that culture while also keeping themselves grounded in their old one - becoming, in effect, one more example of 'hybridization'. Although there was a plurality of identities among them, there was no

erasure of the earlier identity of being Sikhs, Punjabis, Asians, and so forth.

She argued that the Punjabi kids used processes of 'indigenisation' and 'translation,' turning 'foreign' media (British BBC TV, etc.) through "TV Talk" into resources for negotiating their new 'hybrid' identities. Rather than replacing their own culture wholesale with British culture, these youth were creating new 'syncretic' identities and cultural forms rooted in both the old and new ways. Although she disagrees with 'primordialist' ideas of ethnicity, she does think that there are too many institutional forces (in the economy and nation-state and the globe) which guarantee it is not going to fade away. As long as this is the case, we can expect that media consumers will draw on the electronic media to negotiate their continued survival within a pluralist society. In short, people are not passive victims of media transformation; they are active users of media content for creating change.

Studies by Anthropologists

Weiner's (1997) article on 'televisualism' in anthropology seems to be less concerned with the questions dealt with here, and more on a sort of Heideggerian, almost metaphysical critique of the possibility of there *being* such a thing as indigenous media. Weiner suggests that by televising or filming their own cultures, indigenous

societies alienate themselves from culture as lived experience and turn it into a representing, reified object. Weiner claims that indigenous cultures are often built upon the idea of non-self-expression and non-self-objectification - so film and video force them to destroy their own culture in the process of representing it to themselves and others. He claims that 'indigenous media' are enwrapped in Western assumptions of 'visualism' which ignore a whole multitude of other communication modes and expressive styles. He fears that by creating their own filmic works, indigenous cultures become just one more leisure-entertainment commodity to be traded on the market.

He says that video replaces "genuine difference" with ersatz "electronic difference," and that indigenous people through their very use of the video medium are forced to take on Western assumptions and aesthetics. In training indigenous people to use video and electronic media, we are erasing the very culture anthropologists hope to preserve, record, or restore, as, according to Weiner, indigenous cultures are built around the unseen, the unmanifest, and the unspoken. Visual technology violates indigenous ideas of what kinds of information should or should not be shared and when. Weiner's argument might be relevant to this debate, insofar as he would take increased use of Western visual technology as another sign of acculturation (because it marks the surrender of prior traditional beliefs about representation.) So, if indigenous people use video cameras in response to the

incursion of television, this is actually accommodation to Western visual aesthetics, and not resistance to it.

The work of Kottak and Pace might be the most interesting and relevant here, because they studied the effects of TV on indigenous people, considered culture as a relevant intermediating factor between TV and behavioral changes, worked in a developing country (Brazil) which has a flourishing TV industry of its own, and used anthropological methods as opposed to the typical survey methods of mass communication researchers. Kottak (1991) combined survey methods with ethnography to look at six communities in Brazil, and found that the length of time where people had access to television, rather than current viewing levels, was a better predictor of television's cumulative effects. Kottak states that "the results of the project have led me to conclude that the home television set has joined education, sex, skin color, income, class, religion, and age as a key indicator of what we think and what we do."

But what precisely were its effects on Brazilian values and culture? Kottak found that after the introduction of Brazilian TV in 1997 into areas of the rural hinterlands where he had worked in the 1960s, he suddenly found a populace far more knowledgeable about the world. In the 60s, his informants asked him about North American fauna; in the 80s many of the same people asked him about American vs. Brazilian presidential politics and about labor strikes in Europe. This may be a change in culture, but few people would

describe it as a negative one. All of Kottak's junior researchers on his project found similar results: TV made conversations more cosmopolitan, diverse, and informed. People took a greater interest in Brazilian national politics and knew more about who the candidates were and where they stood.

Brazil has a peculiar native TV genre called the *telenovela* ; it is a serialized soap opera show that usually airs six nights a week for about six months in hourlong slots. Unlike American soap operas (such as *Days of Our Lives*) which can run for years without ever reaching any sort of dramatic conclusion, telenovelas usually tell a story which reaches a culminating point, involving some sort of social status reversal. A Brazilian audience of 60-80 million people watch telenovelas each night, providing for some media researchers stark evidence of the successful production of a native TV genre in a relatively impoverished developing nation. However, Schiller and others argue that the telenovela is not really a 'native' genre, it is just a localization of an import from abroad - the soap opera. Debates about just how 'native' soap operas are to any culture continue; it does seem to be the case that just about every society likes stories which involve the emotional tension, familial conflicts, and melodrama of the American soap opera, and would "tell" those kinds of stories even if they had never watched one.

Kottak argues that television had a different effect on Brazil than the U.S. because in the U.S. prior to the introduction of television there were several other kinds of media outlets and the U.S. was a literate and 'media-rich' society. But in Brazil, especially in the poorer rural areas, TV's introduction was more dramatic because those regions were largely illiterate and starved for information. Kottak found that those who had TV for longer periods of time tended to view the world as more dangerous than those who had had shorter viewing exposure. They also showed lower levels of 'institutional trust', but did NOT tend to be more fearful of others. However, the effects in each case, he notes, were slight, and totally unrelated to current viewing levels (i.e., whether the person was a light or heavy viewer of TV.) Kottak notes, further, that Brazilian TV tends to be less violent, and its news shows less likely to report on violent crimes, than TV in the U.S. So there were similar 'cultivation effects' among Brazilians along the lines of Gerbner's (1993) U.S. TV Cultural Indicators surveys - but the results were not the *same*.

Kottak also found that Brazilian TV viewing usually meant decreased listening to the radio, but *increased* consumption of print media. This seems contrary to what many U.S. TV researchers have claimed - that TV causes a decline in literacy and interest in the printed word. Heavy TV viewers in Brazil also seem to be the most apt to pursue additional information, including books, magazines, and

newspapers. However, Kottak notes, in an inversion of the U.S. pattern, in Brazil, the heaviest TV viewers tend to be of the higher socioeconomic classes, and usually the best educated. Curiously, he also found that those communities in Brazil founded by North Americans and Europeans tended to have a more dismissive attitude toward TV, largely because like people in the U.S., they tend to express their beliefs about the value of printed media by showing hostility toward television.

TV viewing also correlated with stronger desires for external contact (rather than social isolation), 'liberal' views on gender status and hierarchy, and having a favorite performer of the same skin color. Kottak suggests his findings on the differences between villages vis-à-vis TV effects indicates that TV exposure and effects may develop over three distinct stages - the first one characterized by the strangeness and novelty of the medium (lasting about five years), the second one by selective acceptance and rejection of TV images and messages and some attempt to back away from TV 'saturation' (lasting about 10-15 years), and then a third period of renewed interest as TV becomes a 'backdrop' to the culture that no one pays attention to anymore, as it becomes fixed within national life with infants and children being socialized by it. He also argues that TV in rural areas in Brazil is still too new to have made it to the third stage - which has already occurred in the United States.

Kottak thinks that TV actually increases social interaction (especially visitation of family and friends) in the first and second stages (because people without TV like to visit people who have it), whereas it might decrease social interaction in the third stage. The more urban areas of Brazil where TV viewing has hit 'third stage,' Kottak's informants told him, show some decrease of the level of activity in the town's streets and central square. It seems to have strengthened nuclear families in places like Sao Paulo, while at the same time diminishing community life. In light of what Kottak's findings actually were, can we say with any veracity that TV actually diminished the "Brazilianness" of its viewers? Did rural Brazilians take on the values and beliefs of urban Brazilians (most of the TV shows are produced in urban areas and feature urban characters)? The answer seems to be no, although their perceptions of the world seem to have moved closer to those of urban dwellers due to 'cultivation effects'. Instead of producing social disintegration or cultural decline, at least in its early stages, TV seems to have had the opposite effect.

Richard Pace, a graduate student from the University of Wyoming, was part of Kottak's research team in Brazil, and his work in Gurupa is particularly interesting, because the town was largely made up of indigenous and part-Indian Brazilians. Pace (1993) used various research methods to examine changes in patterns of social interaction and world

view perceptions. He noted that Gurupa was in "Stage I" of television exposure during his research. He also found that, contrary to American cultural imperialist theorists, the Gurupans tended to ignore American shows or other foreign series because they seemed inappropriate, irrelevant, or hard to understand (even when they were well dubbed or subtitled into Portuguese.) Almost all of his informants (87 percent) felt that TV had overwhelming positive effects on the community, although some suggested negative effects of teaching bad habits or bringing emotionally disturbing news.

The key "social interaction" effect seems to have been increased social visitation among members of the community, along with some new restrictions on socialization (no talking during the shows). Further, key evening events such as festivals, promenades, and even the night school have adjusted their schedules so that people can watch the nightly telenovelas. Because the medium of TV is so scarce, new cultural rules have been developed about where you can position your set (almost everyone puts their TV in the window so passerbys can watch) and how often you should invite over people without TV sets... guaranteeing a 'leveling' of access to viewing. When Pace's TV stopped working and he moved it inside his home and closed the shutters of his house, people chastised him for breaking this informal cultural rule, assuming he was now 'hoarding' his set and preventing others from watching it.

As for "world view" effects, Pace found that knowledge of the world beyond Gurupa is increasing. Pan-Brazilian popular culture seems to be strengthening, as Gurupans are taking interest in televised festivals of other communities. Self-awareness of the relative low quality of life in Gurupa (as compared to Sao Paulo, for example) has led to greater class consciousness. Political awareness of corruption in the Brazilian government increased as well. Pace says, "One of the benefits of the cross-cultural approach is the finding that some commonly held up Western assumptions about TV and human behavior do not hold up in non-Western settings. Evidence from Brazilian communities suggests that high rates of televiewing do *not* correlate with viewer passivity, increased social isolation, violent tendencies, fear of the outside world, lack of trust in fellow citizens, or decreased reading rates..." (1993:191)

In short, as anthropologists, we need to be cautious about generalizing from findings (or supposed findings) about TV effects on people in the U.S., to populations outside the U.S. Local culture mediates the effects of television on human behavior and does determine the level and extent of 'cultivation effects' on worldview. Neither Pace nor Kottak found that TV disempowers the people of Brazil or dominates them economically or politically or makes them more passive. And, most importantly, although it seems to have changed some of their patterns of social interaction, and mildly modified a few basic values about gender, it does not seem to have

eroded their ethnic identity or culture. If anything, it's made them more aware of their "Brazilianness" within a larger global framework.

The researchers Steinbring and Hamer (1980) studied the effects of Western television on the Canadian Cree Indians. They found that the Indians related the television's moving images to the spirit communication in their traditional shaking tent ceremony, *Koosabachigan*, and so this is what they named the TV in their own language. Their research showed that the Cree actually turned to the TV for revelatory omens and guidance, because they felt that the spirits of the shaking tent were always truthful. Along with Molohon (1981), they witnessed attempts to "indigenize" the technology of television in terms of familiar experiences and events. They realized with their work on the Cree, "traditional conceptions of communication influence the ways new media are perceived and used... we cannot consider TV to be a uniform phenomenon cross-culturally, because it is a different thing to different people and its impact varies according to the cultural traditions around it." In short, the anthropological consensus on TV's social and behavioral effects proves Fiske's mantra: *culture matters*. We need to consider a particular social and historical context for the introduction of television into an indigenous community before making blanket assumptions that it will have uniformly positive, or negative, effects.

Unfortunately, because many of us do not take seriously David Bianculli's observation that "television matters," in most introductory texts on cultural anthropology, TV is mentioned only cursorily, if it is discussed at all. Like other academics, anthropological intellectuals seem to think something is wrong with taking a "low culture" medium like TV seriously. I looked through six introductory texts and found that only one, by none other than Conrad Kottak, had a chapter dealing with television and the questions of 'cultural imperialism'. The other five did not have a chapter on television or other electronic media. Apparently, Kottak is the only one to recognize that his undergraduates, for whom TV is a constant backdrop of their young lives, is something they should also analyze and pay attention to in an academic setting.

Toronto School Media Research in Anthropology

Edmund Carpenter seems to have been one of the anthropologists whose work was most directly influenced by Marshall McLuhan. Like McLuhan, Carpenter (1973) believed that the primary sense for most of the indigenous people of the planet was hearing - and that the invention of literacy changed "ear cultures" into "eye cultures" which viewed the world as consisting of separate, hard-edged objects rather than continuous, constantly flowing phenomena. Like McLuhan, Carpenter also seems to have enjoyed writing his thoughts in

bizarre Zen-like aphorisms. In his work with cultures in the Pacific and North America, Carpenter was particularly interested in how they related to media, especially the new electronic media. Here are some of his observations:

In an astonishingly short time, these villagers, including children and even a few women, were making movies themselves, taking Polaroid shots of each other, and endlessly playing with tape recorders... when we returned to Sio months later... I didn't recognize the place. Several houses had been rebuilt in a new style. Men wore European clothing. They carried themselves differently. They acted differently... I fear our visit precipitated this crisis. Not our presence, but the presence of new media. Our demonstration of media tipped the scales. Hidden changes suddenly coalesced and surfaced. The effect was instant alienation. Their wits and sensibilities, released from tribal restraints, created a new identity: the private individual. For the first time, each man saw himself and his environment clearly and he saw them as separable. (1973:133)

In New Guinea, those who control the content of radio seek to replace magic with rationalism... however, one of radio's main effects is the promotion of pure spirit. No dream experience, no ancient religion, ever separated spirit from flesh more effectively than the electronic media. In New Guinea, those who think they are promoting rationalism are actually promoting something quite different - electronic technology. They remain oblivious to one of radio's principal achievements: it promotes magical systems where images, separated from physical bodies, exist purely in time, without spatial identity. (169)

Since 1960, I've put cameras in a variety of hands. The results generally tell me more about the medium employed than about the cultural background of the cameraman. In each case I had hoped an informant would present his culture in a fresh way & perhaps even use the medium itself in a new way. I was wrong; what I saw was literacy and film. These media swallow culture.. I carefully screened films made by indigenous DIES cameramen. In only one did I ever see anything even remotely representing a non-Western approach... a film on a *lakatoa*, a sailing ship, was exceptionally tactile, favoring closeups of surfaces and bindings. (188)

I think media are so powerful they swallow cultures. I think of them as visible environments which surround and destroy old environments. Sensitivity to

problems of culture and conquest becomes meaningless here, for media play no favorites: they conquer all cultures... the dilemma I faced in New Guinea was this: I had been asked to find more effective uses for the electronic media, yet I viewed these media with distrust... I felt like an environmentalist hired to find more effective uses of DDT. (195)

Like McLuhan, Carpenter's basic position toward electronic media technology is one of strict technological determinism. Communications technologies like film, TV, radio, and print transform the order of the senses and the experience of reality, and can apparently instantly transform a collectively oriented community into a bunch of alienated private individuals. However, Carpenter does not see the issue as one of cultural imperialism. Electronic media do not transform non-Western cultures into Western cultures; rather, he suggests, they turn both non-Western *and* Western cultures into *media* cultures by subsuming previous environments and encapsulating experience.

Therefore, writing in the early 70s, Carpenter was skeptical about the promises of 'indigenous media' because he thought media technologies were destroying far more of 'tribal' social existence than they were protecting. Although he didn't necessarily see 'media culture' as necessarily negative, he did suggest that it was qualitatively different both from indigenous oral culture and 'civilized' print culture, and that it was transforming practically the entire nature of perceived reality for both groups. Like many other visual anthropologists, he felt that once you taught the natives how to use cameras, they weren't filming *their*

culture because their very exposure to media made them part of *your* culture. People could not control the ways in which media changed their lives.

Although Carpenter, like Mander, seems like an isolated case, somewhat on the fringes of the world of academe, he was expressing what has become a somewhat muted chord in visual anthropology: that talking about "indigenous media" is foolish because the media themselves are colonizers. What this viewpoint seems to ignore is that indigenous groups had various means of visual representation, and access to mirrors, long before they encountered cameras. To talk about some sudden Adorno-like 'doubling of the self' through media ignores that indigenous groups had used similar visual technologies for thousands of years. Only Westerners with their assumptions of "naïve photographic realism" assume that cameras are so qualitatively different from earlier techniques of image-making, such as cave painting.

Western and Electronic Frontiers

Most of the historical films on Westward expansion in the U.S. used the Frontier metaphor. Native people dislike this metaphor primarily because it suggests that the western part of the United States was somehow vacant, waiting to be settled, when there were plenty of Native groups already living there. Depopulation of North America was largely an aftereffect of disease as much as it was conquest, but by no

means was the continent ever 'emptied' of indigenes. Early on, the idea of the Frontier was connected with that of Manifest Destiny - that the entire continent had been given to Europeans as a "prize" by the Almighty. The lure of the Frontier - "wide open spaces" for those immigrating to the U.S. - drew many pioneer wagon trains westward. Whatever stood in the way - whether it was desert, sagebrush, stampeding animals, foul swamps, or wild Indians - had to be moved out of the way.

The Frontier metaphor remains extremely salient in the American consciousness. The historian Frederick Jackson Turner's account of the closing of that Frontier suggests that with the reaching of the Pacific, America had somehow lost sense of where to continue expressing and satisfying its expansionist urges. Turner's account is an elegy for the pioneer spirit, almost waxing tragic over the fact that there was no further westward for wagon trains to roll. However, the Frontier metaphor continued to survive on, in some cases justifying American imperialism abroad (the New Frontier), or, in the 1970s, even being used by people like Gerard K. O'Neill to justify America's need to explore and colonize the vastness of space (the High Frontier). It continues to symbolize the supposed restlessness and hunger for exploration that characterizes (mostly white) Americans.

Perhaps its most recent revival occurred in 1990 with the creation of the Electronic Frontier Foundation. Largely because many people were concerned over the growing abuses of

hackers in cyberspace, the government organized a massive "hacker crackdown" which some civil libertarians saw as a gross intrusion into the domain of the Internet and cyberspace - especially resented because many people liked the relative freedom on the Internet people had enjoyed previously from any sort of external regulation or control. The EFF was initially founded by Mitch Kapor , John Perry Barlow, and others as a sort of "legal defense fund" for helpless hackers victimized by a supposedly out of control federal government. Barlow's career is really interesting - before he became part of the EFF, he was a lyricist for the Grateful Dead in the 1960s, then a neoconservative venture capitalist in the 1980s, moving out West to Colorado to become involved in business out there. He went from hippie to capitalist cowboy (Sterling 1992).

In the 80s, Barlow helped create Big Sky Telegraph, a BBS/communications network which linked up several Western states (Colorado, Montana, and Nevada.) He realized that communications in the rural West was a growth business - that people liked their 'space' but also loved the ability to nonetheless talk with their neighbor at the fence or the local watering hole. One of the things that first began to rankle Barlow and make him an electronic activist, he related, was the federal government's shutting down of Rusty n' Edie's BBS in the late 80s - a BBS operated by two small-town rustic types that carried large archives of amateur pornography. Barlow discussed this and other episodes with

other people on the WELL (Whole Earth 'Lectronic Link, another California BBS which Barlow had become involved in because of its active Grateful Dead tape-trading and bootlegging forums) and it was there he encountered Howard Rheingold and his idea of "virtual communities."

Rheingold (1994) was one of the first people to suggest that cyberspace was more than just a place where people were communicating with each other - instead, through the creation of virtual spaces such as the WELL and other BBSes, electronic MUD simulations, and 3D virtual reality interactive environments, people were actually creating 'virtual communities' in which in effect people were beginning to settle and *homestead*. Barlow picked up on the settler metaphor quickly. Already, people like William Gibson had called computer hackers 'console cowboys,' and early users of the Internet and electronic mail were being recognized as 'pioneers'. Barlow could not have been unaware of the political currents that were swelling around Western states of the U.S. when he coined the "Electronic Frontier" term in a 1990 essay in which he essentially lauded the strange combination of "Wild West" lawlessness and "Frontier" adventurousness that characterized the early Internet.

At that time, the 'Sagebrush Revolution' was fully underway. Basically, Western states were beginning to actively fight against government regulations concerning endangered species, environmental protection, and land conservation, as people very much like Barlow began

complaining that these were intrusions against property rights. Curiously, one of the key political components of the 'Sagebrush Revolt' was an attempt to undermine federal protection of Indian lands against mineral and other exploitation, as well as federal guarantees of exclusive Indian fishing and hunting rights. The 'Sagebrush' activists revived the Frontier metaphor, suggesting once again that the federal government was interfering in the ability of property owners to develop and exploit the resources of the wide open spaces of the West. Indian reservations and privileges were characterized, once again, as obstacles to the pioneer spirit of America.

I don't know how much Barlow was consciously considering any of this when he and Kapor coined the EFF metaphor, but he cannot have been totally ignorant of some of the resonances that the very title for the organization carried. The point here is not to launch into criticism of the EFF, which has broadened its mission from defending computer hackers (some would say, "sold out"), to fighting for civil liberties, privacy rights, stronger encryption, anti-censorship, and other causes in cyberspace. But the "Frontier" metaphor is one that had adhered to the Internet since the founding of the organization, and allied concepts of 'homesteading' the Net have carried forth to this day. It is unfortunate, because I think that name may be one of the reasons why Native people are cautious and skeptical of getting fair and equal treatment on the Internet. Many

complain about the fact that Indian tribes are denied the Internet URL suffix `.gov` domain for federal governmental organizations.

True, the Electronic Frontier has one critical difference from the Western Frontier - there was nobody already living there when the first electronic squatters arrived, and thus it was in fact a truly empty space. (But since cyberspace is the place that is, in fact, nowhere, what would you expect?) More importantly, the size of your guns (or anything else) there doesn't matter. European-Americans have no intrinsic advantages over anybody else in the anonymous space of cyberspace, other than continuing attempts to maintain a monopoly on knowledge of how the Internet operates. But Lakota and other Indian people are quick technology adopters, as has been noted elsewhere, and very versatile at putting technology to new uses. On the Electronic Frontier, Barlow's console cowboys might find themselves getting shoved out by the Indians - stranger things have happened.

Are Natives Ready for the Electronic Frontier?

Many anthropologists, and other associated 'friends' of indigenous people (such as environmental activists), seek to 'protect' indigenous people from the incursions of technology because they feel that indigenous cultures are 'ill-prepared' for these technologies which thus become a

'threat' to their way of life. Because of the supposed 'alienness' of electronic media and telecommunication technologies to the Native way of life, these technologies are thus said to put indigenous people in jeopardy. However, there are other scholars, native and non-native, who argue the exact opposite: that indigenous people are *well* prepared for electronic technology - perhaps even *better* prepared than their European-American contemporaries. They might be even more *able* to make use of those technologies than the dominant society.

Native People and Electronic Media: the Ideas of Indigenous Intellectual Duke Redbird

In cultural anthropology, it has become a key intellectual concern to emphasize *native anthropology* - the use of indigenous intellectuals to analyze and describe their own culture, rather than attempting to merely describe it from outside. Those of a postmodernist inclination often say that a premier goal of anthropology should be to give indigenous members of their own culture a voice. Despite giving lip service to this concept, anthropologists do not always follow through on this commitment. However, here I will draw attention to a unique native intellectual, Duke Redbird, a Canadian Metis artist, and what he has to say on the relationships between Indians and electronic media. His

words, in this case, come from his biography by Martin Dunn, *Red on White*.

As a Metis (the Canadian term for what might be called *criollos* in Latin America - half-Indian/half-white), some would say that Redbird is hardly indigenous. However, he argues exactly the opposite. "In Canada, the Indians, the Inuit, and the whites are actually all from somewhere else. Only the Metis, the children of their meeting together on this land, are really indigenous." (Dunn 1971). Although the Metis are roughly equivalent to what would be called 'half-bloods' in the U.S., due to peculiar historical circumstances (mainly refusal to be recognized by their white fur trapper fathers), they were never given any higher social status than other Indians, and in fact continued to live through the 19th century in their own 'reserves' and communities, apart from whites. They were treated no differently from other Indians, and in fact, like many other indigenous groups, have suffered for a long time from high rates of poverty, suicide, alcoholism, and other social problems.

Redbird's ideas draw heavily on the writings of Canadian communication researcher Marshall McLuhan and the "Toronto School." He agrees with the central notion that the identity of a community is often strongly connected to the mode or form of the technologies of communication it uses. He points to Walter Ong's (1982) observation that the electronic media are closer to the oral modes of communication used by 'tribal' groups of humanity, and very different in character

from the linear, rational consciousness created by printed media and the written word. Like traditional ways of communicating, the electronic media are nonlinear and 'mythopoetic,' and focused more on group messages and group interaction than the private experience of reading and writing. Thus, argues Redbird, the Metis people are by nature able to express themselves through the electronic media, perhaps in a better way than Europeans. The open-endedness (polysemy) of electronic communication matches the open-endedness (systems) of the Canadian environment, and the open-ended kind of consciousness (plural and hybrid) found in its one true indigenous population, the Metis.

Curiously prefiguring some of Donna Haraway's (1991) ideas of the cyborg being the central fictional archetype for today's hybridized cultures, or recent science fiction novels (such as the *Blessing Way*) featuring natives-as-cyborgs, Redbird describes the Canadian Metis as uniquely "configured" to take advantage of the cybernetic technologies of Canada. "What I have to say is that the modern world of technology, the electronic, tribal total-systems cybernetic society, is the real manifestation of the potential Metis personality. We no longer have to live on the road allowances and margins of North American society" (Dunn 1971). What Redbird is saying is that the European mentality is unsuited for the Canadian environment, and for the media environment of electronic media, but that the Metis by their very nature are best suited for both. Although previously marginalized, in the

cybernetic society, the Metis people can take the center stage. Redbird states:

When the European came to North America, he brought with him his closed super-structure in the name of civilization. Fortunately, it did not fit the gestalt of the North American continent. Here, closed systems do not work, and the European was forced to create both an entrance and an exit to his super-structure. The North American continent, in its own way, shapes the type of super-structure that it will accept. It has the quality of a self-correctional process almost cybernetic in its function. This is the natural process that is North America, and a process that is natural to its indigenous people, the Metis. (Dunn 1971:102)

Essentially, Redbird argues that European socialization leaves Western culture viewing the world as a closed labyrinth, which makes them ill-prepared to deal with the environmental realities of life in Canada and the open-ended nature of the cybernetic networks which they themselves have created. However, the Metis, as intermediaries between the white and red worlds, are prepared to deal with the liminal, intermediating character of cyberspace.

As an artist, Redbird disagrees strongly with the notion that cultural expression is a sideline or peripheral issue to political activism. He sees a cultural renaissance, through mass media, as the fundamental way for the Metis to restore their rightful place in the Canadian consciousness and help set the national agenda for themselves and other indigenous groups. Contrary to other Metis activists such as Howard Adams, who feel that the Metis should avoid contact with the electronic media because of the demeaning representations of Indianness it contains and the potential

for "cultural colonialism," Redbird thinks that the media can be tools for putting forward more Metis role models, so that Metis are not forced to hide their Indianness and disguise themselves as whites. He thinks the Metis will continue to be marginal until they raise their own visibility to the majority culture of Canada.

He sees the Alberta Native Communications Society and other groups doing indigenous regional satellite television broadcasting as "essential" to this process. The Metis need to raise their own consciousness about their history, and that of Canadians about the role that the Metis played in creating the country. The Metis must raise their own awareness, and then take their place in the 'mosaic' of Canadian life, by being granted access to its media - newspapers, magazines, television, radio, and other networks of communication. Essentially, Redbird feels that the solution to the peripheralization of the Metis in Canada cannot come out of ignoring or avoiding the electronic media; it must be arrived at through an engagement of it.

The Internet and Indigenous People

Beginning in 1995, Apple fellow Steve Cisler was charged with creating the Library of Tomorrow Project. At a time when Apple's financial future was somewhat more assured than it is today, Apple wanted to bulwark their reputation as a more socially responsible computer company, "the computer

for the rest of us." So the LOT project was set up a grants program for providing Macintosh computers and software (such as the BBS hosting program FirstClass) to libraries and nonprofit organizations in Canada and the U.S. Some of the initial grantees were the Zuni (who created a reservation area freenet and a multimedia Zuni language dictionary), the Pomo Indians (who created a CD-ROM of artifacts and oral histories), and the native Hawaiians (who started a language preservation and education project). Eventually, many of these groups moved from a FirstClass BBS system to an Internet-based World Wide Web system using MacHTTP, broadening their audience and focus.

In a special issue of *Cultural Survival* discussing the [Internet and Indigenous People](#), available online, Cisler (1998) gathered together a number of representatives of Internet projects for indigenous cultural preservation. He mentions Mander in his introduction to the series of essays, noting that he most notably represents the position that the Internet is antithetical to the survival of indigenous people. In that online article, Guillermo Delado-P. surveys Latin America, and finds active Internet projects among the Maya, the Mapuche, the Kuna, and the Aymara to combat economic exploitation, political repression, and cultural decline. He concludes that indigenous people in Latin America are taking the Internet "by storm."

Aanta Forsgren discusses the appearance of websites for the Saami people in Europe (an indigenous group of

reindeer herders) since 1996, and the efforts they have led to preserve both the northern and southern Saami languages. Jean Polly's account of the Oneida Nation shows that they have had an active Internet presence almost from the birth of the World Wide Web - since 1993. The Oneida were so quick to establish themselves on the Net that other North American tribes turned to them for consultation in establishing their own sites. Keola Donaghy discusses the use of the Internet by native Hawaiian people to record their rich oral traditions, preserve their native language, interconnect the widely scattered Hawaiian islands, and strengthen their language-immersion schools. Finally, Fred Lepine looks at computer projects among the Metis of the Northwest Territories. While some Inuit have called satellite communications a cultural "neutron bomb," most Metis think that as the Internet's wireless capacities, and abilities to distribute audio and video, increase, it will help strengthen Metis language and culture.

All of these reviewers suggest that computers provide a few unique opportunities for cultural revitalization. While it is possible to create printing presses and typewriters using the characters of native languages, it's much simpler to create these typefaces as software fonts in the computer, especially when the writing system is new or is evolving in such a way as to require transitions in how it is written. The computer's ability to display multimedia makes it excellently suited to preserve oral languages, since they can

be heard pronounced by native speakers, and the content of the words can be displayed visually. Further, unlike textual accounts of oral histories and traditional stories, which tend to be fixed and static, multimedia tales can be updated in the rich and dynamic way that has always been part and parcel of indigenous societies.

Furthermore, through the Internet and internetworking, these technologies allow indigenous communities which were previously isolated and fragmented to pool their knowledge, their resources, and their talents. Rather than archiving cultural artifacts and knowledge in a hermetically closed museum, these societies' decision to place on the Internet cultural materials makes them open for access by other indigenous groups and by non-indigenous scholars. Many indigenous groups are angered over how ignored they are by the majority colonial societies, but through internetworks, they have the ability to present themselves to the dominant society on their own terms. While previous media have afforded this opportunity to native groups, it is the widespread global ubiquity and multimedia character of the Internet that may make it most suited for their goals.

Many of these authors feel that the nonlinear, open, and unstructured Internet is particularly well-matched to the indigenous outlook, philosophy, and worldview. Lepine says it matches the circuitous, process-oriented, analogical frame of Metis 'round thinking'. Polly suggests that it is isomorphic to the traditional Indian 'moccasin telegraph' and that the

person-to-person, group-oriented nature of 'virtual communities' is not altogether unlike traditional Oneida decision-making. Donaghy suggests that the network-node structure of the Internet is particularly suited for a far-flung Island people in the Pacific, and that it even matches their mythological concepts of the role of messengers in Hawaiian society. In all of these cases, technology is not seen as something alien, but instead as something that can be assimilated within the indigenous worldview quite easily, because its capacities match certain inherent qualities of indigenous life and thought.

Native Ethnomathematics: To Compute is Human

Scholar Ron Eglash has long been interested in the use of computation, information processing, and 'algorithmic complexity' in non-Western cultures. In his previous work, he has attempted to show the contributions of African cultures to cybernetics and the development of computation. Eglash has attempted to show that we cannot consider the computer or computer networks as a uniquely "Western" invention, insofar as it is rooted in the cultural processes of many non-Western groups, including Africans and Native American ethnomathematics. As a corollary of this, since so many groups already have a tradition of computation, we cannot view the use of computers in these technologies as an 'alien' imposition.

In his most recent paper, Eglash (1997) surveys the use of computation, complexity, and coding in the indigenous knowledge systems of the Americas. His examples are interesting and wide-ranging. He mentions the work of Gary Nabhan, an agricultural researcher who has found that indigenous knowledge systems are often algorithmically oriented toward the propagation of genetic diversity. Nabhan's (1989) work shows how complexity and randomization turn up as fundamental elements of the cosmology of disparate indigenous groups, including the Hopi, the Navajo, the Cayuga, and the Toltec. Indeed, he thinks that these native people had 'traditional' means of reckoning measures of complexity and uncertainty which rival many of the modern algorithms in the mathematical sciences.

Eglash suggests that Native American methods of corn growing may have anticipated the Kolmogorov-Chaitin measure of computational complexity, and that their ideas may even have influenced the Mexican biologist Jimenez-Montano and the American biologist Barbara McClintock in developing their genetic theories of biological diversity. He finds that the Ojibway pictographic scrolls seem to be based on a "self-generational symbolic production rule." He also notes that Native American aphorisms seem to suggest an orientation toward *optimal coding*, or the use of parsimony to avoid superfluous information, while using the optimal amounts of symbols to represent the complexity of the natural environment. A survey of Native American communication

practices, such as smoke signals and fire arrows among the Apache, shows a high Shannon-Weaver entropic value (information content).

Lastly, he also examines the Native contribution to the history of computing, through the use of Native "code-talkers." Native Americans such as the Choctaw, the Comanches, and most famously, the Navajo, were used as 'code-talkers' in the development of cryptography, the first application to which Turing's universal computing device was put. The use of native languages by the codemakers was an implicit recognition that they were too symbolically complex to crack by the Japanese and Germans - they had a very unique "production rule." This collaboration led, after WW II, to the forming of Navajo Technologies, an Indian-owned computer company which created several Ada compilers for the Department of Defense. It is impossible to suggest the computer is an alien artefact for indigenous groups in the U.S., considering how implicated they were in its original development as a military cryptographic device.

Eglash's main goal in this article is to provide the beginnings of a foundation for an ethnomathematical curriculum for Native Americans in the U.S. Rather than somehow being 'alienated' from the worlds of math, science, and computing, Native American youth, through examining their own cultural traditions, can find a rich history of involvement in early efforts to develop techniques of computation oriented toward symbolically representing its

inherent complexity. The computer scientists at the Santa Fe Institute seem to implicitly recognize the indigenous basis of complexity theory through the Native imagery that suffuses their building and their web site.

As Eglash states: "This essay is an attempt to broaden the view of Native American ethnomathematics so that we can, when needed, see change as traditional, 'authenticity' as part of colonial politics, and the artificial worlds as a staging ground for sacred space." Or, to put it another way, Native people have always embraced technological and methodological evolution, and the only people who have really been interested in keeping them frozen in time are the colonial authorities, and that there is no real dividing line between the world of abstract computation and the sacred reverence that Native people feel for their natural and biological environment.

Because of their ability traditionally to reckon and compute the complexity of the natural environment, even without the modern knowledge of such concepts as DNA, one has to realize that Native people might excel in the world of technology and computing. Indeed, groups such as AISES (the American Indian Science and Engineering Society) point to this fact as they hold forward great scientists, engineers, and computer programmers from Native American backgrounds. Native colleges such as Sinte Gleiska have tried to create computing curriculums which ground native students in this

element of their own cultural background while preparing them for the future.

The computer is ultimately a device for symbolic processing, and an open consideration of native culture shows it to be symbolically rich and complex. From the sign languages of the Plains, to the quipus of the Inca, to the wampum belts of the Iroquois, we can find numerous examples of the development of symbolic devices to carry information over great distances. Because many native cultures were nomadic and far-flung over large areas, it was essential to develop simple systems that could communicate complex ideas among people of different cultures and backgrounds. So, in a sense, one could see computer technology as just the latest stepping stone in a long and dynamic history of innovation in native communication techniques.

Examples of Indigenous Television and Media Production

The Invention of Television in Aboriginal Australia

Very early in the fieldwork, it became clear that European interpretation of videos was radically different than Aboriginal interpretations at Yuendumu. We laughed in different places, got upset at different scenes, and, afterward, told different stories about what we had seen. Most Europeans in Aboriginal communities notice this quickly. Some think that the Aborigines just have it wrong, but in time will learn. Others, like myself, suspect that Aboriginal interpretation is internally consistent, makes sense perhaps in terms of some traditional forms, and will have to be accounted for because it is likely to persist. (Tafler 1995:105)

Eric Michaels (1994) worked with the Aborigines of Yuendumu, and helped them create the Walpiri Media Centre in the mid-1980s. He quickly found that the aborigines had a different way of interpreting other media productions, and a unique aesthetic in creating their own. Many viewers of aboriginal videos found that they often contained long, panoramic pans of the landscape. Originally, they thought the Aborigines were just inexperienced with the equipment or the basic aesthetics of moving images. It turns out that they were just using the landscape in video storytelling - the same way in which they do in oral storytelling - as a central "actor" in the narrative.

Michaels mentioned the work of Worth and Adair with the Navajo as an inspiration for his own project. Worth and Adair (1972) gave Navajo youth film cameras in the late 1960s, in part as an experiment to see if Native Americans had a different "filmic" language they would use in constructing scenes, shots, and so forth; and if that 'indigenous aesthetic' might correspond, in some way, with the ways in which their spoken language patterns differ from Europeans. In a sense, Worth and Adair were trying to test the Whorf-Lee hypothesis within a new frame - visual language or visual literacy, rather than spoken language or literacy. Could there be some relation between culture and *Weltanschauung* to structures of visual communication? Would all cultures, given the technologies of video, film, and

moving images, use them to construct the same kinds of images?

Worth and Adair claimed that the Navajo youth did use their 8mm film cameras (although they were given the technology and rudimentary training in how to use it, they claim they gave them no training whatsoever in how to film "good" shots or use "good" edits, leaving those decisions to the filmmaker) in fundamentally different ways. The sequences of shots, assemblages of scenes, and framing of topics were totally different. Almost no Navajo filmmaker tried to make anything resembling a 'fictional' narrative. Worth and Adair were puzzled over the fact that most of the Navajo filmed their sheep. When they interrogated the Navajo over this choice of topic, the Navajo were perplexed in return. They were shepherds. What else would they film? There was no idea that they should use film for anything other than to reinforce or help expand existing everyday activities in their life, no concept of using the camera to create a "fictional story."

Similarly, Michaels' Aborigine informants did not really understand the Western distinction between fantasy or fictional and nonfiction genres. They were unable to understand how the camera could be used to tell a story that never happened. So, he was routinely asked who John Wayne's family was, and why they never appeared in films with him; for Aborigines, every person is connected with a kin group and every kin group with a place in the landscape, and so in

every film that they watched with Michaels, he was interrogated about who characters were related to and where they were from. Also, they were shocked that Western films would depict people who were no longer alive - for Aborigines this was a central taboo, and unthinkable.

Similarly, the Aborigines also considered it inconceivable to tell a historical episode without featuring the people who are descendants or belong to the lineage of the participants. The idea that some actor could "portray" people in the past, who was not in any way related to the lineage depicted, was unthinkable. Invariably, aborigine production teams were organized around kin networks, involving kin related to the individuals depicted. Who was behind or in front of the camera was a continually fluid process, as were almost all other aspects of production; unlike Western video production teams, there was no attempt to divide the group along lines of division of labor based on specialization, skills, or 'talent'. When songs or ceremonies were filmed, it was essential that they be performed by the lineages with which those performances were associated.

As far as subjects of interest to the Aborigine videomakers, the first uses for the video production equipment that Michaels brought with him were for filming sporting events, recording traditional dances, sending "message sticks" (short addresses) to other communities, and so on. However, this was back when the only distribution

vehicles for video were the scattered VCRs in the community. Through the auspices of AUSSAT, CAAMA, and other associations, the Australian government helped the Aborigines set up a regional satellite TV network in 1984 (Mitchell 1993). The Walpiri Media Association, working with Michaels, was thus able to set up their own broadcast station - based on satellite rather than terrestrial transmission technology. Due to the dispersion of Aboriginal communities, this was the only approach that made any sense. As distribution moved to broadcast, the Aborigines began more and more to cover historical 'documentaries' and current issues, such as the Coniston Massacre or taping community meetings.

Michaels found that one of the difficulties the Walpiri station faced was in keeping a broadcast schedule going. Aborigines did not schedule events around the convenience of videographers, and it was unheard of to wait to start an event until the videographer arrived. Likewise, video production teams were assembled informally as the need for them arose. There was no sense of having permanent people filming events around the clock. The solution for this problem was found, in large, by training the studio camera on some part of the landscape, or repeating certain segments over and over again, in order to fill the lacunae in the schedule. Still, Michaels saw that there would be continuing problems focusing on the differences between the traditional seasonal rhythms of Aborigine community life, and the production demands of a broadcast TV station. Today,

Aboriginal television is a strong force for advocating indigenous land claims against the government in Australia (Smyth 1991).

Native Radio Broadcasting in the United States

Michael Keith (1995) discusses the history of Native American radio broadcasting in North America - a phenomenon with a long rich history. Most reservation radio stations began during the politically explosive period of the 1960s, as part of general American Indian frustration over having their concerns ignored by the other media. Prior to this period, there was very little Native North American involvement in the electronic media. He mentions several stations focused on Lakota programming which are of particular interest:

- **Radio KINI-FM**, (96.1), 57 KW, a station founded by Father Joseph Gill, was created on the Rosebud reservation and began broadcasting in 1978. Its goals were to: dispel rumors, promote unity and community, transmit spiritual values (Lakota and Christian), promote Lakota language and culture, provide local community news and events, provide education and information, and offer culturally 'sensitive' recreation and entertainment. It is owned by the St. Francis Mission and does a weekly news program on news from Indian country all over the U.S. entitled the *Sichangu Chronicle*.
- **Radio KILI-FM** began broadcasting in Porcupine, SD. on the Pine Ridge Reservation in 1983 in commemoration of the 10th anniversary of the Wounded Knee occupation. It was started by AIM supporters. Its current operating manager, Tom Casey, tries to steer the station independently of the reservation tribal council, and this has led to several confrontations in the station's history. KILI is a 100,000 watt station, one of the most powerful in the area - since its signal covers 30,000

square miles with Lakota-language programs and other Native-themed shows. It receives most of its funding from the Corporation for Public Broadcasting.

- **Channel 20** is a TV station available to cable subscribers on the Lower Brule reservation through Sioux Satellite Cable Subscribers. It began feeding its programming through the cable system at 1991. It operates through public funding and donations, and mainly exists to provide children's, cultural, and community programming. It broadcasts five days a week from 1 PM- 8 PM. It is Native operated and oriented.
- **Radio KLND-FM** (originally KAEN) started on the Standing Rock reservation in June 1997. Compared to the other stations, it is very new, and thus is still in the progress of developing a complete broadcasting schedule and DJ lineup. KLND delivers a mix of Lakota language programs, country, hiphop, and rock music, and national Native programming from AIROS, American Indian Radio on Satellite. It primarily serves the Standing Rock and Cheyenne River reservations. The station is credited with helping youth on the Standing Rock Reservation persevere through a particularly difficult period of rampant teen suicides, and focuses on live coverage of powwows and sporting events.
- The **Yankton Sioux reservation**, the Sisseton-Wahpeton reservation, and the Santee Sioux reservation all have radio station development projects in the works.

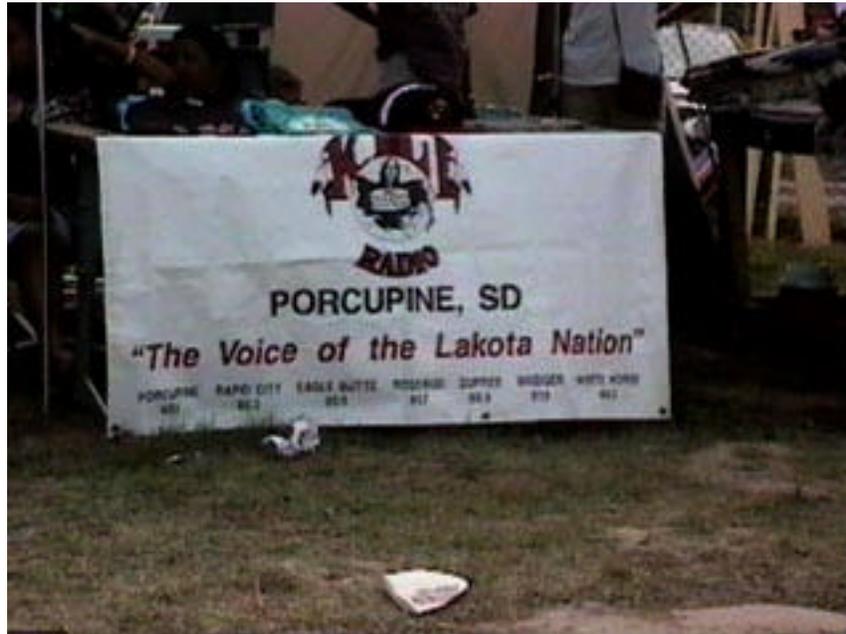


Figure 9. KILI Radio

Although many Indian communities have successfully started up their own radio stations, very few have been able to set up terrestrial broadcast television stations, which require more staff to operate, are an order of magnitude more expensive to run, and require a more difficult licensing procedure (Browne 1996). There also seem to be a lack of Native American video producers in Indian Country, as compared to people who can DJ, talk, or design audio programs, although this situation appears to be changing (Smith 1992). As the amount of video material and video production facilities increase, there will probably be more startups of TV stations, although perhaps through public access cable rather than terrestrial wireless transmission. OTA estimated in 1996 that there were 6 low-power Native terrestrial broadcast stations (such as the Navajo's Purple Cow TV), and an equal number of local cable stations (such as WSBC Seminole Cable TV) carried by tribally owned cable networks. In contrast, there were 27 broadcast radio stations.

Also, most Native radio stations are noncommercial and thus are not primarily funded through advertising. Instead, they rely on corporate underwriting, public funds, tribal money, donations, and the goodwill of a large number of volunteers. They are often facing continuous financial struggles just to keep on the air, aside from the fact that their situations are sometimes politically precarious because occasionally they air things that anger tribal councils. None

of them program exclusively in the Lakota language, but they often broadcast as much as 50% of their shows in it.

There seem to be strong differences between indigenous broadcasting in the U.S. and in Mexico and Canada - probably because its two northern and southern neighbors have a stronger role vis-à-vis state sponsorship of media outlets. The Mexican government sponsors an all-indigenous radio station, and Canadian funding makes the Inuit Broadcasting Corporation (IBC) possible. However, both Mexico and Canada, like some European countries, treat promotion of national culture as a ministerial/department-level issue... something the U.S. would never do. Prevailing U.S. attitudes about government remaining isolated from the media and of private ownership of media would make funding programs like Mexico's or Canada's unlikely here. On the other hand, the long history of ethnic radio in the U.S. by groups such as the Irish and Chicanos has created a "model" for Indian broadcasters to follow.

Keith notes the following observations on the future prospects for Native broadcasting:

Computers are playing an increasing role in Native broadcasting and in the Indigenous community at large. On more and more reservations, computer technology is recording and teaching native languages, tribal history, and traditional culture and knowledge as well as disseminating current events and information... With the information highway and digital technology coming of age, 'Native communities via AIROS will be able to tell their own stories to the world', says Ray Cook. 'We're taking this concept to heart... not only will we access more information, but our perspectives of world events will be added to the mainstream consciousness... the information super highway model of the 90s has made its way into Indian country', observes

Charles Trimble, who said the next Indian wars would be fought in cyberspace... perhaps Native broadcasters can help build onramps to the information highway for our tribes and help keep our people from being among the roadkill. The future of Native radio will be one of rapid expansion. It will be like a black hole. It will take all the energy of today's Native producers, engineers, and more, to fill all the service applications digital technology makes available. Just as the non-Native media industry started with radio and then developed into TV, cable, long-distance telephone relay systems, satellite communications, subcarrier systems, and fiber optics, we see a similar future for Native-based industry components. (Keith 1995)

Inuit Satellite Broadcasting in Canada

Gail Valaskakis (1994) surveys the history and trajectory of native broadcasting in Canada, arguing that the relationship between the Inuit and Western technology has a long and convoluted 400-year history. Inuit goods and services were obtained through the trading of technology and Inuit "whaling bosses" were alienated from the rest of their people through technological 'bribes'. She suggests that nonnative control of information and technology prevented Inuit participating in directing their own cultural change, and controlling their own institutions. Given the opportunity to take control of this technology in the 60s and 70s, the Inuit organized regional media organizations to resist acculturation and economic control by "southern forces" (i.e., the Canadian government).

