

# Media Rights and the Performance of Community:

\_\_\_\_\_ a record of people in the act of remembering  
from the Emberá-Wounaan village of Arimae, Darién



**Media Rights and the Performance of  
Community:**

**a record of people in the act of remembering  
from the Emberá Wounaan village of Arimae, Darién**

**By Seth Porcello**

Fundación Dobbo Yala: Urb. Linares, Nvo. Reparto El Carmen,  
Casa N° 13 -B- (Transistmica, Detrás del Almacén

ElectroIndustrial), Apartado Postal N° 0816 - 04014, Zona 3,  
Panamá, Rep. de Panamá. Tele/Fax: (507) 261-7229 / 261-6347.  
*Personería Jurídica* N° 221, 1990. [dobbo@cableonda.net](mailto:dobbo@cableonda.net)

## **Table of Contents**

<b>EXECUTIVE SUMMARY .....</b>	<b>4</b>
<b>RESUMEN EJECUTIVO.....</b>	<b>5</b>
<b>ACKNOWLEDGEMENTS .....</b>	<b>6</b>
<b>INTRODUCTION .....</b>	<b>7</b>
<b>BUILDING A CASE FROM THE LITERATURE.....</b>	<b>9</b>
INTRODUCTION .....	9
LANDSCAPE CONNECTIVITY AND DISJUNCTURE.....	10
CULTURE AND SOVEREIGNTY .....	12
BROADENING CONCEPTIONS OF PARTICIPATION IN MEDIA .....	14
A LOOK AT PRECEDENTS AND THEIR CONSEQUENCES.....	16
<i>Bolivia's Radios Mineras.....</i>	<i>17</i>
<i>Colombia's Radio Sutatenza.....</i>	<i>18</i>
<i>Consequences.....</i>	<i>19</i>
TERMINOLOGY AND ITS DISCONTENTS .....	21
CONCLUSION .....	22
<b>BACKGROUND TO STUDY AREA .....</b>	<b>23</b>
ENVIRONMENT .....	23
DEMOGRAPHY .....	25
VILLAGE FORMATION AND THE PAN AMERICANA.....	26
LA COMUNIDAD DE ARIMAE.....	28
VOZ SIN FRONTERAS .....	30
CONCLUSION AND RELEVANCE TO THE STUDY .....	32
<b>THEORY AND METHODOLOGY .....</b>	<b>33</b>
PARTICIPATORY RESEARCH OR RESEARCHED?.....	33
METHODOLOGY.....	34
<i>Goals: .....</i>	<i>35</i>
<i>Problem Formulation.....</i>	<i>36</i>
<i>My Role as a Researcher .....</i>	<i>36</i>
<i>Research Design and Methods.....</i>	<i>37</i>
<i>Data Gathering and Analysis.....</i>	<i>40</i>
<b>RESULTS.....</b>	<b>43</b>
TOOLS FOR INTERPRETING THE RESULTS .....	43
MATERIAL RESULTS.....	44
UTILIZATION OF RESULTS .....	45
KNOWLEDGE PRODUCED.....	46
<i>Instrumental Knowledge .....</i>	<i>47</i>
<i>Interactive Knowledge .....</i>	<i>48</i>
<i>Critical Knowledge .....</i>	<i>49</i>
<b>CONCLUSION .....</b>	<b>50</b>
<b><u>WORKS CITED .....</u></b>	<b>52</b>
<b>ANNEX A – RECENT NEWSPAPER CLIPPING ON MEDIA AS A LOCUS OF CONFLICT .....</b>	<b>55</b>

<b>ANNEX B – VOZ SIN FRONTERAS RADIO GRID .....</b>	<b>57</b>
<b>ANNEX C – VOZ SIN FRONTERAS PAMPHLET 2 .....</b>	<b>59</b>
<b>ANNEX D – BACKGROUND INFORMATION ON ARIMAE.....</b>	<b>60</b>
<b>ANNEX E – TABLE OF TIME SPENT IN THE FIELD .....</b>	<b>65</b>

## **Executive Summary**

This thesis traces the importance of community media structures through two lenses: literature review and fieldwork. The literature review first takes a broad look at communications theories with respect to globalization, media access, and the meaning of participation in media. A historical approach is also taken to review relevant background context such as the development of community radio, and the implications of this history are discussed. Then, a general overview of the research site pertaining especially to environmental, demographic, and structural aspects of the study area. The methodology of the fieldwork is discussed, including a proposal for future community media project methodologies. Finally the results and conclusion argue for the importance of community media projects based upon the research completed in the Darién.

## **Resumen Ejecutivo**

Esta tesis es sobre la importancia de estructuras de medio comunidad a través de un reseña literatura y trabajo en el terreno. La reseña literatura primero ve a teorías de comunicación con respecto de globalización, acceso de medio, y la significación de participación en el medio. Voy a ver a la historia de radio comunitario de Bolivia y Colombia, y discuta las implicaciones. Después, voy a hablar sobre el historia y contexto de Darién con énfasis sobre la comunidad de Arimae y los aspectos ambiental y demográfico. El metodología del trabajo se discute, incluyendo un propuesto para un metodología nuevo de medio comunitario. Finalmente, los resultados y conclusión discuta la importancia de medio comunitario fundado en esta investigación en Darién.

## Acknowledgements

I would first and foremost like to thank José Bacorizo and people of Arimae for graciously allowing me to live and work literally in their homes. The experience I had and the support that I received for the four months of this research are a debt I could never repay. I would also like to thank Fundación Dobbo Yala for their critical help in organizing and facilitating this research. The work that was done would certainly have been impossible without Adolfo Menzua, Heraclio Lopez, and all the talented staff at Dobbo Yala. Thank you's to Grasiliano Cardenas and Leovigildo Doviassa for their insightfull conversations on communication in the Darién, as well as generous hospitality. A big thank you goes to Catherine Potvin, who at a critical moment intervened to keep this project alive as it was crossing the street. Her patience and trust has been instrumental and appreciated. John Howe, Darin Barney, and Bill Hoynes provided advice *par excellence*, and I am truly grateful for their valuable contributions. Finally, I would like to thank the friendly library staff at the Smithsonian Tropical Research Institute, whose knowledge, expertise, and support never failed me.

## Introduction

Media technology is slowly but steadily marching into the hands of the people. Costs are plummeting, and access to mass communication systems like radio are increasingly within the grasp of community organizations around the world. News of small media revolutions, like the one carried out by indigenous groups in Chiapas Mexico, or the one that seems to be on the horizon in India, carries with it the hope that communications will breath new life into democracy. At the same time its opponents predict widespread social chaos as more and more voices are heard. Like globalization however, the process is inevitable. Also like globalization, it carries no guarantee that all will benefit equally.

Until the free market unwittingly brings media technology into the hands of even the poorest and most marginalized communities, access will remain in the hands of the privileged. In these hands will be the power to represent, expose, conceal, ignore, address, name, narrativize, and sell.

The founding premise of this thesis is that these powers belong not only to the shareholders, but also to the stakeholders. The people's right to speak is a right to a voice, and that voice exists with or without the media megaphone. Communication and community media practices are not developing but rich, and until this richness is tapped mainstream media will be impoverished.

The research presented in this paper is a tap on that richness, which in an incredibly short period of time produced something of enormous value. In just over four weeks the community of Arimae in the province of Darién, Panama recorded and edited a twenty-five minute dramatization of their thirty-year history of land struggle. This historical drama was part of a skill-share media workshop given by myself in partnership with the Fundación Dobbo Yala, and is the focal interest of this research.

The following text is an attempt to put this community media project in its proper context in the World, in Panama, in Darién, and in what amounts to a diverse communications scholarship. I believe this task is an important one, as there is very little academic thought given to community media, which represents one of the most interesting challenges to cultural and ideological hegemonies spreading through the very same medium of communication technology.

First I will build this case through a look at the literature. How can we visualize the chaotic world of the media? And furthermore what are the stakes and implications for an indigenous village in Panama? This section will try and take a look at the abstract and concrete meanings of community media through an exploration of a diverse literature approaching in some important way the standard of relevancy.

Then I will go on to describe the methodology used in conducting this research. I will draw on previous authors frameworks for participatory research, while contextualizing these methods in their theoretical and epistemological foundations. The methodology of participatory research cannot clearly be separated from the results, as the reality of causes and effects in human society are never as clear as laboratory science would like them to be.



Finally I will present results as non-neutral assertions to be weighed against the strength of the methodology, and the insight of the events.

## **Building a Case From the Literature**

### ***Introduction***

Communication is both a subject and an object, occupying sometimes-simultaneous positions in both (as in the case of discourse analysis). While communication as a word encompasses the whole spectrum of signals and receivers, ultimately, it is a process through which the currency of information shapes our world. Understanding this shaping, especially as a non-neutral process with social, cultural and economic implications, is an objective of this review. “Shaping” however, cannot fully describe the impact of communication and media on the world. Instead we will have to look towards other theories of space (scapes) and social relations (actor-network theory) to understand communication and its diversity of ramifications for senders and receivers.

This flow between senders and receivers is not as unidirectional as it sounds however. An anthropological approach will be considered to gain a deeper understanding of the culture and politics of media. Sociological approaches to collective representations (Durkheim) and symbolic power (Bourdieu) have important consequences for both. Indeed, these collective representations and network theories of social relations effectively destroy the sender-receiver dichotomy, if not the very notion of directionality in processes of communication.

Access to media and communication technologies will be a theme of central importance, and one that bears directly on the possibility for media to be a source of empowerment rather than cultural hegemony. How we can intertwine cultural production and intrinsic or traditional media practices (performances) into our view of media access will be important for building framework that does not dictate the terms on which participation in media is possible. A brief history of participatory approaches to media, especially those from the history of community radio, will help ground the discussion in past experience and offer insight into future work.

Tracing this argument requires a trespass through many different scholarly territories, drawing on a vast and interdisciplinary literature that I cannot adequately review in their entirety. My interest here is to concentrate on the current literature that contributes to the subject of media and its potential for positive social change.

### ***Landscape Connectivity and Disjuncture***

There seems to be what amounts to a new terrain in the turbulent wake of globalization. Phrases like the “global village” suggest a new kind of landscape connectivity that did not previously exist – like rivers which connect valleys previously isolated different parts of the world are being connected in new and dynamic ways. Arjun Appadurai’s “scapes” are a useful way of theorizing this new terrain if only because they allow for the unexpected. He lists five dimensions of global cultural flow, which oppose the theories of homogenization that often accompany ideas like “the global village.” According to Appadurai, ethnoscap (tourists, immigrants, refugees, exiles...), technoscap (flows of technology and its needs), mediascap (images and representations), finanscap (flows of capital), and ideoscap (ideology flows),

constitute a dynamic global landscape of interconnectivity and disjuncture (Appadurai 1990). Maps of these landscapes often yield surprising results. For example, upon close inspection of the energy industry we find that the Fortuna Dam in Panama subsidizes energy bills in Quebec, Canada through the global techno-ideo-finanscape of Hydro-Quebec. A broader map would include the ethnoscape disjuncture between the two countries: discriminatory Canadian immigration laws such as the “integration” based point system and Safe Third Country Agreement make it difficult if not impossible for most Panamanians to immigrate there. The ideoscapes which create this business link and political disjuncture could be mapped further, as well as the mediascape of North American images and representations being marketed in Panama. This is just one small exercise in how a spatial analysis of connectivity and disjuncture can reveal new layers of understanding of the complex forces at work in process of globalization.

Another way of conceptualizing connectivity and disjuncture is through actor-network theory. This is a theory which treats social relations, including power and organization, as network effects in order to explain things like how size, power, and organization get generated (Law 1992; Latour 2005). Here, society is a heterogeneous network composed of material objects and the patterning of those objects (machines, animals, texts, money, any material object you can think of) produce effects like organizations, inequality, and power (Law 1992). What constitutes a person is an effect, generated by a heterogeneous network of interacting materials, while at the same time the agency (ability to affect) of this person is his/her network. One of the results of this theory is the complete disappearance of the microsocial/macrosocial dichotomy. The only difference between the two is the size of the network, and thus the extent of the

patterning of materials. This theory has important consequences for understanding how cultural production and participatory media projects can ramify throughout the heterogeneous networks of society.

### ***Culture and Sovereignty***

While Appadurai wants to speak out very clearly against the idea that the forces represented in his “scapes” model are homogenizing culture globally, it is not due to the lack of homogenizing forces that this is so. Rather, it is due to the “repatriation” or “indigenization” of these elements in their new local contexts that things like advertising, language hegemonies, and clothing styles can be transformed locally (Appadurai 1990). This transformation or appropriation is a phenomenon that is crucial to understanding the importance of media as a tool for empowerment.

Homogenizing forces are not always transnational, but are often national attempts to implement false multiculturalisms. Again, Appadurai: “often states are trying to monopolize the moral resources of community either by trying to claim perfect coevality between nation and state or by systematically museumizing and representing groups within” (Appadurai 1990). Following from this, the ability of “groups within” to be self-naming becomes a question of who has the power to represent. Paulo Freire posited society as “of two voices: the directive voice of the metropolis and the silent voice of the object society” (Freire 1970). Freire’s “culture of silence” is only broken when the “dependent society” gain the right to speak, and thus gain the right to represent. If nations are indeed “imagined communities” (Anderson 1983) then the right to imagine that community and represent that image are matters of cultural and political sovereignty.

This debate over sovereignty within nations is of critical importance in a country like Panama, where almost 20 percent of the land is now indigenous *comarca*<sup>1</sup> (Rosset 2006).

We can understand this relationship between culture and sovereignty through a number of different lenses. Durkheim's idea of culture as constituted by "collective representations," (Durkheim 1965) again asks us to consider the importance of that power of representation, a power that Freire would ascribe to the "directive voice" (Freire 1970). However the power of representation is not something analogous to the power to legislate or incarcerate, for example. Whereas these powers are institutional, and to varying degrees immutable, powers of representation are constantly subject to change. The ability to challenge public representations of identity, class, or history has been integral in the civil rights movement in the United States, for example. Bourdieu's sociology of symbolic power is an attempt to understand how symbolic powers like that of the court are given, and how our groups or collective identities are constituted through the public act of speaking. "Symbolic Power is the power to make things with words" (Bourdieu 1989). The power of Martin Luther King Jr. to transform the consciousness of a nation was a power of words, which represented a movement (or action). His perception and vision of the social world helped to constitute and construct it, as did every perception and vision of every person in the movement. "So sociology must include a sociology of the perception of the social world. That is, a sociology of the constructions of visions of the world which themselves contribute to the construction of the world" (Bourdieu 1989). At issue here is the right to speak publicly, which is a right to give and take away symbolic power. It is a right to imagine and thereby construct the

---

<sup>1</sup> Legally constituted indigenous territories. However, the Panamanian government still claims the right to exploit mineral resources from these territories.

reality we wish to live in and the public symbols we wish to recognize. The right to a public voice is therefore an issue of sovereignty, not just for indigenous peoples but for every citizen of a nation.

### ***Broadening Conceptions of Participation in Media***

One could argue that in fact it is not the words we speak that “make things,” as Bourdieu put it, but the discourse we use in the speaking. Discourse, according to Ann Swidler “is not what anyone says, but the system of meanings that allow them to say anything at all” (Swidler 2001). I would add that this becomes problematic when the discourse is racist, or otherwise does not allow for a particular system of meanings which may better describe reality. The process of changing that discourse is a process of changing the “vocabulary of meanings, the expressive symbols, and the emotional repertoire,” with which a new end can be sought (Geertz 1973). Geertz was speaking here about the relationship between culture and action. His cultural analysis shifts focus from the meanings which may exist internally (individually) to the meanings which are publicly available in practice, in cultural text, in ritual, etc... These two points bring together what I would describe as a theoretical basis for a democratic, publicly accessible media. Media is a ritual<sup>2</sup> in which there is the opportunity to contribute to the formation of public discourse through participation in the performance (action) of public symbols.

There are other ways to understand media as performance however, which further inform our understanding of what participation in media might look like. In Josh Kun’s article “The Aural Border,” the relationship between sound and space is considered in the

---

<sup>2</sup> See Couldry, N. (2003). Media rituals : a critical approach. London ; New York, Routledge.

specific context of the Tijuana-US border. He first traces a performance of punk band Tijuana NO! in front of the border wall in 1994. Their “song (‘La Esquina del Mundo’) is laden with anti-imperialist noise, a blazing Spanish-language punk shout that describes the border as ‘the last street in Latin America / the line that marks us from outside / the limit between stone and village’” (Kun 2000). This performance is interpreted by Kun as not *about* the border, but *of* the border. It is “a collection of words and chords and beats and guitar crunches and bass wallops and vocal howls – that is the border, that renders the border in sound, that makes the border and all of its experiences and histories and political narratives, audible.” Here, we have not only a performance of the geographical space (or non-space) that is the border but also a performance of identity which re-imagines dominant discourses. The border is not simply a fence between here (us) and there (them) but an ideology and a discourse that excludes the whole of Latin America physically (the last street) and economically (the limit between stone and village). By countering this discourse (through the sound, lyrics, and video) Tijuana NO! re-map and re-imagine inter-American cartographies and citizenships through their music and performance. Kun asks: “How do sounds ‘establish’ for the listener what the border is, how it gets crossed, how it gets desired, how it gets feared, and ultimately, how as a place and a state of being it produces its own subjectivities?” From our discussion above we can say that this is done by using publicly available symbols and their vocabulary of meaning to disrupt the power of classification, of naming, and ultimately the power of the state to constitute the border as a form rather than an ideology. Tijuana NO! highlight the potential of strong local media participation to resist, innovate, or appropriate the

symbols of discourse, and are more evidence that cultural homogenization theories of globalization are dead, or at least not listening to the right music.

### ***A Look at Precedents and their Consequences***

As we can see, the potential for media to act as a democratizing force in society is huge. Wider participation in this performance is the main thrust behind the idea that media can be a tool for empowerment. The mediascape as it currently appears globally, and as it globalizes, does not immediately offer us a solution:

What is important about these mediascapes is that they provide large and complex repertoires of images, narratives and “ethnoscapes” to viewers throughout the world, in which the world of commodities and the world of “news” and politics are profoundly mixed. These representations are more often generated by those in positions of power and thus affect the perceptions of reality in a highly skewed direction, affecting the “imagined world” created by viewers (Appadurai 1990).

In the struggle to change this mediascape, there are a number of issues to address. Theorizing a universal approach to media practice is surely a lofty goal. I can only hope to present here a overview of some of the issues, along with a brief history of participatory approaches to media and to its accessibility which will hopefully offer a hand-rail of previous experiences on which the debate can steady itself.

Probably the most important history in the struggle to democratize the media is the development of community radio. This has taken place over the last 50 or 60 years,



arising independently in many different parts of the world (India, Africa, South East Asia, North America and Latin America). The history is incredibly rich, but has not been adequately documented. Much of it is still unwritten, but it remains an important part of the story of participatory media and its potential. I can only give a brief overview here, focusing in particular on the birthplace of community radio: Latin America.

### ***Bolivia's Radios Mineras***

Most histories of community radio cite the Miner's Radio of Bolivia as the first true community radio (Estrada 2001; Manyozo 2006). The Miner's Radio began in 1947 as an attempt by trade unions to organize mine-workers of Potosi in Bolivia against the horrendous conditions miners were working in. This was the time of the "tin barons" who controlled Bolivia's infamous mines which were started by the conquistadors in the 16<sup>th</sup> century. That legacy cannot be quantified, except perhaps by the estimated eight million people who died in the mines of Potosi between 1545 to 1825 (Krippendorff 1981). However this is only part of the picture. By the 1940's Bolivia was struggling out of the depression and into the post-war period. The mining industry had recently tripled its workforce from 16,000 in 1935 to 53,00 in 1943 (Whitehead 1981). At the time of the landmark elections of 1944, mineworkers were struggling with severe decline in labor standards during the second world war which according to Whitehead went "far to explain... the intensity of mineworker mobilization in favour of radical social change." These elections marked some of the first in Bolivian history that gave any kind of political enfranchisement to miners, and thus were some of the first in which the hard work of labor organizing could pay off politically. Miners unions had become

radicalized and were no longer merely asking for wage increases. The results were felt in the elections of 1951:

All the hopeful calculations of the propertied classes were discredited by the outcome, which closed the door forever on the prospect of legitimizing the old social order through elections based on restricted male franchise. The miners were too important a block within this political universe, they were too politically conscious and too united (Whitehead 1981).

Part of this story, which led up to the Bolivian Revolution of 1952, is that of the Miners' Radio. *Radios Minas*, which eventually expanded to a network of 23 radio stations, were funded by the mineworkers unions. "Although the main role of the Miners' Radio was the defense and promotion of miners' rights, they were also central to a wide range of cultural and educational activities. They promoted and broadcast festivals of miners' poetry, discussions about the aesthetic value of popular songs and other art forms, and discussions about education issues" (Estrada 2001). The radio network continued to be force for change, as evidenced by "the number of times they were systematically destroyed, or their equipment confiscated" and in 1981 it was the miners strike that led to the fall of dictatorship in Bolivia (Estrada 2001).