She notes that Inuit have complained for decades of being "sidelined" from participating in the development of new technologies, and that as they heard of white papers being discussed by Jean Chretien's government on technology policy in the north of Canada, they demanded to be included in the discussions. As Valaskakis points out, technology was consistently rationed and given to 'favored' members of their community in order to secure favors of various kinds. Tired of this treatment, they demanded a participatory stake in the development of satellite broadcasting technology which would reach their homes in the frozen north of Canada. Their response was not to resist the technology, but to have the ability to demonstrate some control over it.

After a decade (1970s) of various experiments, pilot projects, petitions to the government for satellite access, and technological developments, the Inuit finally formed the Inuit Broadcasting Corporation in 1982. The IBC was created to broadcast programming to isolated northern Inuit communities which resisted the "southern cultural assault" and offered native cultural preservation and expression (Graburn 1982). The IBC tries to devote a minimum of 5 hours of TV and 20 hours of radio per week to broadcasting solely in the Inuit language, and on Inuit issues or cultural expressions. It has inspired similar efforts among Eskimo in Alaska and Greenland who admire its rapid success (Marks 1994).

Valaskakis notes that prior to the introduction of the IBC, television in the Arctic functioned largely an

'alien socialization agent.' She feels that studies like Coldevin's in 1977 showed cultural dislocation from the effects of television not so much because of changes in attitude, motivation, or identity among the viewers, but because of a lack of fostering of community-level communication. However, in the wake of the IBC, the numbers of Inuktit speakers have increased, and old storytelling traditions have returned. Because the Inuit have taken control of this technology, it has shifted from a cultural solvent to a cultural coagulant. Now many Inuit report increased interest in and use of television.

Valaskakis concludes that recent changes in telecommunications technology have made Inuit broadcasting even more vulnerable, but also more important. The services provided by native media for the Inuit help them in their struggle against marginality and external control. She wonders if the IBC will survive based on declining funding for the NNBAP (Northern Native Broadcast Access Program) and other trends in broadcasting - especially privatization and commercialization. However, she notes that the media programs of the IBC have become an integral part of life for the Inuit of the Arctic, and that they won't give up on their programming any time soon.

Indigenous Filmmaking and Videography

Authors like Faye Ginsburg, Elizabeth Weatherford, and Monica Frota have documented the growth of use of video technology by such diverse groups as the Maya of Mesoamerica, the Kayapo of Brazil, the Maori of the Pacific, the Eskimo of Greenland, and the Hawaiian Islanders. In many of these cases, the use of video has not reached the level of institutionalization it has elsewhere. Instead of being broadcast, most of the video in these communities is recorded, distributed, and viewed informally, irregularly, and sporadically. (This is the point at which usage of video was on the Cheyenne River Reservation.) However, unlike the Navajo studied by Worth and Adair, these people are going out and obtaining their own cameras and equipment, and training their own personnel (usually off reservation) in use of the technology.

Like other "ethnic minority media projects" - by such groups as the Basques, the Welsh, and Chicanos in the U.S. - the goals are focused on maintenance of the language, culture, and traditions within an indifferent majority culture. Frota's project, the Mekaron Opoi D'joi ("He who creates images"), involved her and visual anthropologists Renato Pereira and Luis Rios, training the Kayapo Indians of Brazil how to use the video camera. For many years, the Kayapo have been struggling with destructive development

which has dislocated them from their land (Fisher 1994). In a video interview, the Kayapo chief Megaron Txucarramal said:

We are learning Brazilian culture to help ourselves hold on to our land, to protect ourselves... now we no longer kill Brazilians with bullets or clubs. Instead we have learned Brazilian technologies or cultural ways. Look, this thing there [the camera] is like a gun. This camera is like a weapon that we can use to protect ourselves. Now we are communicating with Brazilians instead of fighting them. Through the camera we can send messages, our words to the cities. Our words in our defense.
(quoted in Frota 1996)

Frota affirms that for the Kayapo, the video camera is a weapon not just for cultural preservation, but for resistance. As avid hunters, the Kayapo found it easiest to learn to film when Frota told them to think of the viewfinder for the video camera as akin to the sight of a gun. This metaphor took pervasive hold for the community, who realized that they no longer had to fight Brazilians with clubs - through their videotapes, they could confront the government and the public with evidence of mistreatment. She argues that, like the Indians of Chiapas, the Kayapo have realized that in the new terrain of a global media culture, confronting the power relationships inherent in the means of self-representation is the most essential struggle. The camera does not preserve Kayapo culture as a static essence, but instead allows the Kayapo to redefine themselves in a new fashion in the present, contrary to the representations of them as relics of the past so often found in the Brazilian media.

Ginsburg's (1994) survey of global indigenous media suggests for her that indigenous filmmaking contains a unique mode of representation that she calls the *embedded aesthetic*. In essence, she says that indigenous filmmakers do not make films for abstract purposes of analysis (as documentarians and visual anthropologists do) or for entertainment (as creative or fiction filmmakers do), but instead they attempt to embed the process of production of filmmaking and the images they create into the social relationships of their community. What makes indigenous media unique is that they are usually not derived from the Western ideals of individual creativity or the capturing of reality (*cinema verite*): instead, native videographers see their role as creating media that helps reaffirm the social relationships of their community. Indigenous media are evaluated by indigenous people on the basis of the extent to which they help further the community's goals and reinforce other productive activities, not on the basis of how entertaining they are or how "realistic" they are (Leuthold 1994).

Indigenous films, suggest Ginsburg, often seek to convey messages from one community to another, or to re-tell an important legend or narrative, or to strengthen cultural objectives. She does not deny that most indigenous filmmakers have been exposed to Western film aesthetics, from external television and Hollywood film, but she suggests that they do not necessarily turn to it as a model for how to make images even when they are aware of it. However, she thinks that many

Western people dismiss indigenous media too quickly because of its so-called lack of 'sophistication' -- when, in fact, they don't understand that from the natives' viewpoint, many of the aesthetic qualities we term "broadcast quality" are largely irrelevant. Furthermore, indigenous people never go to the lengths that Western filmmakers do to conceal their own activity and involvement in image-making - in indigenous productions, shots of other cameramen or video equipment or people "rehearsing" offscreen are not uncommon. There is no effort to conceal microphones, lights, or other equipment.

Leuthold (1998) is another author that discusses the existence of an "indigenous aesthetic," as particularly exemplified by Native videographers such as George Burdeau and Hopi filmmaker Victor Masayesva, Jr. Leuthold argues that the indigenous aesthetic is not rooted in any particular technical aspect of filmmaking - and thus he says it is not unsurprising that these videographers use such "film school" techniques as unusual camera angles, dissolves, and posterization of scenes. While some would argue that the use of such typically "Western" techniques of filmmaking means that there is nothing unique in the way that Natives make films, Leuthold argues that by focusing on surface attributes of the moving image, they are missing the deeper point. There are unique attributes to indigenous media, he says, but they lie in an idea of aesthetics which is, as Ginsburg might suggest, 'embedded' in other notions of epistemology, ethics,

the sense of locale or place, communal identity, and spirituality or the sacred.

What is distinct about the 'indigenous aesthetic' in filmmaking, says Leuthold, is the deeply rooted idea that aesthetics cannot be autonomous from other areas of life. Native films, like other native art, are never judged solely on physical 'beauty,' the originality or 'genius' of the *auteur*, or the way in which they express the private anguish or other idiosyncratic emotions of the creator. Leuthold notes that Native filmmakers use a typical range of 'landscape' or nature scenes which are hallmarks of their uniqueness as visual creations - and believes that this is not due to Natives' mistaken assimilation into European transcendentalist or neo-Romantic ideals, but instead to evidence of continuity, going back to prehistoric rock art, that any aesthetic product of an indigenous society always shows its rootedness in the land itself. While Indian art is not as 'traditional' as most collectors believe, since there is constant innovation, Leuthold feels that in most areas, including filmmaking, the innovation is always patterned by prior tradition and constrained by collective norms and values.

Leuthold thus takes the position that filmmaking simply represents an "incorporation" rather than as "assimilation" - that by using the camera, native people are actually using a new technological tool to maintain in the present a long-standing tradition of "visual documentaries"

through other technological media (such as wampum belts, winter counts, and so forth). He argues that most ethnographers have misunderstood the native reluctance toward photography, which is based not on any hostility to image-making or superstitious ideas of "soul capturing", but instead a savvy realization of the misuse and abuse of photographic images by the early Indian photographers. Cultures that had never seen photographs before, he notes, quickly analogized the medium to an extension of some of their own activities for image-making, and thus there was a sense that the camera could be used in continuity with earlier activities for visually preserving the heritage and culture of the group.

Elizabeth Weatherford has been involved in studying and interpreting the indigenous media activity of Hopi filmmakers such as Victor Masaveya, Jr. and other videographers in the Southwestern U.S., as well as other parts of the world. Many of her articles on indigenous mediamaking has focused less on the aesthetics of its viewers than on the cultural processes of its creation. Weatherford (1990) argues that indigenous filmmaking is unique because it tends to eschew the specialized "crew" metaphor that governs so many Western productions. People are constantly moving behind and in front of the camera. There is rarely a fixed 'producer,' 'director,' 'cameraman,' 'grip,' 'editor,' 'scriptwriter,' or 'talent' - indigenous people are constantly switching between these various roles and often

involving various members of their family in assisting with any or all of these functions. Indigenous filmmaking often becomes curiously egalitarian, with no one ever being "in charge" of the process of production or following a pre-fixed 'script' or 'storyboard'. When scenes require re-telling the story of a family, members of that family are called upon to participate.

Like Ginsburg, Weatherford argues that this style of filmmaking is not necessarily inferior, merely different. However, Westerners accustomed to the aesthetics of their own visual productions tend to think it is poor in quality because the indigenous people ignore certain key conventions (such as continuity or mise-en-scene). Weatherford suggests it is not because the indigenous filmmakers are "worse" at image-making - it's just that they come at the image-making process with different assumptions, ones which are not necessarily less valid. Like Frota and Ginsburg, she believes that visual anthropologists should teach indigenous filmmakers the basics of using cameras and editing equipment, *without* forcing them to use the kinds of shots or edit that they feel are "right," since these visual assumptions often turn out to be ethnocentric. She suggests that, just as with culture itself, certain things that filmmakers take as 'given' about filmmaking are really arbitrary and dependent on historical processes of the development of the medium in the West.

Frota, Ginsburg, Leuthold, and Weatherford all have transcended the simple scientific or theoretical objective of Worth and Adair. They no longer want to give indigenous people a camera in order to see if they will do things differently with it than whites. The question has moved beyond a curious experiment to an effort to help people transform their social reality. Although they are interested in the question of a different visual 'grammar' for indigenous people, their primary focus is essentially an *applied* one - how do these groups use media productions to challenge institutional social and political structures in the majority societies in which they live. This question for them is more interesting than any observations of what may be unique or interesting about indigenous film as an aesthetic product, or culturally unique about the differential dynamics (gender and otherwise) of media production in those societies.

In 1996, the first major motion picture from a Hollywood studio with a largely native cast, a native screenwriter and producer, and a native production team was released: *Smoke Signals*. The producer was Sherman Alexie, an author of many fiction books such as The Lone Ranger and Tonto Fistfight in Heaven and Reservation Blues. The Kevin Costner film *Dances with Wolves* proved to many Native Americans that white people would go see a film that tried, at least with some sincerity, to depict the reality of native history to a white audience. Then *Smoke Signals* proved that

they might even listen to native people telling that story. Smoke Signals was not a "blockbuster" motion picture by most Hollywood studio standards, but it did prove to native people (just like Spike Lee and John Singleton have to black filmmakers) that a native-produced film could command some 'mainstream' white attention - and ticket receipts. And the very title of the film hearkened back to the Indians' earliest methods of communicating over long distances.

Native Internet and Multimedia Projects

There are a number of Native American initiated, owned, and operated computer projects for the development of multimedia, hypermedia, and Internet media. These show that Native people are indeed interested in what might be considered the "cutting edge" of media technologies. Herein we discuss some of these examples.

Since 1996, the *United Native American Television Broadcasting Council (UNATBC)*, a division of the United Native Culture and Language Exchange, has been maintaining a large Internet presence, including the LISTSERVs NAT-IMATION (for native computer animators) and NAT-FILM (for native filmmakers). Their goals have included the formation of an all-native owned and operated, nationally distributed, television network, which would be carried in the U.S. on DBS satellite and cable systems.

First Nations Communications (FNC), a Metis-owned and operated company started in 1994, helped develop the *Spirit*

of *Aboriginal Enterprise* web site (promoting native entrepreneurship), created a multimedia CD-ROM promoting aboriginal tourism in Canada, and worked with CAAIT (Canadian Aboriginal Alliance for Information Technology) to develop 'advanced multimedia and broadband technologies'.

IBM, Raytheon, and Lockheed Martin have joined in a joint coporate-government recruiting program known as *Delta One* which began in 1997. The focus of *Delta One* was to recruit American Indians into software development. Samuel Adams, a part-Cherokee manager of the program, thinks native people have certain 'technology advantages':

Many are bilingual. They're used to thinking abstractly in different languages. There's a strong musical heritage. Just ask any software company about the 'music connection.' The proportion of software employees who play music is above the average for other professions. Also, holistic thinking. The American Indian culture constantly refers to the interconnectedness of nature. Part of the reason American Indians have been called the original ecologists is their appreciation of how changing one facet of their natural environment affects another part. They worked with holistic systems all their lives. The cultural tendency is to explore all ramifications of a design or change in a system, and not be satisfied working on an isolated piece. (personal communication)

NightHawk Designs is a recent Native American owned and operated business. They create website graphics and other multimedia productions. The current team consists of professional computer programmers, writers, artists and designers. They hail from five different states: South Dakota, Iowa, Kansas, Texas and California. All are also members of federally recognized Indian tribes.

Oneida Nations Telecommunications Infrastructure Development is a joint project between NYSERNet, Apple Computer, and the Oneida Nation, this venture created the first tribal home page on the Internet in 1993. The project has since expanded into providing fiber-optic connectivity to government offices, community centers, and tribal housing on the Oneida Nation reservation.

The Educational and Cultural Organization to Advance Restoration and Transition (ECOART) and the *Komike Hau'leo*, beginning in 1993, helped develop several new Hawaiian words for technological items (such as modems and hard drives), a computer font for the Hawaiian language, the native-Hawaiian language *Leoki BBS* (which now operates as an Internet Service provider for all of the remote islands), and a homepage advocating the restoration of Hawaiian sovereignty.

North Slope Borough Distance Education Delivery is a distance-education program in Barrow, Alaska which originates from a high school studio. It uses a full-time dedicated satellite link to provide two-way videoconferencing and transmission of video, text, and graphics. Alaskan native children "attend" classes in such things as Inupiat language and culture from remote locations using this system.

NativeNet information network, coordinated by Gary Trujillo, operates several Internet listservs, including NAT-LANG (discussion of language renewal programs), NAT-1492 (about native history and impacts of colonization), and NATIVE-L, a general indigenous peoples' announcement list.

[Fourth World Documentation Project](#) is an online archive containing documents (treaties, oral histories, agreements, position papers, etc.) relating to over 300 indigenous groups throughout the world, including the Pacific, Asia, Africa, and Europe.

[American Indian Computer Arts Project](#) was started by Turtle Heart, an Ojibwe Artist, in the early-1990s. It features computer generated multimedia artwork by native artists, dispelling the idea that native artists would not work in such a "synthetic" medium.

[NativeTech](#), a site started by Tara Prindle, focuses on documenting the technological creativity of Native Americans both past and present, especially when it comes to craftwork. The goal of the site is to fight the idea that native people were pre-technological 'savages' and showcases their technological sophistication. It links to Electronic Pathways, a site for promoting technology infrastructure for Native Americans.

[Costanoan-Ohlone Information Page](#) - this California Indian-based web page operated by the Costanoan Information Centre provides information about aboriginal heritage within the state, and also features a virtual-reality 'flythrough' of Indian Canyon, documenting burial sites and other sacred areas which bolster the claim of the Indians that the canyon is their cultural and religious property.

Summary

What the reader should take away from this literature review are the following main points. First, that interpretation of TV effects in Western societies is in its early stages and findings are ambiguous because there does not seem to be agreement on the right type of approach. Extrapolating from these effects to indigenous cultures is problematic for that and other reasons. The research by communication researchers, sociologists, and anthropologists on TV effects in non-Western societies is similarly ambiguous but in any case does not make a strong case for technological assimilation of indigenous people. The idea that indigenous people are threatened by technology is shown to have arisen out of a problematic intellectual tradition in Western history.

The ideas of Jerry Mander are shown to be emblematic of the current effort to keep technology away from indigenous people. The main negative voices in anthropology regarding TV, technology, and native peoples, Edmund Carpenter, James Weiner, and Lauriston Sharp, are discussed, as well as possible flaws in their perspectives. Finally, the origins of the "electronic frontier" metaphor are discussed, as well as literature that contradicts the idea that native people are not ready for it and will be overwhelmed by it. Examples of indigenous media production suggest how they are already advancing their position in this nascent field. This

literature review shows that native people are using all aspects of the 'emerging media' - video, television, radio, multimedia, Internet, and hypermedia.

CHAPTER 3
THEORY AND METHODS

Theoretical Perspectives

Intra-Social Theories of Media Effects

Many of the early theories about media and culture are discussed by Stevenson (1995) in his work on 'media cultures'. However, most of these theoretical paradigms focus on the cultural effects of media *within* a society, rather than their effects when transmitted *between* societies - i.e., what occurs when the technology of media, and the content it carries, is translated from one culture to another, particularly in the modern case of the transfer of media from Western societies to non-Western cultures, developing nations, or Fourth World/indigenous societies. Still, these frameworks provide the bulwark of the *cultural imperialism* thesis, which in many ways was an externalization of the model of how media functioned ideologically in an internal context. Herein we address some of these early media theories.

The Frankfurt School, which appeared in the 1940s, consisted of the scholars Walter Benjamin, Theodor Adorno,

George Lukacs, Max Horkeimer, Herbert Marcuse, and others. They wrote on how a close analysis of the "culture industry" revealed how conglomerate capitalism dominated mass culture. Mass media forms (such as tabloid newspapers, pulp novels, and radio serials) served to repress the consciousness of the masses, keeping them distracted from their real social conditions and any possibility for heterogeneity or conflict (Wiggershaus 1994). The Situationists, led by Guy Debord, expanded on the Frankfurt School critique of media and ideology in the 1960s. For Debord (1973), mass media societies had degenerated into "societies of the spectacle" where authentic leisure had been replaced by the rationalized, routinized, demeaning "programmed leisure" of the mass media, and political participation replaced by a participation in the spectacular - everything in life had taken on a theatrical, performance-like character.

Raymond Williams, whose work is usually taken to be foundational for the current academic vogue for "cultural studies," saw mass media and communication as belonging to the realm of 'popular' or 'low' 'culture,' which was a shallow and synthetic creation which left 'high' or 'serious' 'art' to a privileged elite. Williams (1992) suggested that television and the other mass media had a 'hegemonic' function, in promoting a feeling of 'alienation' from being connected to other people in society, thus preventing class consciousness from forming, or from people realizing their own capacity to use the media to create a 'democratic

realism' that reflected their own social conditions. As he saw it, the centralized nature of broadcast media led to their usage to create an 'authoritarian' rather than a democratic culture.

Baudrillard's critique of media builds upon all these other paradigms, as well as the poststructuralism and postmodernism of other French intellectuals. Baudrillard's (1994) rather audacious claim is that media have subsumed everything else within post-industrial culture. *Simulacra* or simulations of reality through media are now preferred to anything within real experience. Advertisers no longer sell commodities, they simply sell the "image" or "aura" of the presence of things that are increasingly undifferentiated. Wars and other political struggles now occur within a 'virtual reality' where everything has taken on the character of a video game. Reality has been replaced with a "hyperreality" where people no longer know the difference between actors and real people, between Disney's version of history and 'real' history, or between real events and events staged for their performative value. Media no longer simply dominates us, according to Baudrillard, it subsumes every aspect of our lives.

Situationism, Baudrillard's hyperreality, cultural studies, the Frankfurt School - almost all treat mass communications as alienating, lacking any potential for emancipation or the development of democratic potentials, and manipulative of the masses on the behalf of the late

capitalist elite. For them, the media in no way help to transform social reality; instead they help maintain it for the *status quo*. The only contrasting position has generally been that of Habermas, who sees communication technology as part of human beings' rational search for "intersubjective communication." For Habermas (1984), mass media helped create the 'public sphere,' a discursive space where people could rationally and harmoniously work together to create a cohesive civil society which would balance out the power of corporations or of the State. Habermas was one of the few 'media-theorist' intellectuals who did not demean popular culture as irrelevant or destructive to mass society.

Unfortunately, his ideas had largely fallen by the wayside in the 60s and 70s when, in the wake of decolonization of the world, in the midst of the many national liberation struggles being waged in Asia, Africa, and Latin America, people proposed a new paradigm for looking at the way that mass media functioned internationally, at the global level. This paradigm, known as "cultural imperialism," suggested that mass media functioned as an adjunct to the colonial (imperial) political, economic, and social domination of the developing world by the "core" or developed nations. Charges of cultural imperialism have also been levelled by developed countries such as France (whose Minister of Culture, Jack Lang, is thought to have made it a 'household word' during a diatribe against Hollywood's flooding of the film market in his country) and Canada

against the U.S.; in the case of Canada, media activists have fought to regulate the influx of U.S. direct-broadcast satellite TV programming into the country since the early 1990s, seeing it as an imperialistic imposition and a threat to Canadian sovereignty and unique identity (Stokes 1992; Pool 1998).

Cultural Imperialism Theory

The theory of cultural imperialism suggests that media and mass communications are used as agents to increase the influence of one society on another. Cultural imperialism theory claims that electronic media are used as tools to "colonize" another society's culture. Rather than exercising power through direct military, economic, or political means, this theory presupposes that today's post-industrial societies use media technology to expand their influence and control. Through export of certain values, ideas, and beliefs, media are used to transform cultures so that they will be more easily controlled and exploited by the dominant media-producing societies (Karlsson 1995).

This theory has been taken very seriously at various levels. French people have been notorious for hurling accusations of cultural imperialism at American "invasions" of their culture by such things as EuroDisney or Hollywood films. In Iran and many other Islamic societies, the purchase of satellite TV dishes has been proscribed, because they

result in what is seen as electronic 'colonization' by the decadent culture of the West. Many Third World nations believe that the United States and other nations engage in "electronic neo-colonialism," blanketing the globe with their media messages while not giving them the chance to reply.

In response, many of the member states of the United Nations have called for a NWICO (New World Information and Communication Order) where media, communications, and information technologies would be more democratically shared and accessed by the planet. Rather than a "one-way cultural monologue" from the West to the rest, there would be an open and equal dialogue. Third World cultures would be able to represent themselves in the media, rather than be represented stereotypically and unfairly by the Western gaze. They would be able to conduct their own internal development campaigns without crushing dependence on the developed world (McAnany 1980).

The staunchest proponents of cultural imperialism theory hold a view of media which is very similar to that of Herbert Marcuse and other neo-Marxists of the Frankfurt School of the 40s and 50s. The Frankfurt School elaborated the ideological critique of media first developed by Gramsci in the 1930s. For Marcuse (1964), the media were tools of internal imperialism, the main agents of fostering the views of the ruling classes on everyone else, within nations and other societies. Intellectuals like Marcuse argued that freedom of the press in Western societies was a sham because

it was only free to people who owned one, and the means of information (media transmission centers) were in the hands of the capitalist class. For Marcuse, all media were forms of propaganda, and all were in the service of the State for suppression of other competing ideologies.

Today's cultural imperialism theorists see global media productions (internationally distributed Hollywood films, satellite television, etc.) as agents of domination by the *core* of the world-system, over the *periphery* of the underdeveloped or dependent nations. The domination in this case is at the nation-state level, with media communication being used to force the dependent countries to accept their marginalization within the global system of power and production. Media are used as tools of *homogenization*, so that consumers in various societies will use the same types of products and commodities, and accept their domination as a "natural" consequence of the superiority of Western values and ideals (Lewis 1993).

Cultural imperialism claims that the United States and other advanced countries use media technology consciously to acculturate other societies and eliminate whatever difference exists in those societies, when that difference impedes the expansion of the global world-system. While some degree of cultural difference is tolerated and transformed into a marketable leisure or tourist commodity, any kind of cultural resistance or assertions of independence are eroded. Native forms of cultural expression and communication are

targeted for *replacement* by Western cultural productions and the ideologies they are said to foster. Traditional lifeways are demeaned by Western media, which instead offer a "better" life of programmed leisure, consumption, and modernity.

Some Native American intellectuals contest that what is occurring *within* the United States consists of this form of cultural imperialism (Churchill 1992). Because the U.S. could not assimilate the American Indians with previous attempts at termination, relocation, and reorganization, they are now using electronic media to acculturate and dominate Native people. Just as some have said of events elsewhere in the globe, these Natives claim that the infiltration of reservations by cable, satellite, and broadcast television represents an imperialist effort of one nation (the United States) seeking to determine and control the lives of another (the Indian nations.) The 'bombardment' of reservations (descriptions of cultural imperialism in practice often use military metaphors) with advertisements for alcohol, "John Wayne Westerns" showing Indians as despicable and uncontrollable savages, and depictions of the white *bourgeois* lifestyle as an ideal, continue what they see as an age-old 'assault' by the dominant society on Indian culture.

Unfortunately, the cultural imperialism theorists, as in many other cases, overstate the effectiveness and power of media. There are many unacknowledged caveats within these

theories. First, research on mass media effects (vis-à-vis violence and other behaviors) in the U.S. has shown that media images do not transform peoples' ideas and perceptions overnight. As with recent research on literary criticism, it seems that mass media audiences do not all "read" or react to media productions in the same way, and Third and Fourth World audiences do not necessarily "read" Western media products in ways that would suggest they reinforce beliefs in Western superiority or the advantages of the Western way of life (Golding 1997).

Secondly, cultural imperialism theory assumes a sort of conscious agency on the part of Hollywood studios and other places of media production - that these sites in Western countries deliberately create media with the purpose of influencing other societies. It is the case that multinational media companies, like other corporations, do want to expand into global markets, and thus try to disseminate their productions to as many places as possible. However, in doing so, they are often forced by idiosyncracies of the local culture to change certain scenes which could be "read" in a different fashion which would lead to a negative reception. Thus, the studios have to adapt their products, rather than causing the audience to adapt. Further, many of these U.S. media productions are primarily aimed at U.S. audiences, with the European and global "aftermarket" as an afterthought. Studies have shown that a lot of clever 'repackaging' of dialogue and content occurs when films and

shows are re-dubbed into other languages (Korzenny 1992), appealing to local tastes and preferences.

Also, the theory overestimates the global "reach" of Western media. Some of the most widespread international media products are created by the film studios of India and Hong Kong, especially throughout Asia. Many countries have a flourishing native cinema, and international films in particular enjoy widespread reception in the U.S. especially among artists and intellectuals. The 'world music' shelf in any major record store today contains musical recordings from artists throughout the world, and even in the 'pop' section, there are infiltrations of artists from Japan, Iceland, Jamaica, and Cuba. Many U.S. communities carry "Univision" on their cable systems, bringing Brazilian *telenovelas* to the homes of Hispanic and non-Hispanic Americans.

If the West is 'colonizing' the world with its media productions, it is similarly being 'colonized' in return. While the global dialogue is not anywhere near equal, and a large amount of 'world music' really represents appropriations of other peoples' music into a repackaged performance by a New Ager or some other Western recording artist, it is nonetheless the case that the media 'marketplace' at present is not one-way. As fixed local cultures are instead being replaced with Appadurai's (1996) global "ethnoscapes" of transnational migrants, cultural elements of various societies are being dispersed throughout the globe. Each of these groups has made their own

contribution to "Western" culture, especially its popular music, which some ethnomusicologists would say is almost totally rooted in African elements.

Native American music and art is very popular today, so much so that many items are actually 'inauthentic' reproductions made in Asia. Native artisans, musicians, writers, and even filmmakers (such as Sherman Alexie) now have large non-native audiences for their works. New Agers routinely enact their own 'repurposed' versions of Native ceremonies such as the sweat lodge, sun dance, and Navajo chantways. The truth is that there has been a large degree of cultural borrowing and appropriation in both directions - but this has been a fact of culture contact and diffusion throughout history. It's simply incorrect to state that there has only been a one-way flow of cultural products from the dominant society to the indigenous cultures (Lull 1995).

Cultural imperialism assumes that "foreign" media are imposed on people as an unwelcome external imposition. But is this the case? Once again, agency is denied the 'victims'. Cultural imperialist theorists seem to refuse to consider that people might want to sample media productions of other cultures just for their novelty or interest; the existence of any 'desire' for 'foreign' cultural products is assumed to be a Marxian "false consciousness," or perhaps a lack of cultural authenticity. If Indians want to listen to non-Indian popular music, then they are only "apples" - "red on the outside, white on the inside". (Like calling a black man

an "Oreo," "apple" is a nasty insult for many Native people.) The assumption is that the culture is somehow 'seduced' by the external influence, rather than simply pursuing variety or new possibilities.

The cultural imperialist theorists treat culture in its more improper, reified sense: a bounded, static object fixed in one place - rather than a dynamic moving target which is always changing, evolving, and adapting. Culture is treated as something which is 'pure', 'rooted' in tradition, constant; cultural change is treated as dissolution, disintegration, and disappearance. While cultural evolutionists might be faulted for believing that all cultures evolve toward the same final state of modernity, cultural imperialists can also be faulted for viewing every form of cultural change as an imposition to bring societies toward that state. But current anthropology understands culture as a condition of hybridity - a mixing of many influences - with traditions constantly being 'reinvented' in the present. So, cultures receiving messages and media productions from outside is simply a cosmopolitan reality of our global society, but nothing new, and nothing threatening to their survival.

The most important question might be: does it work? The dominator societies would not engage in "cultural imperialism" if it did not work. And some of the data seems to suggest that even if they are trying, they are not succeeding. Marie Gillespie (1995) did a study of television

and cultural change among Punjabi Youth in Southall, west of London. She noted the similarities between her informants' interest in the Australia soap opera *Neighbors* and Miller's (1991) work on how people watch the soap *The Young and the Restless* in Trinidad:

Thus in Trinidad, as in Southhall, according to a very similar pattern, a transnational media product is appropriated in ways which encourage people to refine their conceptions of their own local culture, and at the same time redefine their collective identity in relation to 'representations' of others. Such 'indigenisation' as an effect of globalisation involves enhanced cultural consciousness...the development of global communications increasingly brings together cultures which might have been distinct, calling forth a range of ambivalent responses, sometimes hardening and sometimes dissolving boundaries. (Gillespie 1995: 85)

Gillespie found that while the Punjabi youth of Southall would draw upon Western media productions as a 'resource' for challenging their own cultural traditions, questioning such 'traditional' practices as arranged marriages and eating only Asian, home-cooked foods, they also interrogated the media for the ways in which it stereotyped Asians and did not offer Asian role models in terms of beauty. "TV talk" (discussion of their favorite TV shows) allowed them a frame of reference to discuss forces within their own community (especially the practices of gossip and interracial dating), and to reflect on ways in which things could be improved. But television did not cause them to give up their ethnic identity in return for some vague, nondescript identity of "global youth."

Like the Trinidadians, the Punjabi youth of Southall 'indigenised' television shows in order to help them make

sense of their own local cultural reality. They connected television characters with people they knew in their own community. They drew upon popular music videos to improvise school skits which would lampoon certain contradictions within the culture. They identified with the 'freedom' of American teenagers which were displayed by ads showing them to be fun-loving, care-free, and, most importantly, not 'trapped' in the webs of filial responsibility. But when they encountered shows which they felt did not do justice to the situation in the Punjab, or to Punjabi people living in Britain, they acted as enraged and disappointed as their elders.

They still clung to their distinctiveness as "Asians" - and, as Gillespie noted, there was little escaping that ethnic distinctiveness when they went to the mall, or visited other neighborhoods with other British kids. As she points out, the state has an overarching interest in maintaining the ethnic boundaries of its citizens, mainly because it often relies on positioning different ethnic groups within the overall economy and social structure. However much media might try and 'erase' ethnic identity (mostly by portraying the "typical" Briton as white and middle-class), there were a host of other forces constantly reinscribing it.

Tomlinson (1991) suggests that what we are experiencing as we approach the turn of the millennium is not cultural imperialism - the forced imposition of capitalist modernity from the "core" onto the "periphery" - but instead

the process of globalization. He describes the difference thusly:

Globalisation may be distinguished from imperialism in that it is a far less coherent or culturally directed process. For all that is ambiguous between economic and political senses, the idea of imperialism contains, at least, the notion of a purposeful project: the *intended* spread of a social system from one centre of power across the globe. The idea of 'globalisation' suggests interconnection and interdependency of all global areas which happens in a far less purposeful way. It happens as the result of economic and cultural practices which do not, of themselves, aim at global integration, but which nonetheless produce it. More importantly, the effects of globalisation are to weaken the cultural coherence of *all* individual nation-states, including the economically powerful ones - the 'imperialist powers' of a previous era. (Tomlinson 1991:24)

Tomlinson discusses research by Katz, Leibes and Ang on the reception of the television series *Dallas* by international audiences. Israeli and Dutch audiences did not watch *Dallas* in the same way that Americans did. Rather than adopting the show's (supposed) premise that wealth is the root of happiness, they critiqued it from the viewpoint of the flaws in the relationships of the characters. Instead, they often discussed the show within the framework of how it revealed the moral 'bankruptcy' of American values. "The general message of empirical studies - is that audiences are more active and critical, their responses more reflective and critical, their cultural values more resistant to manipulation and 'invasion' than many critical media theorists have assumed" (Ibid).

People in various societies do not allow their identity or their sense of self to be 'conquered' by the

media productions of other cultures. Audience response research suggests that mass media do not magically 'overpower' culture... instead viewers react to and respond to the media text in ways which attempt to link it to their cultural context (Carragee 1990). They often reinforce and "shore up" their own culture through comparison and contrast to the media images of other cultures. Discussion of mass media images forms the basis of cultural conversations about their shared perceptions. Though media may lead them to question cultural assumptions, it has no privileged power in this regard. They are not assimilated by media; they assimilate media into their lives.

While Tomlinson does not think that cultural imperialism really exists in the sense that its critics believe, he does think that the condition of "late capitalism" or "late modernity" is unhinging people in every society, since our 'social imaginary' is incapable of imagining processes at such massive global levels. The accusation of 'cultural imperialism' is ungrounded in that every culture is undergoing various forms of dissolution - but not necessarily due to 'conquest' or 'invasion' by any other particular culture; instead, 'globalization' is 'unhinging' everyone and everything.

While the global reach of electronic mass media and communication technologies is part and parcel of the process of globalization, it is hardly the only factor. Instead, the growth of global trade networks, multinational corporations,

transnational migrations and diasporas, international institutions, and awareness of global ecological problems, make it a reality for everyone. Media technology plays a role in this process, but it is not the central factor. From this perspective, it might be a good idea to approach the "global village" of Marshall McLuhan.

Technological Determinism Theory

The general theory of technological determinism could be simply expressed as follows: that the dominant force in cultural change is the introduction of new technology. As new technologies are introduced in the material infrastructure of production and reproduction, inevitable changes in the social structure and ideology of societies inexorably ensue. Technological determinism could be seen as a corollary of cultural materialism: that the primary source of explanations for cultural change should be found in infrastructural conditions and transitions. It thus follows from the theory of technological determinism that societies with similar technologies will display similar sociocultural configurations.

Thus, when a society diffuses a technology to another society, that society takes on the sociocultural characteristics of the 'diffuser'. Technological determinism underlies a great deal of cultural-evolutionary theory: such as White's (1949) notion that the key factor in the

"development" of a society is its efficiency in the use of energy. In this view, societies exist along a continuum ranging from animal power and the use of the fulcrum, to nuclear power. Technological determinists assume that new technologies cause 'devastating' cultural changes to indigenous societies - as with the famous example of the steel axes that "unbound" the kin networks of Australian aborigines - and that technologically 'superior' societies will always swallow and overwhelm 'inferior' ones.

Unfortunately, technological determinism suffers from a number of ethnocentric and other misguided normative assumptions. What are 'superior' versus 'inferior' technologies? Is nuclear technology really 'superior' to animal power? (It depends on whether you consider risk or not.) Are guns 'superior' to spears? (It depends on whether your criteria are lethality or the risk of "friendly fire".) Was the cultural decline and loss experienced by indigenous cultures in the Pacific or the Americas at the hands of 'superior' civilizations merely the product of their new technologies, or rather due to deliberate assimilation programs carried out by the colonizers - rules forbidding the practice of traditional ceremonies, relocation, imposition of new social systems of production, etc. - and inadvertent factors like disease, new crops and new animals, and racial caste systems?

Technological determinists would assume that cultures will come to resemble other cultures with the same

technological 'base'. Thus, as Western technologies spread throughout the globe, the societies adopting and using those technologies will become like Western societies. In fact, most of "modernization theory" in development practice is based on this theoretical perspective. Modernization theorists assume that the primary hindrance to national social and economic development are 'traditional' cultural or rural/folk practices that prevent people from advancing. New technologies will displace these "obstacles" to development. So modernization theorists assume the key to development is to give people new technologies, such as contraceptives, agricultural technologies, bio-engineered crops, and machine industry. Given such things, the "developing" world will undergo the same demographic transition which occurred in the First World during the Industrial Revolution - the transition to a liberal, individualized, capitalist economy.

Along these lines, some technological determinists would suggest the same process occurs in indigenous societies. The 'incursion' of technologies from the 'dominant' society, such as television, computers, and other media technologies, will cause the same cultural changes that these technologies have produced in our own culture. However, due to the relative powerlessness of indigenous cultures, these effects (breakdowns in traditional family structures, relationships with the natural environment, "atomization" of individuals) are assumed to be even more severe and more drastic. Once again, the direction of cultural change is

assumed to be away from existing cultural patterns, and toward the patterns found in Western post-industrial societies. In this sense, even the anti-evolutionist technodeterminists find themselves in agreement with evolutionist anthropologists.

A special case of technological determinism might be the theories of the Toronto School of Innis (1964), McLuhan (1988), and Ong (1982). The Toronto School promoted the theory that one of the primary determinants of cultural organization was the kinds of technologies of communication that exist in a society. Proponents of the Toronto School thesis assume that the kinds of media and communication used in a society influence the balance of sensory relationships and cognitive functions in individuals, and thus the nature of social organization. Based on the research of Parry and Lord, and studies of Russian illiterate peasants, the Toronto School suggested that there was a "Great Divide" between oral and literate cultures, and that the 'technology of writing' or the phonetic alphabet was responsible for the growth of Hellenic individualism, democracy, and rationalism, while causing the waning of traditional poetry and oral traditions (Finnegan 1988). Literates were thought to have processes of cognitive development not found in preliterates.

Likewise, the Toronto School theorized that the printing press was responsible for many of the transitions in Europe which followed, such as the growth of nationalism, the

scientific and industrial revolutions, and the Enlightenment. Printing made literacy accessible to the masses instead of scribal elites, thus even more deeply "inscribing" the cultural transformations supposedly wrought by literate minds. Mostly, the Toronto School was interested in the changes that would be created by the advent of the electronic mass media - radio and television - in the 20th century. Ong (1982) theorized that these technologies would cause a return of 'secondary orality,' undermining the individualism fostered by literacy in favor of a 'neo-tribalism' reinforced by the sense of belonging to a 'global village' of sight and sound. Today's followers of the Toronto School are now asking whether the Internet is an extension of the media forms of electronic broadcast technologies, or a new and wholly different form of communication with completely different effects (Scheunemann 1996).

Anthropologists such as Jack Goody took up the questions raised by the Toronto School, curious as to whether a "Great Divide" existed between illiterates and literates in Africa. Goody (1977) concluded that there was a direct correlation between literacy and the promotion of economic, political, and cultural development. According to Goody, cultures without literacy lacked self-reflectiveness or self-consciousness, or the ability to develop the complex mathematical and logical skills needed for development. Oralist cultures were too deeply enmeshed in the rhetorical powers of charismatic individuals to develop the impersonal

and bureaucratic formal-rational institutions of democracy. They were incapable of separating people from the roles they played in the social structure. Their need for face-to-face communication and interaction led to a 'narrow communalism' that prevented them from becoming open to new ideas and technologies.

Although the debates about orality and literacy continue to range in anthropology and in other disciplines, many anthropologists of the Toronto/Goody school are interested in the appearance of a "third term" in cultural life - the appearance of 'teleliteracy' or the skills of encoding and decoding messages transmitted through electronic communication. There is a great deal of argument about what the effects of 'teleliteracy' on the industrial or post-industrial world have been, and we have far less than a century's worth of data to go on. However, some research suggests that one of the effects of electronic mass media is 'de-territorialization,' or the sense of being grounded in one particular place and time. Electronic media collapse time and space, and also social and cultural distance, leaving people with "no sense of place" (Meyrowitz 1985).

Anthropologists who follow the Toronto School paradigm assume that the spread of electronic media technology to indigenous cultures have the same effect: that as these cultures become more 'de-territorialized,' they thus lose their traditional languages, their connection to geography and the environment, and their feeling of belonging

to a historical heritage. Local experience is replaced with de-situated global patterns. Thus, like the cultural imperialists, they assume that the spread of media technology results in the cultural decline of indigenous societies, and thus their acculturation to a global 'media culture' of consumption. Although they begin with different starting points, the cultural imperialist theorists and the technological determinists end up in many cases with the same essential conclusions.

Of course, there are numerous problems with the framework of technological determinism as well. For one thing, as Ong (1982) suggested, electronic media bring back a "secondary orality" which 'revives' many of the old patterns of traditional oral societies within the context of modern post-industrial ones. Given that this is the case, one might expect that electronic media would *strengthen* indigenous cultures already long rooted in the practice of orality. Due to the power of electronic media to tell old stories in new compelling forms, one would expect it to reinforce, rather than weaken, oral traditions and the art of storytelling. Thus, one could expect electronic media to have the exact *opposite* effect in indigenous societies: to strengthen existing cultural practices and patterns, rather than to create new ones and dissolve old ones.

Secondly, almost all technological determinist theories deriving from the Toronto School overstate the effects of communication technologies on culture. No

communication technology ever replaces another completely. Thus, even in 'post-modern' or 'hyper-industrial' societies, oral speech, writing, print, TV and radio, and the Internet and hypermedia all coexist simultaneously. The cultural life of people in these societies is simultaneously shaped by all of these media. Further, as McLuhan noted (1988), every medium recapitulates its predecessors. Internet sites repeat themes from television which tells stories which were originally written down from oral sagas. Although different media appeal to the dominance of different senses, the 'convergence' of media increasingly attempts to 'speak' to each one of them at once.

Like other forms of technological determinism, the Toronto School assumes that people are passive in their relationship to technology. It assumes that technologies are wrapped in a "halo" of cultural assumptions about various social relationships, and that adoption of those technologies means automatic adaptation to these assumptions. It ignores empirical evidence which suggests that different cultures employ and relate to technological introductions in divergent ways. Although no technology is a purely 'neutral' tool, electronic technologies are 'polyvalent,' and subject to use in a variety of ways.

Social Determinism Theory

The theories of cultural imperialism and technological determinism contain the same flaw: they treat technology as an active force (sort of like the Borg Collective in Star Trek) and human actors as passive recipients of transformation. However, there is an alternative theory to both of these perspectives, and it is known as the *social construction of technology* or social determinism (Lull 1995). Similar to the sociology of knowledge, social determinism of technology suggests that socio-cultural forces determine what kinds of technologies are invented in a society, as well as who uses them, and how, and where, and for what contextual purposes. The history of technology shows how many technological inventions ended up being used in ways that were totally contrary to the ideas of their inventors.

Social determinism suggests that technologies can be *modified* and used in new and unpredictable ways. In some ways, it is the theoretical outgrowth of "hacker practice." A recent article showed that thieves are using the Palm Pilot handheld device as a tool for stealing electronic keycodes for car alarms. Phreakers were able to turn simple tone generators into devices for making phone calls for free. As electronic technologies become more and more complex, and more and more interconnected, the potential for their "creative repurposing" increases as well. Since the effects

of technology on society are dependent on how technologies are used, we should not ignore the fact that people always come up with new and innovative ways of using technology.

Social determinists frequently point to the ways in which marginalized or subaltern communities use the cast-off technologies of elites for counter-hegemonic purposes. For example, these groups often use old, junked transmitter equipment from government radio stations to set up their own pirate radio transmission stations. Old, cast-off computer equipment is turned into servers for community freenets and networks. Trashed turntables and studio equipment is used by young black MCs and DJs to create impromptu street hiphop, rap, or jungle performances. The video cameras and equipment thrown away by TV stations are turned into tools of guerilla community countersurveillance of police. Corporate voice-mail systems are turned into places of coordination - bulletin boards, if you will - for teenage "hacktivists" (Ross 1994).

Numerous examples from the history of technology show technological devices often end up being used in ways in which their inventors never could have predicted. Invariably, a common thread turns up in this history. Technologies which are invented for commercial purposes end up reinforcing the public sphere rather than the private; technologies invented for individual consumption end up being 'repurposed' for socialization and connection with others; technologies with a 'serious' function end up being used in less 'serious' and informal ways. Electronic technologies are always, by their

very nature, subject to 'reprogramming' for new and innovative uses. This is one of the key hallmarks that separates the transistor era from the machine-hydraulic era, and reinforces the notion that electronic technologies may be qualitatively different from previous technologies in this regard.

Alexander Graham Bell originally thought the telephone would be used by people to listen to music recordings on the phonograph. He never thought there would be any interest in people actually using the telephone to talk to others when they could just as easily visit their front porch. Like many other inventors and engineers, he underestimated peoples' need for sociability, and the social purposes to which they would put technology (Kreiling 1989). A similar thing occurred with the Minitel system in France. Originally, France's idea was to install a system of terminals in French homes so that people could look up phone numbers electronically. Eventually, it was assumed people would also use the terminals to shop from home. However, Minitel did not become at all popular until the system operators started up the electronic message centers or bulletin boards. Perhaps unsurprisingly, the "pink" message boards for arranging amorous liaisons became the most popular.

Developers of online services and interactive TV/videotext services in the U.S. did not bother to learn from the Minitel experience of France in the 1980s. There

were a series of dramatic business flops involving trials of videotext (services such as Knight-Ridder's Viewtron) and interactive TV (such as Qube) in the mid-80s to early 90s. A variety of reasons have been given by scholars for the failure of these technological trials. Some of it had to do with the fact that the technology simply was insufficiently mature (the graphics were often highly primitive and looked awful on TV), or was too expensive, or tied up two other devices that most homeowners usually wanted free for other tasks - the TV and telephone. However, a criticism of these systems often made by the users, which has been subsequently overlooked, was that they really weren't "interactive." Although they allowed people to shop from home, access news and information, and view video on demand, these systems did not allow users to interact with each other. There was no opportunity to use electronic mail, chat, bulletin boards, or multiplayer games and simulations; no teleconferencing, videoconferencing, or audioconferencing.