### **Colombia's *Radio Sutatenza***

*Radio Sutatenza* was founded in the same year as *Radio Minas* in Columbia, by a catholic priest. This later became the *Acción Cultural Popular* and organized around social issues, especially education. The ACP founded Radio Schools, which consisted of small groups that would meet nightly. Supplementary course material was published by the ACP in what they called the "peasants library," and radio topics included "literacy,

numeracy, health, farm production, housing improvements, family and personal relationships, sport and leisure, and... the responsibilities of parenthood and practicing responsible procreation” (Estrada 2001). These radio schools had “an enrolment of some 200,000 peasants in about 20,000 Radio Schools” all funded primarily through the Catholic Church. This was, however, to be the un-doing of Radio Sutatenza, as the ACP’s programming on “practicing responsible procreation” led to the eventual pull-out of all church support. Radio Sutatenza officially closed its doors for good in 1987 after forty years of community work.

### **Consequences**

These histories are important in several ways. First, they establish firmly the tie between community media and human rights. The political project to empower the labor movement in Bolivia, and the project to bring educational resources to rural Colombians both recognized communication as an integral part of the struggle for social justice. It is important to note however that community radio, in the case of Bolivia for example, did not create the class solidarity of the miners but rather was a tool with which the solidarity that already existed could be expressed. This expression was an image, which took on the properties of reality. The vision of a better society began to reconstitute the society Bolivians lived in, and it was through this act of imagining, not the act of broadcasting, that a social justice movement was constituted, or as Gramsci would say, counter-hegemonic patterns established (Gramsci 1971). It should go without saying that a genocidal vision, like that of Radio Mille Collines in Rwanda, can be broadcast just as easily as one of equality and justice. More often it’s equality and justice that are the problem as in the case of the Miners’ Radio in Bolivia, or more recently in Oaxaca,

Mexico in the wake of the APPO uprising where the University of Oaxaca student radio station came under attack by government forces after it became a center of organizing. Reports indicate the targeting of community radio stations is widespread and ongoing (See Annex A). Media is very often the locus of conflict, and this presents challenges to groups which are committed to community approaches. Very little, in what is known as the field of development communication (or DevComm), can be accomplished without a basic faith in the people - what could be called a Freirean commitment to the power of dialogue. Without this, no use of the word empowerment can have any meaning, and every approach will necessarily be top-down.

The importance of language is another aspect of participatory media that becomes especially important in areas with indigenous populations. This can cause some challenges, particularly when the number of indigenous languages is high, for instance in Africa, where very few countries have a common language. A UNESCO project found that under these circumstances “the best broadcasters could do was to select perhaps ten of the main local languages and broadcast daily programs in them on a time-sharing basis” (Estrada 2001). However, the need for programming in native languages cannot be underemphasized. Indeed the United Nations has recognized the importance of language in Article 14 of the Draft Declaration on the Rights of Indigenous Peoples which concerns the right to name and retain names in indigenous dialects, Article 15 for the right to be educated in a native language, and Article 17 for the right to establish native language media (United-Nations 1993). These rights are part of a larger recognition of the colonial role that the imposition of languages has played around the world.

### ***Terminology and its Discontents***

This section was intended to give a general overview of some of the theory and precedents which up until now have been informing a discussion of communication as it applies to media in a more or less audio/radio context. I cannot conclude however, without a brief comment on the somewhat confusing terminology we have inherited from the scholarly literature. Participatory communication (Gumucio 2001), participatory development (Cadiz 1994; Mayo 1995), participatory development communication (Bessette 1996), participatory radio (Vargas 1995), or development communication (a huge literature but just to name a few (Jamias 1975; Manyozo 2006) all seem to describe more or less the same thing. This terminology is not only confusing, but also unsuitable. The word “participatory” begs the question “participatory with who?” Have we resigned all media projects to the fate of management by project-makers who will define for us the project-participants? Are the participants fatally resigned to this periphery? The term “development” in development communication has this same problem of an implied center defining the margins. Just as the word civilized immediately defines the barbaric, the word development defines the underdeveloped. Underdeveloped, as a concept, is especially absurd when it is applied to communication. Was African drum communication underdeveloped because it did not use a radio tower? Once again the word development comes back to haunt our scholarship out of the corpse of modernity theory.

So what else if not these terms? I propose the replacement of the word “participatory” with “solidarity.” Solidarity interrupts the center-periphery dynamics of

participation, and describes more accurately relationships of mutual aid and mutual respect inherent in successful participatory communications projects. “DevComm” as something which hopes to describe a whole field of research, badly needs to be replaced. I propose the abandonment of the entire phrase, in favor of “community media” - again shifting what was the “them” implied in development to the “us” implied in community. I am not suggesting that the whole world can be an “us.” This would be a very dangerous idea that negates the fundamental power dynamics of development work, however it is these very power dynamics which need to be addressed rather than legitimized. I will address more directly these issues in the methodology section.

### ***Conclusion***

The discussion of terminology is not entirely frivolous. The point is to try and address center-periphery dynamics in the language with which we use to communicate our intentions. If we cannot communicate these intentions then we cannot hope to participate, or have meaningful participation in, communications projects. These center-periphery dynamics are at the core of current debates on media democratization, theories of participation in communication like those of Habermas and Freire, and of course the rapidly growing methodological field of participatory research. I have reserved a more careful review of methodological issues for the methodology section, as it deserves to be considered in the special practical context of this research.

From this review, three specific conclusions have been come to which will bear directly on the discussion and implementation of the methodology used for the research in this thesis:

1. The history of community based media initiatives is rich and instructive; it should be the basis for our conceptualization of participatory media initiatives rather than DevComm articles and World Bank reports.
2. Like the right to public assembly, the right to media is a fundamental part of citizenship (or denizenship) which guarantees the people a right to be heard. It is a right to participation and production, and to freedom from constraints on the form of that participation.
3. There is no such thing as an underdeveloped people. Differences in communication methods (or traditions) and language are part of a global heritage, and our approach to introducing communications technology should reflect a commitment to this diversity in the form of partnership rather than paternalism.

## **Background to Study Area**

The research I am presenting took place in the Darién province of Panama, in the Emberá-Wounaan village of Arimae. To properly situate the research within the very specific context of the Darién, I will present here an overview of the environment, demography, relevant history of the area in which I worked. Some of the best historical and demographic information in this section comes from the very impressive 2005 dissertation of Julie Velasquez-Runk.

### ***Environment***

Darién is Panama's most eastern province bordering with Colombia and

connecting the isthmus to the continent of South America. Indeed, Panama used to be called “The Isthmus of Darién” (Wafer 1933). The terrain is mountainous as the province is divided by the Serrania del Darien Mountain Range which constitute but one small vertebrae in the backbone of the Cordilleras ranges that connect the Andes in South America to the the Rocky Mountains in North America. It was these mountains that ultimately persuaded canal builders to look farther west. Darien is also cut by some major rivers, including Panama’s largest, the Rio Tupile. The river basins make up the vast majority of flat land in the Darién, and thus the land most suitable for habitation. This positions most of Dariéns inhabitants along the radial network of basins which empty into the Gulf of San Miguel (Velasquez Runk 2005). The tides produced by this estuary system can be from four to six meters, and have a major effect on the transportation system developed around these waterways. Much of this tidal land is mangrove forest, reaching up to 30 and 40 meters, they are some of the tallest mangrove forests in the world. Communities often cannot be reached except at high tide and with very few roadways in Darién, the rivers are important transportation corridors. Darién’s capitol city of La Palma was chosen for its strategic location along these waterways (Cardenas personal communication 2007), as it sits perched on an isthmus at the center of the Gulf of San Miguel. However, transportation in the region is still difficult in all seasons. The Pan American Highway, which runs through the flat Chucunque basin (east/west) has increased terrestrial accessibility to the region. The *Pan Americana*’s secondary roads make accessible by land areas formerly only accessed by river (Velasquez Runk 2005).

*“But once you see the burnt-orange fruit of the cuipo tree hanging*



*above the canopy, you know the dry season is over and so is the time of the roads”* - anonymous interview on the bus to Darién

### ***Demography***

There are five major ethnic groups in Darién: the Kuna, Emberá, Wounaan, Afro-Panamanians (referred to in Darién as *negros* or *Darienitas*), and *latinos*. According to Velasquez-Runk, “indigenous groups tend to reside along rivers at the far reaches of the tide, Blacks closer to the coast or historically important river mouth areas, and latinos along the Pan American Highway.” The Afro-Darienita population are largely distinct from other African-American populations in Panama. Whereas there is a very large West Indian population in the province of Panama dating back to the canal construction, Black populations in the Darién were brought by the conquistadors in the 16<sup>th</sup> century to mine gold (Heckadon-Moreno 1997). Latinos are the most recent immigrants to the area, having arrived in large numbers with the new Pan American Highway during the 1970’s and 80’s (Heckadon-Moreno 1986). This period was one of great demographic transition, as well as land use transition due to the largely latino practice of cattle ranching. Both these things are direct or indirect results of the highway, which has had far reaching consequences. According to Velasquez-Runk “the changing demographics of Darién were significant enough by the late 1990’s to suggest moving the Provincial capitol from the ocean and river traffic of the largely Black town of La Palma to the road traffic of the largely latino town of Meteti” (Velasquez Runk 2005). Although this has clearly coincided with these demographic changes, the ideological trend from rivers to

roads surely has less to do with demographics than it does with neo-liberal economic policies and logging interests.

### ***Village Formation and the Pan Americana***

Village Formation is an incredibly important part of the recent history of the Darién. It is the story of how a largely dispersed indigenous population living in non-nuclear communities begins to form groups under pressure from globalizing social, political, and economic forces, and how that group formation radically changes relationships to land and ultimately the political map of Panama. Peter Herlihy, who did his thesis on this attributes some of the very first movements of village formation to an endogenous effort by a generation of illiterate parents to raise their children to be able to speak with the outsiders who were increasingly active in the area (Herlihy 1986). During the 1960's the pressure to form villages radically increased however. The populist dictator, Omar Torrijos, instigated government colonization programs, settlement programs, and the establishment of cattle ranching. These activities immediately caused problems, and the 60's and 70's are known in the Darién as a time of struggle and precarity, when the fate of the lands that indigenous people had lived in for generations was seemingly up for grabs (Bacorizo per. comm. 2007). During this time the only way to claim land as collective territory was to have a village of four families or more, and with news of construction plans for the Pan American Highway having reached the Darién, there began a great rush to establish villages and make land claims. As

Velasquez-Runk describes the process, “with the nucleated settlements promoted by the government in the late 1960’s, Emberá and Wounaan households began to cluster, and the land of kin groups began to abut one another, until residents began to recognize these larger, agglomerated landholdings as those of the village. Within village lands, residents continued to recognize the tenure and usufruct rights of households and/or kin groups to parcels of land” (Velasquez Runk 2005). The consequences of this history are still unfolding, and may be a historical narrative of far more significance than that of the Highway. The process by which Emberá and Wounaan peoples were forced to shift their residential centers from the river to the village has been one which not only has biased land rights against the Emberá and Wounaan (Velasquez Runk 2005), but has also profoundly affected the history, perhaps the brief history, of the *tierras colectivas*.

The Pan American Highway (finished in 1972), by and large, met the vast majority of expectations, which predicted that it would be a disaster. Government predictions, representing minority opinions, turned out to be wrong on several counts. For instance there was far more immigration into the area, especially to settlements along the highway, than the government had predicted (Velasquez Runk 2005). Commercial centers associated with logging sprang up along the highway in rapid succession. Of the seven secondary roads (at least) that extend from the Pan American Highway, and two additional roads unconnected to the highway, most of these roads if not all of them were constructed for timber extraction (Velasquez Runk 2005). The economics of the Highway are relatively clear, as they follow in the well-worn tradition of neo-liberal policy in Latin America and the World. Indeed, the Pan Americana not only connects Yaviza to Panama city, but it connects the largely indigenous struggle against neo-liberal

economic policy all the way through to Chiapas Mexico, where indigenous groups are again battling highway development plans known as “Plan Pueblo Panama.”

In 1983, Emberá and Wounaan representatives succeeded negotiating a large semi-autonomous indigenous territory known as a *comarca*. The Comarca Emberá-Wounaan covers about 4,000 square kilometers or about one-fourth of the Darién (Herlihy 1986). The comarca did not include a large number of indigenous communities however, partially due to the location of the Pan Americana (Bacorizo per. comm. 2007). As a result of the increasing land pressure during the post-Pan-Americana 1980's a group of Emberá and Wounaan communities, which had fallen outside of the comarca, decided to form an organization to fight for their rights. The Organización Indígena Tierras Colectivas Emberá-Wounaan (OITCEW) became the Congreso General de Tierras Colectivas in 1996, unifying as many as fifty-two dispersed indigenous communities (Velasquez Runk 2005). One of these communities is Arimae.

### ***La Comunidad de Arimae***

Arimae literally means “right here” in Emberá. Like many communities in Darién, its history is largely the history of the Pan Americana, and the existential crisis of suddenly needing to *be* somewhere, to be able to have a land claim. Unfortunately the last forty years of this history have been one of invasions, settlements, *colonos*, bogus reforestation projects which logged mature forests and then planted teak, false land tenure promises, and the fragmentation of their collective lands. At the time of writing, Arimae's collective land total stands at 7,999 hectares.

There is no better source of history of than the people, as Howard Zinn would say. The following is a brief oral history of the community by José Bacorizo, second Noko (leader) of Arimae:

Before the carretera (highway) the people of Arimae were the people of Darién. There were plenty of animals and medicines in the forest and river to sustain the community. They (ancestors) lived traditionally and had the River Sabana for transportation. When the construction plans for the carretera under Torjillos was announced in the early 70's the leaders in this area knew that time was running out for them. They had not been included in the comarca for Emberá and Wounaan people, and they knew what a road would mean. It would mean a flood of *colonos* (colonists), landless people from other areas in Panama. It would mean the end for the people of Arimae who had the right to the land, but no way to enforce the right. The village of Arimae was founded in 1969 to try and make some boundaries to the village and the land. The carretera was finished in 1972, but the real struggle began in 1977. We were forced to defend our land violently, and at that time we were part of a larger movement of indigenous people to demand our collective rights even though we were outside of the comarca. This movement is now fractured by internal fighting, and the people of Arimae are again having to think up new ways of defending the land. The people are left with the choice of violence or quiet death. At the same time we are losing our indigenous culture. It is not possible to work in the way we used to work.

The year 2003 brought with it a program entitled "Programa de Desarrollo Comunitario de Darién" or DECO. This was a three year, US \$6.25million dollar project in partnership with ACDI/VOCA, a United States NGO (USAID 2004). This program was largely for communities located along the highway, one of which, was Arimae. One

indirect result of this was the construction of the *Casa Communal de Arimae*. This is currently functioning as a two room hotel and artisanal tienda constructed in the traditional style of a raised pile dwelling. A Peace Corps project constructed a computer center in the community that currently has four functioning computers, one of which can be connected to the internet, and a printer/scanner. The community continues to receive Peace Corps volunteers who have been involved in maintaining the computer center and working with the womens artisanal collective.

Arimae has a traditional government structure which meets usually once or twice a month in the local *Congresso General*. This is a large, open structure with a corrugated tin roof which fits most of the village, although the entire village does not attend every meeting. The two local leaders, or *Nokos* in Emberá, are Señor Alipio Opúa and Sr. José Bacorizo.

The community faces a number of challenges at the time of writing, one of which is the quantity and quality of water that the community is able to draw. For more in depth discussion of these challenges, including a discussion of some of the social changes related to changes in the environment - see Appendix D.

### ***Voz Sin Fronteras***

Literally “voice without border,” Voz Sin Fronteras plays an enormous role in the mediascape of Darién. A project of the “Vicariato Apostólico de Darién,” funded through the Catholic Church, Voz Sin Fronteras’ 10Kw AM and FM signals reach the entire province of Darén except for Jaqué and Sambú. The information presented in this

section comes from interviews done with Narcisa Jaén Urriola, Director of Voz Sin Fronteras (Urriola per. comm. 2007).

The station was built in 1992, at a time when most places in the Darién did not have a telephone and cell phones were unavailable. As transportation in the Darién is always difficult and often expensive, there exists an extreme communications gap in the province. Voz Sin Fronteras stepped into this communications gap in 1992 when it started broadcasting personal messages over the airwaves. At present, to broadcast a message of less than one minute in duration is 50 cents. Personal messages over one minute are a dollar. People in the Darién get their messages to the radio station through their local Catholic Church, which relays it to an office in Sane Fe, where the messages are collected and sent to the radio station in Metetí. Messages are broadcast the next day from 2-3pm and from 8-8:30pm. Advertisements and political messages are on a different price scale.

The stations evangelical mission is mixed with its a social mission. There are currently three timeslots for indigenous language programming (Emberá bed'ea or Wounmeu) as well as public health, agricultural practice, and a variety of music programming. The evangelical programming is a bit more controversial, with one show in particular frequently provoking the ire of indigenous listeners, and other shows like Radio Vatican occupying prime timeslots which could be considered of better use to local programming. El Maestro en Casa is a program created by Voz Sin Fronteras which has been providing informal educational programming to more than 400 students finishing primary school. Transportation to school is sometimes prohibitively expensive, and thus

this education programming attempts to serve a general need in Darién for the teacher to come to the house (Maestro en Casa).

There is really quite a lot of interesting things to say about Voz Sin Fronteras, which unfortunately did not occupy a great deal of my research time. For instance, how Voz Sin Fronteras decides what is a private message and what is a public message when they are broadcasting both to the whole of the Darién, is a fascinating question. A fifty-cent “private” messages on Voz Sin Fronteras might announce a party or live-music fiesta. Meanwhile el Fondo Peregrino pays commercial rates to make people aware of a new harpy eagle in the area. I am not asking this question as a matter of fairness, but as a matter of ontology for community radio, or radio with a community mandate. To what end, to what purpose, do we broadcast? Clearly defining this question can be a challenge, especially in the case of a for-profit catholic-community radio station like Voz Sin Fronteras.

### ***Conclusion and Relevance to the Study***

Darién seems to occupy some kind of permanent space of the periphery. It is a permanent frontier despite being in the center of the world. Ecotourism and travel sites often still refer to the Darién in the kind of expedition terms we find in recent books like “The Darkest Jungle,” in reference to the Darién (Balf 2003). And to some degree it still is “the darkest jungle” which is dense enough to act as a disease barrier to Colombia’s hoof and mouth disease (Suman 2005). However, as Velasquez-Runk aptly points out, this is a way of treating as ahistorical an entire region and people who share a complex past that continually gets relegated to the primitive peoples chapter in history books. The



extreme historical and cultural bias against indigenous people is not a legacy but an ongoing reality. I have done my best in this section to give as much history and context to the study as possible, in hopes of not contributing to that reality, with respect to this research.

## **Theory and Methodology**

### ***Participatory Research or Researched?***

Theory and methodology are never distinct. The history of research is one of defining the circumstances under which knowledge can be produced and regarded as reliable. The ways in which we discover, or more accurately, create knowledge are inflections of the very knowledge we seek. Western science seeks a knowledge of the physical world which is free of the investigators influence in order to establish clear causal relationships. As the physical world operates on the basis of causal relationships, the approach makes sense. However the charade of complete subject-object separation, one no longer made even by physicists, is particularly untenable in the social sciences. This methodological posture leads to problematic assertions of value-neutrality, assertions which have been a heavy burden on social science fields like anthropology and ethnographic film. The subject-object, researcher-researched, distinction poses ethical problems as well. Not only are the researched denied the agency to act at the ordinate level of the researcher, but the researcher has the power to use the knowledge gained in

order to act. This action represents a power that the researched does not have, and furthermore a power that could be used *over* the researched.

Participatory research is a developing methodology that addresses these problems. In some sense, science has once again re-invented the wheel. At its simplest, participatory research is just a way of solving problems collectively, which human beings have been doing for thousands of years. There is nothing new about the idea that in order to solve large problems, information must first be shared about the problem, then a decision about what to do about it made, and then people decide how to act. The only difficult aspect of this is understanding how to communicate an organic process of collaboration with no clear element of authorship to a scientific community which is based 1) on a concept of objectivity and 2) a system of authorship which is integral to its institutional functioning. It is worth the effort however, as a clear participatory research methodology has a great potential to change the way science is done, and contribute to a more just society.

### ***Methodology***

In the following sections I will trace the participatory research methodology used in this study loosely through the framework for participatory research outlined by Peter Park in “Voices for Change” (Park 1993). Park gives a very clear outline of the methods and principles by which participatory research projects are to be done, and although I did not use Parks work to do my research, I find it a useful framework for explaining it. The approach is unorthodox, but at the moment so is participatory research.

### Goals :

The goal of this research project in Arimae, Darién was to empower members of the community through a skill-share workshop on media awareness and radio production. Through the process of speech, hearing others speak, performance, dialogue, and oral tradition participants would have the opportunity to interact with media on their own terms. This engagement with the challenges and difficulties of collective production of cultural or political texts would stimulate a clearer vision, awareness, and critique of the issues confronted. This methodology comes from the Freirean pedagogy of *conscientização*, or *concientización* in Spanish (Freire 1970).