In contrast, online services such as America Online experienced explosive growth during the same period. America Online administrators' data on usage of various services shows that the most popular part of the system for users is overwhelmingly the public chat areas. The second most used part of the system is the downloading of software. A similar thing occurred with the Internet. Originally developed by DARPA (the Defense Advanced Research Projects Agency) to be a military C3I network capable of surviving nuclear war in the

late 1960s, the Internet later 'mutated' in the 1980s into a research and education network operated by NSF and mostly available to people at government research labs and universities. Already by the late 1970s though, the most popular application on ARPANet/NSFNet was not data transfer - it was electronic mail. The first electronic mail "exploder" or mailing list on ARPANet was not some somber discussion area for technical problems with the network. It was SF-Lovers, the science fiction discussion list.

Beginning in the 1990s, NSFNet slowly privatized, commercialized, and diversified, becoming the public-access Internet as we know it. Interest in and use of the Internet did not explode until 1994, however, with the appearance of Mosaic, a graphical browser for viewing the World Wide Web, and the realization that people could now use the Web to create their own "home pages," which for many Internet users have become the equivalent of publicly shared home movies. Interviews of Internet users show consistently that although many use it from time to time for research, electronic commerce, accessing online databases, or viewing media on demand, the most popular applications remain IRC (Internet Relay Chat) and other teleconferencing applications, MUDs (multi-user textual simulations), Usenet newsgroups, and electronic mailing lists, which allow Internet users to socialize with other users. What people look for on the Internet, overwhelmingly, is 'community,' even if it's of the 'virtual' kind.

Another example comes from the world of radio. Marconi and others originally assumed that radio would primarily be used for public information and entertainment by professional companies, and the original Federal Communications acts of the 1930s contained the implicit assumption that this would be the primary use of the radio spectrum. However, from its very inception, radio attracted a very strong amateur or "ham" community, who wanted to use the technology for different objectives. The very first radio broadcasters actually set up transmitters in their own homes, and often put on broadcasts that were literally "family affairs." When the FCC licensing system was put into place, radio amateurs who were interested in using the airwaves for interpersonal conversation and information sharing rather than for professional broadcasting successfully petitioned the government to reserve spectrum space for them. This request seemed to have caught the government by surprise. Today, a very popular ham radio application is 'packet radio,' where users with an antenna, TNC (terminal node controller), and a computer actually use the radio airwaves to leave text messages for each other.

Still, amateur radio until recently required strict professional licensing, and one had to pass a test in radio physics, morse code, basic electronics, and other areas. And there was no licensing whatsoever available for people who wanted to set up low-cost, micro-power transmitters. The FCC's main role has been and perhaps continues to be

preventing private individuals and amateurs from interfering with professional corporate broadcasters, and so it is with this mission in mind it has shut down perhaps hundreds of "pirate" or unlicensed amateur broadcasters since the 1930s. The point here is that how radio technology was deployed in the U.S. was the outcome of competing social factions and models of how to use it - the mass broadcasting, profit-based model of the corporate interests and the "narrow casting," community-based model of radio pirates and amateurs. Each faction put the technology to work for different purposes.

Another clear picture from the history of technology is that people seek and prefer things that are simple and easy to use. Sherry Turkle's (1995) work with children and computers demonstrates many of these findings. However, people do not want to surrender transparency - they want to use technologies that at once are simple and "user-friendly" while also having the sense that they are working with the components of the device at the most 'basic' or 'fundamental' level. The Apple Macintosh became an immensely preferable alternative to DOS computers in the mid-1980s because it offered a user interface to people which was simpler and easier to control; it 'naturally' mimicked with its windows and icons the ways people related to things in the 'real' world. People find technologies that are transparent and easy to use; those that have abstruse interfaces, needlessly complex controls, and bad ergonomic design tend to get abandoned, or at least used (as is the case with VCRs) with

extreme frustration. Technologies with the best interfaces are the most widely used; those that are the most transparent are the most easily reprogrammed for new functions and are the most versatile. The importance of the personal computer for our society may be that both things may be that it can be both transparent and simple to use.

Likewise, people relate to small-scale technologies better than large-scale ones. When the computer industry only made mainframes, people were not largely interested in computing. In fact, back in the mainframe era, the President of IBM thought the nationwide demand for his massive computers was maybe "five or six" companies. Users of time-shared terminals at universities and other institutions found them irritating, and disliked having to deal with the technocratic 'priesthood' which fed the machines data in the form of punched cards and reels of magnetic tape. Personal computing took off because users preferred having a sense of individual control and mastery of the computer, rather than running impersonal jobs on someone else's machine. People feel less passive in the face of technology when they can control it as individuals; they don't want to relate to it through technocratic elites or intermediaries.

Social determinism theory suggests that people will use new technologies for social purposes, even if they were not designed for those purposes. The evidence from the realms of cyberspace and these other examples of electronic media technology demonstrates that this is the case. Although the

technological determinists are partially correct in that technologies can be alienating, disempowering, or culturally corrosive; and perhaps the cultural imperialists are partially correct in that corporate elites design new technologies in order to "atomize," fragment, and dominate people; social determinists suggest that people will always use technology whenever possible to achieve their own social ends. How successful they are depends on how *opaque* the technology is; if they can understand, control, modify, and reprogram it, then they can succeed. But if the knowledge of how the technology functions lies in some unreachable technocratic elite, and people are rendered passive to it by its opacity or impersonality, then they will fail. As I will suggest later, this suggests an obvious role for applied anthropology.

However, this aspect of social determinism theory is only half of the story. Social determinism theory suggests that social factors do more than determine how and where technologies are *used*; social conditions affect what technologies are *produced* and when. In this sense, social determinism could almost be seen as the inverse or antithesis of technological determinism. Changes in culture may produce changes in technology. Knowledge of certain technical processes lies dormant until a use can be found for them. Use of microwaves dates back to the 1900s, but the microwave oven was only created in the 1970s as changing patterns of domestic organization and food preparation created a need for

it. The means of employing microwaves to cook food had existed all along, but no one bothered to turn this process into a technological artefact until cultural changes created a niche for its use. The means for transmitting television were found back in the 1900s, but TV broadcasting itself didn't really become a consumer technology until after the 1940s, when there was a greater demand for new information in our society.

Society shapes what technologies are produced because as consumers, people will only buy technologies that meet social needs. The ideas for inventions do not come out of a vacuum, but rather, as examinations of the patents issued over the last century show, they arise from inventors attempting to demonstrate that some new technological process will meet some unmet social need (Gilder 1992). Technological inventions do not arise full-blown out of the heads of individuals; the fact that patents for the exact same process are often issued within hours of each other provides proof that perhaps certain innovations only occur when the necessary social and cultural conditions for them are present. Some scholars of the history of technology suggest that technological ideas arise out of social networks, which like the neural networks of the brain, only become "active" under external conditions. Technological innovation is a social process, not the product of "lone geniuses" toiling in isolation.

Perhaps one of the greatest things that demonstrates the influence of culture on technology is the reciprocal link between science fiction literature and technology. Science fiction is predicated on anticipating the scientific inventions that will occur in the future. However, in its own curious way, because so many engineers read science fiction, it also ends up shaping new technology as well. Mark Pesce, the creator of VRML (Virtual Reality Markup Language) on the Internet, got his inspiration from the fictional ideas of William Gibson's cyberspace. The science fiction author Arthur C. Clarke is said to have first provided the idea for the geosynchronous communication satellite. Many space scientists at NASA admit that some of their ideas for propulsion come out of the "space operas" of science fiction. So, a cultural-literary phenomenon seems to have a major impact on technological production. From robots to genetic engineering, many of our current technological realities were originally creatures of science fiction.

Technological determinism turns people into automatons - robots or machines, if you will - while giving technology agency as an uncontrollable force that transforms peoples' lives without their participation or their agreement. Social determinism turns this theory on its head, and says that people are active agents who use technology to change their social conditions and achieve social objectives, and further, that technologies are created through social processes. The technological determinists are correct in

stating that no technology is a 'neutral' tool - if often embodies the assumptions of its creators about gender, about race, about power, about proper conduct. But social determinists feel that people are creative and innovative agents that can undo these embedded assumptions.

Once again, there are numerous examples of this. Technological toys in the U.S. have often been accused of promoting stereotypical and essentialist ideas of gender. G.I. Joe dolls bark forth grunts of machismo and leadership; Barbie dolls whine of desires for shopping and fun. The Barbie Liberation Front (BLF), a mock-serious feminist activist organization, proceeded to visit toy stores throughout the U.S. in the late 1980s and switch the speech chips of Barbie and G.I. Joe dolls, thus creating an effeminate, sensitive soldier toy, and a powerful, aggressive girls' toy. While television has been used as an agent of social control and 'groupthink,' independent video artists continue to try and use the medium of video to undo the assumptions fostered by broadcast TV. Encryption technologies originally developed by governments to hide secrets from their people, are now being used by 'crypto-anarchists' to actually secure privacy from the prying eyes of the surveillance state. In short, technology does not always serve power, but instead is often used in a kind of Foucaultian 'jijitsu' of reversal against it.

Social determinism says that in order to know the effects of technology on society, one has to ask: who

controls it? Who has access to it? Who understands how it works? Who can fix it or maintain it? Who can modify it? Who participates in its creation and production? Who decides who gets to use it? Technological determinism often declares blanket effects of technology on society, without considering the role played by the intermediary of culture, and the agency of people in creating those social changes through the use of that technology. It assumes that people are passive in the face of technology. Social determinism says no - they are active, and they can control the path that technology takes. It is true that no invention, however horrific (such as the atomic bomb), can be 'uninvented.' But society always determines, in the last instance, whether it's appropriate to be used.

Structure and Agency in Social Systems

One of the perennial debates in anthropology is over the relative importance of social structure versus human agency. Strict structuralists, such as Althusserian Marxists, believe that most of human behavior is pre-determined by pre-existing social structures such as class systems and other institutions. Agency theorists, in contrast, say that human beings do not respond passively to their pre-existing social reality, but instead build a personal or collective vision or interpretation of the world which arises from social facts, and then base their actions on the interpretations of those

facts (Premack 1995). People do not accept their social position as a given, but instead are constantly trying to renegotiate it. Thus, when confronted with class subordination and discrimination, for example, peasants develop "weapons of the weak" which attempt to blunt and negate their situation.

Some social scientists see Althusserian-style structuralism as denying the possibility of change (or at least making it very difficult), and other kinds of structural explanation (such as Radcliffe-Browne's structural-functionalism) as rationalizing the existing *status quo* and ignoring heterogeneity and conflict. For many, the problem is that it imposes a linear kind of determinism on human behavior, ignoring more cybernetic processes of feedback and readjustment. Whereas social structures do shape individual personalities (the hallmark of culture and personality theory) and thus behavior, it is individuals working in collective action who reflectively reshape social structures and institutions; to think otherwise is perhaps to engage in the worst type of 'superorganic' type reification. Thus, society and the individual are cybernetically interlocked.

Strict structural theory has been criticized for its rigidity and narrow determinism, whereas agency theory has been criticized for putting too much focus on individuals and individual choices. Some people say that it simply provides an intellectual and ideological basis for 'blaming the

victim' - that poverty and other problems are the result, not of a poorly structured society, but instead the result of peoples' lack of action. Further, developing an ideology that valorizes poverty as moral and heroic does not blunt the material reality of deprivation. However, agency theorists know that human choice is not infinite, and peoples' lack of resources, education, access, or status clearly limit the actions they can take; agency theory only suggests that they are free to act *within the constraints* of their social conditions. And those actions matter most when they challenge or undermine the pre-existing social system, not when they rationalize its acceptance.

Audience response theory in media studies, for example, gives some agency to people with regard to their media consumption. Viewing media becomes more than a passive activity; people become active media "grazers" who attempt to build their own idiosyncratic narratives out of the storyline on the screen (Ulmer 1989). Although TV shows may contain certain 'hegemonic' assumptions, people often use them to build their own feminist and other narratives, even if such ideas are not really "contained" *per se* in the show itself (and sometimes the 'dominant' hegemonic reading may be opposite.) Michaels (1994) reports that Australian Aborigines identify with the lead character in *Rambo* and identify his situation with their own - despite the fact that he is a white American and a military man more likely to be identified with the Australian army - and identify with his

vulnerability and exploitation by the system, not his lone hero 'machismo' which so many American critics derided.

The structure and agency debate reaches peculiar poignancy when it comes to the question of the interaction between technology and culture. Strict techno-structuralists would say that people are shaped by their technological environment which they take as a given, whereas techno-agency theorists would say that people attempt to transform the meanings of technology in their lives and sometimes even reshape the technology itself. Do they accept certain technological facts ("well, this is just the way TVs and PCs are *supposed* to work") or do they attempt to change and improve the situation ("hey, with Linux and some tweaking, maybe they don't *have* to crash twice a day?") Is technology the active force and people its passive victims, or are people the active agents who attempt to take the technology available to them and use it in new ways which meet their individual and social needs?

Technology and Agency

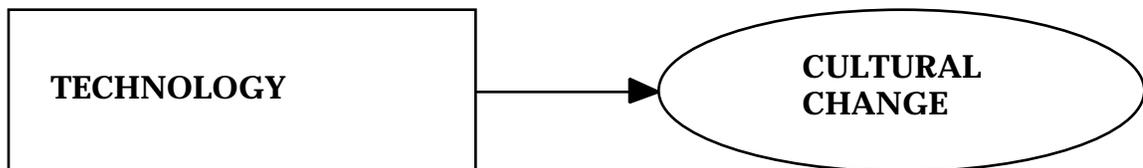


Figure 10. The simple linear model of technological determinism: technology causes (determines) cultural change

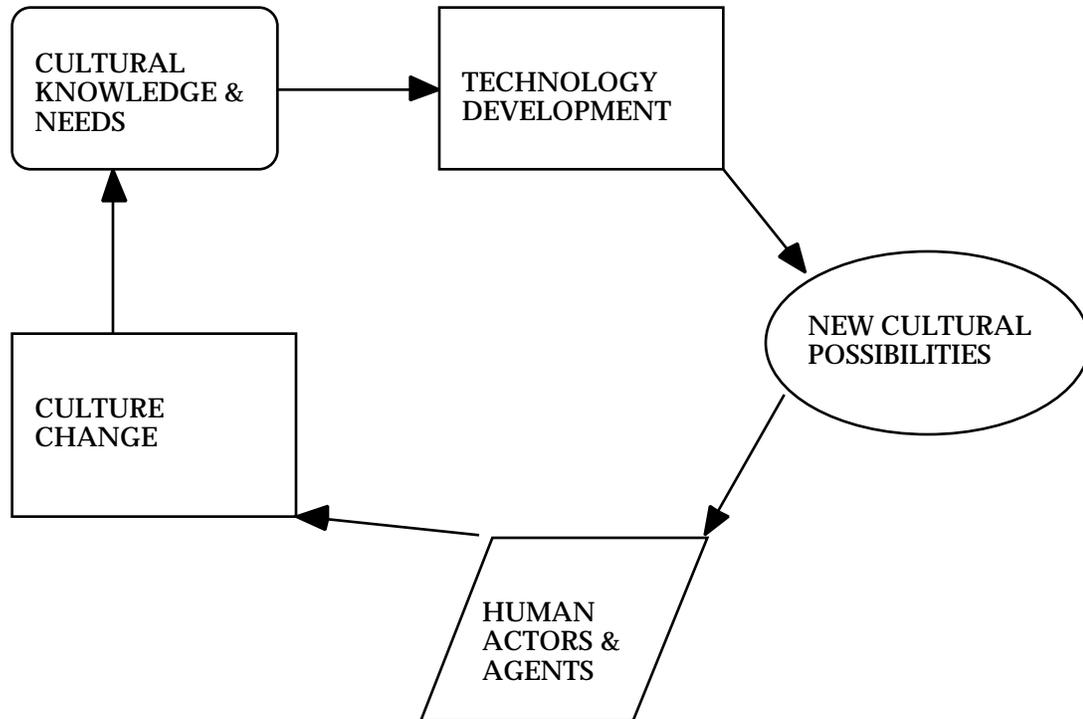


Figure 11. The cybernetic model of technology and culture interaction

The model in figure 10, referred to as *technological determinism*, is a common expression of current anthropological and other social science theory regarding technology and cultural change. Our ways of referring to cultural evolution reflect this basic model of technology. We say that certain technologies cause cultural change, but the simple fact is, it is cultural actors making conscious choices that cause cultural change. Furthermore, technologies are not developed, adopted, or modified unless they meet some cultural need. You could drop a thousand steel axes from an

airplane onto a small stone axe-using society, and unless there was some need within that culture met by the steel axes, they would just ignore them. If the culture didn't understand how or why steel axes should be used, they also would ignore them.

Thus, as figure 11 suggests, technologies originate from cultural knowledge and need, regardless of whether they are independently invented or diffused from elsewhere. A culture cannot invent a technology unless it has the knowledge to create it or make use of it. There are many examples from the history of technology where a technological application is developed but because no one could figure out a use for it, it went undeveloped (Cutcliffe 1992). Heron probably discovered steam power back in the Hellenistic era, but couldn't figure out a mass usage for it. So steam power as a technology awaited a cultural context where it could be put to use for transportation and other uses. Also, cultures will ban research and development into certain technologies - just as medieval Christendom attempted to restrict the use of the crossbow, or modern society's attempts to ban cloning - when they consider them contrary to fundamental values and norms.

Technologies, rather than *causing* cultural change, actually create cultural *possibilities*. For example, iron smelting creates the possibility of increasing military prowess (by building more iron weapons), or of building improved plows for more effective agriculture. We cannot say

that iron technology causes societies to become more militaristic or to intensify agriculture. However, with the invention of iron technology, both of these possibilities become available to that culture - thus allowing it to move in directions it could not before. Some of these possibilities can be positive or negative for the members of that culture, but they all become equally available. Which possibility becomes realized depends on human agency (Stine 1991).

Given the existence of new possibilities open for a society to culturally evolve or develop, which route that society follows depends on the choices of human actors. I do not want to suggest that those choices are not constrained to some degree, but ultimately it comes down to a decision: swords or plowshares. Once foragers had discovered they could domesticate plants, it required deliberate choices to abandon foraging for a life of settling down. *How people choose* to use a technology determines its ultimate outcome as far as its effects on the culture. Obviously, some technologies have only one potential use. Bombs can really only be used for one purposes, although explosive energy also can be rechannelled to send rockets to the stars. What makes most information technologies interesting is that they have multiple uses - they are multifunctional devices. When a technology is multifunctional, and can be used in different ways, human beings will always explore the different ways in

which it can be used, even if those are not the purposes for which it was developed.

Given these human choices, cultural change results. When people decide to use iron to build more deadly weapons, their society becomes more militaristic. A military culture eventually develops greater need for defense and protection against its enemies, thus developing a cultural need for more weapons technology. Cultural change creates new conditions for knowledge and new needs, so the cycle of technological and cultural change begins anew. I believe this cybernetic model more effectively represents the mutual relationship between technology and culture, rather than as a simple linear causal relationship. Based on this model, Lakota people could use television and computers to acculturate to the U.S. national culture, or they could use them to preserve their culture and assert their autonomy. It is through the agency of Lakota people, acting on Lakota cultural needs, that these technologies are put to the use of cultural revitalization and cultural resistance. Their society, instead of waning and disappearing, has the potential to flourish through these new technologies.

First, Second, and Third Wave Civilization

The work of Alvin Toffler has often been ignored by anthropologists and other academics because the professional "futurist" largely worked outside of the academic realm (although he was a visiting professor at various times, and

did hold some honorary degrees, he was not trained professionally in any discipline), lectured to popular and business audiences rather than scholars, and published popular works aimed at mass audiences such as Future Shock. Nonetheless, Toffler is still recognized for having anticipated many of the characteristics of the information age, and for having been one of the first to promote the idea of a discontinuity (see Table 2) between industrial and post-industrial civilization.

TABLE 2. Discontinuities between the industrial and post-industrial modes of production

Aspects of Universal Pattern	Industrial Mode	Post-Industrial Mode
INFRASTRUCTURE		
Source of Majority Employment	Industrial Factory Work	Information and Services Sector
Dominant Organization of Production	Factories and Offices, "9 to 5" 40-Hour Week	Home-based 'Telecommuting,' 'Flexwork,' Technoscience 'parks'
Dominant Factors of Production	Land, Labor, Capital, Raw Materials	Intellectual Property, Bandwidth, Processing Power, Synthesized Materials
STRUCTURE		
Demography	Urban, concentrated	Suburban, dispersed and mobile ("high-tech nomadism")
Economy	Physical commerce, Dow Jones Industrial Index	Electronic commerce, NASDAQ Technology index
Education	'Brick-and-mortar schools'	'Distance learning'
SUPERSTRUCTURE		
Religion	Churches	The 'electronic church' - 'televangelism'
Art	Plastic arts	Electronic arts - techno music, virtual reality, etc.
Ideology	Mechanistic	'Cult of Information'

In The Third Wave, Toffler (1980) suggested that there had been three major "waves" of social, technological, and cultural change that have altered the character of human civilization. The first "wave" was what anthropologists have called the agricultural revolution, which began some 8000 years ago in the Near East, where humans began giving up nomadic lives of foraging for settled life, agriculture, the domestication of animals, and writing. The second "wave" was

the industrial revolution, where the rural agricultural peasants of Europe began, some 250 years ago, moving from the countryside into cities where they worked in factories. The third "wave" was what Toffler identified as the information revolution, rooted in the computer, electronics, and telecommunication technologies, beginning around 1965.

Toffler, and scholars like Daniel Bell (1973), have taken some heat for suggesting some sort of radical discontinuity between our current configuration of civilization and what has preceded it. Many do not think the "information revolution" is anywhere nearly as dramatic as the agricultural or industrial revolutions in terms of its impact on human existence. Many scholars think that while the global economy (the capitalist 'world-system') may be in some sort of unusual "late" phase, as far as capitalist industrialism goes, it's business as usual, at least in the Western industrialized world. Others feel that the current wave of "de-industrialization" is really more of a sort of magic act - with the belching smokestacks and dark Satanic mills merely being moved overseas or across borders where they can't be seen anymore - but the industrial engine keeps on pumping.

Still, there is some data that does suggest discontinuity nonetheless, at least within that part of the world which is already industrialized. The number of people working in factory work is decreasing, while the number of people working in service, leisure, finance, high-tech, and

information industries (including academia) is increasing, as are the number of people working for the public sector - the federal government (which in most cases means some type of social service role), public works, and nonprofit organizations. The "white collar" sector of professionals is growing, whereas the "blue collar" of industrial workers is shrinking. Similarly, there has been a massive movement of people from urban cities to suburban "edge towns" ringing around the cities, and a growth in "telework" or "telecommuting" where people work at home.

The NASDAQ, a stock market for high-tech companies, such as information technology, biotechnology, aerospace, and pharmaceutical firms, has regularly been outperforming the Dow Jones exchange, which features more industrial companies, for the last five years, according to *Wired* magazine. Major aspects of life - including ceremonies (such as marriage), economic transactions (banking, shopping, purchasing insurance, investing), socializing, research, education (through distance learning), entertainment, and even romance - are now being conducted wholly in "cyberspace" and through the Internet. The electronic media are now a major determinant of where people get their information about what the world is like, and telecommunications are breaking down localisms based on nationalism and geography.

No proponent of the "information revolution" would suggest that the previous revolutions have anywhere been annulled. Everyone on the planet still depends, in some way,

on agricultural and industrial products. In fact, many of the world's indigenous people still live outside of even Toffler's "first wave," although these isolated groups are growing far and far smaller. So it cannot be said that any of them are total revolutions, or that they have affected or will affect all parts of the globe equally. Materialists believe the "information revolution" cannot really be changing human life, since it changes nothing about how people materially sustain themselves, reproduce, or obtain resources, but Toffler (1990) suggests otherwise: that consumption is changing (back?) to 'prosumption,' and that human reproduction is increasingly being technologized.

One particular chapter of The Third Wave, 'Gandhi with Satellites,' might be most particularly appropriate for the thesis of this dissertation. In that chapter, Toffler critiques the current strategy of development institutions, claiming that they are pursuing a mistaken goal of bringing the underdeveloped world into the "industreality" of the "Second Wave," which is incompatible with the pre-First Wave and First Wave conditions of a large part of the world. Since this strategy has had a number of notable failures since 1945, Toffler's work suggests that the alternative to it - the 'appropriate technology' movement, 'rural development,' and so on - is even more regressive because it is merely an extension of "First Wave" thinking and can only lead to more isolation.

Toffler suggests that a "Third Wave" development strategy is the most appropriate for the developing world, but for a curious reason: in many cases, it revives or reformulates many of the existing characteristics of "First Wave" life - deconcentration, decentralization, egalitarianism. Because of this extreme compatibility between the First and Third Waves, many developing societies may be able to skip the Second Wave altogether, with its accompanying depletion of resources, pollution, and waste. As Toffler says:

By astonishing contrast, Third Wave civilization turns out to have many features - decentralized production, appropriate scale, renewable energy, de-urbanization, work in the home, high levels of prosumption to name just a few - that actually resemble those found in First Wave societies. We are seeing something that looks remarkably like a dialectical return...given the wider range of options brought by the Third Wave, cannot a people reduce infant mortality and improve life span, nutrition, literacy, and the general quality of life without surrendering its religion and values and necessarily embracing the Western materialism that accompanies the spread of Second Wave civilization? (218)

Just like Ong and McLuhan, who said that "teleliteracy" and the 'global village' would recapitulate many of the elements of preliterate oral existence and tribal life, thereby allowing indigenous people or the 'Fourth World' to skip the linear and ocular foci of literacy, Toffler thinks that the 'Third Wave' will enable indigenous cultures to 'skip' over the homogenizing influence of industrialization while still pursuing integration with the global society, economic development, and improvement in

their quality of life. So, instead of being a threat to the cultural survival of indigenous groups, the Third Wave might help them prosper and flourish - perhaps to a greater degree than the industrialized societies which have lost so much diversity through industrialization, giving them an edge on the electronic frontier?

Toffler's argument is that while the Third Wave is not totally isometric to the traditional indigenous way of life, the fact that it tends to produce phenomena of deconcentration, decentralization, and 'demassification,' and actually acts against the industrial phenomena of homogenization, centralization, and increasing economies of scale, makes it compatible with people who prefer to live in a small-scale, ecologically sensitive, biologically rooted way. Since the Third Wave militates against mass education, mass media, and one-size-fits-all-thinking of all kinds, it is a guarantor of cultural diversity and perhaps even cultural revitalization.

In short, Toffler's theory offers yet another perspective which suggests that information technology, rather than threatening to cause the cultural disappearance of indigenous groups, promises their renewal in the 21st century. Although groups such as the Lakota will undergo all kinds of cultural change in the next millennium, the *direction* and final *destination* of that change may not necessarily be for them to become acculturated to our own civilization and become like us. Although their culture will

continue to evolve, as it always has, it does not necessarily mean that it will evolve to become exactly like ours or adopt our beliefs, worldviews, and values.

What is Globalization and Why Should We Be Concerned?

Geographic Location (1998)

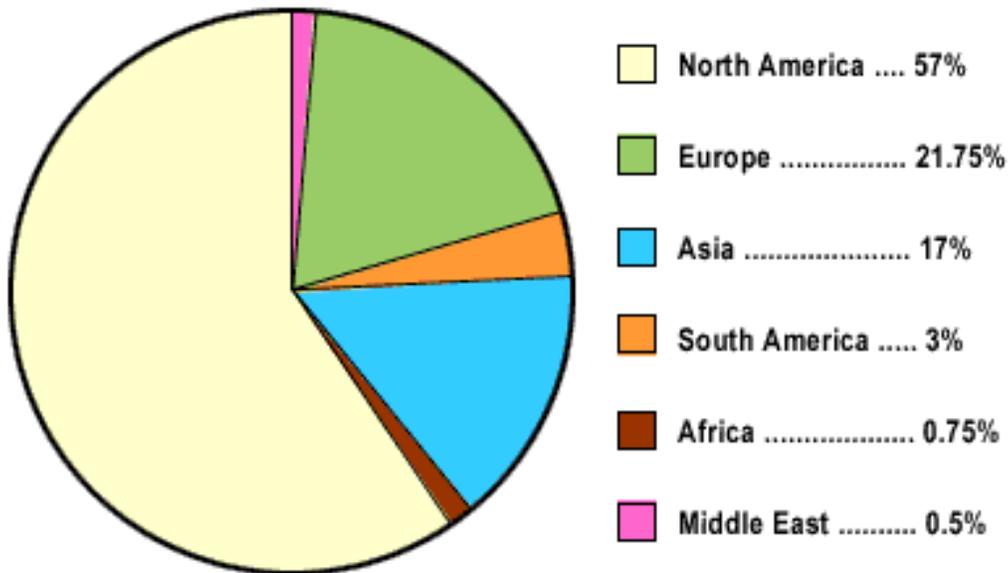


Figure 12. Global Distribution of Internet Users (Source: ITU)

In recent discussions of anthropological theory, the word 'globalization' occurs frequently, usually to indicate that in some way, shape, or form, there are current social processes occurring which are in some way uniquely planet-wide in scope. However, it appears to be the case that with this particular term, as with so many others, various authors really seem to be describing a wide *variety* of simultaneous

processes - sometimes to herald them, and sometimes to decry them:

- The incorporation of pre-capitalist, peasant, pre-market, or other societies into the global capitalist world-system. There is ongoing argument as to whether societies are doing this 'voluntarily' or against their will, through coercion, manipulation, and circumscription.
- The supposed acculturation of non-Western cultures into a purported 'homogenized' Western culture of consumption, material culture, and values.
- The expansion of global institutions of trade, finance, and commerce, such as the GATT agreements, the World Trade Organization, the Multilateral Agreement on Investments (MAI), etc. into national sovereignty.
- The spread of global telecommunications, 'emerging media,' and the Internet, unifying the planet into McLuhan's supposed "global village". (see Figure 12 above)
- Increased flows of transnational migration and the formation of global diasporas, 'ethnoscapes', and other dispersed populations.
- The expansion of multinational corporations which are increasingly decoupled from any one state.
- Various forms of purported "neo-colonialism," such as the neo-liberal policies of the IMF, greater foreign investment in various countries, and so forth.

Among advocates of world-systems theory, the eras of imperialism, colonialism, and global domination are not necessarily at an end despite the fact that most former colonies are now independent from their previous European 'masters'. In fact, although overt colonial domination no longer occurs, through the use of development planning, lending and debt restructuring, international financial institutions, currency control, and so on, the 'core' countries still manage to extract the labor and resources of the 'periphery' (the underdeveloped world) and essentially force the rest of the world into export-based economies that supply them with raw materials.

However, many commentators have noted that 'globalization' should not be seen as a totally new phenomenon. Marx himself commented on the growing 'internationalization' of production brought into being by capitalist systems 150 years ago. Already in his time major industries were becoming 'denationalized' In a certain sense, there is very little about the 'globalization' phenomenon that is truly new , although there are those who would argue that political and legal institutions complementing the increasingly international economic ones, and the attempts to unify the major global economic powers (through the G-7, Bretton-Woods accords, etc.) are both factors which have only appeared within the last fifty years. Certainly, it seems to be the case that as fossil fuels continue to decline, the extraction of energy seems to require drilling in the most far-flung parts of the globe - previously 'marginal' lands which sometimes still belong to the Fourth World.

Many authors such as David Korten (1995) and Arturo Escobar (1998) see 'globalization' as the primary threat to the planet's indigenous peoples, suggesting that they most likely to subscribe to some version of description 1 or 2 for the process. Essentially, from this theoretical point of view, similar to that of 'cultural imperialism,' indigenous groups are being 'assimilated' - in this case, not into the cultural system of any one dominating or conquering national state culture, but instead into a 'global' system of capitalist culture which is in fact not rooted in *any*

culture. In a certain sense, according to this theory, all groups are losing their culture to this 'globalizing' system, which refuses to recognize the importance of the sense of locality, place, or particularity. However, like the 'cultural imperialists,' the prophets of impending 'globalization' are sometimes short in description on precisely how this process is occurring. Are indigenous peoples worldwide being dragged into the marketplace against their will, or are they being 'lured' into it seductively (and, apparently, against their best interests?)

Even assuming that they are coerced into being part of the global market system, are indigenous peoples in effect 'losing' their culture as a result? Certainly, there is some suggestion that definite cultural change ensues from market penetration. Crafts that were originally made for ceremonial or aesthetic purposes become commodities for sale. Agricultural production that once focused on subsistence and shifting cultivation becomes reoriented for monocrop market export. Societies change in various subtle and not-so-subtle ways to accommodate the presence of 'cultural tourism,' as previously 'non-spectacular' rituals become tourist performances. Migration in search of wage-paying factory labor distorts previous kinship systems. 'Traditional' costumes and body decoration are abandoned in favor of more 'respectable' clothing for market participation and transaction (Mohammadi 1997). However, I think that critics of 'globalization' fail to understand that these kinds of

cultural change do not necessarily represent cultural *decline* or disappearance.

In many cases, as with prior situations of cultural contact and colonization, there are the formation of new 'syncretic' forms of culture which sometimes contain the dynamism of the old in new skins. Although indigenous groups do shed certain cultural customs to accommodate the exigencies of the market system, not every aspect of their society is necessarily transformed by the market, and in some cases certain elements are strengthened, at least vis-à-vis the nation-states in which they live. Lands that could not be won back through court claims can be purchased outright through tourist dollars. Attorneys can be hired to press for restoration of other indigenous rights. The assertion of sovereignty to national regimes grows with the degree of economic independence. Most importantly, indigenous groups can now take control over their own representation within the national image-realm through production of their own films and television programs.

The essential matter to consider is that in many cases, indigenous people are not just Bodley's (1982) "Victims of Progress." They are active agents in the process of their own transformation. What some ethnographers describe as cultural disappearance is really just a case of cultural adaptation - what every group on this planet is engaged in, since the only cultures that disappear are the ones that *cannot* adapt. This is not to suggest that indigenous groups

are not subject to external pressures that they have no control over - certainly there are plenty of cases of this, such as the Kayapo in Brazil confronting the incursions of settlers, disease, and deforestation; the Mayans in Central America facing the direct assault of military and paramilitary forces; and Aymara in the Andes continually dealing with being driven into more and more marginal lands. However, the flip side of these devastations has been, among other indigenous cultures, an awakened consciousness of pre-existent social inequalities as well as a larger world of possibilities, and in many cases access to a technological toolkit that made previous adaptations even more viable. Oral languages that were threatened with extinction now are being preserved and even revived through the creation of a written transcription.

Whether we look at groups like the Lakota in North America, in many cases it was contact with European cultures that actually enabled them to reach their apogee of cultural development. It was the horse and the gun that helped make the Lakota 'masters of the Plains'. The great beadwork art of the Plains, the appearance of canvas tepees, and the Ghost Dance itself were 'syncretic' creations. Just as Inuit have found hunting in the Arctic so much easier with snowmobiles and rifles, or Australian Aborigines have discovered the advantages of ATVs in the great Outback. In these cases, technology did not so much displace a pre-existing way of life as it, in fact, intensified it. Similarly, indigenous

people such as the weavers of Otovalo have found in the global marketplace not just a threat, but perhaps a key element to their continued survival in the modern world. Indigenous groups like the Blackfoot in the U.S. have even begun creating their own banks for "microlending" and enterprise development, tired of being seen as helplessly dependent on outside capital for their survival. They have also set up trading coalitions and partnerships with trade organizations in the U.S. and Europe.

While there is no doubt that global markets make indigenous people increasingly vulnerable to shifts in world commodity prices, and entwine their destiny more perilously together with unstable world economies and their stock markets, they also help separate indigenous peoples' destinies from the nation-states in which they are often forced to live as the spoils of "conquest." It is also the case that 'globalization' has helped revitalize many indigenous cultures precisely by helping them unify into a solidarity-based 'Fourth World' bloc on the global stage. Many indigenous groups are now winning at the international level things they could never have pressed at the national level, precisely by entering into worldwide coalitions, partnerships, and associations with indigenous groups with similar issues and concerns. It is precisely their awareness as constituting a unique global 'caste' formed by earlier waves of colonization that has helped the indigenous people of the world put a common agenda on the table.

Anthropologists need to question more critically the assumption that indigenous groups are 'powerless' in the face of globalization and have no participation whatsoever in the process. Where possible, they are seeking to refuse and resist certain kinds of change they do not want, and embracing other kinds of change that they see as necessary in order to preserve certain things which are less malleable. However, they also often redirect cultural change along certain axes, 'repurposing' and transforming the new cultural introductions. They also need to reconsider the assumption that the 'progressive' faction in many indigenous cultures is necessarily an 'internal elite' who are simply seeking to 'sell out' their people for their own personal gain. In fact, in many cases the current situation has given indigenous groups less, not more, autonomy. There is simply no way for indigenous people to 'decouple' themselves from the world-system, and in fact under current conditions, doing so would simply be disastrous for most of them. As projects like Motorola's Iridium take to the skies, there is no longer any place where they can 'hide' from the net of electronic communications that encircles the globe.

However, by *embracing* our global reality, they can reach a larger audience for their demands for recognition and respect. Instead of deriving self-validation from ethnocentrism or isolation, they can see themselves as a unique and irreplaceable part of a globally woven tapestry. Instead of trying to flee or escape from the world-system,

they can seize its edges, like clever cultural hackers, and make it do what they want it to do, reprogramming it with the 'virus' of their intentions. The 'creative destruction' of globalization is a two-way street, even if one side appears to be more dominant. Among the post-industrial societies, the young are taking to practices of body art and adornment that were previously seen as part of the 'primitive' - rediscovering the 'tribal' participatory consciousness that seems so absent in bureaucratic and impersonal modern societies. Thus, both sides are being transformed in this process. The 'periphery' is reaching into the 'core' and transforming it as well. Thus, globalization might better be seen as the weaving of a net, rather than the spreading of a plague.

Deconstructing Technology, Culture, and Nature

These days, the act of "deconstruction" seems almost ridiculously trendy. It seems to signify an academic act, the main goal of which is to baffle or confuse. Still, if there is anything serious that can be taken out of postmodern scholarship, it is that the binary dichotomies which often seem to organize our mental models of the world sometimes serve powerful interests. In 'deconstructing' these dichotomies, we occasionally may show that ideological emperors may be wearing no clothes at all. There seems to be a long-standing meme in Western society which associates

technology with falsehood, routinization, or loss of individuality and heterogeneity. Technology is anti-nature, anti-spiritual, anti-people; various rhetorical gestures try to cast technology in the light of an alien force, an out-of-control Frankenstein monster shaping humanity to its own inscrutable ends. Technology is the West, modernity, 'progress'; in contrast indigenous people are put in the realm of "nature," which is why statues of them in 'natural history' museums so often seem to show them standing naked.

But, as we have slowly begun to realize through our anthropological investigation, our indigenous cousins are no less human than we are. And we humans left the realm of 'nature' for the *terra incognita* of 'culture' a long time ago. As much as we like to sing the praises of mother nature as a conservationist, it actually conserves very little. Most of all, it does not seem to conserve knowledge and experience. In order to adapt to new circumstances, "learned behavior" requires the facilitation of technology - and one of our first technologies, human language, served exactly that purpose. For *homo sapiens sapiens*, culture and technology is as "natural" as the shell of a mollusc - we exude it continuously, live in it as our 'natural' environment, and could not survive without it. Humanity has been transforming nature and the environment for thousands of years (Marx 1964). Technology is no more "unnatural" for the Yanomamo in the depths of the Amazonian jungle than it is for us, and he is just as reliant on it to survive as we are.

Tool use and technology seem to have helped cause the explosion in cognitive capacity that make us what we are. Technology is often the key element in the changing of critical human social relationships such as kinship and domestic life, especially through its role in reproduction (Bernard 1987). So, to forego technology is for us as *unnatural* as birds giving up laying eggs in nests. Technology also seems to have been a longstanding partner in all of our human needs - even our needs for the 'spiritual' or 'sacred'. Drums, bull-roarers, whistling double-chambered vessels, lyres; all have been built and used to create the musical rhythms and tones which shift our consciousness and our emotions. Technology also has often been our best tool for saving and preserving our natural environment, even if the original causes of that environmental decline came from other, earlier technologies. Our view of the Earth from space, through satellite photography, provides us better strategies for dealing with global ecological problems, than we could have ever devised from our sense "on the ground."

We know that the Lakota would not have achieved the dominion over so much of what is today South Dakota were it not for the introduction of key Western technologies in the 18th century- including saddles, guns, and canvas. While they probably suffered from certain introductions from Europe -- notably, new germs to which they had no immunity, alcohol, and of course, the railroads which began to crisscross their territory -- they also benefitted from others. Their existing

buffalo-hunting subsistence economy only became augmented, and they were able to expand their territorial control through their greater capacity for waging war - and thus for a brief century, anyway, they became Masters of the Plains. Other indigenous groups in the Americas, including the Maya people and the Southwestern Indians in the U.S., have been noteworthy for the ways in which they have been characteristically 'open' to incorporating new technologies from outside in order to advance their own way of life.

It is time that we stop putting indigenous peoples in the category of 'nature'. They are as much the children of *homo faber* as the rest of us. The hominid revolution that took humanity out of the realm of 'mere' nature and into the realm of learned culture affected them as much as it did us. The indigenous ethnoscientists of the Americas watched the motions of the stars, and observed closely the medicinal chemistry of plants. Today, we know that state-level indigenous peoples had incredible technologies in the areas of medicine, calculation, and architecture. Perhaps their technologies may have been more appropriate for the North American environment than ours, but they were as dependent on those technologies as we are on ours. Some day, we may move beyond our current technological monologue, and toward a more considered technology dialogue with the indigenous people of the Americas.

The Historical Processes of Culturicide and Renewal

Lakota author James Fenelon (1998) uses the term "culturicide" to refer to the deliberate effort of one society to eradicate the culture of another. He distinguishes it from what other people might refer to as *genocide* or *ethnocide*, which is the targeted physical eradication of a race of people, a nation, ethnic group, or other identifiable minority. 'Culturicide' can be considered distinctive from genocide in that the goal is not the eradication of a group per se but rather the elimination of any elements of cultural uniqueness or distinctiveness. Fenelon argues that the while the enemies of the Indians preached outright genocide for the native people, the so-called "Friends of the Indians" which began organizing in Eastern cities in the 19th century advocated 'culturicide,' which was not much better. From Fenelon's point of view, genocide, culturicide, and more benign practices of assimilation exist on a basic continuum of power and domination. The goal of these practices is always for one society to disempower another in order to seize its wealth, resources, land, or other valuable assets for themselves, suggests the author.

Fenelon asserts that the history of U.S.-Lakota relations can be mapped into eight distinct historical phases, each marked by their own particular variants of culturicide: 1) attempts at conquest and multi-tribal compacts (1800-66), 2) treaty-making (1866-71), 3)

removal/relocation/reduction (1871-76), 4) land-takings (1877-89), 5) coercive assimilation (1889-1934), 6) reorganization (1934-45), 7) termination and relocation (1945-61), and 8) meaningful self-determination (1961-present). By the culturicide concept, Fenelon seeks to suggest that the U.S. government used deliberate policy instruments to help eradicate Lakota culture and transform Lakota into part of "mainstream" middle-class Euro-American culture. Thus, Fenelon argues that Lakota acculturation was not inadvertent or voluntary; Lakota did not simply elect to assimilate free of any coercion or persuasion because they somehow sensed that the European way of life was superior to their own. Instead, the dominating majority society attempted to eradicate their culture in order to weaken the Indians' resistance to their ambitions for taking over their land and resources.

Fenelon suggests that Lakota culturicide began with the Atkinson-O'Fallon mission of 1825, which asserted the supremacy of the United States and their total control and jurisdiction over all Sioux "trade and intercourse". It continued through such things as the 1883 Indian Offenses Act (which banned religious practices such as the SunDance), the 1885 Major Crimes Act (which eradicated indigenous justice systems), the 1887 Dawes Severalty Act (which outlawed communal or *tiospaye* -based land tenure), the creation of assimilationist boarding schools in the 1890s, the 1934 Indian Reorganization Act (which eliminated traditional

decentralized governance), and the 1953 passage of the Termination Policy, Urban Relocation Program, and PL 280 (attempting to "de-recognize" the status of federal Indian tribes.) As Fenelon sees it, culturicide was a planned 'assault' on Lakota social systems of kinship, spirituality, defense, land tenure, education, property ownership, language, politics, law, and trade. Although it progressed with fits and stops, the overall focus of culturicide never wavered: "kill the Indian and save the man."

Although the Lakota were not unique victims among other North American Indian societies of culturicidal processes, Fenelon feels that in many cases the policies developed to deal with them set the model for dealing with other tribes. In every case, the elements of Lakota culture were 'marked' for elimination, control, co-optation, and replacement by Euro-American systems. Although there were different schools of opinion on the 'Indian Question,' even the most benevolent "Friends of the Indian" in the East thought that culturicide was the best answer. They felt that the only way to prevent physical extinction was to promote cultural elimination, and that this was ultimately in the Lakotas' best interest. Although he feels that culturicidal processes are situationally based, varying over spatial and temporal dimensions, they tend to be self-perpetuating because of a continuing need for the dominant society to maintain domination over the subjugated group. Although this domination usually involves coercion, it can also involve

sanctions (the withholding of rations, for example), or suasion using "carrots" which are often revoked at a later point. These programs of assimilation are never accidental or inevitable.

Anthropological inquiry is often held accountable for its fixation on a timeless "ethnographic present" and ignoring processes of historical change, especially external domination. Too many things in the present are somehow said to be produced by present-day structures and conditions, instead of being interrogated for causes in the past (invasion, conquest, colonization, displacement, migration, etc.) In almost every case, anthropologists were preceded by travellers, missionaries, prospectors, and adventurers - they rarely found any culture that was truly 'pristine'. Fenelon suggests that an examination of Lakota acculturation needs to take into account deliberate historical policies and programmes of assimilation. Rather than blaming it on current pressures of contact, or on rather relatively recent social forces such as electronic technology and television, Fenelon points to causes which lie further in the past. Thus, we can explain the existence of acculturation among the Lakota without recourse to the relatively recent arrival of television, as technology critics like Mander would do. But more importantly, Fenelon points the inquirer toward the origins of *resistance* to culturicide among the Lakota, and why the social need for cultural rearticulation might make

technologies like the 'emerging media' of television, multimedia, and so forth, desirable.

Ethnic Resistance and Renewal

Nagel (1996) discusses the "Red Power" movements of the 60s and 70s, suggesting that they can only be understood in terms of other ethnic renewal struggles found during the time period - in particular, the revival of interest in Black culture and ethnicity (Black Power, *Negritude* in the Carribean, Black consciousness in South Africa, etc.), ethnic nationalist struggles for decolonization and independence internationally, and the protest actions of Chicano and other Hispanic-American farmworkers for respect and dignity. As she sees it, ethnic renewal constitutes the construction of a *new* ethnic identity out of a revived emphasis for old customs, historical events, and folklore and folk culture. The new ethnic identity which emerged in the 1960s was "Red Man" or "Indian" - as opposed to, say, tribal, clan, reservation, or U.S. national affiliations. Basically, a new pan-Indian ethnic identity was constructed for the largely detribalized urban Indian population, and became an ethnic category in its own right, focused on pan-cultural rituals such as powwows, and political and economic activism. The irony of the 40s and 50s relocation programs, she notes, was that they became counter-assimilatory, because in the crucible of the cities,

Indians of many different tribal origins came together and realized they had common problems and experience.