A short term goal was to produce some piece of audio that the community could use for broadcast on Voz Sin Frontera or for educational or archival purposes of value to the community. The long term goal was to stimulate a continued interest in producing media in the unique voice of the community which could inspire other communities in the Darién to do the same. This would be a strategy for challenging mainstream media representations of the people of Darién, and serve as a much-needed inter-cultural mode of communication between the many ethnic groups in the region.

Perhaps the most important goal was to satisfy the expectations of the community of Arimae. An important aspect of the methodology of this project, is that I was invited to the community. I was introduced to the two *casiques* of Arimae through contacts at the Fundación Dobbo Yala, where I gave a presentation on my project idea. I was subsequently invited to the community, where I was introduced along with my project proposal at the monthly *Congreso General*. Participation in the project was completely

voluntary, and no compensation was offered. It was made clear at the *Congresso* that I had no funding, and no capital resources to invest in the community. This was important for establishing clear and reasonable goals *with* the community, rather than *for* the community based upon my own needs. The goal afterwards, of course, was to meet those expectations.

### **Problem Formulation**

“Participatory research begins with a problem” (Park 1993). In the case of Arimae, the problems were numerous. My role in the assessment of these problems was one of listening. The first problem articulated to me was the lack of communication and understanding between the many ethnic groups in the Darién. The lack of roads and infrastructure in the Darién means that communities can become very isolated, and the lack of education especially inter-cultural education means that quite often knowledge about other ethnic groups is lacking. A second problem was specific to the village of Arimae, and that was their ongoing struggle to protect their collective land holdings. These two problems turned out to be interrelated, as often the people of Arimae had to protect their land from invasion by landless peasants of different ethnic groups.

### **My Role as a Researcher**

As these problems are social in nature, collective solutions are required. My role as a researcher was to facilitate a specific collective action that would address, clarify, and increase a consciousness of these problems for the wider community. This collective action would provide a space for dialogue and a space for collective memory, as a way of

reinforcing the agency of members in the community to take control of the representational space of the problem. This is to say that the role of the community was both to formulate the problem and what should be done. My role was to act as an organizing force around which participants in the workshop could focus their efforts at dealing with the problem.

### **Research Design and Methods**

On Sunday, February 3, 2007 José Bacorizo (*casique*) introduced me at the village *Congresso*, indicating that I was interested in doing a radio workshop in the community. After the meeting, a sign-up sheet was placed on the center table by the *casique*, where people were free to put down their names for the workshop along with what their interest was. This list had 42 names on it, which was a level of enthusiasm I could never have predicted. It was also a level of enthusiasm that would have been hard to accommodate with the few resources available for the project. This convinced me to make very clear at the next meeting what kinds of resources there were. A preliminary meeting of all the interested people was scheduled for the following night.

The following night at 6pm the bell at the *Congresso* was rung. The meeting started with 26 people: men, women, and mainly youth 12. At this meeting, the main question to be answered was what kind of workshop(s) people were interested in. I gave an overview of what was possible given the resources: equipment available, the time-frame of the project, and the kinds of skills I had to share. After this discussion, another list was made with people's names and what they were interested in. At this point it

became clear that there were two areas of interest in the group, with 10 people wanting a computer class and 15 wanting a workshop on radio.

The community of Arimae has 5 computers and so it was determined that the computer group would split in half with five people attending the class on alternating days. I think this portion of the methodology is important to explain. Although I came to the community with the idea to do a radio workshop, the point of participatory research was to create knowledge and empowerment. Therefore, when I was presented with a community need for training in programs like Microsoft Word, or Excel, or training in how to use the internet, it was this goal of empowerment that took precedence over my objective to make radio. Furthermore, it presented another opportunity to involve the community in discussions of technology and communication. The communities choice to have those interactions through a medium of their choosing, which also contained the possibility of building up economic and skill-based resources of their choosing, was one that I had to respect if my methodology of participatory research was to be of any meaning or integrity.

The radio group was to meet everyday, for two hours or less. The first day of the radio workshop was one of questions and dialogue. I had asked one of the community members if we could borrow his blackboard for the meeting, and this provided a way of writing down ideas as they came during the meeting. I first, again, went over the resources we had at our disposal and the time-frame we had for doing the project. I then made four suggestions as to what could be done in the workshop:

1. A documentary about some issue in the community that was important to them. The water quality, electricity, or Pan American highway were some suggestions.
2. A radio drama about the people of Arimae that the workshop would write, direct, record, and produce.
3. A news program about recent events in the community, which would allow participants to learn the basics of news-writing and journalism.
4. The workshop would break down into smaller groups which would work on individual projects that could then be shared with the other groups. This would be a way of giving individuals the most freedom possible to do what they wanted to do.

After I made these suggestions, a discussion was started as to what would be the best option. Ultimately it was decided that a radio drama about the history of land struggle in Arimae was the best because it could incorporate more aspects of the struggle into a drama and include more people from the village (not already in the workshop). This decision came after four or five people had made arguments mostly for the radio drama or the documentary. There may have been some confusion over the difference between the two, but ultimately everyone was clear on what the radio drama was and what it would require. Ideas for how to structure the drama came next. People wrote their ideas on paper and then showed them to the group. The information was then compiled and written on the black-board. I copied down what had been written on the black-board in my notebook. This was the end of *Taller #2*, and the visioning process of the workshop.

### **Data Gathering and Analysis**

The data gathering and analysis were not empirically defined practices within this framework but rather activities related to knowledge production and empowerment. This section describes the process of recording and editing the radio drama, which is the focal point of this research.

Workshops subsequent to this first meeting of the radio group did not always contain all 15 participants, as nearly all participants had jobs and families to take care of. There was a core group of about 5 that attended every workshop, while the other ten came and went with different scenes. All of the workshops after *taller #2* were for recording the radio drama. I had suggested that we plan the scenes and write a script, but this idea was not embraced. Instead every scene was organized by oral consensus with participants who were recruited from the village. For instance, one of the village founders was recruited to give a short history of the village in Wounaan, and another was asked to play the traditional flute music while some children danced and played a drum. This was to be the first scene in the drama. Another scene involved a meeting between the village and an ANAM (Autoridad Nacional del Ambiente) official. As with every scene recorded in the drama, performances were done entirely improvisationally without a script or cue card. I gave little to no advice on how to do a radio drama, and facilitated use of the technology only.

All recordings were done with a Marrantz PMD-660 audio recorder. Recordings were made in stereo with two Røde NT5 condenser microphones. The reason stereo microphones were used was to more easily capture a live radio drama in which the actors could not be recorded individually. This live element to the drama also gave other



participants in the workshop a chance to think of the kind of soundscape that was appropriate for the drama. This became a favorite activity of the participants, in which they would discuss at length appropriate background sounds. Keyboard typing, cell phone ringing, machetes swinging, chain saws, doors, shoes, chairs, birds, frogs, and many other sounds became an important part of the performance. This was also a way of including many more people than just the actors themselves into the live performance.

Participants made every major decision as to the making of the radio drama. I focused on facilitating the equipment use. When necessary I would take time to explain principles of recording. Topics like sound distance, or the effect of echoes and wind on microphones were discussed with the group but the principle method of instruction was the immediate playback of what had just been recorded. This gave the actors a chance to get comfortable with hearing their recorded voice, as well as the group a chance to discuss the sound composition. Was the keyboard typing too loud, or the ANAM official's voice too quiet? Then the scene would usually be recorded again with the sound source-levels adjusted. Every scene was recorded more than once and every scene had at least one practice attempt, but scenes were never recorded more than three times. The decision of whether to record again was entirely consensus based within the group. My role was to point out the kinds of sounds that made up the soundscape, and ask the group how they felt about them, what could be done differently, and if there was anything that could be done differently with the mics. All the recording in the radio drama was done physically by participants, so that everyone had a chance to use and be familiar with the equipment. This cycle of dialogue, followed by recording, and then listening, is the keystone brick in the community media methodology I am proposing. It is a cycle that

teaches people much more effectively what the strengths and limitations of the technology are, as well as the creative process that goes into making radio.

Once the recordings were complete the files were transferred via a USB connection onto a computer in Arimae. The free open-source digital audio editing software “Audacity” was used to teach digital editing. This software was used because it is freely available on the internet and easy to learn. A few select participants who were interested in the audio editing process volunteered to do the editing. This part of the workshop was very technical, and required a high level of familiarity with computers relative to what most people in Arimae have. While the process of learning digital editing on the computer was entirely open to anyone from the workshop, only a select few that had previous experience with computers volunteered. I believe that given more time, more of the participants could have been trained to use Audacity, however by the time we were to the editing stage in the drama, time was limited.

After the editing was done, all the workshop participants and as many people as we could grab from around the village were brought to the computer room to listen to the finished radio drama. Everyone then had a chance to comment on what had been done during the editing process and how they felt about the project in general.

The community is still in the process of deciding what exactly to do with the radio drama. Again, this is a process of dialogue and consensus which is entirely in the hands of the community.

## Results

In order to embark upon a productive discussion of the results of this research, there are a few issues of theoretical importance to address. First I would like to discuss the various kinds of knowledge that exist in order to more clearly situate the results in this broader context of possible investigation. I will then go on to discuss the results, both materially and otherwise, the utilization of the results, and the future of the project as it stands at the time of writing.

### *Tools for Interpreting the Results*

Park defines three branches of knowledge: instrumental, interactive, and critical (based on Habermas's instrumental, communicative, and emancipatory knowledge). Instrumental knowledge is the knowledge produced by biology, physics, chemistry, and other natural sciences. It is a knowledge system based on observable causal relationships extracted from the influence of the observer. Interactive knowledge (communicative) is based on the shared experience, tradition, histories, culture, and dialogue that we have with other people. It is the process by which we constitute our understanding of community and by which the community constitutes our understanding of other human beings. "Interactive knowledge makes human community possible. Without a common stock of knowledge of this kind, it is not possible to form social solidarity capable of mutual support and common action" (Park 1993). This is the kind of knowledge that came out of the support groups and public proceedings of the 1960's to form the women's movement, and it is the kind of knowledge that more recently produced the massive immigrant rights movement in the US. Through a communication

of shared experiences, stories of border crossings, family separations, chicano literature and the public hearings that formed all over the country in response to Bill HR447, millions of people were mobilized. This mobilization also constitutes an important process of communicative knowledge in which its members learn to listen and speak not as individuals but as part of a larger experience. It is also however, the knowledge of partnerships and everyday life.

Marx defined critical theory as “the self-clarification of the struggles and wishes of the age” (Marx 1843). Critical knowledge is what results from this self-clarification – it comes from reflection on the very frameworks (linguistic, cultural, political) that make reflection possible, and that make an assertion of what is right in society possible. Critical knowledge is that which relates to the *ends* of society, thus critical investigation is a way of understanding how those ends are come to. Referring to critical investigation: “Research, in this case, has to do with questions concerning the life chances we are entitled to as members of a society, as well as with the comprehension of the social obstacles standing more immediately in the way of achieving these goals” (Park 1993). The process by which we come to a critical understanding of ourselves in the larger social context is what is meant by critical investigation.

### ***Material Results***

The primary material result of this research is the 25 minute radio drama produced by the people of Arimae. This drama consists of five narrations for six scenes, which dramatize the thirty-year history of land struggle since the village of Arimae was founded. The radio drama incorporated the contribution and participation of over thirty

members of the community of every age, from the children who are heard dancing and singing in the beginning of the drama, to Avilda Opuá who sings the closing “song to the government,” asking that their voices be heard. The diversity of the participation was sheerly a product of the diversity and enthusiasm of the village, which can be heard clearly in the drama itself.

### ***Utilization of Results***

With respect to the radio drama itself, there are currently three options which are not mutually exclusive:

1. Make an 80 minute CD of recordings from Arimaé including the radio drama which could then be sold at cost (cost of burning the CD) to residents of other villages.
2. Use the radio drama for educational purposes in the school in Arimaé to teach the children about the land struggle of their village.
3. Send the radio drama to radio stations across Panama as a way of gaining a wider distribution for the drama and the issues it raises

However, with respect to the project as a whole, the radio drama has already stimulated wide-ranging dialogues about the use of communication technology as a method of community empowerment. These are not the first conversations on the subject however, as there are currently discussions within the *Congreso General Emberá-Wounaan* to build a radio station that would more adequately serve the needs of the comarcas (Cardenas per. comm. 2007). Personally, I have been fortunate enough to be a co-founder of a small media collective of community workers, education professors, and

indigenous leaders that are committed to the production of inter-cultural, bi-lingual, educational media. The group has a mandate to promote scientific and cultural understanding within the Darién.

The radio drama has also been used to raise money to purchase recording and editing equipment for the community of Arimae. Through contacts with media activists in Scotland, UK, a benefit event was organized to support grassroots media initiatives in the Darién, which raised US\$300.

The results I have presented require a broader understanding of knowledge and the kinds of methodologies that attempt to mine this broader understanding of knowledge. These methodologies transgress not only the subject-object paradigm of the natural sciences, but the very notion of causes and effects which allows so clear a separation of the methodology section from the results. The objective of maintaining this distinction in this thesis rather than throwing it out all-together was to provide different spaces for discussing the same thing. This has caused some overlap, but I think overall is effective in presenting the research.

### ***Knowledge Produced***

The results of this research cannot be clearly quantified, nor can they be clearly separated from the methods. The only hope of presenting such results in a logical and clear manner, is to situate them in the kinds of knowledge they produced.

### **Instrumental Knowledge**

The instrumental knowledge produced comes largely from the document itself. Despite being a dramatization, executed improvisationally, the result is quite an accurate representation of the history of Arimae. This is evidenced by the fact that community members are interested in incorporating the drama into the primary school curriculum to teach children about the history of their village. The drama preserves not only the history, but the feeling that the participants have towards the history, which comes across in the audio. There is a tremendous amount of information encoded in every scene: the moods, the tones of voice, the relationships depicted, the soundscape, all contribute to the sum total of what radio drama is. This information is part of the historical document. In this sense the radio drama is not history as it is read in a history book, but a record of people in the act of remembering. This act of collective memory is much more than the historical facts presented. The representation of the history is as much the document as the history itself. And here we have precisely the kind of act discussed previously in which actors are able to take back the representational space of the media. As history is a media itself, these actors have taken back the representational space of history as well, and made a text of that representation. Texts are a way of taking ideas, thoughts, words, and manifesting them materially in a way that can be more effectively patterned, and thus networked, to begin affecting change in the society we live in (actor-network theory). It seems clear that this text is already being incorporated into the material networks of the community and those of Darién.

This radio drama was broadcast on Voz Sin Fronteras, which is not a way of producing instrumental knowledge but rather a way of sharing it. The distribution of the

results is an important part of any research, but within the methodology of participatory research it becomes a result in and of itself. At the time of writing it is too early to report any feedback on the broadcast, but the very act of sharing the historical record and collective memories of Arimae with thousands of people throughout the Darién constitutes an important step in reclaiming some of the representational space of the media in Panama.

### **Interactive Knowledge**

Interactive knowledge (Habermas' communicative knowledge) is the most marginalized of the three kinds of knowledge outlined above, because it cannot be commodified. In actor-network terms, interactive knowledge is what makes our networks dynamic and unstable, because it affects the way we participate in them. It cannot be easily quantified, except in the actions that lead to its production: the act of living with one another, speaking, and exchanging actions against the background of common experience (Park 1993). The radio drama was precisely this kind of action. It was an exchanging of actions, on, about, within, the shared experiences of the community of Arimae and through this action: a performance of community. In the same way that Tijuana NO! performed the cultural, political, and geographic space of the border, so too did Arimae perform the cultural, political, and geographic space of their community. The broadcast of this performance offers an opportunity to build links with other communities with shared experiences (interactive knowledge). In a community that is suffering what is widely described (by the community) as the destruction of their way of life, performances of community are important. They constitute a large part of the potential



of participatory media projects to empower. The heavy emphasis on dialogue in the methodology of this research is the praxis of a commitment to interactive knowledge.

### **Critical Knowledge**

Paulo Freire's *concientización* was based on the idea that through action emerges critical knowledge and through critical knowledge (or consciousness) emerges action. The cycle of action and reflection was what he described as a transformative process for social change (Freire 1970). I would argue that Arimae's performance of history is a kind of critical investigation, which is essentially research undertaken by the community. Their representation of the ANAM official in scene three as apathetic and unhelpful is an act of critical awareness, which the radio drama did not create, but preserves. What is preserved, is an act of reflection. The representation of the latino colonists (scene five clearing forest in Arimae's collective territory) as believing that they have the same rights to the land as Arimae, is also a critical representation of the complex reality of "invasions." It is also an act of reflection. And so in this sense, although Arimae's performance of their history is an action, it is an act of reflection. This act of reflection, because of its material existence in digital media, can be shared and reflected on by others. The last words of the drama embody both reflection, and criticality:

...and for one, we can not count on a law to protect our territory.

This indigenous group can no longer believe in the authority of the government, and much less the political parties, that every 5 years arrive with false promises. The state should guarantee the territorial security of this village. How can there be no agreements, laws, national

or international, that give territorial security to the people that have lived for thousands and thousands of years on this Latin American continent, that were the first people here?

## **Conclusion**

The research undertaken in Armae has shown that community media can be an effective tool of both community empowerment, and research. Indeed, the two need not be mutually exclusive. Methodologies of participatory research are gaining in popularity, and this research is not the first to use the methodology even in the Darién. There have been some incredibly successful participatory mapping projects conducted recently to map indigenous areas in the Darién (Herlihy 2003; Herlihy 2003) and the hope that science will permanently move away from destructive and paternalistic social science methodologies is not unfounded.

The twenty-five minute radio drama produced by the community of Arima holds important implications for understanding how the tools of representation can be appropriated towards new ends. In many ways these are the same ends as the worldwide indymedia movement, which seek to put the voice of authority back in the hands of people, rather than corporations and governments. As the independent production and distribution of media becomes increasingly possible, so too does this goal.

Perhaps more importantly however, this research seeks to broaden conceptions of how it is possible to participate in the media. Too often the form and framework within which people can participate in media are dictated not by the limitations of the

technology but by its owners. Completely new and innovative forms of media participation like, that of the historical drama from Arimae, are waiting only on the means to production. There is great potential for a more open and democratic media to change not only mediascapes, but the whole cultural and ideological landscape of the world. It is the richness of culture that makes this possible.

In this thesis I have presented a methodology for community media projects, which relies on a cycle of dialogue-record-listen-dialogue. This is a methodology for familiarizing people with communication technology, and collectively developing unique approaches to it. It allows participants the most flexibility possible to adapt themselves to the technology, and adapt the technology to themselves.

There is a tremendous amount of future work to be done in the field of community media. Understanding how communities express problems, identities, or politics, gives insight into the cultural processes by which communities constitute themselves. This understanding also helps bridge the gap between the political positions a community or individual in a community might take, and the complex cultural forces that contribute to this position. Community media is inherently political, as it is about replacing the directive voice of mainstream media and politics with the diverse and dynamic local voice of communities. These communities contribute their own imaginations not only of the local community but also in general, of the world. I would argue that the more ways there are for people to contribute their imaginations and perceptions of community, the more democratic the media. In a free world, a people should be able to de-imagine a nation. Indeed, past precedents for this in history are sure to exist, but perhaps this is only the negative side of the process of imagining a nation.

This is a process that the indigenous people in Darién, and indigenous people all over the world are struggling to do. The potential for community media to be a tool, and a voice for the voiceless, has only begun to be reached.

### **Works Cited**

- Anderson, B. R. O. G. (1983). Imagined communities : reflections on the origin and spread of nationalism. London, Verso.
- Appadurai, A. (1990). "Disjuncture and Difference in the Global Cultural Economy." Theory, Culture & Society 7(295).
- Bacorizo, J. (per. comm. 2007). Noko de Arimae. Arimae Darien.
- Balf, T. (2003). The Darkest Jungle: The True Story of the Darien Expedition and America's Ill-Fated Race to Connect the Seas. New York, Random House.
- Bessette, G., & Rajasunderam, C. (Eds.), Ed. (1996). Participatory development communication: A West African Agenda. Ottawa, Canada & Penang: International Development Research Center (IDRC & Southbound).
- Bourdieu, P. (1989). "Social Space and Symbolic Power." Sociological Theory 7(1): 14-25.
- Cadiz, M. C. (1994). Communication and participatory development: A review of concepts, approaches and lessons, Laguna: University of the Philippines at Los Baños.
- Cardenas, G. (per. comm. 2007). Presidente del Congresso General Tierras Colectivas. La Palma, Darién.
- Cardenas, G. (personal communication 2007). Presidente del Congresso General Tierras Colectivas. La Palma, Darién.
- Couldry, N. (2003). Media rituals : a critical approach. London ; New York, Routledge.
- Durkheim, É. (1965). "Individual and Collective Representations." Revue de Métaphysique et de Morale 6: 273-302.
- Estrada, C. F. a. S. R. (2001). Community Radio Handbook, UNESCO.
- Freire, P. (1970). "Cultural Action and Conscientization." Harvard Educational Review 40(3): 452-477.
- Freire, P. (1970). Pedagogy of the oppressed. New York, Herder and Herder.
- Geertz, C. (1973). The interpretation of cultures : selected essays. New York, Basic Books.
- Gramsci, A. (1971). Selections from the Prison Notebooks. New York, International Publishers.
- Gumucio, A. (2001). Making waves: Stories of participatory communication and social change. New York, Rockefeller Foundation.