One of the strange mysteries that has puzzled Native Americanists for the last two decades has been what happened on the 1980 census. The number of Native people in the U.S. suddenly doubled, from 800,000 on the 1970 census to 1.3 million in 1980. This of course exceeded any reasonable prediction of "natural increase" (demographic births minus deaths) for a single decade. Since the census basically involves checking a box for racial and ethnic self-identification (although the categories are often curiously distorted for various national purposes - which is another story), what essentially happened was that several hundred thousand people in the U.S. switched their ethnic identity from 'something else' to 'Indian' during that time period. There were a variety of explanations - one being that some reservations became more liberal about their blood quantum enrollment qualifications, another that a failing economy caused several people to try and "become Indian" in order to get their perceived federal governmental benefits, and the third was that a large number of urban Indians who had been "hiding" their identity by not checking that box decided to assert it. However, Nagel feels all these explanations fall somewhat short, unless one considers the possibility that due to the ethnic renewal movements of that time period, thousands of people with loose ties to specific tribes or reservations suddenly decided to join what they saw as a new

ethnic group that they could identify with - "Indian." Here was direct proof of the social construction of ethnicity and the historical forces that affected it.

Although this ethnic renewal movement began in the cities, she notes, it quickly fed back into the reservations. However, as authors like Champagne (1989) have noted, when it came to the Lakota Sioux reservations, it became mired in deep factionalist disputes - there had been a lack of consensus on most reservations because of the deeply decentralized nature of the Lakota *tiospaye* system, where although the different bands would unite for the summer Sun Dance, they were organized into kin-based segmentary orders the rest of the year. Further, there were the deep disputes between the "Old Dealers," who preferred to remain loyal to their old hereditary band leaders, and the "New Dealers," who were willing to work through the BIA-IRA framework. All these matters made it difficult to create the necessary pan-tribal political solidarity on reservations like Pine Ridge or Cheyenne River, let alone pan-Indian coalitions. Thus, although Lakota Indians formed the basis of a large amount of leadership for AIM, they were not always seen as welcome on the Lakota reservations. As Tim Giago, the publisher of *Indian Country Today*, noted (1984), people sometimes resented their intrusiveness and militancy. They agreed with the causes and concerns, but disagreed with the means of the ethnic activists, and resented the fact that they were not

deeply rooted through ancestry or participation to the reservations.

Although the Native ethnic renewal movements of the 60s and 70s have often been compared to other examples of the "troubling persistence of ethnicity" in the U.S., such as the continued activity of ethnic politics among European-American immigrant groups (Irish, Italian, Jewish, and so forth) or ethnic migrants from Asia (such as the Koreans, the Vietnamese "boat people," and so on), Nagel and Fenelon note that their case is not simply proof of the 'failure' of the melting pot, or conventional theories of ethnic assertion as jockeying for economic and political status. For one thing, the range of 'ethnic choice' for most Native people (because of their phenotypic appearance) is not as great, and so they are not as free as other U.S. groups to 'switch' their ethnicity (although some do try and pass as Middle Eastern or Hispanic.) Secondly, they are not an immigrant group; they were here first, and like African-Americans, their relocation (in their case, to interior parts of the U.S. rather than across the Atlantic) was involuntary. And thirdly, they have been subjected to a more direct and vehement program of 'culturicide'. Although other immigrant groups have faced pressure to give up their language and customs in order to "become Americans," no group has ever faced such a totally coordinated cultural assault as Native Americans.

Fenelon observes that culturicide operates through basic Newtonian principles - every action creates an equal

and opposite reaction. The militant resistance that appeared among Native people in the U.S. in the 60s was a direct product of the decades (and in some cases, centuries) of 'culturicide' that they had been subjected to. While on the one hand told to shed their distinctiveness and assimilate into American society, they were also held at arm's length from the 'American dream' by racial discrimination. Looking back through history, he finds that this process has been operative for a long time - every federal law or program that diminished some aspect of Indian cultural sovereignty was followed by a political counter response, such as the formation of the National Congress of American Indians (NCAI) or the lawsuits filed against the Pick-Sloan Act (which diminished the territory of several reservations through the creation of hydroelectric programs.) What made the 1960s resistance unique was the way in which the Lakota formed coalitions with other Indian groups - first, by asserting themselves as an undivided nation, consisting of several reservation/tribal divisions; and second, by joining with pan-Indian Red Power movements for national action. "Red Power" drew on narratives of ethnic resistance which had been preserved in Native communities for centuries (Jahner 1992).

It is essentially the social conditions of the "ethnic renewal" period of the 60s and 70s (which is ongoing, although in many cases its more direct national political manifestations have faded and it seems to have entered a different phase), which brought into being the Harry V.

Johnston Lakota Cultural Center on the Cheyenne River Reservation. And Nagel acknowledges that a large part of what created these conditions was the appearance of televisions on the reservation. Lakota people were able to watch dramatic national actions like the takeover of Alcatraz and the BIA building, and the dramatic struggles of Blacks and others during the civil rights era and the period of international decolonization, and the "fish-ins" of Pacific Northwest tribes. Television helped construct a pan-Indian sense of pride, heritage, and common struggle, and made cultural revitalization possible. And it is not surprising that during this time, Indian groups began building their first tribal television and radio stations.

Methods

The research for this project was conducted on the Cheyenne River Sioux Reservation headquartered in Eagle Butte, South Dakota. Participants chosen for this project were Lakota Sioux who were of the age of consent (18 or older) and who were tribal members living on the reservation. They were given a survey which consisted of five components: a demographic question section identifying their age, gender, and individual data; a technology question section identifying what technologies they had on their home; a TV question section measuring the amount of television they watched; an acculturation question section determining their

comparative level of acculturation; and a cultural knowledge question section determining their knowledge of Lakota history. This questionnaire was sometimes followed up by unstructured ethnographic interviews.

Thirty-five people of mixed age (18-75) and gender (but common Lakota ethnicity), were given this questionnaire although only a small number of those (8) elected for oral open-ended interviews afterwards. These people were chosen through strictly random sampling based on picking addresses at random from the Eagle Butte phone book (using Bernard's systematic random sampling method, taking every 10th person from a randomly generated number, with one proviso: non-Indians were thrown out of the sample) and visiting their houses. I asked them to complete the questionnaire in my presence in case they did not understand how to answer certain questions, and to insure that they didn't confer with anyone else in how to answer it, leading to "data contamination." The television section asked specifically how many hours of TV they watched per day and per week, what shows they watched, what kinds of shows they preferred, how long they had owned a set, and what rooms in their home had TVs. The acculturation section asked them questions such as how much they used the Lakota language, how close their values were to Lakota values, and how much participation they had in traditional indigenous rituals and customs. To assure open and honest responses, each participant filled out a consent form, and was promised anonymity of their answers.

The technology section contained a checklist of technological items in their home. I specifically focused on technologies dealing with communication and information, e.g. 'emerging media' technologies. Thus, people were asked to check whether or not they owned a VCR, a TV set, a radio, a telephone, a cell phone, a CD player, a personal computer, a modem, and several other items. (I tried to confirm responses with spot observation where possible.) Thus, they were given a 'technology score' of 1 to 15. The more items they checked, the higher their score. Again, one would assume if people like Mander are correct about their "technological assimilation" hypothesis, then the more technologies a person had been exposed to in their own home, the more acculturated they would be in outlook and behavior. So there would be some correlation between the number of technological items in their household and their level of acculturation as well.

This sample was, in some way, 'clustered'. There are 5000 Indians who live on the reservation, but only 2000 live in the Eagle Butte area. My interviews are drawn solely from people who live in or near Eagle Butte. However, I can state with confidence from my encounters with people "out in the districts" on the reservation, things are largely homogenous. Although it is often claimed that more traditionalists cluster in certain towns (Green Grass, Cherry Creek), there are certainly many who also live in Eagle Butte too. For my data analysis, I attempted to determine if there was any correlation (Pearson's coefficient r of correlation) between

such things as hours of TV viewed per week or years of TV ownership, or technological ownership score, with such things as the number of traditional ceremonies they attended in the past year, the number of non-traditional Lakota values they had, their fluency in the Lakota language, their level of cultural knowledge, or the number of traditional practices and customs they had engaged in through their lives (i.e., had they ever prepared traditional foods?) (Integer scores were generated from the questionnaire based on fill-in-the-blank answers or counts of types of answers. For example, the knowledge score was based on the number of questions they answered correctly about certain key events in Lakota history, such as the Indian Reorganization Act of 1934.) Through simple statistical tests, I set out to test whether television viewing had any impact on these variables which were reasonable proxies for level of acculturation.

One would expect that a more acculturated Lakota person would know less about their own cultural history, attend fewer ceremonies, have engaged in fewer traditional practices, hold fewer traditional Lakota values, and be less fluent in the Lakota language. If TV (or other technologies) cause acculturation, one would expect that higher levels of TV viewing or technology ownership would correlate with these things. The values questions were largely drawn from the "seven W's" prominently displayed in the cultural center.

The Seven Lakota W's

Many Lakota told me that there were seven cardinal values or virtues that had governed their society since ancient times. These seven values were given to them, some said, by the Sacred Buffalo Calf Woman herself, and had been known since time immemorial. Others said that the teaching of the "seven w's" came much later, and that they were promulgated by Bad Warrior, a member of the Looking Horse family whose job it was to be custodians of the Buffalo Calf Pipe, more recently. In any case, most informants agreed that for at least two hundred years, these values had been the 'pillars' of the Lakota culture. A Lakota person was supposed to uphold them in all aspects of his or her life.

1. *Prayer* - a Lakota person is supposed to praise his or her creator (*Tunkashila*, the Grandfather, or *Wakan Tanka*, the Great Mystery) daily, especially at sunrise while greeting the rays of the morning sun.
2. *Respect* - a Lakota is supposed to treat with deference and honor their elders, their spiritual leaders, and their kin.
3. *Compassion* - a Lakota is supposed to care for all people equally, regardless of whether or not they are kin relations.
4. *Honesty* - a Lakota is not supposed to lie and to deal honestly in all their business and other dealings.
5. *Generosity* - a Lakota person is expected to give away a substantial portion of their possessions as charity to the poor, sick, widows, and other needy people.
6. *Humility* - a Lakota should never seek to show off or seek attention, fame, adulation, or any kind of recognition for their deeds.
7. *Wisdom* - a Lakota should value learning and right thought over pursuit of all other things, including personal happiness.



Figure 13. The seven w's of the Lakota way

In some ways, these seven values seem to be similar to the five "pillars of Islam" - they appear to be fundamental religious precepts. Of course, no one thought of the Lakota religion as such prior to European contact. There was no faith it competed with prior to Christianity. Thus, there really is no way of saying "religion" in the Lakota language; the closest equivalent is simply "the doings of the people." In many ways, Lakota people simply see these values as constitutive of their identity - moreso than "blood," race, skin color, or anything other than the language itself. A non-Indian person can be adopted or made Lakota through the *hunka* ceremony but they will only be given this opportunity if they demonstrate these values in their life.

Most Lakota people I met knew of the seven w's, and those who knew said they tried to live up to these principles in their everyday life. Several Lakota said unlike Christianity, they had no formal separation between religion and daily living. There was no need of a formal ritual occasion to practice prayer; and one honored their ancestors first and foremost by living the life they expected them to. Interestingly, many people knew of these seven principles even if they could not state the seven Lakota words that corresponded to them, and said that they lived by them.

Therefore, it seemed reasonable to use these values as a test of acculturation. Presumably, more acculturated Lakotas would either have no knowledge of these values, or would have no interest in practicing them. Since Western or "European-American" value systems often promote values that are intrinsically opposite (such as pursuit of happiness, selfishness, the pursuit of fame or celebrity, secularity, and the questioning of authority), one could expect that the more acculturated Lakotas became, the less likely they would agree with these values.

So, my questionnaire included a "values section" which sought to see whether people were more likely to hold to these values or their opposites. A Lakota person would be asked which statement they agreed with more, as in this example: (a) a person has the right to keep all the

possessions that they earn (b) a person should seek to give away as much of their possession as possible. If the person was truly familiar with the value of *generosity* and felt it was an important cultural norm to them, they were likely to check answer b; if the person was more acculturated to Western values and norms, they were likely to check answer a.

The obvious flaw in this section of the questionnaire, of course, was whether or not the response the person checked reflected any reality. One way I guaranteed this was by promising the respondent anonymity and by administering the questionnaire in a location where no one was observing their answers. That way, they might not feel the need to check the "politically correct" response. Since there was no way of anyone else knowing what answers they checked, no one needed to feel embarrassed by selecting the cultural norm-violating response.

Of course, there was no definitive way of confirming actual etic behavior even if these were true emic ideations present in the person's mind. People who profess generosity might practice stinginess. However, the number of individuals who can fully practice what they preach ("walk their talk," as my Lakota informants liked to say) seems to be low in many situations. I was not attempting to measure behavior, only if people were aware of and agreed with prevailing cultural preconceptions. There was no assumption that these values were somehow primordial in origin, only that they represented

a consensus of proper norms within Lakota culture for a long period of time.

A respondent was given 1 point for every answer they gave which was contrary to 'traditional' Lakota norms and closer to Euro-American norms. Thus, they had a 'values acculturation' score of 1 to 8 (an eighth question asked the individual if they considered themselves a member of a separate Lakota nation or just a U.S. citizen who was, in effect, "Lakota American.") A person who was more acculturated to Western ways of thinking would have a higher score. Then I could correlate this with such things as level of television viewing, and so on.

I also examined the data from the TV section to see if Lakota people tended to watch different kinds of programming from non-Indians. This would control for whether or not they watched different kinds of programs. It would have been an interesting control to see if people who watched more Indian-themed programming were less acculturated, but unfortunately, there was no Indian-based programming on TV, only on the radio. (However, the two local video stores in Eagle Butte had a large number of videocassettes containing fiction films and documentaries on Indian history, and these were often their most popular rentals.) A number of respondents did indicate on the questionnaire (without being directly asked) interest in whether or not there could be more Indian programming available through the CRST Cable system.

Finally, I did textual content analysis on my qualitative data. The Cultural Center had a number of videotaped interviews with tribal elders which they had completed for their Wolakota Oral Histories Project. I went through and watched these videotapes, specifically transcribing areas where people mentioned the impacts of technology in their lives. I also assisted in a small number of oral history interviews where I directly asked about technological impacts (thus assuring they would say something about it.) In my own unstructured interviews with people, the impact of technology on peoples' lives was the central theme of my questioning. Transcripts of these oral histories and interviews were then examined to see if there were repeating themes regarding negative and positive cultural effects from technology. I came up with five positive and negative codes (i.e., codes representing themes of positive or negative cultural effects), through examination of this textual data by the QSR NUD*IST program, and then sought to test whether or not people listed more negative or positive impacts overall, and what, if anything, might predict whether people were more likely to suggest negative impacts. My hypothesis was that people might be less likely to list negative cultural effects if they had more "hands-on" experience and more familiarity (and sense of control) over technology.

Other observations in my findings are based on other qualitative data, such as clippings from the *Eagle Butte News*

and *Indian Country Today*, video and audio recordings I made of events and meetings on the reservation, field notes (which were entered directly into a PalmPilot PDA, thus saving the steps of typing them up and entering them into a computer), informal conversations with tribal officials and staff of the Cultural Center, tribal memos and documents, and participant observation on technology and cultural-change processes as a volunteer/intern for the Cultural Center and an employee of the CRST's MIS department.

A Note on Quotes

All ethnographic quotes in the findings of this dissertation are based on informal and formal oral interviews. Where not specifically stated, the people quoted provided the quote in a personal communication to the author. All of those persons are Lakota residents of the CRST reservation. People are identified by pseudonyms in order to preserve their anonymity and privacy. There is no consistency in the use of these pseudonyms; they are made up at random.

CHAPTER 4
FINDINGS, RESULTS, AND OBSERVATIONS

Survey Findings

Having chosen two independent variables, hours of TV watched per week, and years of TV ownership, I tested if there was any significant correlation between them and the dependent variables of Lakota peoples' level of cultural knowledge, participation in traditional practices, conformity of values to non-Lakota or non-traditional values, fluency in Lakota, and participation in traditional ceremonies (Table 3). These variables all seemed like reasonable proxies for acculturation since acculturated Lakota would know less of their own culture, go to fewer ceremonies, and so on.

The cultural knowledge score was based on how many complete answers the respondents knew to 'fill in the blank' questions regarding Lakota history, historical figures, and important events. Participation in traditional practices was based on how many items they marked in a section of the survey querying whether or not they had ever raised a tipi, used traditional medicine, etc. The score for conformity to non-Lakota values was based on how many items they marked

with a contrary answer to the (professed) emic Lakota value system ("the seven W's" - honesty, generosity, and so forth.) Lakota fluency was based on how well they could speak, write, or use the Lakota language. And ceremonial attendance was based on the number of traditional ceremonies they had attended in the past year.

I took the data from my 35 survey respondents, and did a simple correlation coefficient test between two independent variables, hours of TV they watched per week, and years of TV ownership, and five dependent variables derived from my surveys - scores for cultural knowledge, number of traditional practices performed, level of adherence to modern values, level of Lakota fluency, and ceremonies attended in the past year (all of which were also interval integer variables.) If Pearson's r was close to plus or minus 1, it would suggest that television exposure is strongly correlated with acculturation. There were no significant correlations between either of these TV-related variables and these indexes of acculturation. (Table 3)

TABLE 3. R-Scores (Pearson's coefficient of correlation) between variables representing television and acculturation

R-SCORES (Pearson's r coeff.)	<u>Cultural Knowledge</u>	<u>Tradition Practices</u>	<u>Modern Values</u>	<u>Lakota Fluency</u>	<u>Ceremony Attendance</u>
Years of Owning a TV	0.139	-0.044	-0.465	-0.066	0.147
Hours of TV Watched/week	-0.341	-0.264	-0.279	-0.335	0.205

The strongest correlation was between the number of years the Lakota person owned a television, and the number of non-Lakota (or 'modern Western') values they held in their value system. But even that correlation was hardly near the *r*-score of other linear correlations, such as between their age and the number of children they had (I used this as a control test of association). TV exposure only accounted for 46% of the variation at best. How much television Lakota people watched did not seem to have any influence on how much cultural knowledge they knew, how many traditional practices they had participated in, how many non-Lakota values they held, how well they spoke or used the Lakota language, or how many ceremonies they attended.

The next item to consider was what TV programs Lakota people were watching. Interestingly, while there did seem to be differences in the *types* of shows Lakota people watched (Table 4), as compared to European-Americans, they also watched many of the same individual mass audience programs. It should be noted that people could check any or all types of shows they watched, so they could have checked all possibilities, or none. The question as to favorite show was an "open" question (fill in the blank), thus there were not as many duplicate answers.

TABLE 4. Types of shows most frequently watched.

<u>TYPE OF SHOW</u>	<u># OF RESPONSES</u>
News	18
Movies	16
Documentaries	14
Sports	13
Dramas	9
Talk Shows	7
Situation Comedies	6
Soaps	1

It appears that Lakota people show a definite lack of preference for two TV genres that are much more commonly appreciated by European-American TV audiences: soaps and situation comedies. Still, they show the typical European-American preferences for movies and sports. (Eagle Butte has two very large and very active video stores.) However, the show they report as being one of their favorites, "E.R.", probably has little to do with their own experience (unless they work in the Indian Health Service Hospital) but jibes with the Nielsen preferences of "mainstream" European-American TV audiences.

Even though there does not appear to be anything unusual about their television preferences, and in general they are watching the same shows as other non-Lakota people on the reservation, they are not becoming more acculturated as a result of their exposure to television. Although the Lakota people may be losing aspects of their culture,

language, and traditions, other causes seem to be at the forefront than television.

Next, I decided to check if the number of technological items an individual had in their household was a significant determinant for acculturation. Individuals had been asked to check off whether or not they had certain media/communication/information technologies in their household - such as radios, telephones, video game consoles, VCRs, and so forth. Every item they checked added to their "technological inventory score". If Mander and others are correct that technology causes acculturation, then this technology score should correlate with the indexes of acculturation. However, once again, it did not. Neither did the number of responses people gave to questions about Internet usage (each positive response to questions such as "I have used an online service" or "I have used the Internet at work", etc., added 1 point to their "internet exposure score.") Neither a regression analysis (Table 5) or Pearson's r (Table 6) showed any type of linear correlation between technology and these acculturation variables. In the regression, the variances for the best models (least squares method, 95% confidence) are still extremely large.

TABLE 5. Linear regression analysis: technology score compared to other variables

Y = mx + c	<u>Modern Values</u>	<u>Lakota Fluency</u>	<u>Tradition Practices</u>	<u>Cultural Knowledge</u>	<u>Ceremony Attend.</u>
M	-0.0326	0.0093	-0.1282	0.1900	-1.1725
C	2.0991	3.0341	6.2821	3.1911	19.9522
Var	2.7616	2.2107	5.8661	7.747	196.093

TABLE 6. R-scores of correlation between technology scores and indices of acculturation

	<u>Lakota Values</u>	<u>Lakota Fluency</u>	<u>Traditional Practices</u>	<u>Cultural Knowledge</u>	<u>Traditional Ceremonies</u>
Technology Inventory Score	-0.043	0.0137	-0.115	0.147	-0.180
Internet Score	0.280	0.2919	0.270	0.414	0.127

I wanted to see if those Lakota with Internet exposure tended to use the same kinds of Internet services that non-Lakota users did (see Table 7) .

TABLE 7. Most frequently used Internet services

<u>Service</u>	<u># of Responses</u>
World Wide Web	8
Email	6
Chat	5
Reading News	3
Downloading Software	2

Once again, I found no surprises. Although many of the survey respondents indicated no Internet usage whatsoever, those who did report usage put the web and electronic mail as the two aspects of the Internet they were most likely to use. This does not seem to differ significantly from non-Lakota Internet users.

The strongest correlation seemed to be between their Internet score and how much cultural knowledge they had. Interestingly, this was a positive correlation between how many different kinds of Internet exposure they had, and how many things they knew about their own culture. Hence, if anything, the Internet might be slightly augmenting their own cultural knowledge, not diminishing it. In any case, like television, the Internet and other kinds of technologies do not seem to be strongly correlated with various indices of acculturation among survey respondents. Most of the r-scores are far from showing significant correlations. No links between technology and acculturation are apparent in my data set.

Content Analysis of Oral Histories

I went through and coded several of the oral histories videographed and conducted by the Wolakota Oral Histories Project over the last few years with content codes

based on mentions of technology effects. I also did a similar analysis of a small number of oral histories I helped conduct with members of the Cultural Center, and of other open-ended interviews. In the oral histories, I searched for mentions of effects of technology (particularly how the person remembered changes in their cultural environment as a result of the introduction of technology), and in my own open-ended interviews, I asked deliberate questions in this regard. I was interested in three aspects that might emerge from this coding - what positive or negative changes resulted from technology introduction, whether people were more likely to list positive or negative changes, and what if anything might predict whether or not a person would mention positive changes. I used QSR NUDIST to explore transcripts of these interviews to see what relationships might emerge.

The following is a listing of the most common NEGATIVE cultural aspects of new technologies, from the perspective of the interview subject:

- **[NO MORE VISITATION]:** Many people reported that new technologies made it less likely for people to visit each other. In 'classical' Lakota culture, it was common for people to visit their extended family members for long periods of time, especially during the summer season and if they lived in another camp. Many lamented that the telephone, the automobile, and now electronic mail caused a decline in that family visitation tradition. They reported that family members would visit, but often only to stay for dinner or for part of the night, and then go home. They only time they would actually stay the night was if they had been drinking. Those who reported this problem suggested that it may have helped weaken the extended family bonds at the heart of Lakota culture.
- **[OBESITY/LACK OF FITNESS]:** It is a running joke that big bellies seem to be the hallmark of many of the Lakota men on the Cheyenne River reservation. The rise in obesity

could probably be ascribed to a variety of non-technological causes: physical activity obviously declines in a hunter culture that no longer hunts (other than for recreation); long winters force long periods of sedentarism; most of the food establishments on the reservation now serve high-fat fried foods; alcohol certainly contributes to many pot-bellies; there were no gymnasiums or fitness centers in town (although the CRST Wellness program opened one the year I was on the reservation.) However, several informants pointed to particular technological causes for obesity: because of television, automobiles, computers, and radios people "sat on their arse" all the time and did not get enough physical exercise. They saw this as disrupting the important mind-body balance they thought was part of the heart of Lakota culture.

- **[YOUTH REBELLION]:** Quite a few elder men pointed to television as the prime cause for young men not wanting to learn their own culture and traditions, and adopting "the black man's culture" as an alternative. They thought television was responsible for the large number of young boys out "running the streets at night," fighting with each other, joining gangs, getting pregnant, and getting into trouble. Almost all informants queried about changes in the reservation during their own lifetime reported greater incidence of youth "acting up" and getting thrown in jail. Some suggested other family-related causes (particularly parents absent because of bingo or drinking) or a lack of traditional Lakota values taught at home or in the schools, but quite a few thought television was responsible for the rise in youth misconduct.
- **[IMPOVERISHMENT]:** Many Lakota people thought one of the negative impacts of new technology was a drain of the already scarce resources of the reservation. They often commented on how people "wasted" money on new gadgets all the time, such as satellite dishes, VCRs, video games, and so forth - precious money, they felt, which was then not being spent on food for the family or for other bills. One informant even felt that this 'gadget fetish' was as bad as gambling for many families because of the drain on already strained incomes it represented. They thought it was similar to a form of addiction for these people, who they thought spent too much time testing, repairing, and finding new technologies.
- **[DISTRACTION]:** Many Lakota informants commented on the fact that there had been a decline in participation in community and ceremonial activities over the last thirty years or so. They indicated that fewer people went to district meetings, church activities, traditional ceremonies, or cultural activities. Usually, some technology-created distraction (television soap operas, computer games, etc.) was pointed to as the cause in this perceived decline in community involvement and

participation. Interestingly, this parallels a recent study which suggested that white 'mainstream' culture seems to have had a vast drop in community activity (PTA, bowling league, fraternal orders, etc. all are recording drops in membership) which roughly coincides with the rise of television viewing.

Contrary to what a 'Manderian' perspective might suggest, I found no informants who felt that television altered the values or cultural allegiances of adult viewers. No one pointed to technology as a force for assimilation *per se*, although they did mention how technologies did have weakening influences on certain cultural norms and practices.

Here are some of the POSITIVE aspects of technology that were mentioned in the course of these interviews:

- **[WIDER WORLD]:** Many informants stressed the idea that through various technologies, they had learned more about the ways in which *washichu* society operates, and about the other Indian cultures in the Americas. Although they felt it had made little contribution to their understanding of their own cultural history (which was better preserved through direct oral recounting), some acknowledged that television helped make them aware that the Sioux experience was not unique and that there were Indian people like them throughout the Americas. Transportation technologies like automobiles and airplanes allowed them to visit places many had never seen, while information technologies like television and the Internet allowed them to learn about them without ever leaving home.
- **[LABOR REDUCTION]:** Lakota women in particular often emphasized the boon they received when the reservation received electric power. Many remember going down to the Moreau River to wash their clothes, even during the dead of winter. Others recall having to cook foods over an open fire for hours and hours or having to dry and jerk meat in order to preserve it. The appearance of such technologies as natural gas stoves, electric ovens, refrigeration, washers and dryers, and other electric appliances were often acknowledged as reducing the labor burden of Lakota women. Some added the caveat that they felt that they ended up spending the same amount of *time* at housework, even if it involved less *sweat*; and that what made today's times worse was that many women worked outside the home yet men

did not significantly increase their contribution to the household.

- **[HEALTH IMPROVEMENTS]**: Although many informants bemoaned the fact that fewer and fewer people were going to visit the traditional medicine men, herbalists, and healers, they often pointed to new medical technologies as helping save many lives on the reservation. Many people mentioned when Eagle Butte first got an ambulance as a significant historical moment. Before that, injured people had to be brought to the I.H.S. hospital by their family or friends and many more died on the way. Other technologies that were mentioned as causing a great improvement in community health were the I.H.S. X-ray machine, cellular phones (for calling after car accidents), and the introduction of a 'telemedicine' (distance learning/videoconferencing center) facility in the hospital.
- **[MORE OPPORTUNITIES]**: Many people remembered one of the important changes in their own lifetime was the construction of the Eagle Vocational Center and the Cheyenne River Community College. Before these facilities were built, young people had to leave the reservation in order to get training and technical skills. Bringing computer and other technology to the reservation meant that young people could acquire those skills while still living on the reservation (and in a curriculum that emphasized cultural context), and even if they had to leave to complete a 4-year degree or some other kind of training elsewhere, they were well prepared for the transition. Although many elder informants felt that more and more younger people were leaving the reservation for such opportunities, they thought that this was positive since it meant many were seizing opportunities to learn skills (artistic, technical, professional) that they could bring home and apply for their people.
- **[BETTER RESPONSIVENESS]**: People often heralded the introduction of new technologies on the reservation such as the radio station KLND or the printing facilities for the *Eagle Butte News*. They often said that before these communication technologies existed, they had no way of finding out what went on at tribal district meetings, or about other reservation news and developments, other than through the "moccasin telegraph" of neighbor-to-neighbor gossip. This was pointed to as a positive change because people "out in the districts" of the reservation often felt isolated from what was going on in Eagle Butte and elsewhere - these technologies made them feel like the tribal government was more accessible and accountable.

Using these codes, I went back and coded 22 interview transcripts (12 oral histories that were already conducted

and taped before I arrived, 4 that I helped conduct, and 6 open-ended interviews that were not oral histories *per se* but contained questions about memories of technological change on the reservation) to see if people were more likely to list positive or negative changes resulting from technology. I found 42 mentions of negative changes (counting multiple instances in each transcript), and 45 mentions of positive changes - only slightly more accounts of positive cultural effects than negative ones. The majority of informants seemed to regard new technologies as a mixed bag, with negative and positive effects equally likely to result from their introduction. In general, age seemed to correlate with negative views - the older the person was, the more likely they were to suggest negative effects.

So, I was curious to find out what might be a predictor for positive views toward technology (other than youth.) I went back and decided to examine the transcripts to see if people had had some kind of technical background or training - such as being an engineer, a studio technician, a mechanic, or so forth. Sure enough, I found that people who actually worked with technology in some way on the reservation were all more likely to list more positive than negative effects from technological introductions. Those who had no experience with the *workings* of technology (other than as a 'user') were more likely to list more negative effects than positive ones. For people who had no hands-on understanding of technology, it was an alien and threatening

force outside of their control. For those who worked with it day-in and day-out, it was less threatening.

This suggests that, at least within the realm of emics, people are less likely to *perceive* technology as a negative cultural force if they are able to understand and control it. Also, consistent with many findings in social psychology, when people ascribed negative impacts to technology, they always said they observed these negative influences in *other* people and *their* families, never in the case of their own selves or their own family, although they would sometimes point to those situations as justification for their own rejection of technology ("and so that's why I never bought my family one of those things.") Social psychology research suggests that people often hold other people's actions under a more critical lens than their own. These factors give reasons to hold the light of caution to 'findings' from people such as Mander vis-à-vis technology introductions into indigenous communities. A beginning model of how attitudes toward technology are formed, based on NUDIST analysis of my qualitative data, appears in Figure 14.

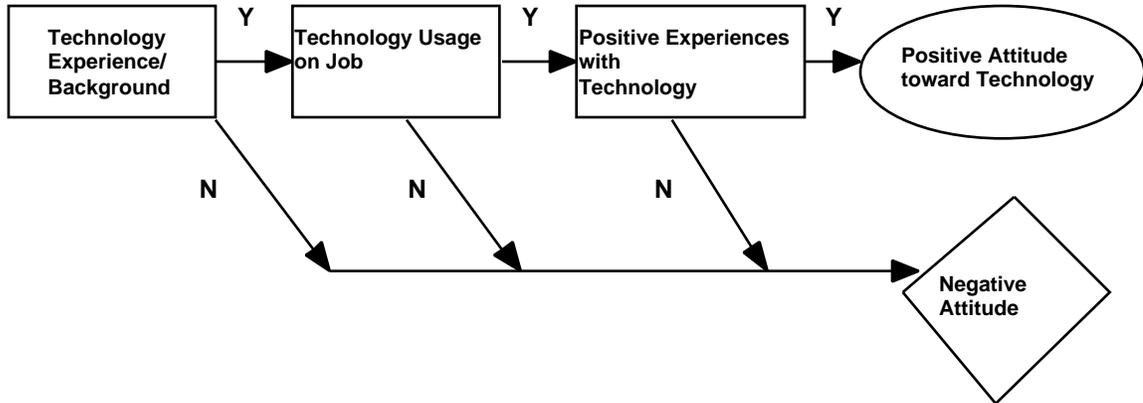


Figure 14. Qualitative Analysis of Relationships

Technology and Cultural Conflict among the Lakota

We need to teach our kids European science, mathematics, and technology - they need these things to deal with the white man's world and to help our people. But we need to be careful because they pick up the white value system and think that all that matters is degrees or money. The white teachers just don't know our value system and don't care about it. America is just something that's made up but we are for real. ('Sam,' an Indian elder on the CRST reservation)

Although many Lakota feel the use of new electronic technologies such as video, computers, and telecommunications are having a positive effect on their culture, my research found that in fact this wasn't a consensus view. There were numerous criticisms of technology that fell along several lines. The first was that the presence of recording technologies at sacred Lakota ceremonies was a threat to their numinosity. Many Lakota placed this problem in strict terms: the spirits forbade the presence of certain things at ceremonies, and thus things like video cameras, still cameras, and tape recorders were simply not permitted. Several of the key Lakota rites, such as the *yuwipi*, are performed only at night, in complete darkness. The interior

of the sweat lodge is also completely dark when the tent flaps are closed. What occurs within those spaces is not supposed to be visible to the world-at-large, and thus should not be recorded.

There has been longstanding disagreement about even writing what occurs at these ceremonies down, which is why some Lakota have often expressed anger at the way in which their ceremonies have been described by anthropologists and other observers. Aside from the fact that some of these accounts are distorted and inaccurate and reflect the biases of the observers, even when they are accurate, they tend to reveal things that most Lakota feel shouldn't be in the public domain. If people want to know what occurs in their ceremonies, they should come and participate, and more importantly, agree to the rules, restrictions, and customs that accord with the performance of those ceremonies. Many Lakota despise the New Age Sun Dances that are performed in New Mexico and elsewhere by whites; they feel these are parodies based on the replication of distorted, secondhand accounts by other white observers.

Like many other religious traditions, the Lakota religion contains a certain degree of *esotericism*. It is assumed that through vision-quests (the *hanblecheya*) and other rituals that the person is only granted certain truths at the moment in which they are prepared for them. Giving out spirit wisdom willy-nilly would be counterproductive because it wouldn't be understood. Similarly, the Lakota idea of the

sacredness (*wakan*) suggests that the sacred itself is a force of fluidity and change. Writing down sacred traditions, or fixing them in one form through the gaze of the camera, threatens the essential nature of the sacred - which is change - with stability and sterility. The Lakota have always been against the idea of scripture or dogma, because it is believed that the spirits always reveal their teachings anew to each generation.

Their ceremonies have always been open and subject to innovation on the part of medicine men, which has always been somewhat confusing to anthropologists, who have often assumed there must be one set way to do a sweat, or hold a pipe ceremony, or a naming ceremony, or an adoption ceremony. The existence of contradictions in the accounts of these rituals has often been thought to be because of errors on the part of the observer, or perhaps some "degeneration" or "corruption" in the original teachings. However, the Lakota recognize that in a purely oral tradition (as with the game of 'Telephone') certain innovations will occur. What many anthropologists have not understood is that this is expected. There is no "authoritative" idea of having certain colors correspond to certain directions. One medicine person may simply have a different 'revelation' about this than another (Rice 1989).

Many Lakota said they would never agree to having a ceremony such as the Sun Dance broadcast on television, or even recorded on videotape. It goes against the ethos of participation that forms the backbones of these ceremonies.

There could never be a Lakota version of the "electronic church" because it is only the direct participation of people in these rituals that gives them their value. The Sun Dance is about the sacrifice that the dancers are willing to make on behalf of the community, so that the community might survive for another year, and also the indirect sacrifice of the other participants who are willing to set aside their business and other activities for four days to support the dancers. Watching all this on TV, which would require no interruption on the part of the watcher into their everyday life, and no effort to support the dancers, seems alien to the Lakota - a very strange and dangerous idea.



Figure 15. Mural of the Sun Dance - which also cannot be photographed (Artist: Sidney Keith [deceased], Source: HVJ Lakota Culture Center)

At the Sun Dance I observed near Green Grass, I was told at the outset before going that I was not to bring my video camera. I asked if it was OK to take notes on the ceremony. People indicated that would be acceptable, but emphasized that the only people who should be at the Sun Dance are the relatives and friends of the dancers, who are there to support them in their four day long effort. (I probably would not have been given an invitation to go had not the brother of the director of the Cultural Center been a dancer that year.) One could take notes if they wished, but ultimately one's presence was presupposed on supporting the dancers and participating in the subsidiary rituals (the use of sage, the taking of the pipe, the chants of the audience) that accompanied their actions in the center of the dance arbor. I was told that if I was there only as a disinterested observer that I should leave.

Of course, anthropology itself is predicated on the idea of *participant observation*, and the idea that one should directly participate in the rituals and ceremonies of the people among whom the anthropologist lives. And I did directly participate in many of those ceremonies, including the yuwipi, the sweat lodge, and some funerals. However, while there is some disagreement about the appropriateness of allowing whites as part of the audience/'congregation' (i.e., those people who stand on the outside of the dance arbor) at Sun Dances, I don't know of too many medicine people who would allow whites to actually be dancers. As one man told

me, "These rites are by the Lakota people, for the Lakota people. If a *washichu* were to participate, it could only be the case if he was made a Lakota through the *hunka* (adoption) ceremony, and even then many people would consider it inappropriate unless he had been part of the community for many years."

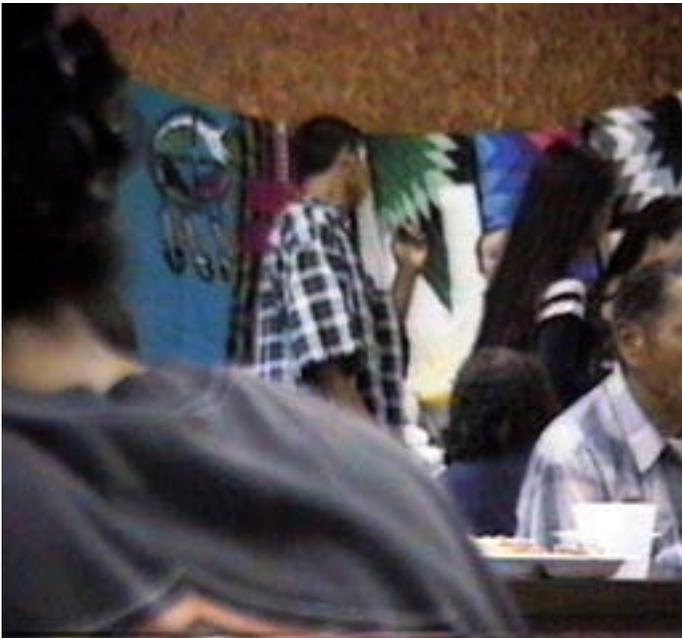


Figure 16. Funeral ceremony for Sidney Keith

Few anthropologists have ever danced themselves in the Sun Dance for various reasons. The simplest might be that few would be willing to undergo the ordeal just for the firsthand knowledge it might provide. Another is of course that it requires a year of extensive preparation. When one pledges to be a Sun Dancer, this is a very solemn vow, taken

as seriously as one's pledge to be a pipe carrier. For the year prior to dancing one must agree to refrain from many activities and to be especially holy. Considering the relative short-term duration of most fieldwork, there have not been many anthropologists who have had the time to undergo the preparation to be a dancer, even if they had the willingness.

In any case, I decided to take notes on my PalmPilot during the ceremony. Putting on my typical mock social-scientist airs, I went around taking notes on the position of certain things (whether they were located to the east, west, or north of the arbor), the position of the sun, the number of women vs. men dancers, and other observations. Interestingly, many of the Indian people did not know what the device was. Some were concerned that it was a sound recorder. They quickly approached other people and tried to find out if this was what I was doing. I got a stern lecture from a white woman who was at the ceremony (I found it curious that she of all people took it upon herself to dictate to me) that if this was what I was doing, it was highly inappropriate, especially if I was one of those people taping Lakota songs and chants without their permission (presumably so they could go in some 'world music'/New Age album without compensation to the people who first performed them.) I told her that this was not what I was doing, and that I agreed with her about the inappropriateness of such activity.

This suggested to me that obviously a more practical concern of the Lakota about the presence of these recording technologies at ceremonies was their ability to appropriate, and worse, mis-appropriate Lakota culture without their knowledge, consent, or compensation. I really don't know how often that actually occurs, but it must happen often enough for them to be concerned about it. The situation would not change even if it were Lakota people who were doing all of the taping. There still would be a possibility that the tape itself could fall into the 'wrong hands,' as it were, or be somehow broadcast on an open signal. The Lakota do not object to musical and other appreciation of their culture by other people; however, they raise a valid objection to the fact that they should have some control over the flow of music and other aesthetic products to the outside world, and under what terms that that occurs.

When it comes to less numinous or sacred ceremonies - such as the more secular and performative rituals of powwow dancing - matters are less clearcut. The Lakota realize that their powwows are an important tourist attraction to the tourists crisscrossing South Dakota during the summer, and that many of them will bring video cameras. At some powwows, one pays a "\$10 licensing fee" to bring a video camera into the powwow grounds, sort of a way of at least guaranteeing in advance that there will be some compensation for the making of video recordings. However, I never saw a single powwow where video cameras were forbidden, although I can say that

on at least two occasions I was the only person present who had one, and that this seemed to draw a curious mixture of questions and some quasi-paranoid suspicion. (Both of these powwows were in fairly remote locations, far away from the usual tourist routes, and at both of those events I was also probably one of only a handful of non-Indians, as well.) There was never any occasion where anyone asked me to leave or stop recording, however.



Figure 17. There are always plenty of cameras at powwows

There are some Lakota who do not think the preservation of even more secular ceremonies through video - such as dances or namings - is a good idea. Their objection comes from a deeper ground. They believe that these

ceremonies are rooted in an inter-generational, oral process. They must be learned at the feet of *tunkashilas* (grandfathers) directly by young people. If one could learn how to participate or perform in these ceremonies strictly from videotapes (or book accounts), it would break this inter-generational chain of transmission, and sever the importance of face-to-face interpersonal orality in Lakota life (Amiotte 1992). If one learns about ceremonies this way, it might lead only to mindless imitation - both imperfect performance, and a lack of understanding for the deep emotional and spiritual meanings that underlie *why* the ceremony is done. The mere presence of recordings of these ceremonies might tempt people to learn them in such an imperfect and imitative way.

People learning the ceremonies and the dances from television? I don't know about that. Everything that we do in our ceremonies has an inner meaning. You need to learn that inner meaning and then feel it in your heart. The feeling is the most important, but you can't feel what you don't know you're supposed to feel, so it starts with the knowing. A medicine person could sit there and explain all this to the person watching, but they wouldn't understand. There has to be a heart to heart link - that doesn't go through a screen. The spirits talk through our medicine people - they won't talk through a screen either. ('Danny,' an Indian elder.)

Although instructional dance videos might be popular among whites, most Lakota would think it quite absurd to learn how to do powwow dances from videos. One must learn from other dancers, and one must practice with other dancers. Certain very specialized dances are even seen as the intellectual property of certain lineages and must be learned

from them. In fact, the best dancers have excellent improvisational skills - the ability to add unexpected flourishes to a dance step, or to stop suddenly in their tracks when the drumming stops. A powwow dancer who learned by rote from a video would probably not develop these abilities, and would not last very long on the powwow circuit. They might not learn the fine-tuned skill of following the cadences of a live drum team.



Figure 18. Oglala Tribal Powwow dancer

On the other hand, for a long time, the Lakota were banned from performing many of these ceremonies, during the periods of direct U.S. government policy toward assimilation and termination of Indian tribes, and they do recognize,

paradoxically, that in some cases they were forced to 'recreate' certain aspects of their own culture from anthropological literary accounts and ethnographic films, after elements had been forgotten. Because they lacked a written form for Lakota (which changed after the development on an transcription system using the Latin alphabet in the middle 20th century) and did not even write down various other things even in English, they were forced to turn to these (however imperfect) transcriptions to remember what their grandfathers did before them. Most Lakota simply view this as an aberration that occurred from an externally imposed problem. Were it not for outside interference, they would have continued to orally transmit these practices from generation to generation, just as they had before. Although this was done in the past, they would prefer not to have to do it in the future.

Those Lakota who oppose video recordings by the Cultural Center of powwows and other activities see a dangerous temptation in it. They feel powwows have already descended dangerously into the realm of spectacle and entertainment, or tourist amusement. However, the dances have meanings, and many of them were performed on special occasions, often by warriors who had just returned from some great achievement. Video-recording of powwows turns them into cultural commodities in the Western television circuit - little different from the occasional broadcasts of Japanese sumo wrestling or Australian dwarf throwing. The powwow is

supposed to be an occasion of fraternization, and of renewing old affinal or kinship ties, as well as an attempt to promote the Lakota values and culture to those who are present. Were it to be televised, it would lose all of these functions. Although the powwow itself is in some ways a curious objectification of the lived culture of the Lakota (turned into performance, money contest, and tourist spectacle), turning it into just another TV choice among 500 cable channels would objectify it beyond recognition.

Although hackers might feel "information wants to be free," almost every society recognizes some sort of intellectual property and notions of restriction on the free flow of information. In Western societies, it is usually protected through commodification, and mechanisms such as copyrights, patents, and trademarks, usually for the material advantage of inventors, businesses, and creative artists. Indigenous peoples, on the other hand, usually have restrictions on who can perform certain ceremonies, based on the occasion, on the lineage of the person, on whether or not people named in a song have since passed away (this is very important for Australian people), and on who is present in the audience. Certain songs, chants, stories, and rituals are often associated with lineages, or times of the year, or places in the landscape, or community needs. The idea that they could be performed (or played back) any way willy-nilly by anybody with a TV remote is anathema to these groups. These things have ritual performative power, and that power

should not be invoked just by being able to turn a dial. Indigenous people have no idea of 'censorship' *per se*, but they would never accept the uncontrolled replication and usage of their intellectual property, which would always be a threat if certain things are broadcast over the open airwaves.

Thus, while many Lakota are anxious to take their culture online onto the Internet, there are many debates about what belongs there. Most do not like the idea that a traditional song could be downloaded from a web site and remixed with hiphop music by some aspiring DJ in Detroit, or that some would-be hacker could take images of tribal elders and digitally deface or manipulate them. Once out on the open network, they have no control over how their cultural heritage is used or abused by others, and so for most Lakota this is a strong danger and caveat. They feel their own culture has already been so horribly distorted and twisted by whites, so open access to cultural artefacts, knowledge, and ceremonies on the Internet could only make the situation worse. Valuable cultural data must maintain its integrity and its rootedness in other aspects of Lakota life or it risks becoming meaningless.

The one area where there does seem to be some definitive agreement about the appropriateness of using video recording equipment and other electronic media technology is in the use of capturing oral histories. Most people approve of the use of video cameras to record meetings of the tribal

council, or public discussions, or shows or events that discuss or reveal issues and social problems on the reservation. In the realm outside of religion, ritual, performance, and ceremony, there seems to be little acrimonious debate, and most people seem to welcome the fact that these technologies might force more openness on otherwise often secretive tribal councils. They welcome the use of TV to announce upcoming events and occasions, and to help people on remote areas of the reservation follow the things that are being debated in Eagle Butte.



Figure 19: Lakota Concepts - an instructional video series

The Wolakota Oral Histories Project of the Cultural Center was borne out of a community consensus that these oral

histories were critically important. It was thought that many tribal elders were dying without ever imparting their knowledge of the past and their wisdom to a new generation. As these elders were passing away, so were the memories of what life was like for the Lakota before the era of the reservation system, and of the Lakota traditions which were practiced in the past. By interviewing these elders, it was thought that this knowledge could be preserved before it was lost forever. Video technology was used for this purpose because many of these elders could not read or write in either English or Lakota, and the best way to preserve many of their Lakota folk tales and so on was through video, rather than attempting to transcribe it into writing.