- Heckadon-Moreno, S. (1986). La colonización campesina de bosques tropicales en Panamá. The Botany and Natural History of Panama. Saint Louis, Missouri, Missouri Botanical Garden: 397-410.
- Heckadon-Moreno, S. (1997). Spanish rule, independence, and the modern colonization frontiers. Central America: A natural and cultural history. A. G. Coates. New Haven, Yale University Press.
- Herlihy, G. K. (2003). "Maps of, by, and for the Peoples of Latin America." Human Organization **62**(4).
- Herlihy, P. (1986). A cultural geography of the Embera and Wounaan (Choco) Indians of Darien, Panama, with emphasis on recent village formation and economic diversification. The Department of Geography and Anthropology, Louisiana State University.
- Herlihy, P. (2003). "Participatory Research Mapping of Indigenous Lands in Darién, Panama." Human Organization **62**(4).
- Jamias, J., Ed. (1975). Readings in Development Communication, Laguna: UPLB College of Agriculture.
- Krippendorff, E. (1981). "The Victims. A Research Failure." Journal of Peace Research **18**(1): 97-101.
- Kun, J. D. (2000). "The Aural Border." Theatre Journal **52**: 1-21.
- Latour, B. (2005). Reassembling the Social: An Introduction to Actor-Network-Theory. Oxford, Oxford University Press.
- Law, J. (1992). "Notes on the Theory of the Actor-Network: Ordering, Strategy, and Heterogeneity." Systems Practice **5**(4).
- Manyozo, L. (2006). "Manifesto for Development Communication: Nora Quebral and the Los Baños School of Development Communication." Asian Journal of Communication **16**(1): 79-99.
- Marx, K. (1843). Letter to A. Ruge. Karl Marx: Early Writings. New York, Vintage Books: 209.
- Mayo, M., & Craig, G. (1995). Community participation and empowerment: The human face of structural adjustment or tools for democratic transformation? Community empowerment: A reader in participation and development. London, ZED Books: 1-11.
- Park, P., Mary Brydon-Miller, Budd Hall, and Ted Jackson, Ed. (1993). Voices of Change: Participatory Research in the United States and Canada. Westport, Conn., Bergin & Garvey.
- Rosset, R. P. e. M. C. e., Ed. (2006). Promised Land: Competing Visions of Agrarian Reform, Food First Books.
- Suman, D. (2005). "Globalization and Development: Using the Coastal Area of the Darién Region of Panama as a Case Study." Occasional Papers on Globalization **2**(5).
- Swidler, A., Ed. (2001). What anchors cultural practices. The practice turn in contemporary theory. London, Routledge.
- United-Nations (1993). Draft United Nations Declaration on the Rights of Indigenous Peoples. Economic and Social Council, United Nations Commission on Human Rights.

- Urriola, N. J. (per. comm. 2007). Directora de Voz Sin Frontera. S. Porcello. Metetí, Darién.
- USAID (2004). Plan Estrategico Comunitario Participativo: Comunidad de Arimae. Programa Desarrollo Comunitario de Darién, USAID.
- Vargas, L. (1995). Social uses and radio practices: The use of participatory radio by ethnic minorities in Mexico. Boulder, San Francisco and Oxford, Westview Press.
- Velasquez Runk, J. (2005). And the creator began to carve us of cocobolo: Culture, history, forest ecology, and conservation among Wounaan in eastern Panama. DAI, 66, no. 11A.
- Wafer, L. (1933). A New Voyage and Description of the Isthmus of America. L. E. E. Joyce. Oxford, Hakluyt Society.
- Whitehead, L. (1981). "Miners as Voters: The Electoral Process in Bolivia's Mining Camps." Journal of Latin American Studies 13(2): 313-346.

## **ANNEX A – Recent newspaper clipping on media as a locus of conflict**

(Copyright 2007 by Inter Press Service/Global Information Network)

MEXICO CITY, Feb. 2, 2007 (IPS/GIN) -- One of the 12 community radio stations operating legally in Mexico has literally come under fire, and its journalists have received death threats and been arrested; another has received warnings for covering the activities of social movements; and a third was closed down at gunpoint by supporters of the local government.

All three cases have been reported to the authorities. The first case, involving the Calenda station in the southern state of Oaxaca, reached the Inter-American Commission on Human Rights Thursday, through a complaint filed by the World Association of Community Radio Broadcasters (AMARC).

Aleida Calleja, who represents AMARC in Mexico, told IPS that the three radio stations, which have limited broadcasting reach and do not respond to commercial interests, are in need of protection.

"Freedom of speech is at stake here," she said.

In January, the mayor of the town of San Antonino Castillo de Velasco, who was overthrown by protests, "opened fire on one of my colleagues, although he missed; another almost lost an eye when stones were thrown at him; and I was arrested and received death threats, and was later forced to sign a document in which I promised not to support subversive activities," Dario Campos, a volunteer reporter at the Calenda station, told IPS.

Since mid-2006, the station, which broadcasts in San Antonino, a town of 4,900 near Oaxaca, the state capital, has been the target of the rage of the town's former mayor, who belongs to the Institutional Revolutionary Party (PRI), which has governed the state since 1929.

"For giving coverage to the social uprising and airspace to APPO (the Popular Assembly of the People of Oaxaca), which here in our community toppled the mayor, our radio station and its staff (of 10) have been attacked," Campos said by telephone from San Antonino.

In the capital of Oaxaca and several neighboring towns like Antonino, APPO led a months-long uprising last year against Governor Ulises Ruiz, of the PRI, demanding that he resign or be removed for corruption and for violently squashing dissent.

Along with neighboring states Chiapas and Guerrero, Oaxaca is one of the poorest states in this country of 104 million. In Oaxaca, 80 percent of the population lacks basic sanitation services, street lighting, piped water and paved streets, according to the Oaxacan Human Rights Network.

The conflict began in June, when APPO, an umbrella group made up of more than 300 social organizations, took shape and its members occupied the center of the city of Oaxaca.

But thousands of federal police were deployed to the area to break up the protests and seize control of the city in late October, and dozens of activists were arrested. Human rights groups reported numerous human rights abuses.

During the months of protests, around 20 people, mainly demonstrators, were killed when unidentified gunmen opened fire on the protesters. One of those killed was a U.S. journalist.

"We merely give support to the community, which includes providing information and supporting efforts in health, community organization and other areas," said Campos, a 25-year-old economics student.

Neither Campos nor most of his colleagues receive any pay for their volunteer work at the radio station.

Community radio stations generally enjoy broad local support for the services they offer their communities, such as educational programming, coverage on human rights and health questions, or information and warnings on dangers like natural disasters. In addition, they often broadcast in local dialects, such as indigenous tongues in Mexico.

The AMARC complaint states that the Calenda station is facing threats aimed at "silencing it."

The complaint filed with the Inter-American Commission on Human Rights is aimed at getting the regional body to order the Mexican state to take the necessary measures to safeguard the life and physical integrity of the radio station's members, and to guarantee their right to freedom of expression.

Calleja said the Nandia indigenous radio station, which operated in a Mazateca community in the state of Oaxaca, had also suffered reprisals at the hands of PRI supporters during the APPO uprising.

"Nandia was shut down at gunpoint last year and remains closed despite the complaints that we have filed," said Calleja.

Another community station that has had problems is the La Voladora station in Amecameca, a mountainous area in the state of Mexico, near the capital.

The station's staff members have been the targets of death threats and verbal attacks because of their reporting on the indigenous Zapatista National Liberation Army (EZLN) and other social movements.

Of the more than 130 radio stations in Mexico that describe themselves as community stations, only 12 -- the ones that are backed by AMARC -- have licenses to operate. The rest, which include stations run by church groups or trade unions, face a permanent risk of being closed down.

Although the National Chamber of the Radio and Television Industry accuses community radio stations of fomenting piracy and encouraging guerrilla groups like the EZLN, the government of conservative former President Vicente Fox, whose six-



year term ended in December, granted operating licenses to 12 stations in 2004 and 2005.

The permits, which the local branch of AMARC had been demanding since the 1990s, were issued in a vaguely defined legal framework that gives the state enormous discretionary power over community stations.

AMARC is an international non-governmental organization serving the community radio movement, with associates in 110 countries. Its goal is to support and contribute to the development of community and participatory radio along the principles of solidarity and international cooperation.

## **ANNEX B – Voz Sin Fronteras radio grid**



# ANNEX C - Voz Sin Fronteras pamphlet 2

## ¿Qué Somos?



- El primer medio de comunicación en Darién.
- Una radio cálida a servicio y alcance de nuestra gente.
- Una radio que:
  - Crea y difunde
  - Cercana y amiga
  - Educativa y transformadora
  - Promotora e integradora
  - Participativa y creativa
  - Promotora y transformadora
  - En su contenido y en la visión del futuro
  - Persevera e insistente

## ¿Qué Hacemos?



- Favorece la comunicación y acerca las demandas en Darién.
- Ofrece programas informativos, educativos, éticos, culturales, recreativos, religiosos y reuniones sociales.
- En sus programas involucra a grupos de mujeres, niños, profesionales, deportistas, vejez, afro y campesinos.
- Tiene espacios de orientación, salud, agricultura, educación, ecología, entretenimiento, folklore y otros.
- Busca construir comunidad y promover la participación.
- Cuida la voz saludable, con FAYNE.



## ¿En Dónde?



- En Darién:
  - La provincia del Darién
  - Las reservas de Península
  - Las reservas indígenas
  - Fincas de cultivos y raras
  - El plan de desarrollo de la zona
  - Corrientes de agua en la zona
  - Corrientes de agua en la zona
- Pero Darién, NO ES:
  - Sin cultura y tradición
  - Sin identidad
  - Sin historia
  - Sin futuro
- Darién ES, para Usted, oportunidad de:
 

• Conocer	• Despertar
• Crear	• Humanizar
• Producir	• Promover
• Participar	• Transformar

Darién, durante siglos, ha tenido siempre distante el futuro. Pero VOZ SIN FRONTERAS se lo está haciendo presente.

## ANNEX D – Background information on Arimae

### Is Social Justice and Ecosystem Service?

#### *A case study from the Embera-Wounan Village of Arimae Darién*

The issue of whether or not social justice is an ecosystem service is mainly a conceptual one, one that interrogates the theoretical framework of ecosystem services more than it contributes the practice of conservation for which ecosystem services was created. However, I believe the question is a valid one insofar as it probes deeper into the question of “human well-being,” a concept upon which the entire ecosystem services approach rests.

According to the conceptual model put forward by *Ecosystems and Human Well-being: A Framework for Assessment* or EHW report, ecosystem services are “the benefits people obtain from ecosystems.” Changes in these benefits then affect human well-being through impacts on security, the basic material for a good life, health, and social and cultural relations (page 5: EHW). These impacts are termed “constituents and determinants” of human well-being.

Human well-being is not universally definable however, and there are a tremendous amount of conflicting world views in regards to existing definitions. As world view is a social phenomenon, I will look at the social dimensions of human well-being in an attempt to clarify the potential consequences of an ecosystem services approach to social justice in the indigenous village of Arimae, Darién.

#### *History*

The date to which all other dates in the history of Arimae are relative is 1972. This was the year the carretera Pan Americana was built. Before this turning point in the history of the community, the center of community life and living was the Río Sabana. There were enough fish and shrimp to feed the people; the river was both transportation and drinking water, even in the dry season. After the carretera was built the headwaters of the Río Sabana were deforested and the fish disappeared. The river depth started to drop. A large teak plantation was built in Agua Fria which began dumping chemicals (pesticides and fertilizers) into the river, and by 1981 the community was desperately looking for another water source. Since then the community has been connected to the waterline used by Sante Fe, but the situation has continued to worsen as there is less and less water. There are long periods of time during the dry season when there is no water, and the water quality fluctuates. At the time of writing, the community has been without water for the past 9 days. The carretera also, as per usual with highway projects into so-called undeveloped areas, brought a large amount of resource extractors and landless peasants (colonos) into the area. Logging trucks were some of the first vehicles to use the highway, and the 1970's is known in Arimae as a decade of struggle in which the

fight for collective lands was one of constant negotiation with apathetic government officials and even violence in confrontations with the colonos.

The result is one of partial victory, in that Arimae still does have some untouched collective land holdings, but they are greatly diminished. The past thirty years of invasions, irresponsible loggers, bogus reforestation projects, and an almost complete lack of enforcement or protection of any kind have put a severe strain on the ecological productivity of Arimae's communal land holdings.

### *Social Significance of Changes in Ecosystem Services*

In talking to people old enough to remember, the social significance of this fundamental change was that for the first time in the community's history there wasn't enough land (or resources in general) to go around. According to the *casique* in Arimae, José Bacorizo, the changes after the carretera went far beyond the economic and material. The destruction of the river ecosystem increased the community's reliance on the cash economy, as more and more food had to be bought from other places. Even the water itself had to be paid for with the connection to Santa Fe's water line. The increased reliance on the cash economy had the effect of disrupting the relationship of the people with the land. The young people began to lose the respect they had for nature. Villagers started to migrate to the city and this had the effect not only of reducing the amount of individuals who could participate in the communal political and work life of the village, but also resulted in the influx of urban cultural values into Arimae which were often at odds with the traditional values of the older generation. Other social changes in the village came with the land shortage. A system of ownership became a part of the collective land system, whereby some of the land remained collectively owned and remaining land parceled out to individual families for cultivation. Most people in the village agree that the family plots of land are too small for any serious income, and they have mostly been used for small-scale cash crops and staple foods like yamé, yucca, frijoles, and plantains. This system of personal land plots is entirely new, and has been the source of a number of ongoing disputes within the village, which are *also* characterized by older members of the village as new.

However there are other causes of social change in the village which do not seem to have come from changes in ecosystem services. According to the *casique*, the installation of electricity in the village was a major turning point in the social dynamics of the community. Before the lights, everyone young and old would come to the community meetings. The light brought the televisions and after that people, the young especially, stopped going to congreso as much.

Overall, there is a general consensus among people I talked to that before the carretera, and even as late as 1980, people were much more willing to work collectively. "Before, the village could clear 2 hectares in one day... now you're on your own," as one community member put it. One possible reason for this given to me by an Arimae resident is that now people have different jobs which mean they are gone to other places during the day, sometimes not returning until late at night.

### *The Río Sabana and Socio-Environmental Feedback Loops*

From an ecosystem services perspective, the narrative is very clear. Changes in ecosystem function and productivity in all categories (production, regulation, etc.) have affected “determinants and constituents of well-being.” However our area of interest here are the social components of that change which depend and impact on changes in ecosystem services. Perhaps the best example of this is the inland water resources of the Río Sabana. This ecosystem service depended heavily on upstream management practices. Both river depth and water quality needed an intact forest ecosystem upstream to protect the watershed. Deforestation heavily impacted the water table, causing water levels to fluctuate dramatically with seasonal changes, and the runoff associated with flooding in the wet season affected water quality. Other management practices such as tree plantations and cattle ranches contaminated the water very rapidly. The determinants of water level and quality are relatively clear.

The social impacts of these changes, while not quite so straightforward, are equally as pronounced. The drop in river depth meant the river could no longer be used for transportation, increasing the dependence of villagers on the cash economy. The water quality impacted health, “basic materials for a good life,” and in the case of Arimae perhaps the most dramatic: good social relations. The Embera-Wounan of Darién have a very deep connection with rivers. When you ask indigenous people where they are from in the Darién, they will very often reply with the name of a river before the name of a village. Both S. Heckadon and J.V. Runk<sup>3</sup> have pointed this out on numerous occasions. Some of the older people in Arimae who lived most of their lives with a healthy Río Sabana won’t eat chicken, as they never have been able to get used to the taste of it. Again, this increases their dependence on the cash economy, which comes to the village once daily in the form of a fish truck. The disputes over land, which used to all be communal, is perhaps the best example how social relations have been affected. Not only these disputes, but also the entire system of personal/familial land plots are in many ways a direct result of the destruction of the marine resources and diminishment of collective land holdings. This social impact in turn affects the way the diminished resources are managed, and thus impacts the ecosystem services.

To summarize: the destruction of the Río Sabana precipitated a social change, which ultimately amounts to an increased dependence on the cash economy and the collective land holdings. This increased dependence on the cash economy inhibits the village’s ability to work collectively, and thus manage collective lands collectively, further increasing the village’s dependence on the cash economy as they each must enter the labor market as individuals. This inability to survive off of the collective land makes the village evermore dependent on the cash economy, and the pressures to log and/or clear individual plots of land increase. This logging and/or clearing leads not only to forest fragmentation and negative ecological impacts, but also to further social divisions within the community as this degradation of the forest impedes the ability of villagers who are still cultivating to produce for their families. The cycle continues.

---

<sup>3</sup> Velasquez Runk, J. (2005). And the creator began to carve us of cocobolo: Culture, history, forest ecology, and conservation among Wounaan in eastern Panama. DAI, 66, no. 11A.

*Social Justice and Ecosystem Services*

According to the *casique* José Bacorizo (Arimae), social justice is the ability to be indigenous, and live in the traditional way (personal communication March 31, 2007). This was specifically defined as the ability not to have to use cash income to survive. The reason for this specification seems rather clear from the assessment above. The entire social system of collectivity and resource management has cracked under the strain of a capitalist, individualist, market system. This is a highly exploitive system in which they can only hope to make 5-6 dollars a day without any job security or employment rights working for the same privateers who are ruining the water quality and deforesting the Darién. Their environment, unseparable from their “spiritual environment,” has been contaminated by a system which does not respect the intrinsic value of their land (J. Bacorizo per. comm.).

This is perhaps where my ecosystem services assessment breaks down, or finally starts. In a definition of social justice which claims an intrinsic value in the environment, the assessment of services loses relevance. When existence is a service in and of itself, one only needs to open ones eyes to assess it. A social justice predicated on intrinsic value cannot incorporate step 3 in module 4, where an assessor looks for cost-effective alternatives to ecosystem services. A social justice of intrinsic value cannot reconcile the twin findings of the Millennium Assessment, which report that the environment is deteriorating but human well-being has increased. This is ultimately where social justice and human well-being separate within the framework of the MA.

I believe this separation is not reconcilable under the ecosystem services paradigm. This paradigm would classify a social justice of intrinsic value under “good social relations,” which would be a benefit of cultural services provided by ecosystems. However, cultural services is highly problematic concept. Without the ability to value cultural services in any meaningful way, it becomes nothing more than pamphlet fodder, meaningful only to those people who would do to right thing anyway. For instance, Arimae is half Embera, and half Wounan. How would you develop a management plan in a situation in which there were differing cultural services extracted by the two groups? What if those services were contradictory? Whose cultural service would the management plan value more? A concrete example: many of the young people simply do not share the cultural appreciation that their parents and grandparents have of cocobolo, which is a sacred wood in the Wounan tradition. Is the cocobolo tree still servicing these young people culturally? And if the Embera did not happen to share the belief with the Wounan that the creator carved them from cocobolo, how would a cocobolo harvester go about assessing, and value weighting cultural services in Arimae?

Perhaps the problem with the cultural services paradigm begins here: culture is not a static empirical index, but rather a dynamic process in which many subjectivities continuously re-constitute themselves and each other as a selfless whole, rather than an archive of beliefs. Anthropologists are constantly begging policy makers and researchers alike to stop essentializing indigenous identity as these a-historical objects which can be taken back to the lab and analyzed. A view of cultural services which does not incorporate the diverse and changing cultural needs of indigenous people will result in project failures, resource loss, and acute frustration of the few people who were good-willed enough to take cultural services seriously in the first place. How to reconcile

opposing cultural needs, or incorporate diverse cultural needs in management policy, is still simply a matter of social justice more than it is a matter of correct ecosystem services assessments. In looking very briefly and superficially at this case study I would like to humbly conclude that in the end, it will not be for ecosystem assessors, policy makers, or conservationists to decide how much communities value their resources, much less what this value is worth to society (value of cultural services). But rather it will depend on the broader social and economic empowerment of communities to have the material ability, as well as the political power, to make the right environmental decisions. In short, it will depend on social justice.



## **ANNEX E – Table of Time Spent in the Field**

<b>ARRIVE</b>	<b>RETURN</b>
February 4, Sunday	February 13, Tuesday
February 17, Saturday	February 22, Thursday
March 15, Thursday	March 25, Sunday
April 5, Thursday	April 8, Sunday
<b>Total Days in the Field:</b>	30