For many Lakota, fear of technology arose out of concerned perceptions of the tribal council. Since the tribal chairman and many members of the tribal council were extensively pro-technology, and many of the tribal members of Cheyenne River Reservation felt that they had tended to vote in ways that showed they were too rooted in the *washichu* world and its ways, that their efforts to bring new technologies to the reservation were simply more manifestations of their assimilated ethos. Thus, the technology was not feared simply because of its capabilities, but by association. If the tribal council was pro-technology, there had to be some hidden agenda behind their support which meant yet another effort to help the state of South Dakota

encroach upon the sovereignty of the reservation and its people.

As Ward Churchill (1992) and Vine Deloria (1995) have written, the white man has tried to take away everything else from the Indian people; all the Indian has left is his religion. Yet, they claim, the latest wave of 'genocide' proceeds with the goal of taking even this final respite away. Through a combination of 'plastic medicine people' offering adulterated New Age visions of Indian cosmology, and attempts to appropriate Native ceremonies through anthropological and other accounts, Indian people will themselves become superfluous. Once the Lakota culture has been objectified and recorded by video and other technological apparatus, the people themselves will become unnecessary - mere curiosities who actually stand in the way of the white revision of Native belief. These AIM activists feel that the hidden goal of the Western effort to record and preserve their culture is to pave the way for the erasure of the Indian people themselves.

Once the ways of the Lakota exist as museum pieces, as it were, the final phase of Western genocide will be complete. Having stolen the Indian's land, his freedom, and his means of subsistence (the buffalo), the white people will have stolen the Native culture - capable of completely replacing it with an *ersatz* simulation which better suits the commercialism, commodification, and shallow 'infotainment' of the whites. Who needs native wisdom when

you have Disney's *Pocahantas* ? White people would rather have natives who just serve as mouthpieces for their own beliefs and agendas, and by placing themselves within the realm of technological representation, Indian people are only helping them along.

Instead of cultural revival, these critics only see this process as a continued manifestation of cultural objectification. Seeing the Lakota culture has ultimately rooted in values, social and natural relationships, practices, and lived experience, they feel it is slowly being replaced by an ersatz culture of tourist entertainment and performance, and commodified objects. They feel their own history is slowly being replaced by electronic simulacra which are only pale imitations of the true majesty - and tragedy - of their experience. For these reasons, they do not welcome the use of electronic technologies to record and transmit their culture. If it can only survive through becoming a pale imitation of itself, then it should not continue.

Look, we like the white man's technology - it allows us to find out what the white world is all about - this is a world for better or worse we now have to deal with. But I am worried too about it. I don't like what our kids see on this Internet. Lakota parents don't know where they are going on this Internet in school and the teachers don't watch them. They are learning things that are bad for them, about drugs and other stuff. It's good that we are using all this technology to revive our culture but we have to be careful. There are people who want to abuse it, distort it, turn it into their property. There are so many fake Indians now out there on this Internet, telling people they are our "spiritual leaders." This is harmful and our kids don't know the

difference. ('Marsha,' an Indian woman who worked at the BIA building)

Lakota Acculturation: Observations

When I heard you were an anthropologist, I considered putting on my buckskins and pounding a drum when you came to meet me. I mean, that's all you anthros write about in your books, right? You make money off of telling people how weird and interesting we Indian people are, and worse people believe the stuff you write. I was going to tell you "secret knowledge" - you people always like telling your friends that after spending a summer here suddenly you know all our secrets. Well, you don't know anything. Sometimes we like to go through your books and laugh. ('David,' a CRST unemployed middle-aged Lakota man)

One of the more confounding things I confronted upon arrival on the reservation was how unlike "Indians" most of the people I encountered were. Which is to say, they were unlike the "Indians" of stereotype. I expected stoicism, flamboyant costumery, people with sharp, noble aquiline features, tipis, horses, and strong extended families. Instead, I encountered large-bellied guys with biting senses of humor and a knack for getting into trouble. I found things that did provoke some "culture shock," but they were discordant facts of a different order. I encountered a different kind of cultural difference - I was an urbanite among rural cowboys, a middle class kid among people in stark poverty, and an "egghead" computer nerd among people who were used to working with their hands.

Some of the customs I had expected to find from reading accounts of the Lakota (such as Walker's) written around the turn of the century, I did not see. I expected to

see the complex avoidance behaviors I had read about between siblings demonstrated. I expected to find fierce warriors who would die before surrendering their honor. I expected to meet inscrutable medicine men, with knowledge of all the herbs of the land and the stars in the sky and the wisdom of the spirits. What I found were people that, culturally in many ways, could only be called "Lakota American." Other than the fact that they occasionally spoke in a language other than English, and looked different from other people in South Dakota, you might be hard pressed to know the difference between them and their neighbors next door to the reservation.



Figure 20. The image of the traditional Lakota warrior (Source: Western Heritage Museum, Spearfish)

There clearly has been some acculturation of the Lakota people, but my research suggests that much of their cultural loss occurred prior to the arrival of television and other media technologies. It began with their restriction on the reservations and the extermination of the buffalos in the 19th century and deliberate policies of 'culturicide'. Some of it occurred through various government programs to assimilate Indians by "terminating" their status as a distinct tribal group. Much of it is the result of Indian children being confined to residential boarding schools, where they were forbidden to speak their language or even spend time with their parents. Some of it has occurred purely through cultural contact, by normal processes of diffusion. And a key factor in it has been the devastating effects of economic impoverishment and poverty, which ate away at the Lakota family and the kinship basis of Lakota society.

By the time TV became a viable medium on the reservation (which was when cable and large C-band satellite dishes were introduced into the area in the 1980s - before that, people could only pick up signals from Rapid City by aerial, and only on good nights) much of this acculturation process had already been complete. Reanalysis of Walker's accounts of the Sioux suggest that many of his informants, such as George Sword, had already been heavily acculturated into non-Indian society. By the time many American anthropologists began working with Lakota people (such as Boas' students) in the early part of the 20th century, the

Ghost Dance had already been crushed by the bloody massacre at Wounded Knee, and the confinement to reservations had become complete. In fact, many Lakota veterans had returned from World War I, and had become full U.S. citizens. Whatever processes of cultural loss and decline had occurred on the CRST reservation, they had began long before the arrival of telecommunication technology and electronic media.

The main television-induced phenomenon on the reservation seems to have been the wholesale adoption of black urban "hiphop" subculture by reservation youth - such as baggy pants, black slang, and 'posing' as gangsters. In the rooms of many rez teenagers, I found the common heroes adorning their posters were black basketball stars, rappers, and actors. However, this appears to be an age-graded phenomenon, as so much of adolescent rebellion seems to be. The kids identify with the one experience they see on television which relates to their own - the street life of black ghettos which is depicted on music video channels. Since they don't see Indian people on television telling them to "fight the Man," they can only identify with the black gangsta rappers who tell them to do this. Black culture provides the image of "cool" just as it does for suburban white teenagers, but this seems to be a 'phase' - very few continue to identify with it into adulthood, often adopting their parents' values and preferences. Adolescents lack the "media literacy" that adults have and thus often buy uncritically into messages from TV. Many Indian kids I spoke

with wished that they could see more "people like me" on television, that they wanted more Indian role models they could identify with.

Coincidence or not, the awakening of Lakota activism, resistance, and consciousness-raising dates to the arrival of electronic media in the region. Many parts of the CRST reservation could not get any television or radio until the 1960s and 1970s, when television transmitters in towns in South Dakota boosted their signal. Like many other activist organizations, AIM oriented many of its activities toward drawing media attention, realizing that it was only by calling attention to the continued existence of the "Indian problem" in America that they could get the U.S. government to act. Many of AIM's activities, such as the occupation of the Wounded Knee site, were coordinated in such a way as to maximize media exposure and attention. However, many Indian communities realized that the white mass media would never cover any of these issues fairly. When they covered "fish-ins" in the Pacific Northwest, they would interview local white fishermen and ignore the affected Indian people.

Thus, the first Indian-owned and operated newspapers, like Tim Giago's *Indian Country Today*, date from this period - as do many of the first native radio stations. Like many others, he thought that native people had nothing to lose from the white man's technology that they hadn't lost already - and plenty to gain. Giago (1980) writes:

Modern methods of communications are only a part of the many changes that are taking place in Indian

country. From Arizona to South Dakota, survival of the tribes is the common goal. Just as the ancient tribal runners used to carry messages from village to village in order to keep the people informed, tribally-owned radio and television stations will replace those runners. One of the many ways to improve and preserve the knowledge of our ways and traditional culture is through communications. Our ability as communicators is found in many lifestyles, whether at home, in the office, at district meetings, or at tribal ceremonies. (112)

The rise of native journalism has a lot to do with the cultural revival that occurred beginning in the 1960s. In many ways, this marks the effort of Lakota people on the CRST and elsewhere to take control of their destiny, and to reverse the effects of previous governmental policies focusing on acculturation. It's important to emphasize that the Lakota people are not simply recreating their traditional culture as some static entity from a Golden Age. They are, like many other Native American groups, attempting to combine elements of their past with other things that modernity has to offer. This differentiates the current processes of cultural revival from earlier "ethnic revitalization movements" such as the Ghost Dance. And also, these processes represent continuity with the way in which the Lakota have always adapted innovations from other groups to improve their own way of life.

People ask me - why do you wear a baseball cap, baggy pants, colors? My granddad asks me if I think I am a black city kid or an Indian kid. Well, I know I ain't black, and I am proud to be an Indian. I am tough and I show no fear not because I'm no gangster, but because I am an Indian brave. The homeys who hang with me are my *tiospaye*. We take care of each other - that's the Indian way. ('Tommy,' an Eagle Butte high school kid).

The Preservation of Cultural Characteristics among the Lakota

I love what people say about us. Because we don't wear feathered headdresses or live in tipis anymore, they say we aren't Indians anymore. They talk about us in the past tense, like our people and our culture don't exist anymore. Well, we are still here. We still follow the ways of the Pipe that was given to us. We haven't forgotten the importance of the land - the land still has meaning for us. We remember our *Paha Sapa*. Many of us have forgotten our language but we are trying to relearn it. Without our ways, as a people, we are dead. But we have not abandoned our ways yet. ('Kara,' a CRST elder Indian woman).

Although at first encounter, I felt that the Lakota of the Cheyenne River Reservation were not as different from me as I thought, it later became evident to me that in other ways, they were far more different from me than I expected. Some of what is presented here is to counter the idea that the Lakota people have lost all of their unique cultural characteristics -- these persistent differences suggest they have been far from completely assimilated despite all the historical experiences they have been through. These factors suggest a certain degree of continuity in Lakota culture which suggests they are anything but fully acculturated to mainstream Euro-American society. If television had intensified the acculturation of the CRST Lakota, very little of these persistences would have been observed. These observations suggest, as I have indicated, that 'emerging media' technologies may well be causing previous acculturation processes to reverse, as part of a general cultural revival.

Walker and other anthropologists suggested that the Lakota were an egalitarian, solidarity-based society, without much of any formal authority or leadership. In classical anthropological terms, they were led by "headmen" rather than "chiefs" (even though, even today, people will call up the CRST and ask to speak to the "Chief" of the Lakota tribe). Despite my inherent assumptions (what could be called my "hierarchical unconscious"), I found that outside of the IRA-based structure of tribal authority, the leadership role continues to be carried out by informally. At many public meetings of Indian people, I sheepishly asked who was the leader of the native organization was so I could meet with him and interview him. This assumption proved counterproductive, and the question often produced blank looks. This was because most groups had no formal leader, only people who would assume that role informally.

Our group doesn't have a "president." We sometimes pick people for our meetings who you might call a "facilitator." They start things off with a prayer and then set the frame of the discussion but they are not "in charge." The oldest men are the ones who are looked up to though - if they want to speak everybody listens. But here in Indian country we don't wear stopwatches. It's not like council meetings. Nobody gets cut off for taking more than their five minutes. Nobody would be arrogant enough to read the newspaper while somebody is talking. Here we listen to people. We observe where they are speaking from, not just what they are saying. Words mean a lot but we want to see the deeds that go with them - otherwise they are just words. ('Fred,' an elder man in the Elder Men's Treaty Council.)

One of the things I also observed was continued consumption of many of the traditional Lakota foods. Such dishes as *wojape* (plum pudding), *wasna* (pemmican), *toniga*

(cow gut soup), puppy meat, *papa* (jerky), and chokecherries were served often at public gatherings, ceremonies, and other important occasions (although consumed less often in the home.) They were combined with some "pan-Indian" cuisine adoptions, such as *Indian tacos* (made from fry bread, hamburger meat, lettuce, tomatoes, and shredded cheese). Although Lakota people have begun eating more of the starchy, sugary, high-fat processed foods of the European diet (such as snack chips, candy, fried chicken, etc.), contributing to what many physicians think might be an explosion of diabetes within their culture, many of the people I met were returning to their traditional foods, including the buffalo meat, which is very low in fat.

I heard a great deal of continued usage of the Lakota language. I found that many tribal meetings and events were increasingly being conducted in Lakota. Many people who had not grown up learning the language as children were now taking classes in it as adults. Many public events began with prayers in Lakota. Many tribal officials, such as the Tribal Attorney General, had become quite fluent in the language. (He also was an accomplished Blues guitar musician, and had released an audio-cassette of some of his Lakota songs.) Most of the people I knew used English in their homes although they might read stories to their children at night in Lakota. Although they might not speak the language fluently, they knew many of the old songs that were sung in the sweat lodge. In general, most people who I met who could not speak their

own language were embarrassed by it. Almost all indicated they had pursued, or would soon pursue, Lakota language instructions so that they could increase their fluency.

Elsewhere, I have mentioned the continued belief of Lakota people in spirits, their continued reliance on medicine people for guidance and healing, their continued participation in traditional ceremonies, and their increased interest in traditional spirituality. One of the interesting things I found was that even in the Christian churches, there were nights devoted to traditional spirituality! The only groups that seemed opposed to the traditional religion were the evangelical missions that often came through in "tent revivals." At one of the tent revivals I went to, the preacher told many of the people present to stop associating with "demons" and "sorcery." The attendance at these tent revivals was quite low, and in fact most of the people I saw there will usually non-Indians. When I asked people why they would not go, most indicated it was because of the way the preachers would put down the traditional religion.



Figure 21. Evangelical tent revival

A lot of traditional arts and crafts are still practiced by today's Lakota artists. Although many have explored non-traditional media (such as video or acrylics) and subjects, there are still many who create beadwork jewelry, traditional 'vision shields,' porcupine quillwork, bison headdresses, and featherwork. One of the Lakota artists I met was a painter and muralist who painted traditionally themed murals (showing sacred animals, moonlit landscapes with tipis, and so on) in the high school and on other public meetings.



Figure 22. C-EB Lakota artist mural

He told me that for most Lakota artists, art was still seen as a spiritual function, a way of reminding Lakota people of their relationship to the divine powers found in nature. Another art form that is still quite ubiquitous is the blanket known as the "star quilt," often woven by women, and given away at funerals and other giveaway ceremonies. At a star quilt show held at the cultural center, I saw many interesting compositions, including one that had a Chicago Bulls Head in the center of the star.



Figure 23. Star quilt adorning car

Although kinship patterns have changed dramatically (more toward the kind of nuclear family structure that characterizes the "Eskimo"/American pattern), I still observed a great deal of reciprocity in CRST Lakota communities, especially between extended family members. Extended family members were frequently invited to stay over in the homes of their relations, and they would share with them meals, rides into nearby towns, small gifts, and other items. In many cases, they were given outright gifts of money. In fact, many people would facetiously complain about the way in which their relatives would always turn up around payday with their hand out. I found most Lakota people consistently willing to loan money and other items to their relatives, regardless of how desperate their own economic

situation might be. Some people considered this a detriment - suggesting that it was just a continued form of "parasitism" that drained the community's productive income.

Between such elements as art, religion, language, political economy, and social organization, cuisine, music, and dance, there seem to be many elements of the social structure and superstructure of Lakota life that persist on the Cheyenne River Reservation, despite dramatic transitions in other aspects of their cultural life. Some of these elements are conscious revivals of traditions and activities that had begun to fade on many reservations during the termination period in American history. This seems to suggest against the fact that, as Mander and others claim, television has accelerated the pace of acculturation. Perhaps Lakota people are reacting *against* the norms they see on 'mainstream; television - at least those old enough to know how antithetical those norms are to their goals. By making them aware of how cultural revival was succeeding elsewhere, TV may in fact have emboldened them to move forward.

It's always fun to watch those old Westerns on TV. The nasty Indians always come and attack the peaceful white people in their wagons. Of course, nobody cares what those Indians are so angry about; maybe they're just an angry people who are angry for no reason, maybe they're just a hateful race. I remember watching those shows as a kid and saying, "Why are *those* Indians doing all those things?" I was ashamed to be an Indian. But as I grew older I realized the people in those TV shows weren't my people. They were white actors. And they were cardboard cutouts created by the white people in Hollywood. ('Jack,' a CRST Lakota man in his 50s.)

Performance and Public Culture

The powwow is always a great time for me and my family. I always have my kids dance because I want them to learn how to dance the right way, in some way that that has something to do with their culture. The announcers are always really funny, they know all the latest jokes, they pick them up as they travel from 'rez' to 'rez'. In old days, we used to travel a lot, visiting friends and family, but as time went on we did this less and less. But the powwow trail gives us a reason to keep up with friends and family who might not live on our 'rez'. And those Indian tacos - well, you can see how much I like them. ('John,' a Rosebud Lakota man with 9 children).

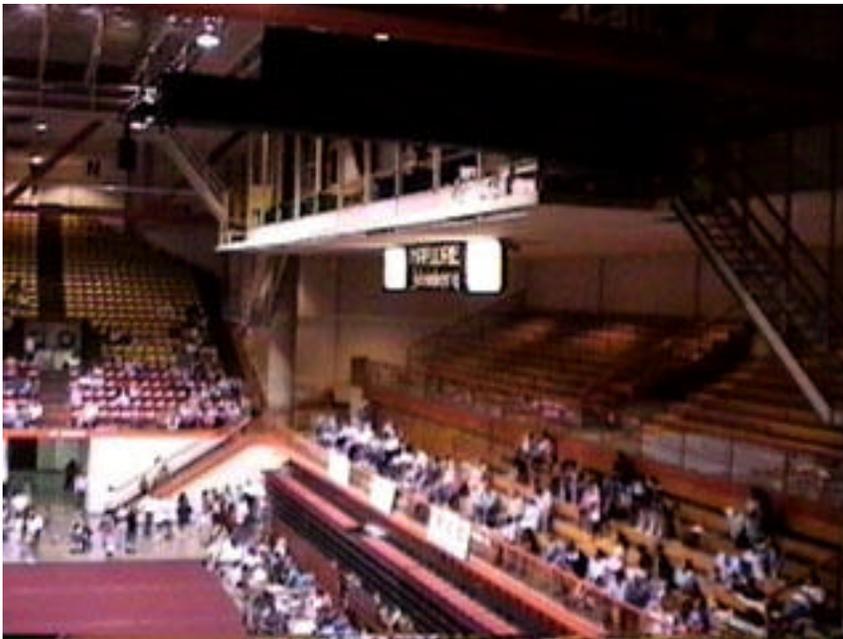


Figure 24. Black Hills intertribal powwow - electronic sponsor board

There are two large powwows in Eagle Butte each year - the CRST Labor Day Powwow (which is held in conjunction with a rodeo, a carnival, a fastpitch softball tournament, a parade, and an art exhibition) and the Cultural Center Spring Wacipi, which is held indoors in the C-EB High School

gymnasium (because when it is held, the weather is often still quite cold, even in the spring, and there can often be snow on the ground that weekend.)



Figure 25. CRST Labor Day Rodeo opening ceremony

I had the opportunity to visit several powwows, including the Black Hills Intertribal Powwow held in Rapid City, the Wakpala Traditional Powwow, the Pine Ridge Reservation summer powwow, the St. Joseph's Indian School powwow, and the Cherry Creek annual powwow. The powwow is an interesting example of something that began as a Plains Indian cultural phenomenon, and later became part of the 'canon' of pan-Indian culture throughout the U.S. Today, there are powwows in almost every part of the U.S., with

Indians coming to attend from almost every state. In some cases, there are Southwestern or Northeastern Indians doing powwow dances that originally were performed only by Plains tribes.

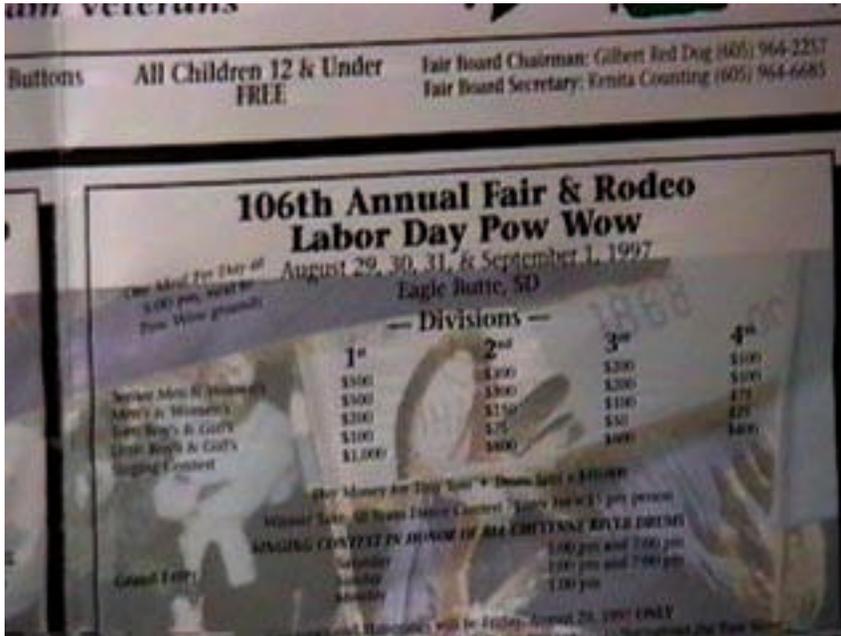


Figure 26. Cheyenne River Sioux Tribe Labor Day Powwow, Fair, and Rodeo

Originally, the powwow had a different character. Many of the dances were done for a commemorative purpose, perhaps to celebrate a successful hunt, or the completion of a raid against enemies, or as a way of marking the onset of maturity and adulthood in youth. But by the early 20th century, powwows started becoming more oriented toward becoming oriented toward performance, entertainment for tourists, and contest. Today's powwows are a contest of skill, with judges deciding the best dancer in each category

(men's, women's, and children's fancy, shawl, jingle, traditional, and other dances), largely through a process of elimination. They also offer an opportunity for different drum groups (usually 8 men who travel as a team with their drum throughout the powwow 'circuit') to partake in the "drum split" (money divided up between all the drum teams.) For the audience, they offer the chance to take part in a festive event that reaffirms their Indian heritage, as well as to see old friends whom they haven't seen in a while. Announcers also use the occasion to tell stories and jokes and gossip, and even serve as an informal "news wire service"; and a good announcer can make or break the success of a powwow.



Figure 27. Powwow drum group

Although no longer a culture of warriors, Lakota culture is still a meritocracy which likes to honor various

kinds of prowess and excellence. The ability of a dancer shows their commitment to learning and practicing traditional ways, as well as their confidence, athletic skill, and sense of balance and rhythm. Individual dancers are often honored in the middle of a dance round by members of the audience who rush out to the ring to leave dollar bills at their feet. Many people often comment on how 'commercial' today's powwows have become, with vendors outside the ring hawking Indian tacos, T-shirts, audiocassettes, trinkets, and jewelry. People have to pay for admission, and dancers have to pay entry fees to participate. Opinion seems split about whether or not this is a good thing; many people feel that the 'commercial' nature of powwows forces the organizers to worry too much about financial success, and thus to cater to the (often richer) non-Indian tourists. But some people think that the monetary prizes brings out a higher caliber of dancer and makes the powwow more professional.



Figure 28. Powwow vendors

Although some powwows reserve the strict title of 'traditional' for themselves (such as the Wakpala Traditional Powwow), it's not always clear what the difference is. I expected 'traditional' powwows to forego PA loudspeakers and other audio equipment, or cash prizes and fees, or vendors, or some of the newer dances with a shorter history, or the common practice of having veterans fire rifles with blank rounds during the grand entry. Yet most of those things were present. When I asked people what they felt constituted a truly 'traditional' powwow, they emphasized a few basic traits: no alcohol served and no drugs permitted in the vicinity; people camp on site rather than staying in inns or motels; no use of the newer dance songs with English words (there is a famous song on the powwow circuit that uses the

words from the cartoon show Mighty Mouse); most of the announcements are said in Lakota; no fighting or misconduct permitted on the powwow grounds. Almost all the 'traditional' powwows happen in small reservation towns, rather than in large urban areas or other central locations. I can definitely say, at least from the vantage point of my limited experience, that at 'traditional' powwows one sees far fewer white tourists. Only the occasional white ethnographer, who still stands out like a curious sore thumb...



Figure 29. Warning against alcohol and drug consumption

The powwow is undoubtedly a social and entertainment event, and also one that serves to help circulate people and resources between reservations. However, one cannot also ignore the fact that it has become one of the central mechanisms for reaffirming Lakota culture (and sometimes pan-Indian identity) in the 20th century. The problematic of this

is one that is not unique to Native American societies. In the face of various kinds of acculturation, many societies often begin using public performance as a way of reaffirming their ethnic heritage and cultural identity - whether that be Yiddish theatre among Eastern European Jews in the United States, or Cracker folklife festivals in Northern Florida. But, as many anthropologists have noted, preserving culture this way turns culture into an abstraction that is performed rather than a system of life that is *lived*. Museums preserve (some critics would say, quite imperfectly) culture by turning it into a fixed set of physical objects. Performance turns culture into merely a set of aesthetic enactments - in a crude sense, "just a set of song and dance numbers." And once culture becomes nothing more than performance, it becomes subject to appropriation and imitation. Do powwows preserve culture only at the cost of 'deadening' it or turning it into something that only gets 'performed' on weekends?



Figure 30. Powwows and technology: tradition and amplified sound

This position is often found in the anthropological literature, which seems to be deeply rooted in essentialist ideas of cultural 'authenticity'. From the perspective of sociologist Ervin Goffman (1959), however, almost all of culture is performative. Whenever individuals are in public contexts (perhaps even in private ones), they are always 'on stage,' "performing" a self that meets social expectations. Just because those expectations might include the desire of tourists for exotic spectacles, or of other Indian people for a good show, does not in itself make the performance 'inauthentic.' Powwows reaffirm Native American cultural survival, and even if they no longer are directly commemorative of triumph in warfare or hunting, they still allow native people to demonstrate their commitment to their

culture. A talented powwow dancer, just like a professional athlete or an expert warrior, has to practice continually to hone their skills. Especially when held off-reservation (in Indian community centers or high schools with a high native population in urban areas), the powwow allows people to communicate to others the importance of maintaining their culture's sense of aesthetics. "Powwow culture" does not represent the decline of indigenous culture in North America; it represents one of the best ways of continuing to assert Indianness as a valid, separate ethnic identity while also promoting pan-Indian unity and economic development.

Many people suggest the rise of indigenous filmmaking should, like the rise of powwow culture, be viewed with disdain rather than approbation. Like Weiner (1997), they fear that once Native culture becomes a 'televisualized' culture, it will simply become an alienated *similacrum* of itself. Native culture will just become another gap in between the 'dramedies', sitcoms, and infomercials that fill the cable spectrum. Native people, instead of living their lives, will simply settle for watching each other on TV. The presence of the camera will create a curious incentive toward narcissism in cultures that otherwise were self-effacing and emphasized communal values opposed to anything like the pursuit of individual fame, celebrity, and fortune. People like Weiner suggest that filmmaking is an outlook of the visualist bias in Western culture, that things must be seen in order to be represented; he counters that in many

indigenous societies, this directly clashes with their belief that the most significant things lie in the world of the invisible and the imperceptible. Once native dances, storytellings, and ceremonies are performed for the camera rather than for their own intrinsic reasons, fear anthropologists like Weiner, they will become formalized performances emptied of cultural meaning.

Essentially, Weiner and these others seem to think that the presence of visual mediation is a novel experience for native culture, forgetting that most native societies have had a longstanding history of visual communication in their own right (through pottery, sandpainting, dollmaking, and so forth.) The use of photography, filmmaking, and multimedia by these societies is really an extension of previous activities, not necessarily a quantum disjunction from the past. Long before the arrival of these media on Lakota reservations, native artists like Oscar Howe were beginning to create a style of painting which at once drew upon elements of the Lakota heritage while also reaching out to white audiences. Howe did murals for many buildings in South Dakota which displayed for many new eyes some of the most important stories from Lakota legend and mythology, including a famous painting of the coming of the White Buffalo Calf Woman. Howe's paintings do not follow completely the aesthetics of previous Lakota art, but also do not totally deviate from those previous standards either. The fact that there have been so many notable Indian artists like

Howe, suggests that the Lakota will be very successful in bringing their vision of their life to the media of film, video, and computer disks, without necessarily having to 'sacrifice' it in any way.

One of the groups organized by UNATBC (The United Native American Television Broadcasting Council), with many Lakota members, is the NAT-ANIM or Native Animators' group. They are trying to create computer animations in Infini-D, Macromedia Director, and other programs, which will act out some of the famous tales of indigenous people. They are aware of potential criticisms that the computer animations may reduce the power of the stories to the level of childrens' cartoons (although many were originally supposed to be told only to children), or somehow distort what were originally oral stories that relied on the imagination of the hearer. Still, they feel that these stories can reach people outside of their traditional settings (being told around the fire by tribal elders) and can make the transition to the electronic realm without losing their original morals and meanings. The ability to reach a larger public (including non-natives) does not necessarily 'dilute' the relevance of the stories, which many see as containing lessons for all cultures, and not just their own. Also, some feel that this is a better way to preserve the old stories than writing them down, because writing them fixes them in an unchanging form, whereas the electronic media makes them more subject to future re-telling

and re-editing, which fits the dynamic nature of a previously oral society.

Although native experimentation in 'emerging media' does represent a continuation of a trend that began with the powwow as a cultural preservation strategy, it's important to also understand that ultimately it is an expression of resistance - a denial of acculturation and an affirmation that 'culturicide' has not been complete. The adoption of 'emerging media' technology is not an accession to Western visual aesthetics - and most students of native film agree that Indian filmmakers like Victor Masaveya, Jr. and Sherman Alexie have managed to maintain a separate 'space' for indigenous media in the mass media market. Although some critics of television insist that it is a medium that forces people to approach subjects only superficially, without depth or interiority, in reality, this is only a generalization from the kind of television that they are familiar with. Australian aboriginal television tells as much through its silences and absences as it does with its imagery - something that probably few non-native media creators would be able to accomplish. My observations of the first CRST experiments with 'televisuality' suggest that the culture they are creating for the camera is not so radically separated from the culture they affirm on the powwow dance grounds - one that is not wholly the same as that of their ancestors, but still in keeping with some of their beliefs.

A powwow on TV? No, I don't think that would work. We don't exactly have a lot of professional sports up here - there aren't big pro bowl games to go watch on weekends. People use powwows as an excuse to go travel and meet people. They can watch the NFL and the WWF on TV - powwows are a place to see people. Still, I like it when you can listen to powwows on the radio. Even if I can't be there and see the dancers, I still get a little charge from hearing the music. ('Jack,' a CRST Lakota man in his 20s)

Curious Encounters with Technology among the Lakota

"Finally, we Indian people have gotten a little bit smarter. The white man gave us lots of unwanted gifts - blankets full of disease, spoiled food, boarding schools. Then he took from us everything we wanted - our land, our freedom, our religion, even our buffalo. And he had the gall to call us 'Indian givers'. But we got even. We took the white man's technology, and we are using it to get rid of the stuff he gave us which we no longer want." ('Mark,' an Indian elder on the CRST)

The Tribal Bison Cooperative Project



Figure 31. Pte He Kca, Inc. - mobile slaughterhouse

The CRST made a series of decisions in the 1980s to embrace an original new strategy for economic development which would also, in some ways, return them to the ancestral roots of their culture. Many accounts of Plains history suggest that all of the bison were wiped out by the railroads in the 1890s. In fact, a small handful of them continued to survive - in many cases, because of the efforts of white ranchers who considered them a novelty. The handful of surviving bison reproduced over several generations - and now today there are roaming bison herds in many of the national parks in the Black Hills, as well as a small bison herd (500

head) which is owned by the CRST tribe's Bison Cooperative program. The tribal council in the 80s decided to initiate the program because although hunting the bison in the open was no longer viable, they could raise the bison in a enclosure and sell them to slaughterhouses for their meat. A year or two later, they joined the Inter-Tribal Bison Council, a coalition of tribes in the Plains area with their own bison programs. Bison meat appeared as part of the changing cuisine patterns of upper-class Americans in the 1980s who were concerned about the cholesterol content of beef - and so a new (but small) market appeared for it primarily in Plains states.



Figure 32. Bringing a bison to slaughter

However, the CRST tribe soon realized that selling the bison to slaughterhouses was not as economically

productive as slaughtering them onsite. Being able to slaughter the bison onsite meant being able to harness more parts of the bison (including the hide and horns, which serve little functional value today, but are used for ritual and aesthetic purposes) and make more income from selling the meat themselves rather than giving it to wholesalers. Unfortunately, there was no space to put a full bison processing plant near the location of the enclosure, and there wasn't enough money in tribal funds to buy a full processing center in any case. Further, they wanted a facility that would make sure that no part of the bison was wasted. For these reasons, they actually turned to an innovative company in Sweden. Beginning in 1991, this company had started making mobile slaughterhouses for the Saami people. Basically, the Saami had wanted to be able to slaughter reindeer and process them in the field, because their religious beliefs forbade moving the carcass from where it had fallen.



Figure 33. Processing the bison

In one of the ironies of our global transnational culture, a facility that had been designed for one indigenous group in Sweden was being purchased by another indigenous group in the United States. It had been adapted slightly (mainly by widening doors and bays) so that it could be used for bison instead of reindeer. The purchase had occurred in May of 1997, and within a week and a half of my arrival in Eagle Butte in the summer of 1997, I was rushing over with other cultural center staff with video equipment to videotape the opening of the new mobile bison processing plant. Basically, the Swedish technicians who had come and set up the mobile slaughterhouse were going to train a bunch of Lakota people how to use the equipment in the plant. What occurred there were a series of cultural dislocations that

can only exemplify how odd our global society had become. The Lakota workers who were going to assist in slaughtering the bison donned bright colorful overalls and helmets that at the time made me think they looked like members of the rock group "Devo". The Swedish people who were showing them how to use the equipment spoke very little English, and no Lakota. A Lakota man went out, shot a bison (as he put it, "right between the eyes"), and they hauled it up into the truck with a power winch.

It was loaded into a bay, and using a variety of powered knives, hoses, and tools running from the side walls, the Swedish men and their Lakota helpers swiftly skinned and carved up the bison. The meat was then moved into freezer bays to the back of the truck. One of the people present turned to me and asked me with sincere curiosity "what did the Indians use for preservation before they had refrigeration?" I found this question extremely odd as the man was a Lakota Indian and he was asking me, a white guy (who had never told anybody that day that he was an anthropologist), if I knew how Indians preserved food in the past. Why should he expect me to know more than him about his own cultural past? I replied that in a class, I had learned that they jerked the meat and that they preserved it by drying it out in thin strips. Further, the way he had said it, it was almost as if in a denigratory fashion regarding his own ancestors - i.e., "the Indians" who lived a century ago without technology or refrigeration - how could they have

managed without modern conveniences? I also found it strange that several Indian people had to leave the room during the slaughtering, apparently driven away by the pungent smell or the splattering of blood and bone, while I and other cultural center members casually filmed the event.

In several ethnographic accounts on the Lakota, they are often described cheerfully carving up a bison into all its useful parts - nothing was wasted, not even the organs. Yet here I observed several Lakota people fleeing the scene of a slaughtering which probably, by comparison, was less "gross" and more clean and surgical. After the slaughtering was over, I and some Indian people who I didn't know were offered a chance to 'tour' the bison herd in a pickup truck (since it was clearly unsafe to walk around visiting the animals on foot) so we could see the animals closeup. During that time, everyone was extremely quiet to me, in a way that was almost unnerving. I wondered if they knew if I was an anthropologist or simply were suspicious of me as a new white outsider. At the end of the day, I asked one of the guys in the truck a question. He looked at me startledly. He said, "I thought you were one of those Swedish guys! I figured you didn't speak any English!" Somehow this odd anecdote proved for me in a concrete way the assertions that Donna Harraway makes about technology, identity, and hybridization. Technology brings cultures together into intersections in very curious ways.



Figure 34. Kultur-Komfort-Funktion

In many ways, bison herding and 'farming' is only a pale imitation of the previous Lakota way of life. The thrill of the hunt is gone; now the 'hunter' need only go up to one of the herd and shoot it between the eyes before loading it into a makeshift bulldozer, so as to haul it over to the processing plant. Yet, it reaffirms the connection between the Lakota people and one of their most sacred animals. The most sacred figure for the Lakota is the Sacred Buffalo Calf Woman, and bison skulls are a central religious totem. Since the Lakota believe no part of the bison should ever be wasted, the processing plant actually helps ensure that nothing is lost to decay on the way to the slaughterhouse. Thus, the processing plant represents a way to pursue a

livelihood successfully which reaffirms Lakota traditions and spirituality within the framework of a market economy - in some ways, until the species regenerates to its previous numbers, the best of all possible worlds given present conditions.



Figure 35. Getting it all on video

More significantly, what the mobile processing plant showed to me was that indigenous people are actively involved in what in social science is understood as the "world-system," (as voluntary participants, and not just inadvertent victims of its expansion, as they are frequently portrayed) and to meet a unique cultural need that could not be satisfied by machinery produced in the U.S., they turned to

equipment that was made elsewhere in the world. It turns out that tribal officials had found out about the Swedish company through the Internet. So, again, in a curious way, technology in this case had made global forces serve local needs, rather than the other way around. Indigenous groups went out and located technology they needed to promote an economic activity which they also saw as part of their tribal programme for cultural revitalization - returning to their earlier roots as a "bison-focused" culture. This unique reindeer-processing technology from Sweden had not "colonized" them - they had gone out, located it, "assimilated" it, and repurposed it for a new usage.

Yeah, this isn't the way we used to kill the buffalo. It does almost feel kind of sacrilegious. It probably was more heroic to go out and kill them on the open plain. It probably was better when we used the buffalo as our shelter and as our clothes. But the main point is that we still thank the Creator for this gift. We don't go out and kill them for no reason like those guys in Yellowstone. We don't shoot them for sport to let them rot out in the open for the vultures. ('Mara,' a young Indian woman.)

Webbing up the Tribe

While I was working in MIS for the CRST, one of the things I was directed to do was to create web pages for various tribal programs. Some of the tribal departments assigned the highest priority were Game Fish & Parks, the Economic Development Office, Prairie Management, and Property & Supply. I encountered a surprising degree of resistance to this. Many tribal programs were highly skeptical of what

benefits they could derive from having a web site. In many cases, they did not like the fact that the Tribal Chairman would be the 'webmaster' who would have ultimate control over the dispensation and display of information about their programs. They also did not like the fact that they would have no direct control over editing their pages after they were posted to the tribal web server. But mostly, they did not see how having information on the web could help them manage to accomplish their program mission.

Other concerns were more specific. The Legal Department was afraid that a web site could somehow allow people to "hack" into their confidential case files, or might provide a way for white supremacists and other anti-Indian bigots to learn what suits the tribe was planning to file - so their main issue was security, and how Internet exposure could jeopardize that. The tribal government discussed using the web to disseminate more information about tribal council meetings - even so far as providing a live video feed of council meetings through the Internet - yet the tribal council often resisted any additional exposure through the Internet as preventing them from getting business done quickly. Tribal officials in the Payroll office were concerned over the fact that problems with the web site might cause other computer failures, thus preventing them from completing their critical task of getting paychecks delivered on time.

Many tribal programs were interested in being more heavily 'internetworked' - so that they could more quickly share documents, papers, records, and files with each other - but didn't see any reason how the web would assist them with doing this. The web would give them exposure to the wider non-Indian world. The tribal government saw some advantage in this, as it would help press their case for self-sufficiency to the BIA and DOI. But most of the tribal department heads did not see things the same way; as they saw it, their mission was to perform services for the tribe, and there was little reason to expect people to stop coming by and visiting their offices just because they set up a web site to provide the same information. After all, coming into the main BIA building also gave people a good reason to make their rounds of visiting their old friends and socializing - the "Moccasin Telegraph." Although people had just begun using email to do their habitual gossiping, it somehow never had quite the same emotive intensity as when they were able to do it with people in person.

Tribal officials had their own second thoughts about giving different tribal departments web access. Many were afraid that employees would waste time visiting Internet porn sites, playing Internet games, or using Powwow Chat. (The Powwow32 program was an interesting chat program which was not developed by native people, but it did sponsor on its system several native-themed chat rooms.) One of the things I was directed to investigate was the possibility of installing

some type of "SurfWatch" (a site monitoring, filtering, and blocking program) on the tribe's computer network. In fact, at one point, a tribal official even discussed with me whether there was any way to prevent people from using the web during work hours. When I pointed out to him that many tribal employees would be using the web for their work, he realized that that might be somewhat counterproductive.

Local businesspeople and artists were more interested in the possibility of setting up websites than the various tribal departments were. Of course, the key thing that interested them was the possibility of electronic commerce. The artists felt they could increase their visibility and reach out to the international art market for Indian crafts; the local businesses felt this was an opportunity to start selling to people beyond local town residents. One Lakota man was using his web site to sell horses; another was using it to promote speaking tours to various colleges around the U.S. with programs in Native American studies. The interesting thing about all of this was that contrary to the exhortations of Marx about their class, the *petit-bourgeois* of Eagle Butte were far more interested in opening themselves up to a larger, wider world than their counterparts in tribal government. Even traditionalists felt the web would play a role in their cause for restoring more local, informal, and decentralized authority in governing tribal affairs.

Why do we need a web page for our tribal program? Nobody cares about what we do besides other Indians. It won't help us do what we do any more efficiently or better. We

don't have anything to sell or tell to whites. You know what I think? It will just help the Chairman keep better tabs on us, maybe help him look better on that Internet he's so interested in. We don't get anything out of it. He's so worried about the Internet, if he wants to make communication easier, why does he make it so hard to arrange a meeting with him? ('Tim,' assistant director of a CRST tribal program)

Institutions of Cultural Revival and Resistance

Some of the things you guys do over at the cultural center are real important - if you didn't do them nobody would. Those old people are dying and their stories and what they remember are dying with them. The young people don't go to listen to them anymore so it's important that we save their wisdom before they pass on. They learn so many other things on TV and the Internet. It's good that they have the chance to learn something about their own people too. They can hear the language our people spoke. ('Erin,' a Lakota woman in her thirties.)

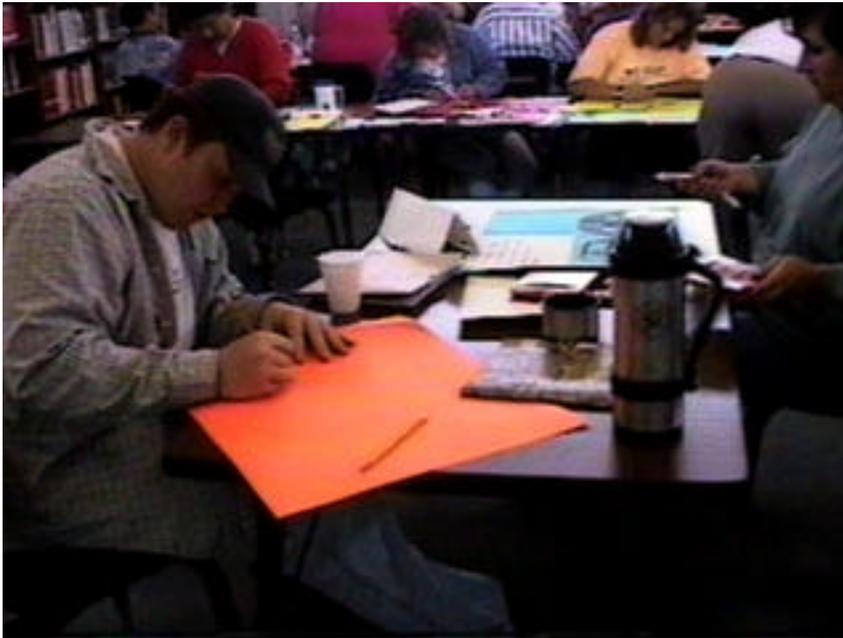


Figure 36. The C-EB Adult Art Education project - making art is remaking culture

It is necessary to make a distinction between what analytically is sometimes referred to as processes of cultural revival or revitalization as opposed to *ethnic revitalization movements*. Ethnic revitalization movements are usually eschatological, messianic, prophetic, and millenarian in character. That is to say, they are generally religious or religio-magical uprisings which usually seek to create a future in which traditional ways will be fully restored to their prior state and a colonizing force will be driven away. The most famous example of such a movement among the Lakota was the Ghost Dance religion of the late 19th century. Originally started by a Nevada Paiute named Wovoka, the Ghost Dance began to attract the attention and interest of Lakota people who began to bring the dance to the reservations which had been newly formed in South Dakota (as of 1889.) In one of the great tragedies of history, U.S. Cavalry paranoia over the "militancy" of the Ghost Dancers led to the massacre of the dancers at Wounded Knee in 1890, effectively bringing an end to the Indian Wars against the Lakota.



Figure 37. Wounded Knee mural (Artist: Sidney Keith, Source: HVJ Lakota Cultural Center)

Like other ethnic revitalization movements, the Ghost Dance involved beliefs of supernatural power (wearing the Ghost Shirt would protect the wearer from bullets), resurrection (the ancestors would return from the grave, as would the buffalo), and the ousting of a conquering power. What contrasts cultural revitalization movements is that they tend to be based more on the use of secular (legal, social, and political) instruments (although the goal may be the restoration of traditional spirituality) and do not have a religious focus. Such social movements tend to focus on pragmatic goals of restoration of language, culture, and traditions, rather than on expulsions of whites or European-Americans or for an end to colonization. The focus of "Red Power" cultural revival movements since the 1960s has been to

assert greater political autonomy and sovereignty through legal action (especially the use of treaties), self-determination (through independent governance), and programmatic attempts to revive disappearing languages and cultural practices. The essential locus of action has become the legal and cultural sphere, rather than the religious or the military.

However, in a certain sense, what is going on has been somewhat mislabeled. Sometimes called cultural preservation, this activity is assumed to be somewhat like the historic preservation efforts of women's polite societies in Northeastern cities - the capturing of a slice of life since lost in time. "Cultural preservation" assumes, as many anthropologists have, that this is nothing but a salvage activity, merely aimed at pickling and bottling cultural elements for museums as the culture itself disappears. However, most Indian groups recognize this activity as "cultural revitalization" - the attempt not just to preserve language and culture for posterity through recording, but to promulgate its restoration and its return to everyday practice and usage. Even still, in many ways this effort is actually a form of "cultural resistance," since it occurs in the wake of ongoing efforts by the U.S. government to acculturate and assimilate Indian people to 'mainstream' European-American civilization. As Gramsci noted, culture is always a field of domination, and thus cultural revitalization movements by Lakota in the 20th century are

also attempts to resist U.S. hegemony and politico-economic control.

While on the Cheyenne River Reservation, I was able to observe several foci for the current efforts for cultural revival (other than the Lakota cultural center itself) -- the *Naca Omniciye* (or Elder Men's Treaty Council), the actions of the American Indian Movement (or AIM), several different organizations trying to organize CRST youth (such as the Healthy Nations program), the revival of some of the old traditional warrior societies (such as the Fool Soldiers and Dog Soldiers), and the language renewal efforts of the Cheyenne River Community College (CRCC). During the period I was there (1997-8), one of the central items of political contention was the Omnibus Terrestrial Wildlife Mitigation Act of 1997 (S 1341 in the U.S. Senate, sponsored by South Dakota Senator Tom Daschle.) Along with companion legislation, the "JTAC," the goal of this bill was to deal with the losses that both the State of South Dakota and the CRST Lakota had suffered to create Lake Oahe and the Oahe Dam. In the construction of Lake Oahe, a large part of the Missouri River basin had been submerged in the 1950s. This supplied additional hydroelectric power to the state, but it also essentially submerged the old Cheyenne River Agency location (on the west bank of the river) along with a large portion of the eastern part of the reservation, and also a number of state wildlife areas.

There was a curious coalition that existed between the tribal council of the CRST and the South Dakota state government. Although there was a great deal of distrust between the two entities (many people felt that South Dakota governor Janklow was a racist, a rapist, or worse), in this particular case there was some cooperation since both sides stood to gain. The state would get some money from the government for land lost during the 1950s, and the reservation would receive several kinds of compensation - monetary, expansion of job training, and clarification of sovereignty. Previously, there had been no clear cut ruling on the authority that governed hunting and fishing on the eastern river side of the reservation, since the old reservation boundary was now essentially in the waterline. This legislation established Indian control over all fishing rights - henceforth non-Indian fishermen would need permits from the CRST Fish and Game authority, not the state, in order to fish in the area. The tribal government described this as a win-win situation, but I encountered curious resistance to the bill at meetings of tribal district meetings (one appears below in Figure 38).



Figure 38. District 4 meeting

At a meeting of the District 4 council in February of 1998, where the tribal chairman and a councilman attended to discuss the bill, I encountered a surprising degree of resistance from district members. Most people assumed that the bill had to be bad because it had the support of both the council and the state government. As they saw it, the tribal council had "sold them out" before on other issues and was doing it again. And if the state government supported it, it had to diminish Indian sovereignty in some way, since as they saw it, the state's longstanding goal (through attempts to control gaming, transportation, and so on) was to move its Indian reservations out from under federal BIA/Dept. of Interior control, and essentially put them under the authority of the

state government, with the goal of gaining the state a hefty new source of revenue and power. Many concerned with the bill seemed concerned about parts of the legislation that were somewhat hazy and unclear about water rights and the boundaries of the 1950s "taking area". Some sections of the bill could be interpreted as actually transferring control over some bodies of water *back* to the state government. The tribal councilmen meeting with their representatives tried to assure them that they had made every best effort to remove the "bad parts" of the bill after meeting with Daschle. However, the state attorney's office had tried with great effort to keep those "parts" in.

In fact, they thought the bill would most likely die not due to Indian resistance, but due to white resistance, since whites vote more in SD state elections, and some white hunting and fishing groups were mortally opposed to the bill because they did not want to be under Indian authority. Since the bill's main beneficiaries were Cheyenne River Reservation, and, to a lesser extent, Standing Rock, many CRST officials were surprised at the opposition expressed by the tribal councils of Pine Ridge and Rosebud. Although not directly impacted by the issue, these reservations also felt that the bill represented a diminution of Indian sovereignty (rather than an expansion) and that if sovereignty was lost in this one battle, it would affect the ongoing "war." The CRST councilmen, for the most part, chose to emphasize sovereignty issues over monetary compensation, knowing full

well that the Lakota had refused years ago any degree of monetary compensation for the Black Hills seizure. At various meetings of cultural revival groups, I found this Mitigation Act discussed quite a bit. It became a hotbed of controversy, and many groups pointed to it as evidence of the outright illegitimacy of the tribal government structure.

Another was the Black Hills themselves. Many people in these "revitalization organizations" felt that of all the illegal and outrageous acts of the U.S. government, the seizure of the Black Hills was the most offensive to them. Many felt that the Black Hills had been promised to the Lakota by the Ft. Laramie Treaties of 1851 and 1868, establishing them as being firmly within the boundaries of the 'Great Sioux Reservation' for "as long as the grass grows." For the Lakota, the *Paha Sapa* or Black Hills had been the most sacred of places, thought to be where the Lakota people first emerged into this world from a cavern, and where several spots of religious significance (such as Devil's Tower/Bear Lodge, Bear Butte, and Harney Peak) were found - places where the Lakota would stop during their annual migrations around the great "Racetrack" which mirrored the motions of the celestial animals in the stars (Goodman 1990). However, expeditions led by the infamous George Armstrong Custer located gold in the area in 1875, and by 1876, hordes of prospectors began to pour into the area.



Figure 39. Colorful Native flags at Bear Butte

At first, the U.S. government meekly tried to keep the gold prospectors out of the area, but the gold fever was too strong, so they decided to try and purchase the area from the Lakota. When this met with failure, the government finally opted for military seizure, and essentially took control of the Hills in the late 1870s by force and deceit, threatening Indians who resisted the taking of the area with starvation and death. Even the U.S. Supreme Court recognized the illegality of the taking of the Hills in the 1970s, and the Office of Indian Claims acted on the matter, but not in a way the Lakota would have liked. Since the Claims Commission was only authorized to offer monetary compensation, the Lakota were offered a massive monetary settlement based on the assumed monetary values of the Black Hills in the 1870s

with some accrual of interest - a total settlement of around \$81 million dollars. This settlement has sat in a bank account, untouched, as all Indian tribal governments recognized that accepting the money would mean renouncing claim to the land, and as they have continued to assert, "the Black Hills are not for sale." Of course, in the same breath, many Indian activists also added that the settlement way undervalued the true monetary value of the area.

In 1981, Senator Bill Bradley attempted to pass a bill which would have transferred all federally owned territory in the hills (essentially some 60 percent of the land, including several national parks) back to Indian control. Private and state property would not have been transferred back to the Lakota. The bill died in Congress, and there the issue has lain ever since, awaiting future legislative action, since the offering of monetary settlement essentially foreclosed any future possible judicial action on the matter. Many Justice Department officials privately informed Lakota leaders that they felt the best option was to accept the money and buy up all the unowned land in the area - but this area was very small and did not include many sacred sites. The Black Hills remain one of the largest of sore spots for today's Lakota activists, and discussions of their status were at the forefront of all the organizations striving for cultural revival. They have sought to bring the issue to the highest of authorities, hoping that the United Nations will take action on it.

Here I discuss several of these organizations - realizing that they represent only a small segment of the efforts going on in "Indian Country" even within the state of South Dakota, let alone the United States.

Elder Men's Treaty Council - I attended several meetings of the *Naca Omniciye* or Elder Men's Council of the Cheyenne River Reservation. This group represented an attempt to recreate the elder men's council of earlier times - although traditional Lakota society was not a gerontocracy, elders were consulted for their wisdom and experience by other leaders (Price 1994). The group held meetings frequently in the Cultural Center in Eagle Butte, with members coming great distances for the occasional meetings (some from other reservations.) A frequent topic of discussion was the illegitimacy of the current IRA tribal council government, and efforts to return to the *Oceti Sakowin* or "council fire" method of self-governance. However, the group recognized that they had to deal with the devil they knew, and there was consistent talk of demanding (not asking) that the tribal council charter the organization, granting them an "official" stamp of legitimation.

This group often conducted a large amount of its business in Lakota, which is not surprising considering that many of its leaders felt one of the paramount goals of the group was to ensure that the use of the Lakota language become more widespread in everyday transactions (rather than

just ceremonial ones.) However, they recognized that in many cases there were group members who were not fluent yet in Lakota, and so minutes and many other things were kept in English. Still, one man told me that he wished more people would listen to Lakota as much as possible so that they would realize how it was so much more a "natural" or "powerful" language than English. Another central focus of the group was in returning the people to the treaties signed before the end of the Indian Treaty-making era of the United States in 1871. They felt that most of the major legislation following the Treaty period was illegal (such as the Severalty or Termination and Relocation Acts), and that it was "in the treaties that the true power of the Lakota people could be found today."

Essentially, the group felt that the main problem with many Lakota people was that they did not know the content of the treaties, and that the U.S. government was in abject violation of almost all of their provisions. So one of the group's main activities was directed toward increasing treaty "awareness" among the Cheyenne River Lakota, and in finding ways to use the treaties as a "weapon" to get the U.S. government to return sovereignty to the Lakota people. Although some of the elders felt the later treaties (especially the 1861 one) were imperfect solutions, and thought that even those should be abrogated (along with a simple unilateral declaration of independence), there was general consensus that the treaties provided the main legal

device for obtaining grievances from the federal government. One frequent assertion was that the treaties gave far-reaching powers to the "full-bloods," and if they were followed, the current system of "mixed-blood" domination of tribal government would fade away. The "old deal" would once again replace the "new deal" IRA puppet government-usurpers.

The elder council also wanted to change the name of the reservation, from Cheyenne River, to *Tiwahe Topa* - the Four Bands - to emphasize the four bands that were settled on the reservation (Mnicojou, Sihasapa, Itzazipco, and Oohenumpa) - and shortly before I left they conducted a flag raising of a new flag for the CRST which contained symbols of the four bands. They wanted to promote a greater awareness of peoples' band heritages, so that people would start knowing and identifying which of the four bands they came from. A frequent topic of concern for the elders' council was the appointment of non-Indians to official positions on the reservation, especially in law enforcement. (During my stay on the reservation, a non-Indian police chief from Georgia was made head of the Tribal Police department.) Because of the active involvement of the police in dealing with youth gangs, the elders' council wanted people in those positions who were Indian and who took strict oaths of sobriety. (A frequent accusation against the police chief was that he drank during off hours and allowed his men to drink off duty as well.) They also wanted to make sure "Indians with doctorates" came back to the reservation to hold teaching

positions, since the *wasichu* teachers, however well-meaning, "did not understand our way of life fully."

A further key topic was the inter-generational responsibilities between elders and youth. Many elders' council members wanted to conduct various joint activities between their group and youth organizations, as a sign of reaffirmation of this responsibility, and of concern for the way in which youth were being raised outside of traditional culture and values. It was felt that it was of critical importance to bring Lakota language and culture into the BIA educational system, and that traditional elders be invited to "guest-teach" on various topics. Many elders felt that the problem of youth gangs plaguing the reservation was a demonstration of the seriousness of the lack of traditional values in the upbringing and education of youth. They felt that one of their key goals was to locate old historic documents and make them familiar to the young people, since by reading these documents they would know that their people were, at one time, "strong and proud."

Once they had gotten back to the "old deal" of things, they felt, the Lakota nation could "become more than just prisoners of war" and could "return to the task of spreading *wolakota* or harmony to all nations." Many of the elders felt that by continuing to press their case to the United Nations, there would be some ruling that would finally bring about the return of the Black Hills and other territories that were originally part of the Great Sioux

Reservation of 1868. By finding old historic documents, they could establish that these lands and others were once part of the Lakota nation, and make their case. Since many of these elders were so determined to get back to the "old deal," I asked them what they thought about technology. Would going back to the old ways mean giving up technological devices such as automobiles, televisions, computers, and radios? The response I got was a general "no." Most of the elders felt that there was some use for the "technology of the *wasichu* " even if "his way of life did not necessarily fit our own."

Indeed, one member of the group continually asked me for technological advice. He was particularly interested in document scanning, because many of the old documents the group were interested in were in a decaying state, and he wanted to know how to preserve them in electronic form on a CD-ROM. He also wanted to find out how to laser color printing and special character fonts so he could create greeting cards and other stationary in the Lakota language. They also approved of the use of videotaping of oral histories for the Cultural Center Wolarakota Project, because they recognized that many of the elders interviewed by the project were close to dying and found it hard to travel to meetings or other occasions. If they were not interviewed on video, their knowledge and wisdom would be lost forever to the community. Many of them wanted to know what was involved in setting up equipment so they could videotape all of their own meetings and have an archive of them.

Youth Programs. Three institutions that were very active in organizing youth and promoting youth activities on the CRST were the Sioux YMCA (based in Dupree), the Healthy Nations program, and the Main, an afterschool recreation program center so named because it was on Eagle Butte's main street. All of these organizations were strongly concerned over the growing involvement of Lakota youth in "rez gangs" such as the Odd Squad. My interviews with people indicated to me that the consensus position was that gangs had started on the CRST around 1992 or so, that they had appeared on other reservations in South Dakota around the same time, and that they had spread from urban areas (like Minneapolis or Sioux Falls) back to the reservation through a complex process. Basically, Indian gang members from these cities moved back to the reservations, or formed networks of friends "back home." Most of the gang members had no real idea of what gangs were like other than movies they had seen (a popular one among rez kids was the movie *Colors*), images from MTV "gangsta rap," and things they had heard from people who had spent time in the urban areas.

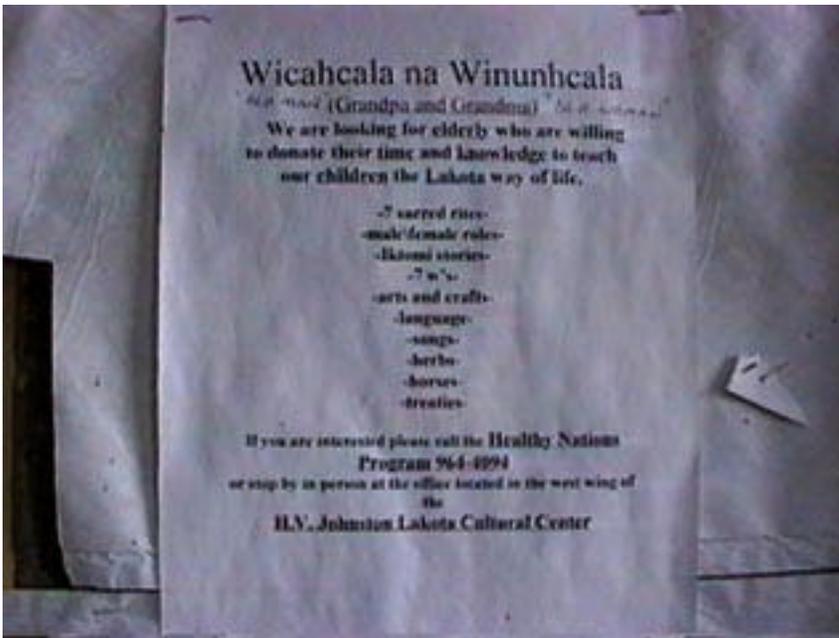


Figure 40. Looking for elders to teach youth

These youth organizations had found from youth surveys and youth focus groups that the main things confronting CRST Indian youth were boredom and family neglect and abuse. It was these things that in turn led to violence, addiction, teenage pregnancy, and joining gangs. Although there was nothing they could do to directly get involved in parental issues, these groups sought to provide a surrogate home for kids with nothing else to do after school, and a surrogate family for kids who, for most intents and purposes, had none. Most important was the promotion of healthy youth activities, so that kids could get physically fit and not fall into the usual pursuits of fighting, drinking, and curfew breaking. The Healthy Nations program made it its special mission to combat youth alcoholism, having found that

many adult alcoholics had begun drinking at a very young age. One way to do this was to try and sponsor fun but "dry" dances, socials, and other activities for high school students and other young people.

However, these groups also had a political-cultural focus as well. Many of them felt that one of the sources for growing rates of youth alienation, suicide, and addiction was the distancing that many youth had from their own culture. The Sioux-YMCA, which had started as an expressly Christian organization for promoting "Christian virtues" among the Indians in the 19th century, had changed its focus in the 20th toward promoting more "traditional" activities for youth, including Lakota ceremonies. The Healthy Nations program sponsored a number of youth powwows and other cultural events where young people were encouraged to interact with older Lakota mentors who could guide them on "the Good Red Road." They also had youth encampments where kids would hold "summits" to discuss the issues confronting them, and come up with their own resolutions, without any adult interference and input. They tried to live up to the motto that children were *wakan* (sacred) and thus deserved some degree of respect for their decisions from adults - they were not just to be seen and not heard.

An endless topic was what to do about the "troubled" youth. Many felt that the existing counseling programs worked too much within a "European-American" framework, attempting to use "non-Indian" ways of weaning people from addiction or

unhealthy lifestyles. These groups sought to emphasize the use of traditional cultural techniques to help kids grow up and assume adult responsibilities. Because Western counselors were unfamiliar with the problem of Indian "bicultural" kids, they didn't know the special problems they faced growing up with feet in two societies. Once again, the focus was on reviving traditional techniques that emphasized experiential learning (something that Westerners are imitating with their "youth boot camps") and forms of restitution (such as community service) rather than punishment. These organizations felt that the existing justice system was failing these kids, and that they were coming out of youth detention with even worse behaviors and habits when they came in. This had to be fixed.

Another sphere of debate I often saw were arguments over whether exposure to the Internet was good or bad for kids. Many felt that the kids were just using the Internet to find porn, or information on "huffing" (using common household inhalants), or learning other antisocial behavior. There also was the concern that they would be targeted by pedophiles. (Indian children are sadly often a target of white pedophiles because they know they cannot be punished in an Indian court.) Others also suggested that the Internet was a positive force because they got to meet other Indian kids throughout the U.S. on other reservations (this was why the Navajo-based email list "rezlife" was launched) and they got a chance to learn about and see other cultures in action, so

that they could take more pride in their own. Activists in these organizations frequently argued over whether their goal should be to increase youth access to the Internet, or assure more control (through monitoring programs) over where kids go.



Figure 41. Veterans as modern warrior figures

Warrior societies. Many Lakota people felt that the key to "finding their way" again was to revive some of the traditional institutions that had existed in pre-reservation days. One example of this were the attempts to re-start many of the old warrior societies. Of course, the curious consideration with these and other efforts was the question of what functions such groups would have in the modern context. Since the last war any number of Lakota were

involved in was the Persian Gulf War of 1991, there didn't seem to be any need for any full-time warrior society, especially as there was no longer any need for defense for hostile enemies who launched periodic raids. So, in many cases, these organizations were revived as purely "humanitarian organizations" with a primarily charitable orientation - their main purpose not being altogether dissimilar from what the Masons, Elks, or Rotarians do in white communities.

The problem we have now is lateral violence - our men are beating up our women, our parents are hitting our kids, we are constantly criticizing, tearing each other down, hurting each other with words. But this is because we have been the victims of violence for so long and now have no place to fight back. Our hoop of Lakota life was replaced with the pyramid of the Europeans, where everybody has to piss on the person beneath them. We are stuck with our anger in this closed box we call a reservation. We need to learn how to be warriors again - fighting for our people - for our way of life. It is a waste of energy for us to be fighting each other, but that seems to be all we do these days. There are better things to fight for. ('Ken,' a speaker at a Lakota conference on "community healing".)

Many Indian people felt that they simply didn't have anything comparable to these groups that existed in white society. All they had were Christian churches and social clubs. The idea of re-launching the warrior societies was to give men a new way to combat their "emasculatation" - by being "warriors" against poverty, neglect, and despondency - and to get involved in the sodalities which had played such a key role in the pre-reservation days. They offered a chance for people to get involved in social networks outside of their own *tiospaye* or extended family. Also, the warrior societies

were to have a new, more explicitly political orientation, going to "battle" on political issues affecting Indian communities in the South Dakota state legislature. Lobbying, lawsuits, and treaties were going to be the new "weapons" wielded by these "warriors" in their struggle to build a stronger native community. The warrior society revivals represented yet another case of the Lakota cleverly adapting an old social institution to new modern realities.

Today, we don't fight out on the plains anymore. Our battles are in the courts. The weapons aren't arrows: they are the treaties. But the enemy is still as persistent as ever - I think he still can't accept that Indian people are still here. He wants to push us out of the way of anything he wants, land, gold. But we can fight back now - your government accepted that we were a sovereign nation and signed treaties with us declaring that fact. Just like all the other nations out there asking for justice - we can ask for that too and we will get it. ('Joe,' a lawyer with the CRST Legal Department.)

Lakota: Land of Survivors

You know, it took me a long time to figure this out. For a long time I was ashamed to be an Indian. I didn't identify with that and it wasn't part of me. I didn't have anything to be proud of - but now I know I'm part of a great people. We were a mighty and proud nation. I am somebody special. I am Lakota. ('Dylan,' an 18 year-old Lakota, interviewed in the film)

The first official film production of the Cultural Center, *Lakota: Land of Survivors*, is a 60 minute documentary shot on video by members of the center and also some members of a Spanish production team that were resident in Eagle Butte at the time. *Lakota: Land of Survivors* opens with a history of the Lakota people, then quickly tells of

their decline under the onslaught of white settlers moving into the Dakotas. Then, it moves to a variety of interviews - some with elders interviewed through the Wolakota Oral Histories Project, some with tribal officials about social problems on the reservation, and some with young people on the reservation on the particular problems that young people face. As an example of indigenous media, it does not seem that dramatically different from other documentaries on Indians by sympathetic non-Indians. The content of the film is indeed 'embedded' in the tales of Lakota people struggling to survive in a hostile world, but the visual content and structure of it do not seem to have any real 'indigenous aesthetic.'



Figure 42. Lakota Land of Survivors: poster

Lakota: Land of Survivors is the first tape that the cultural center has actually produced for mass distribution. Although its video library contains hundreds of recordings of powwows, interviews, story-telling, performances, parades, and lectures, most of these are unedited and are used for occasional showings to people in the center or in the school system. (As of now, they do not show anything on the local cable access, since the local CRST cable system lacks a studio for that kind of production.) Their goal is to make it the first of a series of tapes which the cultural center will sell commercially through its web site and other outlets. It clearly is intended for non-Indian audiences, since the tape is subtitled wherever any figure speaks in the Lakota language. It is at once an attempt to generate revenue for the center and the tribe, to educate non-Indians about Indian concerns and issues, and to tell a partial history of the Cheyenne River Reservation. Although it was entered into the 1996 national Native Film Festival of the National Museum of the American Indian, it was not accepted.

The narrative of the videotape does mix, in a somewhat characteristic way, the tragedy and comedy of life on the reservation. On the one hand, viewers are presented with stark and dramatic depictions of social problems on the "rez" such as the lack of housing, alcoholism, gangs, disease, and suicide. Yet on the other, they can join in with colorful residents who reminisce wistfully about "what it

must have been like whupping Custer," or the joys of owning a "rez car." While the tape tries to show the desperate socioeconomic conditions on the reservation, and the horrific historic conditions that the CRST Lakota have endured, it also tries to tell the story of people who are *survivors* - who are still proud of their heritage, of their way of life, and of the place where they live. They are not defeated, only warriors waiting for the next round of battle. The Lakota are presented not as helpless victims in need of white salvation, but as people struggling to make a better life for themselves - and who could succeed if certain people would return what was rightfully theirs and get out of their way... the film makes a strong case for their right to reoccupy the Black Hills.

Unlike a classical visual anthropology documentary by a ethnographic filmmaker spending a summer's shooting season on the 'rez,' the film, like so many indigenous productions, uses very little narration, reflects constantly on its own situations of production, and constantly rotates its personnel behind and before the camera. Rather than trying to describe abstract processes of kinship or reciprocity, or opening up traditional ceremonies and performances for the outsider's eye, it looks solely at practical problems and the personal stories of people. Through the camera, we meet youth and elders, the two generations who are held most sacred and central by the Lakota value system, and who are inevitably intertwined. Rather than describing or analyzing their

culture, they talk about difficulties they have faced in their life because they are Lakota, and how they've managed to keep up their "walk" besides those difficulties.

Many visual anthropologists have suggested that "indigenous media" is essentially an 'oxymoron' because in learning to produce these media, indigenous filmmakers draw upon canons of Hollywood, pop culture, and TV, and thus face the danger of co-optation. They end up producing films which simply imitate the least-common denominator approach of dominant Western visual media, kind of like redoing black minstrel shows with more 'realistic' black characters, thus undercutting the very purpose of what they want to do (telling a different story and challenging dominant representations.) However, *Lakota: Land of Survivors* does not feature taciturn warriors from the cultural imaginary of 1950s Spaghetti Westerns or other devices to entice the non-Indian viewer in. In that sense, it suggests that there may be ways to create indigenous films that can appeal to mass audiences without this risk.

For a long time, we weren't allowed to be who we are. We were told to be something other than Indians. We've got so much we need to recover, and to remember. We need to have one foot in the white world, but we're nothing without the good red road. I've only recently realized how much we used to do that we don't do anymore. Our old ways were based on respect and on connection - we had them for a reason. Anything that can help us get back what we lost is important - if a computer or a camcorder is useful, then we will use it. Those are tools - the goal is to restore our people. ('Sherrie,' a Lakota middle-aged woman.)

CHAPTER 5
APPLIED MATTERS

Applied Anthropologists and Native American Communities

Since the late 1960s, when the writings of Indian advocate Vine Deloria Jr. began to become popular among Lakota people, many tribes began questioning the role that anthropologists played in their communities. Cultural anthropologists were blamed for paving the way for assimilation of the reservations and for devising colonial policies which were the most effective for controlling the indigenous population. Physical anthropologists and archaeologists were accused of stealing and desecrating the remains of the Lakota ancestors by unearthing them and subjecting them to scientific analysis without the Indian peoples' permissions. Linguistic anthropologists were accused of gathering information on dying Indian languages without lifting a finger to prevent those languages from disappearing.

Deloria's (1995) critique of the anthropologist was stern, moralistic, and severe. He accused the "anthros" of invading the reservations each summer with their tourist garb, cameras, and notebooks, and then taking off without

doing anything to help the Indian peoples' struggles to recover their rights, their lands, and so forth. They got rich writing their books and getting tenure while the Indian people they studied continued to suffer a life of poverty, discrimination, and so on. At best, what the anthropologists were writing was irrelevant to the everyday lives of Indian people and the struggles they were waging in "Indian Country" for their freedom. At worst, they were acting as outright agents of colonial domination, silencing Indian voices, portraying Indians as a "dying" or "vanishing" civilization whose culture had to be documented and recorded before it disappeared from history, and luring Indian people into integration within the corporate-suited world of white society.

In many cases, what anthropologists wrote about Indian culture, religion, and tradition was outright inaccurate, often based on highly marginal informants. In other cases, they took things that were esoteric ceremonies or otherwise protected cultural traditions that were not supposed to be shared, and they profanely revealed them to the rest of the world, diluting their true meaning in the process. Indian people felt like they were "studied to death" by the anthros, a sort of lab rat for the development of American anthropology by Franz Boas and his colleagues. Yet despite all these studies and monographs and ethnographic

films, the conditions of life in Indian Country had not improved substantially.

Despite decades of anthropological writing on Indian culture, little if anything changed vis-à-vis reservation conditions. The Lakota reservations continued to suffer from endemic poverty and unemployment; poor roads, public health facilities, sanitation, and other "infrastructure"; and tribal corruption under post-Indian Reorganization Act (IRA) governments which often sold off tribal mineral and other resources to other corporations with little or no benefits to the people at large. Further, despite the fact that so many people were interested in their culture and religion, Indian people were not free to practice it, and many religious ceremonies, such as the Sun Dance, had been banned since the 19th century.

It was, in part, due to this fact that applied anthropology became a significant force in American anthropological praxis. The founders of applied anthropology in America in the 1940s were concerned over the failure of anthropology to make a significant difference in the lives of subordinate and subaltern groups which were traditionally studied by anthropologists. Since anthropology had established itself in this country primarily by providing knowledge of its own "internal Other" (the Native Americans) to the larger society, these applied anthropologists felt that perhaps the greatest obligation were to our own

indigenous communities. They saw applied anthropology as being a compassionate, coherent force for managing and guiding the rapid social change that was occurring among these groups.

Due to various reasons, some of the anthropological writing on the Lakota changed toward a "social problems" approach in the 50s and 60s. There was less concern over gathering information on kinship, linguistic grammars, folklore, and ethnohistory. Anthropologists with an applied orientation began looking at problems in Indian communities such as alcoholism, violence, diabetes and nutritional diseases, and poverty. These applied studies, nonetheless, were often paternalistic, assuming that Indian people were incapable of solving things for themselves (Schensul 1987). They often argued against tribal autonomy and for more bureaucratic BIA-managed programs, and were still predicated on the idea that solving these problems were simply an interim step into making the Lakota a "mainstream" ethnic group that could be easily assimilated into the American melting pot of cultures.

The radicalization of Indian Country in the 1960s caught all anthropologists, applied or otherwise, quite off-guard. With the emergence of the "Red Power" and American Indian movements, Indian communities started demanding the right to speak for themselves, and not to have themselves represented by outsiders - no matter how much those people

presented themselves as sympathetic advocates. Many reservations began training their own tribal members in anthropology, archaeology, and cultural resource management, and began sharply curtailing the activities of white anthropologists on the reservation. They could no longer carry out research without the explicit support and consent of the tribal council. If they were found violating the tribes' own norms about appropriate research, they could lose their permission to remain on the reservation. (Biolsi 1997).

Other voices besides Deloria's raised indictments against anthropology. Anthropologists were accused of using reservations as a private "preserve" or "zoo" of subjects for gathering data. They were accused of being puppets of the U.S. government's campaign to silence radical Indian voices, and not a few were even thought to be FBI agents working as part of the secret COINTELPRO campaign to expose and 'out' AIM radicals such as Leonard Peltier. Their theories, such as the Bering Strait origin theory for native peoples, and other ideas of evolution of Native culture, were said to be the intellectual underpinnings of white racism, colonialism, and even genocide. Once the white society had stolen all of Indian Country's intellectual property (having taken its best lands and material resources a long time ago), the project of extermination could be completed..

Anthropologists were charged with getting relevant, or getting out of the way. In response, many anthropologists

changed their explicit orientation toward applying their knowledge in such a way as to serve the Indian peoples' own goals and ideals. Applied linguists began working with Indian elders to preserve languages for living usage (rather than archival storage.) Applied archaeologists (cultural resource managers) actually began working *with* Indian communities, post-NAGPRA, to help them curate the repatriated artefacts so that the people could best learn about and reintegrate their history and their cultural patrimony. Applied visual anthropologists, instead of making films about the Lakota, started working with them to make their own ceremonies, stories, and narratives into visual productions. Applied medical anthropologists worked to find ways to integrate traditional healing and herbalism into modern HIS medicine.

Still, this forced many anthropologists who had never been very interested in applied anthropology to make it a focus of their projects. They had to figure out a way to give something back to the communities they studied, in order to extract data, knowledge, and cultural materials from them. Although not all anthropologists work from this new orientation, the ones who do not are often in the minority. Almost all anthropologists working with Indian people today axiomatically assume the advocate function, assuming it is their responsibility to help the people they study when it comes to matters of land claims, suits against the BIA or federal government, or other battles for cultural autonomy,

preservation, and resistance. Some would say this is still anthropological self-interest at work; if Indian peoples cease to be some exotic population of different "Others" to go visit for dissertations and other anthropological 'initiations', then anthropology might have to close its doors.

Not all anthropologists are comfortable with the new, more politicized, more collaborative applied Native American anthropology. Many archaeologists and paleontologists still think NAGPRA was a massive mistake that will prevent scientists from learning the true prehistory of the American continent. The recent debates about "Kennewick Man" show that many anthropologists still think that tribes use NAGPRA as a sort of political blackmail to keep people from learning the supposed 'truth' about their origins and history. Apparently, should it be revealed somehow that Natives were not the first inhabitants of the American continent, some think it would lead to a magical reversal of their land claims and the loss of other results of increased tribal sovereignty, such as the supposed multimillion dollar casinos they operate.

Many anthropological museologists resent the efforts of AIM and other groups to protest the exhibits they have put on for white audiences on Lakota culture. Once again, the assumption is that science is somehow being perverted through politics. From the Lakota point of view, the anthropologists' "science" simply refuses to offer anything other than a deaf

ear to their oral traditions, simply because they were never written down. It is only white arrogance that allows anthropologists to think they have a right to another peoples' ancestral remains and cultural heritage, and to put those things on display for their own purposes. Meanwhile, "the representation wars" go on.

Visual anthropology is going through its own "sea change" as well. Originally, the only people making films about native communities were ethnographic filmmakers. One of the first ethnographic films, "Nanook of the North," was about the northern Esqimaux. These various documentaries and ethnographic films were once again thought to serve the purposes of documentation, analysis, and proxemic study. They were to help contextualize the native societies into some larger theoretical or social-scientific point. It was never thought that indigenous people would ever have interested in filmmaking themselves, since such visual representations would be "alien" to them (Hillman 1995).

Today, many visual anthropologists are now working in a different role. Some are merely documenting the growing phenomenon of indigenous media - native people creating their own visual and audio productions. Originally, it started as something of experimental interest, as it did with Worth and Adair - give the natives a camera and see what they will do with it. But the natives no longer need to be given the cameras by the anthropologists. They are going out and

purchasing the equipment themselves. Others, in a more applied vein, are seeking to get involved with indigenous projects on a consultant basis, working, as Eric Michaels did, to help indigenous groups get their own media projects off the ground. This may be the best new niche of the engaged applied anthropologist - helping indigenous people to create their own representations.

Some Basic Facts about Native Americans in the U.S.:



Figure 43. "Rez Car" - self-deprecatational humor about vehicular poverty

According to the "American Indian Facts of Life" by Saginaw Chippewa enrollee George Russell (1997):

- Number of people thought in the U.S. to have 'discernible' Indian blood: 10 million. Number who

were 'self-declared' as Indian on the 1990 U.S. Census: 2 million. Number of tribally enrolled Indians in the U.S.: 1.2 million.

- Number of Indians who live on Indian reservations: 440,000. (22% of the total population of tribal enrollees.)
- 1 in 6 Indian adolescents have attempted suicide. Alcohol mortality, tuberculosis, and diabetes occur 7-8 times as often among Indians than among the general population.
- Of Native students nationwide, only 52% finish high school, only 17% attend college, only 4% finish a 4-year college degree, and only 2% attend graduate school.
- The average unemployment rate for all Indian reservations is 45%. Also, 45% of all Indians are classified below the poverty level. 75% of the Indian workforce earns less than \$7000 per year.
- On the Navajo reservation, 46% of tribal members have no electricity; 54% have no indoor plumbing; 82% have no telephone.
- Eleven million acres of land within reservation boundaries (20% of the total) are owned by non-Indians. Non-Indians make up 46% of the U.S. reservation population.
- Less than 10% of contemporary Indians speak their native language.
- Some 98% of the U.S. Indian population is "tribally hyphenated" (Ottawa-Chippewa, etc.) and some 75% is "racially hyphenated" (Chippewa-Irish).
- Indian reservations contain 40% of U.S. uranium deposits and 30% of coal reserves.
- Amount the U.S. government spends each year on Indian programs: \$3 billion. Amount said to be currently "missing" or "unaccounted for" in BIA trust funds: \$2.4 billion. Amount the government spends on defense each year: \$300 billion.

Applied Activities on the CRST Reservation

Recently, many anthropologists, recognizing what they see as an exploitative relationship between indigenous people and other powerless groups and anthropologists, have proclaimed that the only meaningful work anthropologists can

do must involve some sort of applied component. They suggest that it is an essential ethical responsibility of the anthropologist to make a significant contribution to the community - sometimes fiscal, sometimes material (in the leaving behind of technology or other items of value), and sometimes social (helping to sponsor native youth for scholarships, etc.) - in return for benefitting his or her career from publication of their research results.

Furthermore, following the call of more "postmodern" anthropological authors such as Marcus and Fischer, many have also argued that this research must be collaborative in its origin and in its publication of results (which should be returned to the community.) Thus, the anthropological enterprise becomes more of a dialogue than a monologue (Moran 1996).

Although not a purely applied project, my stay on the reservation had a strong applied component to it. Since very few programs other than the University of Southern Florida allow one to graduate with a degree in applied anthropology, there are few cases where one can write a "purely" applied dissertation. Therefore, through this project I have attempted to make some contributions to current anthropological theory and discussion, perhaps largely to suggest a new role for practice-oriented applied anthropology - although engineers can help explain how new technologies operate and function, anthropologists may best assist in

helping local people find ways to use technology within their local cultural context. They can assist both by helping indigenous groups locate the resources to acquire new technologies, and in implementing programs for training people how to use them for local needs.

My applied work on the Cheyenne River Sioux Reservation included a number of voluntary positions, and one paid position as (for a short time, anyway) 'head' of a tribal department. The primary locus of my involvement throughout my stay of field work was as an unpaid 'intern' for the HVJ Lakota Cultural Center. There, I assisted with videotaping and editing oral histories, commercials, powwows, commemorative ceremonies, and other events; helped produce and perform one episode of the Center's semiweekly radio show, 'Wakpa Waste,' on KLND radio; provided computer support and troubleshooting for computer equipment; advised on the purchasing of new video and computer technology for the center; helped in the set up and logistics of numerous events; wrote an (unsuccessful) grant for funding for multimedia development activities from the National Center for Preservation Training and Technology (part of the National Park Service) (which will hopefully be the basis of future grant applications); set up the cultural center's Internet web site; and helped train people in video editing and the use of various computer applications. On the web site, I put things such as digitized versions of its

collection of historic photographs, photos of its collection of native arts and crafts (in several views), video clips from the oral histories project and "Lakota: Land of Survivors," information on cultural tourism programs, audio clips from recordings of traditional music and the radio show, and even a "virtual tour" of the building.



Figure 44. Cultural center computer station

The other central area of involvement was a period of approximately six months where I worked as a paid employee of the CRST tribe for their MIS (Management and Information Systems) department. I took the position because my two grant requests for research support were rejected (and I needed to

support myself), and because I thought it would be a unique vantage point from which to observe technology-and-social-change processes on the CRST reservation. For reasons that are too complex to go into here involving various matters of tribal politics, my stay in MIS was a confusing array of changes in status and salary, including two terminations of employment and two rehiring. Even though I never worked full-time for MIS, always spending at least 50 percent of my time over at the Cultural Center, I spent my last two weeks on the reservation running the department as its *de facto* head. The full accounting of what happened in MIS requires my discussion of personal relationships with fellow employees, the former MIS director, and with the Tribal Chairman, which is inappropriate in this context. I will only state that the situation in MIS was complicated largely by the fact that due to a variety of reasons, it was one of the most politicized offices in the tribal governmental structure. Herein, I will primarily discuss the goals and activities of MIS and the role I played there.

The MIS department's main function, parallel to the role of MIS divisions in major corporations, is to coordinate the support and purchasing of information technology for the CRST tribe. That means that all tribal departments (legal, land, child welfare, finance, etc.) are supposed to be advised by MIS on the acquisition of new hardware and software. However, unlike most corporations, the tribe's

various departments operate independently of MIS in many cases to buy their own equipment. The tribal government had unsuccessfully tried to centralize all equipment purchasing through MIS, but this never occurred during my tenure there. Thus, the main function of MIS became, ultimately, support for tribal technology, even if it played no role in the decision to purchase or upgrade that technology. Although most corporate MIS departments have their own budget to acquire items necessary for computer repair and support (such as network testers, cabling, diagnostic software, replacement peripherals), the CRST MIS department did not. Also, largely due to political reasons, the former MIS director who had knowledge of all the previous assets, actions, and policies and procedures of MIS refused to divulge any of this information. This made working in MIS, to say the least, somewhat of a frustrating experience.

Thus, most of what I did in MIS initially was support - advising people about what to do during printer problems, problems with their monitor, the accounting system, computer networks, etc. Although I had had little experience with many kinds of computer hardware (such as running cabling or operating RS-232 terminals), I found myself having to learn "on the job" quickly as no one else was there to help me learn it. There was a support person who would come in from Computer Software Associates (CSA) in Montana every 2 weeks or so because the tribe had contracted with them for support;

essentially MIS personnel like myself ended up filling in in the interim. However, I found that there were long periods of time where MIS had no support calls, and in consultation with the tribal chairman I tried to move the focus of MIS from this sole support role to providing Internet services (specifically, World Wide Web services) and providing computer training - where I felt I had more to offer. I wanted to centralize location of the tribe's web pages on the MIS servers since they were on a server in Oregon - I felt that this would give the tribe more local control over the editing and functioning of the web pages.

Also, I set up a Technology and Indigenous Peoples LISTSERV on the MIS servers, and moved the cultural center's web pages to the MIS servers, where I was able to set up interactive elements such as a guestbook, chat room, and discussion boards. The tribal chairman wanted to set up a full-time computer training center for MIS; that never occurred during the time of my fieldwork on the reservation, so I ended up doing trainings in several places, usually wherever I could find a presentation-capable computer with a large (36" or greater) monitor. I gave workshops on how to use Windows95 and 98; how to use the Internet and the web; the basics of computer hardware and software; and how computing technology could fit into the goals of the reservation community. I also surveyed what equipment I found people using in the main tribal building. I found the

majority using obsolete computers (12 year-old RS-232 terminals), operating systems (DOS 3.0), peripherals (tractor-feed dot-matrix printers), and software (WordPerfect 3.1), which is not surprising for an Indian reservation. Some of the most up-to-date technology was, not surprisingly, in the cultural center.

Other institutions where I became involved were the local Cheyenne River Community College, where I served on advisory committees for two federal grants (a multimedia CD-ROM language instruction project, and a general technology/computer upgrade project for the college); the CRST Telephone Authority, where I sat in on meetings about creating training programs for a new data processing center and Internet Service Provider (ISP); the Cheyenne-Eagle Butte High School, where I helped film some events; and the Sioux-YMCA, where I helped with some interviews of elderly people who had been part of the YMCA going back to the previous century and assisted with youth programs involving training kids to use cameras. Through MIS, I ended up meeting the directors of many different tribal programs, and even met a fellow (archaeological) anthropologist in the Land Department who helped do GIS surveys of cultural and archaeological resources on the reservation. Even when I wasn't working for MIS, I found people from various tribal programs calling me for computer consultation and advice. They also wanted me to image things for them using my video or digital still camera.

On the reservation, my applied work gave me another frame of reference to deal with people. Many of them were intimidated of the fact that I was an anthropologist, figuring that this somehow meant I was going to go dig in their backyard, take out some calipers and measure them, or attempt to illicitly film some native ceremonial ritual and reveal it to the world. But when they saw me as a volunteer for the cultural center, and an employee of MIS, and not just a *wasichu* interloper, many were more open about sharing information with me. It helped me establish friendships and relationships with many people. In a certain sense, the applied work was the basis for the research and observation; I could not have seen Lakota people's reactions to and experiences with technology so closely otherwise. They would not have trusted me as much as "just an anthropologist from Gainesville, Florida." Thus, like many anthropologists, I would advocate applied work as an integral part of any field experience, and not just for ethical reasons, but rather for the simple practical one that it opens many doors.

The New World Information and Communication Order

Since the 1970s, the developing nations - what many call the Third World and the Fourth World of indigenous cultures - have been demanding the institution of a New Economic Order. In United Nations forums such as conferences

held by the United Nations Development Program (UNDP) and International Telecommunications Union (ITU), developing nations have made one of their demands the NWICO (New World Information and Communication Order), which they see as essential for combating the one-way biased flow of information from North to South. Belief that the developing world was being denied its fundamental right to communicate led to the formation of the UN's special MacBride commission. (MacBride 1984.) The principles of the NWICO are to be based on the fundamental right of citizens of the world to communicate (as formulated in Article 19 of the Declaration of Human Rights), to control data about their own resources, and to have access to the information they need for development. Many of the current principles of the Global Information Infrastructure (GII) discussed in the Buenos Aires Plan of the 1990s, such as global universal (telephony) service, come out of the developing nations' demands within the NWICO framework. (Richstad 1977.)

The essence of the complaints of the developing nations were that information flows were asymmetric (wire services such as the Associated Press reported on news from the Third World, but always originating those reports from non-native copy writers based on First World capitol cities) and that there were drastic disparities between the availability of communication technology between the developed and developing world. Although some of the data

compiled by the MacBride commission and other agencies is now 20 years out of date, it does reflect some trends which have often remained starkly unchanged since that time period.

TABLE 8. Internet users and phone lines by region

<u>Region</u>	<u>Telephone Lines (landline) per 100 Pop.</u>	<u>Internet Users (millions)</u>
Africa	2.15	1.14
Asia/Pacific	7.10	26.55
Europe	36.81	33.39
Middle East	1.81	0.78
North America	72.1	87
South America	12.5	4.5
Worldwide	13.99	179
Worldwide (minus Top 15 nations)		18.1

Source: Computer Industry Almanac, NUA, ITU, 1998

TABLE 9. Cultural commodity exports in developed and underdeveloped countries - worldwide percentage of exports in various categories

<u>COMMODITY</u>	<u>Exports from developed countries</u>	<u>Exports from less / under developed countries</u>
Printed matter	95.5 %	4.5 %
Radio receivers	68.1	31.9
TV receivers	85.6	14.4
Cinema film	87.4	12.6
Phonographs	93.2	6.8
Books	95.1	4.9
Data processing	97.9	1.5
Photographic supplies	98.6	1.4

Source: UN Yearbook of Intl. Trade Statistics, 1990

TABLE 10. Phones, TVs, and computers per capita in selected countries from the First and Third world

COUNTRY	GNP/ Capita (in \$)	Phones per 1000 pop.	TVs per 1000 pop.	PCs per 1000 pop.
Japan	22,816	640	600	83
USA	20,913	960	900	243
Germany	17,834	599	482	87
Singapore	9,259	490	310	107
CIS (Russia)	8,694	140	330	3
Taiwan	6,098	405	260	56
Korea	3,953	350	220	25
Brazil	2,426	100	210	6
India	318	9	9	7
Worldwide Average	4,299	172	162	25

Source: Computer Industry Almanac, 1992

TABLE 11. Data from the PANOS Institute study on "the Internet and the South"

Percentage of Internet 'host' computers in the United States	70%
Number of countries with fewer than 1 phone per 100 persons	49 (35 are in Africa)
Percentage of global population with virtually no access to basic telecommunications	80%
Costs of telecommunications access in Indonesia as compared to the U.S.	400%
Countries with no or extremely limited Internet access	58 (41 are in Africa)

Source: PANOS Institute, 1995

TABLE 12. Global teledensity

<u>Region</u>	<u>Teledensity (%)</u>	<u>Household Telephone Penetration %</u>	<u>Payphones per 1000 Pop.</u>
World	12.80	34.4	1.55
Developing Nations	5.07	16.3	0.84
Low Income Nations	2.44	8.5	0.57
LI (excluding China)	1.22	4.1	0.21
Developed	54.03	94.3	5.19

Source: ITU, 1998

What these data demonstrate are stark disparities between the information and communication technologies infrastructure of the developed and the developing worlds. Table 9 is particularly instructive in the discussion of worldwide 'cultural imperialism'. It is clear that the developed world greatly dominates the dissemination of most forms of electronic and non-electronic media. With the advent of the 'global' Internet, the disparity remains, since many parts of the South remain 'disconnected' from any major Internet access because they lack basic telephone service and telecommunications. There is some thought that global satellite communications (such as Motorola's Iridium) may

change the situation of the developing world, but it has yet to do so. Table 12 shows how some countries are far more ready for the 'information age' than others.

It is important to note what the NWICO calls for. Unlike France's Minister of Culture, Jack Lang, the member countries of the MacBride commission did not call for some sort of restriction on foreign television or other media programmes passing through their borders. They were not seeking import 'quotas' for global media. Also, the indigenous groups that participated in the commission (as non-state observer groups) did not call for being isolated from new media technologies. Like other MacBride forum participants, they indicated that the primary goal for the NWICO should be to *increase* the technology transfer of media, information, and communication technologies to the developing world - with the proviso, however, that such development projects focus on teaching local people how to build these technologies on their own, training them how to use and fix them on their own, and giving them the means to develop media *production* facilities as well as technologies for media reception (Hanson 1990).

There was a recognition that the U.S. and other developed nations were dominating the global conversation; but what the NWICO called for was giving the developing world the technology and the skills to craft their own reply. 'Dependency theorists' in many cases suggested that

asymmetries in power and wealth were reinforced by disparities in access to global media. Thus, there was a recognition that technology was the solution to this problem - and that lack of access to it (and control over it) was the cause. Many NWICO activists, in fact, tied economic and technological disparity together directly, arguing that especially in a post-industrial economy, lack of access to information technology meant economic suicide (Elkington 1988).

They complained about 'data colonialism' - that Third World countries in many cases had to download expensive satellite map data on their own climate, geography, and so forth from proprietary databases in the First World; that software programs largely written by programmers in Asia were then patented somewhere in Europe or the U.S. and their 'object code' made unavailable for continued local use; and that studies on Third World development, demography, and so on were stored in NGO computers which were headquartered in inaccessible places in London and New York. (Clark 1990). (See Figure 45 below)

Distribution of Internet hosts, January 1999

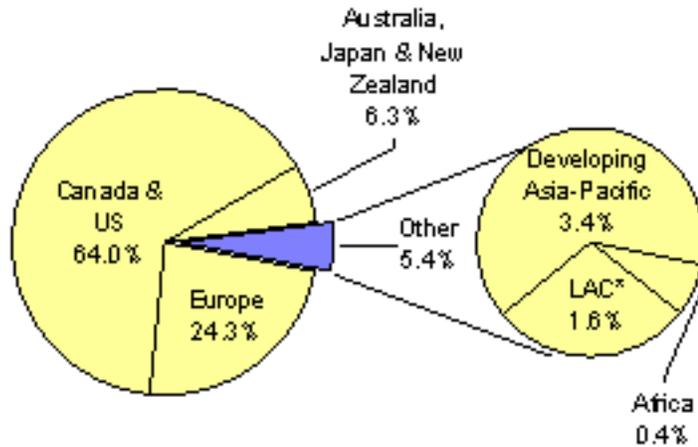


Figure 45. Internet Hosts Worldwide (Source: ITU, 1999)

Stories on Third World countries were often done by journalists who did not know the native language or culture and would horrifically misrepresent the local situation, and then the people who were written about essentially had no ability to reply.

The important fact to understand about the NWICO is that it addressed technological and informational disparities as *political* issues - as significant as inequities in wealth, power, or military strength (Nagy 1991). The nations calling for the NWICO did not see technology as the threat to their autonomy; instead it was the West's *monopolization* and *misuse* of technology that were the major threats. They realized that the West had a stake in keeping the technology from getting into their hands - because their strategy of cultural domination relied on it. The key was to change the

Third World's passive status in regards to the technology - so that they didn't have to be dependent on the cast-off technology of the First World. (The fact that so many developing nations were willing to do this is one of the factors that makes "Y2K" software issues so important for them.)

If there is a role for an applied anthropology striving for 'relevance' in the confusing world of globalization and change, it is in acting as a 'cultural broker' for helping indigenous groups and other subaltern societies claim the rights they have demanded - to communicate, to control data about themselves, and to have access to information technology. Largely without any of our help, they are finding ways to acquire these technologies for themselves. However, the skills to create these technologies and to use them innovatively and to maintain them do not transfer so easily. Instead of greeting the situation with shock, applied anthropologists need to step in and assist with the process. These are no longer 'innocents' needing to be sheltered from a larger world - they need to be given the tools to fight as equals in it.

Indigenous Knowledge and Intellectual Property

As native people prepare to take part in the electronic frontier, one of the contentious factors remains

the relationship of indigenous people to intellectual property. The essential problem that the world faces right now is the updating of existing intellectual property laws for the era of electronic networks, a process that is occurring both domestically (c.f. the Digital Millennium Copyright Act of 1999) in various nations and internationally. However, indigenous people are demanding a place at the table in the re-vision of notions of intellectual property, suggesting that they were denied a "seat" at the formation of such laws 2 centuries earlier in Western countries. Indigenous delegates attended the World Intellectual Property Organization (WIPO) roundtable on Indigenous Knowledge in July of 1997 in order to insist that their viewpoint have some representation. The main indigenous concerns right now focus on such matters as "bio-piracy" (the patenting of the genetic structure of indigenous individuals by multinational biotechnology conglomerates), the acquisition of indigenous knowledge (such as the acquisition of ethnobotanical knowledge of medicinal plants by pharmaceuticals, or the unlawful appropriation of ethnomusical performances by recording companies), and the theft of rites of indigenous religion and esotericism by New Agers, "plastic medicine men," and 'urban shamans'.



Figure 46. Cool Runnings - Indian-owned and operated ethnomusic company

If the goal of some 'underground' and subaltern social groups and Third World nations has been to try and undermine and sabotage the existing intellectual property system, the complementary focus of indigenous people has been to come at IP issues from a different focus - to demand that international authorities respect the *source* of knowledge and information as well as who codifies, commercializes, and formalizes it; broaden their viewpoint of what kinds of information are 'valuable' and requiring protection; and actually strengthen the control over the flow of knowledge based on a different criteria than protection of trade secrets and engines of economic exploitation. Indigenous groups want international intellectual property laws to protect information that resides in local communities, and

small-scale ethnic and cultural groups, not just that which comes produced out of giant research laboratories, universities, and corporate firms. Information should not necessarily have to be 'tangible' or in an electronic database in order to be protected - because if this is not the case than the mountains of ethnoscientific knowledge in oral cultures are totally open to exploitation (Greaves 1994.)

Indigenous people suggested that a key problem with the WIPO's system was its insistence that the only way for information or knowledge to gain IP protection was for it to be commodified. They argued that this was contrary to the indigenous worldview regarding knowledge protection - that while it might be the 'property' of individuals or lineages or clans based on certain inherent rights of usage, no one could own it as 'property' in the sense of it being a transferrable commodity which could be alienated, bought, or sold. They suggested that where indigenous people protected indigenous knowledge, it was so that knowledge would not be abused or lost, not because they wanted to protect it as a strategic commodity or investment (Warren 1995). Also, indigenous people always recognized knowledge falling in the realm of sacred matters as requiring careful control. Just as indigenous people suffered because they held a different understanding of the use and value of land from European societies, so, the delegates argued, was the case with

differences between the indigenous understanding of knowledge and the European one. Since indigenous groups tend to emphasize practical, experiential knowledge rather than codified knowledge, this particular information is almost always transferred from individual to individual, usually without direct monetary compensation.

Also, members of the IBIN (Indigenous Biodiversity Information Network) presented information at the roundtable suggesting that current United Nations and other global conservation/biodiversity programs could not function without the contribution of indigenous knowledge, yet there was no consideration whatsoever of how to compensate the indigenous communities who would be the source of that knowledge. As they pointed out, the majority of the world's biodiversity lies in tropical rainforest and other lands that have traditionally been the preserve of the world's indigenous peoples, and that indigenous cultures have 'catalogued' a far larger range of its genetic diversity (since foraging peoples can identify sometimes 10 or 20 times as much species in the forest as agricultural or industrial societies) (Werner 1980). This knowledge is stored not on floppy disks or CD-ROMs, but in the very indigenous languages which are rapidly disappearing at a rapid rate as their few remaining speakers depart this world. Since many tropical conservation programs have essentially embarked on programs of building gene banks or enclosing off vast areas of forest without even bothering

to consult let alone compensate the indigenous people who are the true "experts," the greatest intellectual rip-off of all time is occurring, according to the IBIN testimony.

Unfortunately, as many indigenous groups worry, "bio-prospecting" has turned not just to the indigenous flora and fauna of the Fourth World, but to its very human inhabitants and their genetic material. Ever since Marshall Sahlins (1972) wrote about the lives of hunter-gatherers, people have become increasingly aware that rather than living lives plagued by disease and hardship, they are often very healthy. Although extremely vulnerable to communicable diseases to which they have developed no immunity, indigenous peoples seem relatively free of the many chronic diseases that plague modern 'civilization' - such as tooth decay, diabetes, heart disease, cancer, and obesity. While some of this appears to be due to their diet, level of physical activity, and environment, many biologists think there may be genetic causes at work. Perhaps through recombinant DNA transfer other people may be able to benefit from some of the immunities to the infirmities of modern life that indigenous people enjoy? Whether or not this is the case, scientific researchers seem very interested in the genetic makeup of the indigenous peoples of the world.

This has led to some harsh criticisms of the Human Genetic Diversity Project (HGDP) by indigenous organizations. The mainline Human Genome project has had as its goal the

complete mapping the sequence of the genes of a 'typical' human - just what the gender, race, or phenotype etc. of this individual is has not been discussed - a massive project that will probably complete somewhere in the next millennium. Of course, once all these genes are catalogued, the next endeavor will be to figure out what they do (which ones promote certain congenital disorders, behavior patterns, or other biological traits will be of great interest), which could take several more decades. The Human Genome Genetic Diversity Project has been an expansion of the HG project beyond just the sequencing of the 'average' human - instead, the goal has been to measure the range of variation of genetic makeup for mankind, with the ultimate goal of answering such questions as the evolutionary history of humankind, the ancestral origin place of various human populations, and just how different all modern humans are from each other genetically. Thus, it has been trying to get genetic samples of existing indigenous populations in the search for answers to these questions.

Indigenous people believe the goals of the project go beyond mere scientific curiosity and toward commercial exploitation by multinational pharmaceutical companies. HGDP researchers retort that their goals are only for "pure" science, not those sorts of applications, and they did not support recent attempts by the pharmaceutical firm HumGen to "patent" the DNA sequence of a Pacific Island Melanesian man.

However, the HGDP controversies do not exist in a vacuum. Recently, the Third and Fourth worlds have become something of a "body parts shop" for the First World. Poverty and the commercialization of blood, germ cell, and organ donation has resulted in a massive organ flow from poor to rich countries which researcher Andrew Kimbrell (1993) calls "the Human Body Shop". Market pressures for organ donation from poor countries have been so powerful that some countries have even considered revising their definition of death so that people could be 'harvested' for their organs more quickly! Such a stark commercialization of human life raises the possibility that it could become far too cheap, all too easily. Belief that "body prospectors" come from the First World to the Third World, removing the organs of children (while still alive!), has taken on such a sinister tinge that an anthropologist was even attacked in Guatemala on the suspicion that she was engaging in just such behavior.

Although such 'rumor panics' have all kinds of sociological sources, this one, like others, had its roots in some truth: the poor Guatemalans were suffering a kind of slow-motion biological vampirism whose causes were a lot harder to identify and nail down, so they attacked an American woman as a way of lashing out against a concrete manifestation. In Alaska, businessman Joseph Moore sued several NIH scientists because they had removed a series of cancerous cells from a tumor in his body. For this, he should

have been grateful; however, they had used these cells from him to create an artificial cell-line culture from which they had synthesized a new antibacterial drug. Moore was never compensated from the billions of dollars the new drug had generated. Indigenous people feel that they, too, are becoming biological "factories" for new synthetic hormones, neurotransmitters, and other human biochemicals, all without any consent from them or compensation either. The very information contained within their bodies is quickly becoming someone else's patented property, even though they had no say in the matter and receive no credit for the 'discovery'.

As for indigenous knowledge of biota (other than their own bodies), indigenous groups at the WIPO and other bodies have begun demanding that pharmaceutical bio-prospectors be forced to draw up community agreements with their local communities, agreeing not just to one-time monetary compensation but also their ability to have a say (along with shareholders) about how products are commercialized and marketed, the right to long-term partnerships in education and technology transfer, and the power to ask firms to leave if they violate the local environment. Some groups feel that they should be co-patent owners of any biological information that becomes patented; others oppose the very idea of the patentability of life. Some indigenous communities have come to the ingenious idea of setting up their own computer network databases - such as

the Web of Life set up by potato growers in Ecuador - so that people can have easy access to their "storehouse" of biological knowledge, but they retain control over how much and what the conditions are under which it can be accessed. Once again, although information technology seems to have raised the velocity at which indigenous knowledge is being expropriated out of the Fourth World, it also seems to have provided the tools through which indigenous peoples can be the most effective gatekeepers.

Indigenous Emerging Media as Intellectual Property

Where the debate particularly enters the parameters of this research dissertation is in the arena of indigenous media production. Ginsburg, Weatherford, and other anthropological authors have heralded the new era of indigenous media production, suggesting that this is an area which somehow resists commodification and allows Indian people to control their own self-representations. Unfortunately, these authors seem woefully unaware of the range of media piracy that exists today. Once images are circulated on electronic networks, they can be captured and repurposed. Recently, native activists became quite concerned when they found out that the name of their famous warrior chief Crazy Horse was being used to sell a brand of malt liquor. Can you imagine what would happen if the distillers

decided to use film reels of the Indian man (if any had existed), "resurrecting" his image as a spokesman for the product through digital compositing (a technique increasingly used to bring back dead historical figures of film and television to say and do things they never said and did)? Once native people begin broadcasting themselves on television, their images become subject to this kind of appropriation as well.



Figure 47. The Crazy Horse monument (his face is 4 times bigger than those on Mt. Rushmore)

Authors such as Berkhofer (1978) have long argued that the images of Indians circulated among white communities have always been the "white man's Indian" - stereotyped,

distorted perceptions reflecting more of the preoccupations, racism, and skewed viewpoints of the white audience than anything having to do with Indian reality. Just as with black minstrel shows, various kinds of popular entertainment featuring Indians up until the 1960s (usually using Lebanese, Italian, or other ethnic actors) often portrayed them as idiots, subservient sidekicks, irrationally fierce "savages," ridiculously noble and stoic "noble savages" (such as the famous image of an Indian man who cried a single tear when he saw a plain strewn with litter in a field in a 70s Ad Council commercial), or greedy shills out to get rich from gullible white folks. Ginsburg and Weatherford may be correct in lauding the fact that indigenous people are now creating their own self-images, and thus they and others can laud the appearance of major Indian-produced motion pictures such as Sherman Alexie's *Smoke Signals*, but the fact remains that people who are Indian haters can often "recycle" these images in very insidious and unflattering ways.

Leftist academics may like to applaud when "guerilla artists" such as the AdBusters do this to media productions of advertising agencies or commercial films, but the shoe is on the other foot when the powerful can take the media productions of subaltern and powerless groups and do the same thing to them. Unfortunately, while postmodernists and Situationists may think this is an appropriate response to the capitalist mass media, they will have to come to face the

fact that activist, community, and "POV" video is subject to the same distortion. A benign documentary by a black activist on homelessness in African-American communities could be seized by white supremacists, turned into their "proof" of African racial inferiority, and reused for their own, less benevolent purposes. Perhaps they might choose to 'morph' the black men who appear in the film into monkeys in Photoshop or some other digital tool to 'prove' their racist theories. Sadly, all appears to be fair in information war, and we cannot expect the powerful not to seize on the images of the powerless to reinforce their ideologies.

This is in addition to the obvious questions of commercial exploitation. Since the appearance of "world music" as a genre in the 1980s, many indigenous groups have been dismayed to find traditional love chants, war songs, or ritual drumming music turned into the background for some Western musician's song, on some recording companies' musical compilation, which sells thousands of copies - once again without any consent, acknowledgement, or compensation for the source of the melody. Many video producers managed to surreptitiously capture Indian powwows and other performances and turn them into commercially successful videotapes in the 1980s, once again without compensating the Indian performers a dime. Without some form of "intellectual property" protection for indigenous media, the exploiters of Indian music, dance, and performance will not even need to go to the

reservations to get rich - they can just steal it off the airwaves and use it for their own productions. Even if the Indians are putting their aesthetic creativity out on the aether for noncommercial purposes (reviving pride in their own culture), that will not protect them from others who view their media productions with dollar signs in their eyes.

The question for indigenous artist-activists has become, then, how to "protect" Indian media productions without turning them into "property" - commodities. Since even 'independent' filmmaking is, to a large extent, controlled by large motion picture studios, is it really possible to assume that Indians can ever reach large audiences without making some of the sacrifices that other minority filmmakers (such as Spike Lee or John Singleton) have had to endure at the "hands" of the industry? If the "indigenous aesthetic" of native mediamakers means that they are not producing their films for money but instead for cultural, community, and aesthetic reasons, can they really evade being 'contaminated' by the assumptions and practices of Western commercial filmmaking? (Will non-native Alaskans appreciate native talk shows on the Aboriginal Peoples' Television Network without Jerry Springer antics, or native dramatic series without periodic explosions and disembowelings?) Assuming they can, there still needs to be a way to assure the images they produce are not turned by someone else into just another "redsploitation" film with

some quick editing. Although indigenous people may not like the existing framework of intellectual property proposed by the WIPO, they know that without some kind of international IP protection, their words and images are just as much fair game for the market as their bodies, lands, and resources.

Native Americans and Telecommunication

I want to see a dream become reality. If any American Indian wishes to communicate to another individual or tribe, that the capability to do so is available, so we can perpetuate our ways, language, and people into the far reaches of the future... as Sequoyah was included in history for his attempts, let us continue the struggle for equality in communication, so we can all have a voice and be heard. (Andrew Conseen Duff, Eastern Band of Cherokee)

The need to clarify matters of tribal and federal jurisdiction in the field of telecommunications and information policy is now reaching a critical point... if tribes do not participate at this juncture, then tribes will be omitted entirely and will spend infinite resources to backpedal into this fast-moving field. (Randy Ross, Otoe-Missouria Tribe) (OTA 1996: 15)

All the information (direct quotes and paraphrases) in this section of the dissertation comes from the special report of the federal Office of Technology Assessment, *Telecommunications Technology and Native Americans: Opportunities and Challenges*. (printed in 1996; sections also available online on OTA's web site).

Optimistic vs. Pessimistic Scenarios

Telecommunications technology offers many opportunities to help Native Americans deepen their cultural roots, empower their communities, strengthen Native governments, and address daunting challenges such as very high unemployment rates and poverty rates and health conditions. The promise of telecommunications is by no means assured, however. Indeed, if Native Americans, collectively, do not gain better understanding and control of this technology, the result could be to further undermine Native culture, communication, sovereignty, and self-determination. (OTA 1996:8)

The OTA report's optimistic scenario suggests that by the year 2000, Native communities will experience through telecom technology an improvement in health, education, governance, economic development, culture, and community development. In contrast, the pessimistic scenario suggests that they will be 'sidelined' by the telecommunications revolution, and that they will end up being exploited by and disenfranchised and disempowered by the technology. Significantly, the report recognizes that Native people must be involved in all technology decisions and taught how to control and maintain the technology, identifying this as the key variable that determines whether the optimistic or pessimistic scenario will be realized. As we approach the year 2000, it does seem that Native communities are still closer to the pessimistic outcome, and worrying about the fallout from "Y2K" to boot.

The OTA believes that Native Americans (similar to other minorities, including Hispanics and African-Americans) are falling behind the majority society in terms of telecommunications, and their report outlines some major policy recommendations to the FCC, BIA, DOI, and other government agencies, which include developing local Native sources of telecommunications expertise, creating regional technical assistance and extension centers, increasing tribal sovereignty over their own telecommunications services, and most importantly, encouraging tribes to develop an information policy, addressing the issues of access to sensitive ceremonial or sacred material, and the protection of the integrity of information content from misrepresentation or misuse (by 'plastic medicine men,' anti-Indian bigots, faux native craftsmen, etc.)

Ways in Which Telecommunications Technology can Assist Native Cultures

Renewing and strengthening native languages

As the OTA recognizes, most native languages (in North America) had no written form prior to the arrival of European settlers. However, due to policies of language suppression (i.e., 'culturicide'), the central outcome of European contact has been a massive 'extinction' of numerous languages. Some languages have yet to develop a mature written form, and are thus still only communicated orally or

pictographically. Fortunately, PCs allow Native people not only to read and write their language, but to check their pronunciation, see visual representations (rather than English translations) of words, explore the pictographic formats, and even (through simple rudimentary artificial intelligence) engage in conversational practice.

Obviously, this cannot totally substitute for 'live' classroom language instruction and live oral practice, and many Native elders insist they must communicate the language to youth face-to-face in order to emphasize gestures, facial expressions, tones, and other paralanguage. But microcomputers and other technologies can assist them. Teleconferencing allows students to learn with distant elders, TV and radio broadcasts allow people to hear the language in everyday settings, and bulletin boards and chat rooms help them practice with distant people. Telecommunications increases the number of people who can learn the language at the same time. The key to successful language revival is the use of language by children in the home, but technology offers a promising kickstart to initiate that process, beginning with adult learners.

Protecting sacred sites and objects

The OTA notes that since the passage of the NAGPRA legislation, tribes have been inundated by repatriated cultural material. They are having a difficult time collating

and indexing all the items. Furthermore, they often have to track all the various sacred sites and burial areas on their reservation, since archaeologists are now required to work with tribal councils for research authorization. A special NAGPRA module built into the NADB (National Archaeological Database) developed by the National Park Service helps tribes manage all their requests from researchers, maintain an inventory of items in their possession, and develop a GIS mapping system for monitoring the status of all archaeological and sacred sites within their territory. Furthermore, many tribes are now using teleconferencing to confer with distant museums in order to smooth the process of repatriation, and putting their archival collections online so that they can be 'studied' by researchers without being disturbed.

Although some Indian people have privacy concerns, encryption and other secure technologies can help assure that 'unauthorized' parties (i.e., grave diggers, arrow hunters, and tomb robbers) don't find out the location of sensitive or sacred areas. There are also ongoing debates about the status of returned material (debates I witnessed myself at the Cheyenne River Sioux reservation). Some people feel it does not belong in any museum collection at all, even an Indian owned and operated one; it belongs, as they say, "back in the ground" with the ancestors and reburied. Telecommunications offers a middle ground in this debate. Digital photos and

other recordings could be made of the items prior to reburial and then put online for native people and scholars to later access. This might not substitute for handling the artefact (you can't test composition, for example) but at least there is an opportunity for preservation.

Recording, developing, and sharing culture

Tribal libraries, community colleges, cultural centers, schools, and other 'information centers' are finding the old paper-and-pencil tools of the past are not enough to help preserve and promote knowledge of their history and culture. Oral histories, treaties and historical documents, examples of traditional craftwork, and traditional folklore and stories are being pressed into CD-ROMs. There is a growing interest in these institutions to use telecommunications to help tribal members and especially young students learn not just about their own cultural heritage, but also that of other indigenous people living elsewhere in the world. Once in a digital format, these recordings are dynamic, rather than static - they become living documents that can be shared and updated.

As oral cultures, most native societies put a critical emphasis on face-to-face storytelling, performance, and communication. Technological recordings of cultural activities can often be a secondary substitute, but for many tribes confronting cultural decline, there can be no better

alternative, since these recordings can quickly be disseminated in a variety of environments and media to large audiences. Like other oral societies, they also place a great emphasis on context; there is some concern that certain sacred songs or items could be displayed inappropriately. Thus, some degree of tribal information policy will have to be developed by tribes to manage these issues. Such issues are not insurmountable. For many groups, it simply means that things like art, stories, oral histories, and treaties can go online, while ceremonies, religious artefacts (like medicine bundles), and other items stay 'offline'.

Broadening public awareness of native cultures

Native people have often complained that the majority culture mass media often depicts their own history inaccurately, represents them in stereotypical and denigrating ways, and treats them as some kind of fossil or extinct relic, refusing to discuss their present situations and challenges. For many non-Indian people who do not live near Indian reservations, they have no real outlet of information for obtaining honest, accurate information about Indian people. There are some museums (such as the Smithsonian's National Museum of the American Indian or NMAI) but they cannot reach a large segment of the public (other

than occasional visitors) or provide access to up-to-date information and material directly from the tribes. OTA notes telecom technology could help solve both problems. Kiosks at National Park Service sites and other areas could provide access to native-produced multimedia and videos.

Still, some native people are hesitant about promulgating their culture through electronic fora because of the prevalence of ethnic fraud - New Jersey soccer moms pretending to be Cherokee medicine women, shops selling Chinese-made trinkets as 'authentic' Native crafts, or Greek immigrants pretending to be Lakota sages with timeless Indian wisdom. The apparent anonymity of computer networks seems to encourage these types of deceptions, and encourages people to put forward misinformation about cultural traditions which is at best misguided or inappropriate in such a context, and at worst libellous and defamatory. Some Native activists have thus suggested that they stick to regulated and mediated places of communication, where there can be more careful control over content and other issues. Furthermore, there could be seals of authenticity given to web pages which certify that they are really "100% Indian."

Information Technology and Economic Development

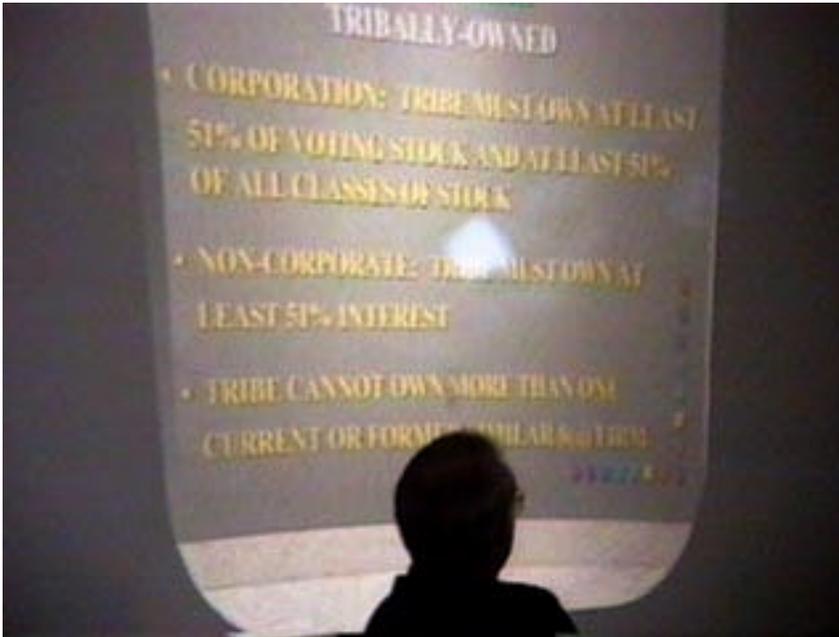


Figure 48. Starting Tribally owned businesses - an SBA conference on the CRST reservation

One of the rationales in the growth of the Internet has been the proliferation of electronic commerce. Many development agencies are convinced that a key "engine" for sustainable economic development in Third and Fourth World societies in the next century will be information technology. The question is, how viable is the IT model for economic development for indigenous communities? Many detractors would argue that it is not viable because Indian communities in the U.S. like the CRST Lakota lack the telecommunications infrastructure, technically skilled populace, and the support base for information technology (since few reservations can

build computers, modems, routers, and other equipment onsite, they become dependent on the major vendors.) They suggest that reservation communities focus on a "basic needs" development approach that primarily focuses on building more housing, more heating oil, schools, hospitals, and so forth. They also point to previous examples of technology transfer projects which failed because of rapid technological obsolescence and the lack of any local populace to maintain, repair, and upgrade the equipment.

Nonetheless, many reservations such as the CRST have decided on a pro-technology approach, and use it a key linchpin element of their strategy for economic development. In many cases, they have gone this road alone, without any recourse to outside agencies and organizations. Like many communities, the CRST realizes that political sovereignty, however noble, remains hollow while it is completely dependent on the federal government economically. Further autonomy from the DOI and BIA can only be achieved through developing an independent economic base. While many reservations have turned to gambling and gaming for this base, the CRST has not favored this approach, and they have attempted to look for other solutions. They hope to use information technology (radio, TV, the Internet) to promote local industries (the tribal bison cooperative, tourism) and even to branch out into "high-tech" areas of employment such as setting up a data processing center.

Industrial development on many reservations has been weak and sporadic because in many cases they are located in areas that are very remote from the nation's main "arteries" of transportation and commerce (interstate highways, railroads, sea ports, etc.) Although many extractive enterprises have located their operations on Indian reservations (such as oil, coal, and other mineral companies), few industrial factories have tended to locate there. It is not by coincidence that many Indian reservations sit on some of the most remote and least desirable land in the United States. In many cases, this is the way they preferred it (to be as far away from interference as possible); in most others, it was because they were forcibly relocated onto lands which no European settlers could have possibly wanted because they were not arable (and in many cases did not want until there were future discoveries of oil, uranium, natural gas, gold, and other minerals.) Although labor costs on Indian reservations are low (just as they are in the Third World), other costs remain high (Maynard 1969). Many reservations have some of the strictest ecological land use restrictions in the U.S., and have strong regulations of employment safety and conditions. Many reservations are not exactly located in the most affluent areas of the U.S.; since the surrounding white communities are also rural and poor, this often means the lack of a substantial market for consumer goods.

It is also often prohibitive to ship large amounts of raw materials on the often dilapidated, disintegrating two-lane "rez roads." Most white management personnel usually do not find the quality of life, health care, and leisure on Indian reservations up to the standards of other communities. And, due to the realities of Indian value systems, as well as outright racism and stereotypes, industrial corporations consider Indians unemployable. As a simple fact of their value orientation, most Indians are not likely to put in extra hours at work if it means spending less time with kin. But beyond this, many companies simply assume, in racist fashion, that Indians are drunk, lazy, chronically late, belligerent, and otherwise poor workers. This conception is not new; the Spaniards and Portuguese also held this viewpoint of native people in the 1500s, and in addition to the fact that they managed to liquidate a large portion of the population, this concept that Indians were poor laborers led them to begin importing slaves from Africa to do manual labor. Because of all these conditions, most industrial corporations will not locate factories on Indian reservations without incentives offered by the federal government. While such programs have been implemented over the last fifty years, in many cases they have resulted in companies locating on Indian reservations and then shutting down their operations a few years later.

The only longstanding industrial developments on Indian reservations have been resource extraction industries - oil, coal, and energy companies. However, while these companies have often negotiated economic benefits with the tribe in return for leases for exploration, they often do not directly employ tribal members, using outside engineers, prospectors, and other employees. They also are frequently attacked by tribal members who are concerned over the damage they do the natural environment and the fact that their economic "spillover" into the reservation economy is small. In some cases, the employees of the firm simply work 9 to 5 on the reservation and then depart for cities hundreds of miles away to spend their time and money elsewhere. Although some reservations have tried to set up their own industrial factories (in effect, tribal member-owned and operated industrial cooperatives), producing such things as sheet metal and tires, the number of these experiments have been small, and many have ended in dramatic failure due to complains over extreme nepotism in how people are hired and profits are shared. The industrial model of development has been, with some rare exceptions, a failure.

The growth industry for many Indian reservations in the 90s has been the gaming industry, largely due to federal rulings that Indian gaming is not subject to state laws and restrictions. Indian gambling has been very successful precisely for the fact that Native people can offer something

no one else can - with the exception of a handful of states (Nevada, Iowa, New Jersey) gambling has not been legalized. Non-Indians are forbidden to own and operate casinos. In many ways, casino gambling is a "third-wave" post-industrial economic enterprise - it is a 'leisure industry' in which people essentially pay for the opportunity to increase their wealth. Like other kinds of post-industrial economics, it generates 'something' from 'nothing' through an inequality of information - the casino only makes money because it knows that a certain percentage of people will lose their assets each night, even though no individual can ever know whether they will lose or win. It's also a "high-tech" enterprise - slot machines, video poker machines, and other devices contain more transistors and electronic components than some personal computers.



Figure 49. CRST Bingo

Gambling has been incredibly successful for certain Indian communities (such as the Mashantucket Pequot of Connecticut, and the Seminole of Southern Florida), generating large amounts of revenue and employment for the reservation. In fact, gaming has been so successful that some U.S. congressional representatives like Sen. Slade Gorton have begun demanding "means-testing" for federal government programs that benefit Indian reservations, and states have demanded a right to some of the revenue through taxation. Indian activists have countered that these programs are not "handouts" but guarantees given in return for treaties - but more importantly, that it is simply ridiculous to think that all Indians are getting ridiculously rich from gambling. The key variable has always been - as any realtor

knows - location, location, location. The successful Indian casinos are located near large urban centers such as Hartford, Miami, and Phoenix, which have large numbers of people (especially retirees) with lots of leisure time and disposable income, and far away from other places that offer legal gambling (sometimes with greater amenities) such as Las Vegas. Many Indian communities are not so fortunate.

Indian gaming in South Dakota has been less than successful for a variety of reasons, perhaps the main one being that the state has an extremely low population density, and the neighboring states are similar. Also, it really only has a summer tourist travel season. During the rest of the year, flooding and ice and snow often make roads impassable. The main tourist areas for the state are in the Black Hills, which is no longer Indian territory, and the state decided in 1990 to allow limited casino gaming in Deadwood, South Dakota, as part of their own "economic revitalization" program for what had originally been a mining/railroad ghost town.



Figure 50. Okaton, SD. Ghost town

Many Indian activists became furious when actor Kevin Costner, supposed friend of the Lakota people in the film *Dances with Wolves*, decided to open his own casino in Deadwood. Since many of the reservations are not close to the state's major highways, and often lack any other major tourist facilities to draw large crowds of people, and neighboring states (such as Iowa) now offer gambling, most of the Lakota-owned and operated casinos have been losing money, including the Oglala Lakota Pine Ridge casino. The Standing Rock Prairie Knights casino seems to be the one exception, although even its income seems to be largely seasonal (the hotel's occupancy rates plummet during winter.)

The CRST had contemplated opening its own casino on the eastern edge of the reservation, near the Missouri River

in the late 1980s. I discussed with several tribal officials about what had happened during this time, and almost everyone's recall of the situation seems to have been hazy and unclear. The project had gotten into the planning stages, there was even talk of beginning construction and a proposed "ribbon-cutting" date a year from that point, and then, in one of the classic cases of reservation power upsets, a new tribal council and administration came in after tribal elections and scuttled the project. There were accusations that the previous administration had embezzled some construction funds. It never left the planning stages. The CRST offers nightly bingo (five nights a week), but from my observations, even in the summer tourist season when whites are crisscrossing the reservation, the main players were still local Indians. Only during major events (such as the Summer and Spring Powwows) does this seem to change. However, casinos and gaming on the CRST reservation and others have been challenged on more than just fiscal grounds.

Many traditionalist Lakota oppose casinos for a variety of moral/cultural reasons. Almost all forms of gambling, including state lotteries, essentially operate as a tax on the poor. The majority of players at most Indian casinos are usually other poor Indians, who only end up being poorer. Paychecks that should be going toward their families end up buying liquor, cigarettes, bingo cards, and casino chips. Also, although this does not appear to be so much the

case on the Plains, in the Northeast and the Southwest Indian gambling (and other gaming) seems to have attracted the interest and involvement of organized crime. More unorganized crimes, such as prostitution, robbery, and drug-dealing also seem to follow in its wake. The traditionalists on many reservations see casinos as incompatible with the Native way of life. It is not a "right livelihood" for people because it exploits their suffering. Some natives think that is just evens out the Indian-white "balance sheet" of suffering (white people lose their money in return for taking their land), but most tribal elders do not accept this. They also think that by accepting gaming, Indian reservations are just opening a "back door" for the state takeover of Indian reservations, through various gaming control legislation. Gambling is a "Trojan Horse" from the whites oriented toward eradicating gains in Indian sovereignty.

It is thus from the perspective of the lack of success in industrial development and casinos as sources of revenue that we must turn to consideration of the interest of the CRST in information technology as a source of economic development. Although the tribe has tried to make its tribal bison herd a key economic resource, the simple fact is that the bison population has nowhere recovered from where it was in the late 19th century before the massive railroad-organized bison slaughtering campaigns. Realistically, many tribal members think it could take centuries before it recovers to

that level. Further, they recognize that while the Indian has always seen the buffalo as a vital resource, the interest in buffalo meat as an alternative to beef steak is a new cuisine trend that most European-Americans have not caught on to. Although bison steak is lower in cholesterol and saturated fat, and some would say it even has a leaner taste and texture than beef, the simple fact is that it remains a novelty item in the American diet. The Indians simply do not have the marketing "muscle" and power of the Cattleman's Council - the number of bison ranchers who are non-Indian is very small. But the question remains: why would information technology be viable for native people given the aforementioned limitations? Why would they consider it?

One of the key insights of the initial few years of cyber-research has been the extent to which the Internet and/or 'cyberspace' seems to nullify space and place. Microsoft CEO Bill Gates believes the Internet will provide an economic boom for rural America because people can now 'telecommute' to their information/third wave-sector jobs... rather than the firm or the people having to relocate, each can stay exactly where they are. It also seems to nullify identity. The famous joke is that "on the Internet no one knows you are a dog." This phrase could perhaps be expanded to include "... or an Indian." In a service economy, firms contract out for who can perform services for them most cheaply and efficiently. From the point of view of a firm

that requires their data records or image files processed and analyzed, it doesn't matter whether the people who contract to perform the service are located in Miami or Eagle Butte, South Dakota, as long as they can do the work and return the results. Many computer companies no longer offer their technical support onsite, but instead "farm" it out to tech-support firms located in rural areas hundreds of miles away. From the point of view of the person making the phone call, all that matters is that they can reach those people by a 1-800 phone number, not where they are physically located. Thus, the information economy makes not just rural white communities, but also Indian reservations extremely viable.

Although anthropologists like Ginsburg and Weatherford would like to focus on the cultural, political, and aesthetic reasons that indigenous filmmakers have begun disseminating their work, they seem to have ignored the fact that filmmaking is also a gigantic revenue generator. Hollywood films can often end up grossing millions of dollars, especially in the overseas markets. Cultural materialists and others should be somewhat suspicious of claims that aspiring Indian filmmakers and savvy tribal councils do not see this as a source of economic development. When I talked with CRST tribal officials, they commented on the economic success of Indian-owned radio stations, many of which have large non-Indian audiences and strong advertising support. Recent developments, such as Sherman Alexie's film

Smoke Signals and the approval of the Aboriginal Peoples' Television Network, suggest the unthinkable - that Indian-produced and Indian-themed films, TV networks, and syndicated programming could actually attract mass-market and not just "ethnic" audiences. This has a lot of native communities seeing some strong economic potential in mediamaking. The huge success of the film *Dances with Wolves* suggest that there is a large interest in commercial motion pictures that deal with Indian issues and themes.

The trouble has always been distribution. Although many native communities can produce media, how can they get it to non-native audiences? Few reservations can afford large towers which could broadcast a signal far enough to be watched by non-Indians. Although many native communities have found provisional answers (satellite networks in Canada, videotape distribution in the U.S., even experiments in low-power broadcast television), many now seem to think that the Internet may provide the answer. As fat Internet "pipes" become more common, and tools like RealVideo and NetShow become more widespread, the potential audience for native media through the Internet continues to increase. This also is true for non-electronic media. Native artists have often had to travel to art shows hundreds of miles away in order to find buyers interested in acquiring their craftwork. However, collectors of native art can now locate, browse, and even purchase (through e-commerce) native artefacts without the

artist or the buyer having to leave their homes. Through the distance-shattering power of electronic technology, European collectors (who seem more interested in Native art than Americans) can reach out across the Atlantic and fulfill their passion.

This was one of the main aspects of the web site I helped set up for the HVJ Lakota Cultural Center. People could view the beadwork, jewelry, and other items for sale at the HVJLCC Arts N' Crafts Center, and even in some cases find out information about the Lakota artist and the other artworks he had created. Although I lacked the tools at the time (a secure encrypted server) to allow people to actually purchase the items over the Internet, I at least made it possible for people to quickly and easily contact the cultural center about purchasing their items. They didn't have to rely anymore on sporadic sales to tourists and travellers. Furthermore, their role as 'middleman' became less important as people could in some cases directly email and contact the artist about their work and where to find other samples of it. The contacts I received from the web site confirmed one of my assumptions - that the majority of the art market for Lakota artefacts seems to be over in Europe and not so much in the United States. When I asked one German man why that was, he said that many Europeans became interested in Lakota art after *Dances with Wolves* played in

European theaters overseas! (More evidence, too, of the role of synergism in the information economy.)

Many software companies now routinely "farm" a large amount of their programming work to computer programmers who work in Third World countries such as India, China, and Brazil. Why not hire Native computer programmers to do the same work right here in the U.S.? Indian reservations could generate economic development through becoming internationally known 'experts' in data processing, computer programming, multimedia/graphic design, or even beta testing of software. The hope of the Telephone Cooperative was that their data processing center could handle the billing, records, and other data management tasks for large companies who didn't want to do it onsite. Most kinds of 'third wave' contract-based labor are usually based on flexible scheduling - although projects are completed within a deadline, there is no requirement for contractors to work on them fixed hours in a fixed location. This seems ideally suited to the kin-oriented, nomadic nature of most Lakota societies. Give them a laptop and let them work where they feel like, when they feel like, and Indians will probably be surprisingly productive. Gateway Computing is a large vendor-partner with a number of Indian reservations in the state of South Dakota, often offering them opportunities to purchase computers at or below cost. There is an obvious self-interest here - they recognize the potential labor force.

So - all of this being so seemingly ideal, why haven't projects like this mushroomed into being on the CRST reservation and in other native communities? There are obstacles - which must be dealt with. The key ones seem to be the lack of technically trained native personnel, and the lack of telecommunications infrastructure. The latter one seems insurmountable, but there are solutions to it. Indian reservations, in general, have much poorer and much fewer data-grade telephone landlines than even white rural areas. The state of telecom infrastructure in native communities is so poor that the BIA has organized special hearings on the matter this year. However, the costs of bringing in ordinary voice-grade telephone lines are so high, as are the costs of bringing 1920s and 30s era telecom plant up to par, that most reservations have balked at the idea of financing fiber optics, T3 data lines, and other "fat" communications lines. The answer seems to lie, as with other parts of the Fourth World, in various kinds of "wireless" technologies - radio-based data transfer via cellular towers, satellites, and microwave relays - since the expense of bringing the wires to remote reservations seems to be cost-prohibitive.

Many CRST tribal officials I talked to displayed a great deal of interest in the Motorola Iridium project - which, through geo-stationary orbiting satellites, will essentially make it possible to make phone calls (or transfer any kind of electronic data) from any point on the planet to

any other. While the "telecom infrastructure" problem plagues Indian reservations to the same extent that it does numerous other Fourth World communities, there seem to be solutions on the horizon. In many cases, people are far more worried about the threat of the "Y2K" bug. Again, like other parts of the developing world, Indian communities often have much older computing and electronic equipment, and in some cases are using mainframes that were built in the 1950s and 60s. These older computers are far less likely to have the "Y2K" patches, and are more likely to fail when the year 2000 rolls around. As with other groups, some native people liked the "Y2K" problem to other eschatological matters - such as Lakota and Hopi traditional prophecies. Most did not realize that the Y2K problem might hurt them far worse than it will the *wasichu* political and financial world.

The true problems for most Indian reservations seeking IT-based economic development, it seems, are not necessarily in the technological realm, but in the human one. There is a lack of native people with the proper technical training to operate, support, or build the technology. The tribal community colleges have all realized this and are trying rapidly to address it, but they themselves lack the resources to build "state-of-the-art" training programs. Indian high schools have some of the highest dropout rates in the U.S., and of all U.S. racial minorities, Natives are the least likely, percentage wise, to complete four years of

higher education, let alone graduate or advanced work in engineering, computer science, or technical fields. Native schools often have the smallest number of per-capita computer terminals for Internet access of any schools in the nation. The local Cheyenne-Eagle Butte High School was painfully aware of this, and had just that year embarked on a large "crash" project to offer more Internet access to pupils. The entire community was agreed that training was the key - but outside of the schools who was going to offer it? What option was there for adults to gain computer literacy and training?

For these reasons, the CRST tribal chairman had decided that building a computer training center on the reservation had to be a foremost priority. It also became one of my highest priorities while working for the tribe's Management and Information Systems (MIS) department. Both while working for MIS, and before and after, I made it one of my chief priorities to give open computer training presentations and workshops where I explained to Indian people such things as how to use the Internet, computer operating systems, or Microsoft software. The CRST Telephone Authority was trying to set up a computer training center for its own employees, which would also serve as the first hub of their proposed expansion into data processing and Internet services. The goal of the tribal administration was to set up a more open computer training center which would primarily help train tribal employees in all departments and divisions,

but also would be, on a more limited basis, open to all tribal members. For reasons which I will not dwell on here, that training center was never completed before I left the reservation in 1998, but I still gave my trainings in several provisional locations, such as the Eagle Center Vocational Education Building and the CRCC computer center.

The "training gap" seems insurmountable, but it is not. AISES reports that many companies are starting to realize that Indians are excellent computer programmers. They seem to be able to synthesize information quickly. They are able to visualize information dynamically. They seem able to adapt to new circumstances in the "information environment" quickly. At some point, they suggest, computer companies are going to realize this and help finance training centers in "Indian country." For many reasons that have been discussed elsewhere in this study, natives have the capacity to outperform others on the electronic frontier. They only need to be given the tools to do that.

Technology and Indigenous Identity

Although proponents of the idea of 'technological assimilation' make a number of arguments concerning the negative effects of television and electronic media on indigenous peoples, many of these arguments can be refuted. Often, people will state that once indigenous people use new technology, they are no longer "Indian" anymore. Similar

arguments are often made over subsistence technology. People will claim that once the Makah begin whaling with mechanical harpoons and motorboats instead of traditional canoes, they are no longer "true" Makah Indians; or if the Lakota Sioux use a mechanical bison-processing plant to 'farm' and raise bison, they are no longer "true" Sioux. But this assumes that cultural identity is based on some kind of technological toolkit, rather than a series of beliefs, social structures, and practices for survival. Do we consider our own identities to be rooted in merely what things we use?

So, are indigenous people who use video cameras any less "Indian" than their counterparts? The answer is no, and the idea that they are seems to be rooted in peoples' deep-seated notion that indigenous people are somehow rooted in a romantic or idyllic pre-technological state of 'nature'. That is why indigenous people often appear in "natural history" museums, naked, without tools. But new understandings of indigenous people show that they have long pursued a strategy of technological adaptation - borrowing tools from enemies and allies, neighbors and conquerors, in their struggle to survive. New media technologies do not represent a "dilution" of their identity, but rather a reaffirmation of it through adaptation to new circumstances (Taylor 1994).

Another argument often made for the idea that electronic media are a threat to indigenous peoples is the

claim that they give up their traditional customs, rituals, and practices in favor of the new technology. However, my research with the Lakota Sioux showed that this was not the case. People who used new media technologies did not necessarily participate in fewer Lakota cultural activities, or have less familiarity with the Lakota language or knowledge of their own history. In short, there was no evidence I could find which suggested that Lakota who had more technological items in their home, or watched more television than their peers, showed any evidence of being any more 'acculturated' to Western norms and behaviors. While there was plenty of evidence for acculturation, much of it seems to date from far earlier periods of culture contact, and it did not seem to be rooted in television or media technology.

Anthropological research (primarily time allocation studies) has shown that people do not necessarily give up older, more traditional activities in favor of new ones. People who are heavy readers do not give up leisure reading when they buy a television; in fact, they usually find creative ways to combine both activities 'multi-modally.' In fact, new technology often provides them with a new impetus to pursue old activities. Today's 'traditional' Indian powwows would not be possible without amplified sound, auto highways, and lighting, which makes it possible for a large number of people to attend and an even greater number of

people to participate later into the night. Likewise, new animal slaughtering and processing technology has made it possible for the Indians to revive their own bison herd and profit from it commercially.

A third argument for the "assimilationist" position is the idea that electronic media will undermine the strong "oral" character of indigenous societies. As preliterate cultures, many indigenous groups are rooted in a strong 'tribal' identity based on charismatic authority, oral traditions, and face-to-face forms of participatory democracy. People feel that new media technologies, such as print or television, are threats to the more immediate and direct character of Indian societies. If knowledge is no longer transmitted orally through the generations, then that knowledge will be lost. If ceremonies and oral histories are recorded through videotape, they will not be passed on with fidelity and accuracy to the next generation.

Once again, this position fails to understand that indigenous cultures always recreate their own traditions from epoch to epoch, to meet the changing needs of their historical situation. Further, it assumes that electronic media are incompatible with 'orality' or the right-brained nature of indigenous thought. However, as Ong, a fellow-traveller with Marshall McLuhan, once argued (1982), the electronic media create a sort of 'secondary orality' which brings some of the earliest tribal characteristics of

humankind to the forefront for a second "replay." If this is the case, surely they must be compatible with indigenous oral societies; in fact, such cultures might excel in using them effectively, maybe even more effectively than print-based civilizations could.

Video recordings of traditional ceremonies do not supplant the oral traditions of indigenous cultures any more than writing down accounts of those ceremonies. Both are valid efforts at cultural preservation. Indeed, many Indian elders think that putting indigenous knowledge on television may be the only way to get their own indigenous youth interested in it, since boarding schools and other factors have often severed the intrinsic intra-generational link, and many elderly speakers of indigenous languages or practitioners of traditional medicine are dying off. Some sacred rituals will always remain "off limits" for recording of any kind, but others do not have their value or importance diminished by recording them.

The Maya in Chiapas, as another example, have learned how to use the media to call attention to their plight (especially the underdevelopment of their region and their confrontations with the military) and their struggle against the PRI-dominated Mexican government. Indeed, many commentators have noted just how media-driven their struggle against the Mexican authorities is. The Maya Zapatistas know they will not triumph in their fight without enlisting the

help of international allies, so through the fax machine, shortwave radio, and the Internet, they send their "communiques" to a global audience who in return sends them donations of money and other assistance (Castelis-Talens, 1994.) Media technology has become essential for indigenous groups who have long been ignored by the dominant governments of their colonizers. It becomes a tool for the reassertion of identity in the face of colonial governments that seek to erase it.

It has become fashionable for many authors, following the 'cyborg anthropologist' Haraway, to characterize various subaltern ethnic groups as 'hybrids' or 'cyborgs' (border-crossing Hispanics in the U.S., etc.) Haraway argues that the advantage of the cyborg identity is that it moves people away from Eden and other origin myths, because cyborgs are not divinely created, they are assembled and combined from organic and technological components. However, if there is any group that in many ways seems to represent the outcome of a process of assumption of 'cyborg' identity, it is probably Native Americans such as the CRST Lakota. The archetypal cyborg, such as *Robocop*, maintains some aspects of his essential "naturalness" and biological humanity within the shell of a mechanical body that amplifies his physical abilities. He never really loses that things that keep him human, rooted in nature and humanity's social needs.

This seems to be the case of the Lakota. Although outwardly they have been transformed in many ways, and have fastened many technological appendages to their culture, within their society still seems to exist deep-rooted linkages to the natural world and to traditional ideas of the place of humanity within nature. The grafting of technology onto their society has not stopped the Indian heart within the 'cyborg body' from beating. Some anthropologists have suggested there is a long history of masquerade among Native people in the Americas - such as the Andean Indians who dress up as white conquistadores and churchmen during festival processions, or the various syncretic religious cults in Mexico that placed Native powers and deities behind the masks of Catholic saints. Researchers should not be so quick to assume that the Indian wearing a new mask is no longer an Indian.

Research on other cultures demonstrates that technology often enables various kinds of identity transformation. It has in our own society, as I have documented elsewhere. However, we should not assume that that process of change is also necessarily the *loss* of identity. This is only the case if that identity is a fixed object, something that anthropology should hopefully no longer accept based on what we know about ethnic fluidity and change. In applied anthropology, we often recognize that our first and greatest responsibility is to our 'clients' - in 'salvage'

and other anthropology we often assume the guise of defenders of their cultural survival as a group with a unique identity. Which is fine, as long as we do not forget that identities can be unique and still evolve. And that some of the agency behind identity transformation is sometimes the choices of people themselves, outside of any external intervention from technology or anything else.

CHAPTER 6
CONCLUSIONS AND DISCUSSION

Conclusions

This research study involves several elements of ongoing interest to visual anthropology, Native American anthropology, applied anthropology, and the anthropology of science, technology, and computing. The conclusions from it branch into areas of anthropological praxis, theory, methods, and focus. From my field research, Internet research, scholarly review, and reflections, I believe I can point to the following general conclusions:

1. Technology, and specifically, television, video, computers, multimedia, and other "emerging media" technologies, are not the most significant cause of acculturation on the CRST reservation. Although these findings are not necessarily generalizable to other Indian communities, or indigenous groups worldwide, I believe that conditions similar to the CRST reservation exist elsewhere, and thus the socio-cultural processes are likely to be the same; thus, one can expect that technology is not the major cause of acculturation in most cases, and my Internet research supports this assertion.
2. The "emerging media" technologies are playing a central role in the current phase of cultural revival which has been occurring on the CRST reservation and elsewhere since the 1960s. Thus, in some cases, some technologies - 'emerging media' technologies - actually become tools of resistance to acculturation.

Indeed, it can be argued that without these technologies, this revival would not have been as successful as it has been so far. Therefore, "emerging media" such as television may not be a threat to the Lakota and other indigenous groups so much as it is a boon.

3. The role of whether or not technology serves as a force for acculturation or cultural revival, greater autonomy or political subjugation, social development or stagnation, depends on the local degree of control over the technology. The CRST reservation, and the HVJ Lakota Cultural Center in particular, have been successful in their cultural revival programme because of their insistence on training tribal members in how to operate, understand, and use technology.
4. In developing theories about technology and cultural change, cultural anthropologists should play greater role to the elements of agency and action. Technologies are selected, repurposed, rejected, and transformed based on local context and local needs. Technology does not act as a monolithic force for cultural assimilation and absorption by colonial, imperial, or dominating cultures. Technology and culture are mutually influencing systems; one does not strictly determine the other.
5. Applied anthropologists concerned with the social, cultural, economic, political, spiritual, and physical health of native communities should play a role in helping those communities acquire and understand new technologies, especially "emerging media" technologies. The best role for anthropologists in many cases may be acting as a 'broker' to help those technologies fit into the local context and provide local people with the skills to understand and use them.

Herein, I will attempt to discuss these conclusions one by one.

Technology and Acculturation

If the "cultural imperialism" thesis were correct, we could expect that Lakota television viewers would be influenced by television shows, especially those that promulgate alien cultural values, denigrate their heritage, and display the apparent 'superiority' of European-American ways of life. If they accepted these messages from television programming, then we could expect that the level of television exposure among people on the CRST would predict whether people were likely to reject their own way of life. However, there was no connection between either the level of television viewing (hours per week) or the length of television ownership, and the degree to which people use (or disuse) the Lakota language, participate in traditional customs or ceremonies, know their own history, or accept Lakota norms and values.

This suggests, as some theorists of televiewing have suggested, that television viewers do not simply accept blindly the messages projected on the screen. Indeed, when those messages are antithetical to pre-existing beliefs or preconceptions, they tend to be rejected or reinterpreted. Images and scenarios that are seen as contrary to cultural expectations are simply critiqued and ridiculed, even pointed to as a didactic negative device. Alternatively, people

simply treat the television characterizations as "pure entertainment," rather than showing behaviors that should in any way be imitated or otherwise reacted to. When they denigrate their own way of life (as is the case with many 'native' sports mascots for professional sports teams), they actually see it as a "call to arms" to defend it against such insults.

The only evidence where I saw television shows causing acculturation was among native youth. Television seemed to be the main influence for the fashion and other elements that young people adopted in order to demonstrate their "gang lifestyle," although there was no evidence that it was a causative agent for making kids join gangs. However, children and adolescents of all ethnic groups are said to be uniquely vulnerable to television messages, largely because they lack the reality discrimination faculties or 'media literacy' of adults. More so than adults, children turn to television for role modelling, and they see black 'gangsta rappers' on MTV talking about the glories of the gang lifestyle, while living in circumstances of urban poverty that are not entirely dissimilar from the rural reservation conditions they live under. The messages of "fighting the Man" carried by black rap make sense to Indian kids as well, and they see this as an image of 'cool' that they can relate to, lacking, in many cases, Indian role models on the screen.

If Mander were correct, we would assume that other technologies besides television would contribute to the acculturation phenomenon. If all modes of information technology represent a "megatechnology" encroaching on the indigenous ways of life, we could also expect to find that as people have more and more of those technologies, they would be more acculturated - less likely to know and speak their own language or practice their own indigenous culture as well. However, we do not find this to be the case, and through surveys, it was also determined that there is no correlation between the amount of technology a Lakota individual has in their home or their usage of the Internet and their level of acculturation. Despite concerns that many cultures (such as Iran or China) have over the Internet "overwhelming" their own cultural values, it does not seem to be doing this on the Cheyenne River Reservation.

While the population of the reservation is quite acculturated to European-American lifeways, this is in large a prior condition that has resulted from more than a century of cultural contact, deliberate policies by the U.S. government of assimilation or "culturicide," and socioeconomic conditions that have forced Indians off reservations in search of work elsewhere. The technological systems on the reservation cannot be seen as a "colonization" from outside because the native people brought them in of their own volition, and also have transformed and adapted

them for their own situations and circumstances. This is not "false consciousness" with regard to technology but actually the continuation of a pattern found among many North American indigenous societies since the initial period of colonization.

Technology and Cultural Revival

Throughout the archaeological record, and in contemporary studies of development and cultural change, we recognize that the independent invention of a new technology, particularly with regards to food production, transportation, or communication, enabled the expansion of a particular civilization. Why is it, then, that we cannot recognize similar processes at work when cultures borrow or appropriate technologies from other societies? When archaeologists discover a particular material culture "horizon" migrates in space and time, it is often assumed that this represents some sort of cultural 'imperialism' or conquest. The alternative, either that of direct diffusion of the technology to other cultures, or indirect copying (appropriation), is sometimes not considered. But ancient people had different ideas of intellectual property than ours. Inventions were not thought to be the "property" of an individual or a society. Further, they probably recognized (more so than us) that every

invention always involves some degree of appropriation of the ideas and accomplishments of others, a point often hammered home in the James Burke PBS series *Connections*.

Although it is not the only factor that has contributed to the ethnic/cultural revival of Native Americans in the last three decades (changes in political outlook of the federal government, the growth of other 'identity politics' movements within the U.S., and poverty and desperation have certainly all played a role), technology seems to have been one of the major ones which made it possible, and in particular, electronic or 'emerging' media technologies. Like the Lakota, other native nations have decided to use modern technologies to more efficiently reproduce older (and perhaps more sustainable) modes of subsistence - such as the Lummi Indians' aquaculture program, or the Eskimos' use of snowmobiles for arctic hunting, or the Makah Indians' use of harpoons and motor boats for whaling. People concerned with abstract, idealistic notions of cultural purity might see these as somehow "diminutions" of cultural identity, but instead they represent realistic ways to continue cultural practices within the framework of the modern world-system.

Like other groups I have studied (computer hackers, for example), many indigenous people see technology not as a colonizing alien force but instead a means for providing *autonomy*. Although initial interest in 'emerging media'

technology focused on their uses for cultural preservation, there is a growing awareness that they are instead tools for cultural renewal and *resistance*. Places like the HVJ Lakota Cultural Center are attempting to document oral histories of Indian people not just so they can have a recorded past, but so that there can be lessons for the youth in the future, and so that political disputes in the present (such as the status of the Black Hills) can be affected. Their radio programs on KLND radio often deal with public issues on the reservation, mobilizing people to take action on the issues that affect them. Media technology, in the format of major motion pictures such as *Dances with Wolves*, may have done more to change public perceptions of native people in the U.S. than anything else.

Older generations of anthropologists recognized the relationship between community, *communication*, and culture or civilization. The spread of communication makes the growth of civilization possible. The collapse of communication is often a primary ingredient in the death of other civilizations. The indigenous people of North America were always innovative with regards to the development of new modes of communication (sign language, fire arrows, and smoke signals are just some examples.) And today, through communications satellites and electron guns, they are developing a new mode of communication, one that has potential global reach. In this sense, the scope of

indigenous civilization is greater than it ever was before. Indigenous people see the camera, as Monica Frota describes it (1996), as a *weapon*, their means to document themselves as a living, surviving, evolving reality, not a disappearing relic. It gives them a tool to act on the global stage, where so much economic and political power is now exercised.

The growth of 'native media' or indigenous filmmaking has allowed the growth and development of Ginsburg's "indigenous aesthetic." The aesthetic sense of indigenous cultures has been given a new impetus through the introduction of new materials in the past (such as the introduction of beadwork into native Plains craftwork in the 19th century), and so it is today. Indigenous filmmaking is not some alienated distortion of native aesthetics, as Weiner (1997) and others seem to suggest, but instead the culmination of traditions of visual representation through other, less dynamic, media. But it may be in the changeable electronic realm, rather than in the static world of printed text, that the oral cultures of native people may be able to best articulate their voice to the largest possible audience. They may be better prepared to take advantage of the electronic frontier than we are, and so on this frontier the winner of cowboys vs. Indians may be harder to call.

Local Control over Technology

Today at the turn of the millennium, the Inuit and Metis people of Canada are prepared to launch a national satellite television network that will reach thousands of native people in Canada and countless other non-Indians, carrying Inuit language and culture programming to many people. The Aboriginal Peoples' Television Network will offer an alternative to the mainstream white Canadian media. While other cultures have attempted to stem perceived 'cultural imperialism' through the rejection of technology (such as Iran's ban on satellite dishes, China's attempt to restrict Internet access, or France's import restrictions on American films and television shows), the Inuit have realized that the problem was not the technology in itself but their own lack of access and control over it. Instead of being in the hands of local people, television programs were produced in distant studios located hundreds of miles away from where they were being watched. People were not able to see their own local reality on the screen.

If we want to understand whether a culture were be strengthened or weakened by the introduction of a new technology, or whether it will cause acculturation or promote cultural revival, we need to ask questions such as: does it fit in their local context? Does it fit with other elements

of their culture? Are they actively seeking to incorporate the technology or is it being forced on them from outside? Is the technology easy to disassemble and understand or is it opaque and confusing? Is it too expensive or resource-intensive to fit into a small-scale society? Are local people actively interested in mastering and using the technology? These conditions will help shape the outcomes of the situation. Technology does not assimilate people; where possible, people assimilate technology.

Development anthropologists have documented cases where the introduction of new technology into indigenous communities (such as new plant varieties during the Green Revolution) has led to dramatic failures and even diminished quality of life. However, in many cases, it was because these technologies were inappropriate for the local ecology or cultural context, or because people were never trained to use and maintain them without outside assistance. This has led to the new orientation toward *participatory development*, with the recognition that a more collaborative approach, and the *appropriate technology* movement, which attempts to minimize the ecological effects and maximize the sustainable usage of new technologies (like the solar cooking ovens of Bangladesh). Participatory development works because people are able to reorient technology for the ends they find to be important, not those the anthropologist has already chosen.

In the last 20 years, the way in which media have been distributed is changing. Originally, the nature of broadcasting technology required a centralized, top-down distribution system of words and images. Major motion picture studios released films which were then shown in theatres throughout the country. National television studios released TV programming which was then broadcast by local affiliates. Large recording companies released musical recordings that were then played by large high-power stations all over the country. But today, technologies like public-access cable, low-power FM microbroadcasting, cheap consumer video cameras and VCRs, Internet streaming media, and desktop publishing make media production available to everybody, not just large multinational media corporations. This is occurring precisely even as the major broadcast outlets are being centralized under the corporate control of an ever-diminishing number of media companies.

Thus, when Mander asserts that media technology are too expensive or complex for indigenous people to use for their own purposes, he ignores the developments that have occurred in that technological field, because he ignores the social forces driving those developments. He also seems to be associating indigenous people with some pre-technological "state of nature" and underestimating their adaptability, as well as ignoring their 400 year history of taking European technology and putting it toward their own objectives. He

fails to recognize that one of the key parameters of communications and information technologies is that they are *reprogrammable* . They can quickly be adapted for new functions. The same video camera used for police surveillance can also be used to monitor police brutality. People are only threatened by technology when they cannot control it.

Technology and Agency Theory

We need to be cautious of 'cultural imperialism' theory and all species of technological determinism theories where technology is treated as the active, independent variable, and people's behavior as the dependent variable. We are too conditioned to thinking of technology as a concrete *thing*, a physical object. But really it is a social *process* which is the outcome of cultural *knowledge* of scientific laws and other processes of nature. Further, not everyone always uses the same technologies in the same way. The ways in which technology is *used* vary from culture to culture; Eskimos do not use snowmobiles for the same purposes we do, and Navajos, as Worth and Adair found out, do not always use cameras for the same objectives either. Since this is the case, how can technologies always have the same effects? Anthropologists need to pay more attention to the concrete ways in which technologies are used.

Thus, in looking at television, Kottak and his fellow researchers found that the way people reacted to TV in remote Brazilian communities depended on how long it was in their possession. When TV was first introduced, it was a novelty. Not very many people owned one and so people would frequently come over to visit the homes of people who owned one. Also, people were mesmerized by the *telenovelas* because they were new and unfamiliar. TV programs were "foregrounded" in people's attention. But as time went by and more people owned sets and had more experience with TV programming, the set became "background" to other things in everyday life. People no longer paid as much attention to it. They started watching fewer shows, and TV watching became less of an "event" and more of an occasional background distraction to other activities, such as cooking, cleaning, or socializing.

It is a false truism that technology is a neutral tool that can be put to *any* use, good or evil. Technologies are designed for certain outcomes. They contain within their design certain implicit assumptions about how they are to be used, and even assumptions about the nature of gender hierarchies and other social relationships. Engineers and inventors exist within a cultural context. Bombs do not heal people. However, technologies can be redesigned and they can be redeployed. The same explosive power that lies within a bomb can also be harnessed by a rocket nozzle to send a spaceship to the stars. What happens to technologies *after*

they are invented and in peoples' hands often surprises the engineers. Back in the 1950s, IBM and Hewlett-Packard thought no one would ever want a computer in their own home. But this was before the era of the microchip, and before Steve Jobs realized just how much demand there was for something like that out there.

Although some scholars have said that agency theory is an 'unscientific' theory in that it seems to bring back into anthropology some kind of mystical "free will," the simple fact is that saying that people have agency does not make their actions unpredictable. The choices they have are limited by a variety of constraints, but to understand the choices they make as active agents, we need to look at all those possible constraints - not just focus on one (such as technology) as the key determinant. Agency theory focuses on human beings as active agents who seek to pursue their needs and desires, not merely as passive 'victims' of external forces, whether they be TV messages or economic forces. It suggests that they do not take the world as a given, but seek to reinterpret in a way that gives meaning to them as individuals and as members of a culture.

One white person watching the TV show "Amos N' Andy" might conclude that blacks are in fact lovable but stupid buffoons with no language skills. Another might conclude it is yet another example of exploitation of ethnic minorities. One black person watching that show might feel embarrassed by

their own identity, and another might feel emboldened to go to a black consciousness meeting. The point is that the TV as a device, or the show itself, are not simple causative agents. Every user/viewer brings a certain degree of prior experiences, values, education, and orientations toward it, and thus has a slightly different reaction. In understanding how people react to technology, we need to understand what knowledge and beliefs they bring toward using it.

Applied Anthropologists as Technology Brokers

There has been much hand-wringing over the sins of the anthropological past with regard to Native Americans. Whether blasted by Vine Deloria for appropriating knowledge from Indian communities without ever giving anything back, or lambasted by our own for complicity in colonialism and assimilation policies, anthropologists have felt the need to make as many notable public *mea culpas* as possible. There has been an anguished search for continued 'relevance' in a world where non-Indian people seem unwilling to learn anything new about indigenous people (since all the great ethnographies have already been done - right? - and there's nothing new under the sun), and Indian people greet our presence with growing hostility and indifference. Some anthropologists have responded by suggesting we should give

up on studying the powerless of the world, and instead turn to "study up" the powerful - technoscientists and other elites - or just study our own ethnic cliques, doing "native anthropology" among, say, the Jewish cognoscenti of New Jersey. What relevance has ethnographic filmmaking anymore when the 'natives' are already filming themselves?

Native people, of course, complain that they have been studied to death, with mounds of data being compiled for every Red soul in every nook and cranny of the continent. Yet, from all these mounds of data, they've seen little improvement in their living conditions. So, some applied anthropologists have suggested that if there is any continued relevance for cultural anthropological work with indigenous people, it has to be through a client/collaboration model. The anthropologist must be invited by the client (the tribe) to gather some data that *they* need (whether for a land claim, an enrollment dispute, the location of a lost item, etc.) and must work *with* and for tribal officials. While this is a fine model, many white anthropologists may be sitting on their arses for a long time waiting for an invitation. Instead, we should be offering our services as cultural brokers (which is what we have always been all along.) We can help tribes obtain the technology they need and the training they require to use it.

Applied anthropologists can function as technological 'conduits' from the urban centres where they often live to

the often rural, frequently isolated Indian reservations of North America. This is not like the old, often imperialistic strategy of the modernization anthropology of the 1950s. Instead of shoving technology down peoples' throats, anthropologists can help them get the technology they want and need. In return for the precious anthropological data we seek, we can offer technological assistance as recompensation. Indigenous people may detest the values of our culture, but they do appreciate its technology. Applied anthropologists do not always have a great deal of training in computers and other technologies, but they also often have easier access to that training. Surplus computers are often available on numerous university campuses, as are numerous software training courses. This is giving people the tools they want and need to change their lives, not a preplanned intervention to alter their way of life.

We can assist cultural resource management and language renewal efforts, but ultimately unless we are also 'natives,' we should recognize that *they* are the experts vis-à-vis their culture. We can analyze it, model it, quantify it, put it into the HRAF to help discover covering laws. But we did not grow up in their culture and we are not part of their heritage. The best way we can help them renew it is to give them the technological "weapons" they need for their arsenal. We often know the places to go to seek grants and other financial assistance because we do so for our own

research. As collaborators with them, we can help them go out and obtain the economic resources and the technology transfer that they need from the majority society. This role helps us give something back, while giving us a new and unique vantage point for 'participant' observation.

A *relevant* applied anthropology for the 21st century would not seek to 'salvage' or offer 'salvation' for 'pristine' indigenous cultures by 'protecting' them from technology on isolated preserves. It would assist indigenous people not just to preserve their culture like a frozen relic but also to recreate it in the present as a dynamic reality. It would attempt to integrate technology into their lives on their terms, rather than terms imposed by outsiders. Instead of treating them as Others to be known or controlled, they can become People to be helped. They have initiated this cultural renewal process; now they need our help. Are we willing to give it?

Future Studies

This dissertation represents only a case study of one particular interaction between technology and culture among indigenous peoples. Although there has been some examination of 'emerging media' interactions with cultural change among other indigenous groups, cited in the literature review,

there are numerous indigenous encounters with television and other technologies that have not been documented. There could be several more intervening factors that determine the vector of technological introductions into indigenous societies. We can expect different phenomena to emerge eventually among the Brazilian Xingu and Kayapo, the Australian Aborigines, the Canadian Inuit and Metis, the Mexican Maya, and the U.S. Lakota. Each lives under the aegis of different majority societies and national governments, and thus has different television regimes to deal with. Public access to the airwaves is more open in Canada than it is in the U.S.

The case of one "white crow," the Cheyenne River Sioux Tribe, has been put forward as a falsification to the general principle that "all crows are black", or, as Mander might put it, that technology always leads to the acculturation of indigenous people. However, more research needs to be done with other indigenous societies to see if there are more black crows out there than white. Perhaps the CRST is an isolated case, and technology has acculturative effects in almost every other situation. Or maybe there are a handful of black crows out there, and due to "reporting error," Mander and other anti-technology Luddites have focused on them to the exclusion of the largely white crow population. Whichever the case may be, we need to know the intervening variables between technology and acculturation effects. I believe the evidence here shows the key variable

may be local familiarity and control over the technology, but it may not be the only one to influence outcomes.

Perhaps other factors, such as the length of time contact has existed between the indigenous group and the colonizing society, whether or not the indigenous group has a prior written literature, how much history the indigenous group has had in acclimatizing diffusion from other nearby societies, how oriented national government policy has been toward promoting 'culturicide,' how long members of the indigenous group have been educated within the non-indigenous world, etc. all play a role. Looking at other case studies, or perhaps the launching of a wide-scale cross-cultural study that encompasses several cases, could help answer these questions. For too long, anthropologists have been crying "globalization!" without looking at what's really going on on the ground, which is contrary to our intellectual history and tradition, and we need to start examining that process as a two-way street.

Future longitudinal studies might also answer whether or not technology successfully contributes to cultural revitalization. Perhaps the Luddites are right, and technology proves to be too expensive or unwieldy to make a significant contribution. Maybe the 'Y2K' bug shuts down reservations across the Americas or some other massive technological failure causes them to abandon that path. As one person once asked me, "They can put this stuff on the

air, but will people watch?" Indigenous people might be offered programs focusing on their own language and culture as an alternative to Melrose Place and the *telenovelas*, but people might stick to the soap operas with their slicker commercial production values. Low-cost public access programs in the U.S. started by other minority groups have not commanded the viewers and attention that the slicker corporate "B.E.T." (Black Entertainment Television) network has. Looking at these changes over the long-term can answer these questions as well.

There is evidence out there that the "post-industrial moment" (for lack of a better term) offers a unique opportunity for indigenous groups to heighten their presence on the global stage. There are dramatic changes occurring in the world, and some scholars believe that a technological revolution is going on, while others deny it. Some, like Ong, think that the electronic media have brought about a resurrection of humankind's earlier tribal consciousness. Humanity's desire for recognition (and validation of identity through the electronic screen) has finally exploded into full bloom. Looking at these changes in indigenous cultures may help give us a lens in comprehending these phenomena within our own civilization.

If these changes are going to be as dramatic as the industrial revolution (as some people think), now is a good

time to start understanding what they are going to be. So more research is desperately needed.



Figure 51. Never stop questioning

REFERENCES

- Adair, John Worth, Sol
 1972 Through Navajo Eyes: an exploration in film communication and anthropology. Bloomington: Indiana University Press.
- Amiotte, Arthur
 1992 The Call to Remember (Lakota storytelling - the oral tradition). Parabola 17(3):29(6).
- Appadurai, Arjun
 1996 Modernity at Large: cultural dimensions of globalization. Minneapolis: University of Minnesota Press.
- Ayoungman, Vivian
 1995 Native Language Renewal: dispelling the myths, planning for the future. Bilingual Research Journal 19(1):183(5).
- Basso, Keith
 1979 Portraits of the 'Whiteman': joking and linguistic play among the western Apache. New York: Cambridge University Press.
- Baudrillard, Jean
 1994 Simulacra and Simulation. Ann Arbor: University of Michigan Press.
- Bell, Daniel
 1973 The Coming of Post-Industrial Society: a venture in social forecasting. New York: Basic Books.
- Benedict, Ruth
 1934 Patterns of Culture. Boston: Houghton-Mifflin.
- Berkhofer, Robert F., Jr.
 1978 The White Man's Indian: images of the American Indian from Columbus to the present. New York: Vintage Books.
- Bernard, H. Russell Pelto, Pertti J., ed.

- 1987 Technology and Social Change. Prospect Heights:
Waveland Press.
- Bianculli, David
1992 Teleliteracy: taking television seriously. New
York: Continuum Publishing.
- Biolsi, Thomas
1995 The Birth of the Reservation: the making of the
modern individual among the Lakota. American Ethnologist
22(1):28(26).
- 1997 Indians and Anthropologists: Vine Deloria Jr. and
the critique of anthropology. Tucson: University of
Arizona Press.
- Bodley, John H.
1982 Victims of Progress. Palo Alto: Mayfield
Publishing.
- Brady Consultants, Inc.
1973 Cheyenne River Sioux Comprehensive Planning
Program. Spearfish: Brady.
- Brandt, Elizabeth
1988 Applied Linguistic Anthropology and American Indian
Language Renewal. Human Organization 47(4):322(8).
- Browne, Donald R.
1996 A Voice of our Own?: electronic media and
indigenous peoples. Ames: Iowa University Press.
- Burns, Allan
1993 Maya in Exile: Guatemalans in Florida.
Philadelphia: Temple University Press.
- Carpenter, Edmund
1973 Oh What a Blow that Phantom Gave Me! New York:
Bantam Books.
- Carragee, Kevin M.
1990 Interpretative Media Study and Interpretive Social
Science (reading recent revisionism). Critical Studies in
Mass Communication 7(2):81(16).
- Castelis-Talens, Antonio
1994 Indigenous Radio in Mexico: XEPET, one voice of the
Maya in the Yucatan. M.A. Thesis, Anthropology,
University of Florida.
- Castells, Manuel

- 1996 The Rise of the Network Society. Cambridge: Blackwell Publishing.
- Champagne, Duane
1989 American Indian Societies: strategies and conditions of political and cultural survival. Cambridge: Cultural Survival.
- Churchill, Ward
1992 Fantasies of the Master Race: literature, cinema, and the colonization of the American Indian. Monroe: Common Courage Press.
- Cisler, Steve
1998 The Internet and Indigenous Groups. In Cultural Survival, Vol. URL: <http://www.cs.org>
- Clark, Norman
1990 Development Policy, Technology Assessment, and the New Technologies. Futures Journal 22(9):913(19).
- Cutcliffe, Stephen, ed.
1992 New Worlds, New Technologies, New Issues. Bethlehem: Lehigh University Press.
- Debord, Guy
1973 Society of the Spectacle. Detroit: Black & Red.
- Deloria, Ella C.
1994 The Buffalo People. Albuquerque: University of New Mexico Press.
- Deloria, Vine Jr.
1995 Red Earth, White Lies: Native Americans and the myth of scientific fact. New York: Scribner.
- Densmore, Frances
1992 Teton Sioux Music and Culture. Lincoln: University of Nebraska Press.
- Ducatel, Ken
1992 Internationalization of Information Technology Services and Public Policy Implications. Journal of World Development 20(12):1843(14).
- Dunn, Martin
1971 Red on White: the Biography of Duke Redbird. Toronto: New Press.
- Eglash, Ron
1997 Native American Ethnomathematics and Information Coding: personal communication.

- 1999 African Fractals: modern computing and indigenous design. New Brunswick: Rutgers University Press.
- Elkington, John
1988 The Shrinking Planet: U.S. information technology and sustainable development. New York: World Resources Institute.
- Escobar, Arturo
1998 Cultures of Politics/Politics of Cultures: revisioning Latin American social movements. Boulder: Westview Press.
- Fenelon, James
1998 Culturicide, Resistance, and Survival of the Lakota Nation. New York: Garland Publishing.
- Finnegan, Ruth H.
1988 Literacy and Orality: studies in the technology of communication. Oxford: Blackwell.
- Fisher, William H.
1994 Megadevelopment, Environmentalism, and Resistance: the institutional context of Kayapo indigenous politics in Central Brazil. *Human Organization* 53(3):220(13).
- Fiske, John
1996 Media Matters: everyday culture and political change. Minneapolis: University of Minnesota Press.
- Foucault, Michel
1984 The Foucault Reader. New York: Pantheon Books.
- Freeman, Kate
1995 Ojibway, Mohawk, and Inukitut Alive and Well?: issues of identity, ownership, and change. *Bilingual Research Journal* 19(1):39(31).
- Frota, Monica
1996 Taking Aim: the video technology of cultural resistance. In *Resolutions: Contemporary Video Practices*. Minneapolis: University of Minnesota Press.
- Gauntlett, David
1995 Moving Experiences: understanding television's influences and effects. London: Libbey & Co., Ltd.
- Ghaffari-Farhangi, Seta
1998 The Era of Global Communications as Perceived by Moslems. *Gazette* 60(4):267(14).

- Giago, Tim
1984 Notes from Indian Country: Volume I. Pierre: State Publishing.
- Giddens, Anthony
1991 Modernity and Self-Identity: self and society in the late modern age. Stanford: Stanford University Press.
- Gilder, George
1992 Life After Television. New York: Paragon Press.
- Gillespie, Marie
1995 Television, Ethnicity, and Cultural Change. New York: Routledge.
- Ginsburg, Faye
1994 Embedded Aesthetics: creating a space for indigenous media. Cultural Anthropology 9(3):365(18).
- Goffman, Ervin
1959 The Presentation of Self in Everyday Life. Garden City: Doubleday.
- Golding, Peter, ed.
1997 Beyond Cultural Imperialism: globalization, communication, and the new international order. Thousand Oaks: Sage Publications.
- Goodman, Ron
1992 Lakota Star Knowledge: studies in Lakota stellar theology. Rosebud: Sinte Gleiska University.
- Goody, Jack
1977 The Domestication of the Savage Mind. Cambridge: Cambridge University Press.
- Graburn, Nelson H.
1982 Television and the Canadian Inuit. Etudes Inuit Studies 6(1):7(17).
- Granzberg, G.
1982 Television as Storyteller: the Algonquian Indians of central Canada. Journal of Communication 32(1):45(7).
- Greaves, Tom
1994 Intellectual Property Rights for Indigenous Peoples: a sourcebook. Oklahoma City: Society for Applied Anthropology.
- Grossberg, Lawrence
1998 MediaMaking: mass media in a popular culture. Thousand Oaks: Sage Publications.

- Habermas, Jurgen
1984 The Theory of Communicative Action. Boston: Beacon Press.
- Hakken, David
1993 Computing Myths, Class Realities: an ethnography of technology and working people in Sheffield, England. Boulder: Westview Press.
- Hamer, John Steinbring, Jack
1980 Alcohol and Native Peoples of the North. Lanham: University Press of America.
- Hanson, Janice
1990 New Communications Technologies in Developing Countries. Hillsdale: Lawrence Erlbaum Associates.
- Haraway, Donna
1991 Simians, Cyborgs, and Women: the reinvention of nature. London: Free Association.
- Harris, Marvin
1979 Cultural Materialism: the struggle for a science of culture. New York: Random House.
- Hillman, Roger, ed.
1995 Fields of Vision: essays in film studies, visual anthropology, and photography. Berkeley: University of California Press.
- Hofling, Charles Andrew
1996 Indigenous Linguistic Revitalization and Outsider Interaction: the Itzaj Maya case. Human Organization 55(1):108(7).
- Innis, Harold
1964 The Bias of Communication. Toronto: University of Toronto Press.
- Jahner, Elaine A.
1992 Transitional Narratives and Cultural Continuity: American Indian persistence and resurgence. Boundary 2 19(4):148(32).
- Jameson, Frederic, ed.
1998 The Cultures of Globalization. Durham: Duke University Press.
- Karlsson, Magnus, ed.

1995 The World's Largest Machine: global telecommunications and the human condition. Stockholm: Almqvist & Wiksell Intl.

Katz, Elihu

1997 Twenty Years of TV in Israel. Journal of Communication 47(2):3(18).

Keith, Michael C.

1995 Signals in the Air: native broadcasting in America. Westport: Praeger Publishing.

Kepplinger, Hans Mathias

1989 Content Analysis and Reception Analysis (new directions in TV news research). American Behavioral Scientist 33(2):175(8).

Kimbrell, Andrew

1993 The Human Body Shop: the engineering and marketing of life. San Francisco: HarperCollins.

Korten, David C.

1995 When Corporations Rule the World. San Francisco: Kumarian Press.

Korzenny, Felipe

1992 Mass Media Effects Across Cultures. Newbury Park: Sage Publications.

Kottak, Conrad

1991 Television's Impact on Values and Local Life in Brazil. Journal of Communication 14(1):70(18).

Kreiling, Albert

1989 The Chicago School and Community (media and community). Critical Studies in Mass Communication 6(3):317(5).

Laird, Christopher

1992 Culture Down the Tube: TV in the Carribean. Geographical Magazine 64(5):S13(3).

Leuthold, Steven

1994 An Indigenous Aesthetic? Two Noted Videographers: George Burdeau and Victor Masayeva Jr. Wicazo Sa Review 10(1):40(12).

1998 Indigenous Aesthetics: native art, media, and identity. Austin: University of Texas Press

Lewin, Leonard

1996 The Report from Iron Mountain: on the possibility and desirability of peace. New York: The Free Press.

Lewis, Peter, ed.

1993 Alternative Media: linking global and local. Paris: UNESCO.

Lincoln, Kenneth

1987 The Good Red Road: passages into Native America. San Francisco: Harper & Row.

Lull, James

1995 Media, Communication, and Culture: a global approach. Cambridge: Polity Press.

MacBride, Robert

1984 Many Voices, One World: the MacBride report on communication and society. Paris: UNESCO.

Mander, Jerry

1991 In the Absence of the Sacred: the failure of technology and the survival of the Indian nations. San Francisco: Sierra Club Books.

1996 The Case Against the Global Economy. San Francisco: Sierra Club Books.

Marc, David

1995 Bonfire of the Humanities: television, subliteracy, and long-term memory loss. Syracuse: Syracuse University Press.

Marcuse, Herbert

1964 One Dimensional Man: the ideology of advanced industrial societies. Boston: Beacon Press.

Marks, Laura

1994 Reconfigured Nationhood: a partisan history of the Inuit Broadcasting Corporation. *Afterimage* 21(8):4(5).

Marx, Leo

1964 The Machine in the Garden: technology and the pastoral ideal in America. New York: Oxford University Press.

Masayeva, Jeanne L.

1992 An Institutional Response to Language Endangerment: a proposal for a Native American Language Center. *Language* 68(1):24(5).

Maynard, Eileen

- 1969 That These People May live: conditions among the Oglala Sioux of the Pine Ridge reservation. Aberdeen: Indian Health Service.
- McAnany, Emile G.
1980 Communications in the Rural Third World: the role of information in development. New York: Praeger Publishers.
- McKibben, Bill
1992 The Age of Missing Information. New York: Random House.
- McLean, Adrienne L.
1998 Media Effects: M. McLuhan, TV culture, and the X-Files. Film Quarterly 51(4):2(10).
- McLuhan, Marshall
1988 Laws of Media: the new science. Toronto: University of Toronto Press.
- McLuhan, Marshall
1989 The Global Village: transformations in world life and media in the 21st century. New York: Oxford University Press.
- Meyrowitz, Joshua
1985 No Sense of Place: the impact of electronic media on social behavior. New York: Oxford University Press.
- Michaels, Eric
1994 Bad Aboriginal Art: tradition, media, and technological horizons. Minneapolis: University of Minnesota Press.
- Mitchell, Tony
1993 Treaty Now! Indigenous Music and Music Television in Australia. Media, Culture, and Society 15(2):199(10).
- Mody, Bella
1984 A Study of Third World Media in the San Francisco Bay Area: a final report. Stanford: Stanford Center for Chicano Research.
- Mohammadi, Ali, ed.
1997 International Communication and Globalization: a critical introduction. Thousand Oaks: Sage Publications.
- Molohon, K.T.
1981 Responses to Television in Two Swampy Cree Communities to the West. James Bay Kroeber Society Papers 63/4(1):95(8).

- Moore, John
1987 The Cheyenne Nation: a social and demographic history. Lincoln: University of Nebraska Press.
- Moran, Emilio F.
1996 Transforming Societies, Transforming Anthropology. Ann Arbor: University of Michigan Press.
- Morley, David
1995 Television: not so much a visual medium as a visual object. In: Jenks (ed.), Visual Culture, London: Routledge
- Nabhan, Gary
1989 Enduring Seeds: Native American agriculture and wild plant conservation. San Francisco: North Point Press.
- Naficy, Hamid
1993 The Making of Exile Cultures: Iranian television in Los Angeles. Minneapolis: University of Minnesota Press.
- Nagel, Joane
1996 American Indian Ethnic Renewal: Red Power and the resurgence of identity and culture. New York: Oxford University Press.
- Nagy, Hanna
1991 Informatics and the Developing World. Finance and Development 28(4):45(3).
- Oguibe, Olu
1996 Forsaken Geographies: Cyberspace, the Internet, and New World 'Others'. In URL:
<http://eng.hss.cmu.edu/internet/oguibe/>
- Ong, Walter J.
1982 Orality and Literacy: the technologizing of the word. New York: Methuen Press.
- OTA
1995 Telecommunications Technology and Native Americans: challenge and opportunities. Washington DC: Office of Technology Assessment.
- Pace, Richard
1993 First-Time Televiewing in Amazonia: television acculturation in Gurupa, Brazil. Ethnology 32(2):187(19).
- Palmer, Gary

1988 The Language and Culture Approach in the Coeur d'Alene Language Preservation Project. Human Organization 47(4):307(11).

PANOS

1995 The Internet and the South. In URL:
<http://www.oneworld.org/panos/>

Parenti, Michael

1986 Inventing Reality: the politics of the mass media.
New York: St. Martin's Press.

Paulston, Rolland G., ed.

1990 Other Dreams, Other Schools: folk colleges in ethnic and social movements. Pittsburgh: Center for International Studies.

Pool, Ithiel de Sola

1998 DBS and Cultural Integrity. Society 35(2):140(12).

Postman, Neil

1992 Technopoly: the surrender of culture to technology.
New York: Knopf.

Potter, W. James

1998 Media Literacy. Thousand Oaks: Sage Publications.

Premack, David, ed.

1995 Causal Cognition: a multidisciplinary debate. New York: Clarendon Press.

Press, Larry

1995 McLuhan Meets the Net. Communications of the ACM 38(7):15(6).

Price, Catherine

1994 Lakotas and Euroamericans: contrasting notions of 'chieftainship' and decisionmaking authority. Ethnohistory 41(3):447(37).

Prindle, Tara

1995 NativeTech. URL:<http://www.nativeweb.org/NativeTech/>

Reyhner, Jon

1995 Maintaining and Renewing Native Languages. Bilingual Research Journal 19(2):279(26).

Rheingold, Howard

1994 The Virtual Community: homesteading on the electronic frontier. New York: HarperPerennial.

Rice, Julian

- 1989 Lakota Storytelling. New York: P. Lang.
- Richstad, Jim
1977 Evolving Perspectives on the Right to Communicate.
Honolulu: East-West Center.
- Riggins, Stephen Harold, ed.
1992 Ethnic Minority Media: an international
perspective. Newbury Park: Sage Publications.
- Roach, Colleen
1997 Cultural Imperialism and Resistance in Media
Theory. Media, Culture, and Society 19(1):47(20).
- Ross, Andrew
1994 Microphone Fiends: youth music and youth culture.
New York: Routledge.
- Russell, George
1997 American Indian Facts of Life: a profile of today's
tribes and reservations. Phoenix: Russell Publications.
- Sahlins, Marshall
1972 Stone Age Economics. Chicago: Aldine-Atherton.
- Sale, Kirkpatrick
1995 Rebels Against the Future: the Luddites and their
lessons for the computer age. Reading: Addison-Wesley.
- Salwen, Michael
1991 Cultural Imperialism: a media effects approach.
Critical Studies in Mass Communication 8(1):29(10).
- Sanders, Barry
1994 A is for Ox: violence, electronic media, and the
silencing of the written word. New York: Pantheon Books.
- Sardar, Ziauddin
1993 Paper, Printing, Compact Discs: the making and
unmaking of Islamic culture. Media, Culture, and Society
16(1):43(17).
- Schensul, Jean
1987 Collaborative Research and Social Change. Boulder:
Westview Press.
- Scheunemann, Dietrich, ed.
1996 Orality, Literacy, and Modern Media. Columbia:
Camden House.
- Schiller, Herbert I.

- 1992 Mass Communications and American Empire. Boulder: Westview Press.
- Sharp, Lauriston.
1952 Steel Axes for Stone Age Peoples. In: Spicer(ed.), Human Problems in Technological Change. New York: Sage
- Slade, Joseph W.
1989 Public Broadcasting in Finland. Journal of Broadcasting and Electronic Media 33(4):355(18).
- Slouka, Mark
1995 War of the Worlds: cyberspace and the high-tech assault on reality. New York: Basic Books.
- Smith, Bruce L.
1992 Native Radio Broadcasting in North America: an overview of systems in U.S. and Canada. Journal of Broadcasting and Electronic Media 36(2):183(11).
- Smyth, Rosaleen
1991 White Australia has a Black Past: promoting Aboriginal land rights through TV and video. Journal of Film, Radio, and Television 15(1):105(19).
- Soley, Lawrence
1998 Free Radio: electronic civil disobedience and the radio pirates. Boulder: Westview Press.
- Steinmetz, Paul
1990 Pipe, Bible, and Peyote among the Oglala Lakota: a study in religious identity. Knoxville: University of Tennessee Press.
- Sterling, Bruce
1992 The Hacker Crackdown: law and disorder on the electronic frontier. New York: Bantam Books.
- Stevenson, Nick
1995 Understanding Media Cultures: social theory and mass communication. London: Sage Publications.
- Steward, Julian
1963 Theory of Cultural Change: the methodology of multilinear evolution. Urbana: University of Illinois Press.
- Stine, Jeffrey K., ed.
1991 Technology and Choice: reading from Technology and Culture. Chicago: University of Chicago Press.
- Stokes, Mark

- 1992 Canada and DBS. *Journal of Canadian Studies* 27(2):82(15).
- Stover, William J.
1984 *Information Technology in the Third World: can it lead to human national development?* Boulder: Westview Press.
- Straubhaar, J.D.
1991 *Beyond Media Imperialism. Critical Studies in Mass Communication* 8(1):39(21).
- Tafler, David, ed.
1995 *Transmission: toward a post-television culture.* Thousand Oaks: Sage Publications.
- Taylor, Lucien, ed.
1994 *Visualizing Theory: selected essays from Visual Anthropology Review.* New York: Routledge.
- Toffler, Alvin
1980 *The Third Wave.* New York: Morrow Books.

1990 *Powershift: knowledge, wealth, and violence at the edge of the 21st century.* New York: Bantam Books.
- Tomlinson, John
1991 *Cultural Imperialism: a critical introduction.* Baltimore: Johns Hopkins University Press.
- Turkle, Sherry
1995 *Life on the Screen: identity in the age of the Internet.* New York: Simon & Schuster.
- Ulmer, Gregory
1989 *Teletheory: grammatology in the age of video.* New York: Routledge.
- Valaskakis, Gail
1994 *Rights and Warriors: first nations, media, and identities.* *ARIEL* 25(1):60(13).
- Walker, J.R.
1982 *Lakota Society.* Lincoln: University of Nebraska Press.
- Warren, Dennis M., ed.
1995 *The Cultural Dimensions of Development: indigenous knowledge systems.* London: Intermediate Technology Publications.
- Watson, Iarfhlaith

- 1996 The Irish Language and Television: national identity, preservation, restoration, and minority rights. *British Journal of Sociology* 47(2):255(20).
- Weatherford, Elizabeth
1990 Native Visions: the growth of indigenous media. *Aperture* 1(119):58(4).
- Weimann, Gabriel
1996 Cable Comes to the Holy Land. *Journal of Broadcasting and Electronic Media* 30(2):243(14).
- Weiner, James F.
1997 Televisualist Anthropology: representation, aesthetics, politics. *Current Anthropology* 38(2):197(39).
- Werner, Oswald, ed.
1980 *Indigenous Knowledge Systems and Development*. Lanham: University Press of America.
- White, Leslie
1949 *The Science of Culture: a study of man and civilization*. New York: Farrar & Straus.
- Wiggershaus, Rolf
1994 *The Frankfurt School: its history, theories, and political significance*. Cambridge: MIT Press.
- Williams, Raymond
1992 *Television: technology and cultural form*. Hanover: Wesleyan University Press.
- Woll, Allen L.
1987 *Ethnic and Racial Images in American Film and Television: historical essays and bibliography*. New York: Garland Press.
- Wood, Houston
1997 Native Hawaiians in Cyberspace. URL:
<http://www.fas.nus.edu.sg/staff/conf/poco/paper2.html>
- Zerzan, John, ed.
1988 *Questioning Technology: a critical anthology*. London: Freedom Press.

BIOGRAPHICAL SKETCH

Steven Mizrach is a doctoral candidate in the cultural anthropology program of the Anthropology Department of the University of Florida. He earned his bachelor's degree in anthropology at Johns Hopkins University (completing a senior thesis in 1988, "The Social Organization of the Physics Community at JHU"), and earned a master's degree at UF in 1995 for his thesis, "The Hacker's Jargon: The Electronic Discourse of the Computer Underground." He has worked as a computer consultant, an intern for the Union of Concerned Scientists, and a new media editor.